



2022 ANNUAL REPORT & PROXY STATEMENT

**NOTICE OF ANNUAL
MEETING OF STOCKHOLDERS**



Cybersecurity
Partner of Choice

WHAT WE DO

We innovate to stay ahead of the evolving threat landscape, so organizations can embrace our technology with confidence. We provide next-gen cybersecurity to thousands of customers globally, across all sectors. Our cybersecurity platforms and services are backed by industry-leading threat intelligence and strengthened by state-of-the-art automation.

Whether deploying our products to enable the Zero Trust Enterprise, responding to a security incident, or partnering to deliver better security outcomes through a world-class partner ecosystem, we're committed to helping ensure each day is safer than the one before.

OUR VISION

Our vision is a world where each day is safer and more secure than the one before



Letter from the Chair and the Lead Independent Director

At Palo Alto Networks, we are rebuilding cybersecurity based on the principles of Zero Trust, fueled by rigorous analytics and automation. We are here to secure the way forward by making cyber security stronger yet simpler so that each day is safer than the one before. We've Got Next and so will you. //



Dear Fellow Stockholders:

Fiscal 2022 was another year of achievement at Palo Alto Networks. Our billings exceeded \$7.4 billion, reflecting a growth rate of 37% year over year, and our revenues exceeded \$5.5 billion – 29% year-over-year growth. In July, we celebrated our 10th anniversary as a public company. At the close of trading on the day of our initial public offering, our market capitalization was \$3.5 billion, reflecting the value of a company that pioneered a new era of security through its groundbreaking firewall technology. Today, as our market capitalization exceeds \$51 billion (at the close of trading on October 28, 2022), we are confident in the strong foundation we have built and eager to tackle the challenges of the next ten years.

As always, innovation drives our success. During the past year, we deployed 49 major product releases as compared to 29 in fiscal 2021, including advancements in next generation cloud access security broker (CASB), cloud code security, cloud next generation firewall and, in an industry first, agent and agentless cloud security posture management (CSPM) – just to name a few. We deliver to our customers best-of-breed capabilities across a platform of network security, cloud security and security operations. Simply put, we remain the cybersecurity leader, serving tens of thousands of customers worldwide, many of whom are still in the early stages of their cybersecurity transformations.

Of course, none of these accomplishments would have been possible without the dedication and engagement of our employees. We continue to prioritize their health, safety and professional fulfillment through FLEXWORK, an employee-centric strategy that offers over 12,500 employees an expanded set of choices. These choices include where individual work is completed, time spent in the office, personalized learning paths, and flexibility of benefits. We are proud of the workplace recognitions that the company received in fiscal 2022, including Most Loved Workplaces (Newsweek), Top 100 of America's Most JUST Companies (Just Capital), Next Gen honoree (Ripplematch), and Best Company in Bay Area (Comparably).

Finally, we recognize the contributions and character of Mark McLaughlin and Asheem Chandna, neither of whom will stand for reelection to the Board of Directors when their terms expire at the conclusion of our 2022 Annual Meeting of Stockholders. Mark's leadership as the company's chief executive officer from August 2011 until June 2018, and his continued service on our Board of Directors since then, have been instrumental in driving the company's growth and nurturing our unique culture. Likewise, without Asheem's technical expertise, financial acumen and, most notably, keen discernment of emerging technology trends, our transformation into the company we are today would have been less complete and consequential. On behalf of our employees and the entire Board of Directors, we express our deep appreciation to Mark and Asheem for their profound impacts on Palo Alto Networks.

As in the past, this year's Proxy Statement is constructed to maximize clarity and understanding about the company's strategies, successes and challenges. Several of our key initiatives are worth prefacing here.

Stockholder Engagement. We remain guided by, and appreciative of, the perspectives of our stockholders as expressed through their engagement with us. Throughout fiscal 2022, we once again executed an extensive stockholder outreach program. In total, we engaged in discussions with stockholders holding approximately 60% of our outstanding shares as of June 30, 2022. John, as our Lead Independent Director, remained at the forefront of our engagement efforts and participated in 30 meetings with stockholders holding approximately 39% of our outstanding shares as of June 30, 2022. In addition to our financial outlook, our stockholders conversed with us about our executive compensation, sustainability, corporate governance practices, inclusion and diversity, as well as other topics of import to them. We will continue this valuable dialogue with our investors in the coming year, and are committed to maintaining outreach that is truly a dialogue with our stockholders.

Letter from the Chair and the Lead Independent Director

Executive Compensation. We implemented the commitments that we made to our stockholders in our 2021 proxy statement. We maintained an executive compensation program closely tied to our financial performance, 100% of our named executive officers' equity compensation awards (aside from new hire awards) were performance-based, with different performance targets than the cash incentive plan awards, added an ESG modifier to our cash incentive plan, increased the stock ownership guidelines for our executive officers, and established a one-year equity post vesting holding period for all named executive officers. The compensation discussion and analysis (CD&A) section of this Proxy Statement describes our performance against these commitments. We encourage you to read the letter from our Compensation and People Committee accompanying the CD&A for their views on our executive compensation program, particularly as it relates to our pay-for-performance philosophy and how we performed against that backdrop.

Our Commitment to ESG. We continue to take seriously our commitment to environmental sustainability, social responsibility and corporate governance (ESG). In fiscal 2022, in direct response to the feedback we received from our stockholders, your Board of Directors adopted majority voting for uncontested elections of directors and a resignation policy in the event a director does not receive a majority of the vote. Elsewhere in Proxy Statement, we discuss our ESG successes in fiscal 2022 and provide an overview of our ESG programs and commitments, and how your Board and executive leadership team oversee our ESG efforts.

You are cordially invited to attend the 2022 Annual Meeting of Stockholders of Palo Alto Networks, Inc. to be held on Tuesday, December 13, 2022 at 12:15 P.M., Pacific Time.

This year's annual meeting will be a virtual meeting conducted via a live webcast. You will be able to listen to the annual meeting, submit your questions, and vote during the live webcast of the meeting by visiting www.virtualshareholdermeeting.com/PANW2022 and entering the 16-digit control number included on your proxy card or in the instructions that accompanied your proxy materials. If you did not receive a 16-digit control number, please reach out to your broker for further instructions.

On behalf of our Board, we thank you for your investment in Palo Alto Networks and for your continued trust. We look forward to the annual meeting on December 13, 2022.

Thank you,



Nikesh Arora
Chair and
Chief Executive Officer



John M. Donovan
Lead Independent
Director



Network Security

STRATA | PRISMA SASE

Best-in-class security
delivered across
hardware, software
and SASE



Cloud Security

PRISMA CLOUD

Comprehensive
platform to secure
everything that runs
in the cloud



Security Operations

CORTEX

A new approach to
SOC with fully
integrated data,
analytics and
automation, wrapped
with strategic services
capability.

Notice of 2022 Annual Meeting of Stockholders



DATE AND TIME

Tuesday, December 13, 2022
12:15 PM Pacific Time



VIRTUAL MEETING SITE





www.virtualshareholdermeeting.com/PANW2022



WHO CAN VOTE

Stockholders of record as of October 14, 2022 are entitled to vote

Voting Items

Proposals	Board Vote Recommendation	For Further Details
1. To elect two Class II directors named in the accompanying proxy statement to serve until our 2025 annual meeting of stockholders and until their successors are duly elected and qualified.	 "FOR" each director nominee	Page 40
2. To ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2023.	 "FOR"	Page 57
3. To approve, on an advisory basis, the compensation of our named executive officers.	 "FOR"	Page 60
4. To approve an amendment to the 2021 Palo Alto Networks, Inc. Equity Incentive Plan to increase the number of plan shares reserved for issuance.	 "FOR"	Page 98

Stockholders will also act on such other business that may properly come before the Annual Meeting or any adjournments or postponements thereof.

YOUR VOTE IS IMPORTANT. Please act as soon as possible to vote your shares, even if you plan to attend the annual meeting online. For instructions to vote your shares and more information, see "About the Annual Meeting" on page 112.

We appreciate your continued support of Palo Alto Networks and look forward to receiving your proxy.

By Order of the Board of Directors,



Bruce Byrd

Executive Vice President, General Counsel and Corporate Secretary
November 3, 2022

HOW TO VOTE

<p>ONLINE Visit www.proxyvote.com. prior to the Annual Meeting, 24 hours a day, seven days a week.</p>	<p>BY PHONE Call the phone number located on the accompanying proxy card or voting instruction form.</p>	<p>BY MAIL Complete, sign, date and return the accompanying proxy card or voting instruction form in the envelope provided.</p>
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IMPORTANT NOTICE REGARDING THE AVAILABILITY OF PROXY MATERIALS FOR THE ANNUAL MEETING TO BE HELD ON DECEMBER 13, 2022: THE NOTICE OF 2022 ANNUAL STOCKHOLDERS' MEETING AND PROXY STATEMENT AND THE 2022 ANNUAL REPORT ON FORM 10-K ARE AVAILABLE AT WWW.PROXYVOTE.COM.

Proxy Roadmap



ABOUT US

Read about our corporate values, fiscal 2022 financial and business highlights, stockholder engagement efforts, and executive compensation highlights.



BOARD AND CORPORATE GOVERNANCE AT A GLANCE

Learn more about the makeup of our Board of Directors, as well as corporate governance, at a glance.



ENVIRONMENT, SOCIAL AND CORPORATE GOVERNANCE (ESG)

Read more about our approach to ESG, including the roles of our Board and management team in setting our programs and priorities.



PROPOSAL NO. 1

Read about our proposal to elect Dr. Helene D. Gayle and James J. Goetz to a new term, and learn more about our Board members, Board committees and Board compensation.



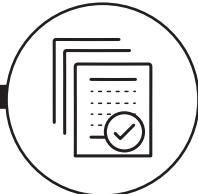
PROPOSAL NO. 2

Read about our proposal to ratify Ernst & Young as our independent registered public accounting firm for fiscal 2023.



COMPENSATION, DISCUSSION AND ANALYSIS

Read the letter from our Compensation and People Committee, and learn more about our executive compensation programs.



PROPOSAL NO. 3

Read about our "Say-on-Pay" proposal to approve, on an advisory basis, the compensation of our named executive officers as disclosed in this proxy statement.



EXECUTIVE COMPENSATION

Learn more about the components of each of our named executive officers' compensation, including salary, annual cash incentive and equity grants, and read about our CEO pay ratio.



PROPOSAL NO. 4

Read about our proposal to approve an increase in the number of shares of common stock available for issuance under our 2021 Equity Incentive Plan.

About Us

Our Company

Palo Alto Networks is a global cybersecurity provider with a vision of a world where each day is safer and more secure than the one before. We were incorporated in Delaware in 2005 and are headquartered in Santa Clara, California. Our principal executive offices are located at 3000 Tannery Way, Santa Clara, CA 95054.

We empower enterprises, organizations, service providers, and government entities to protect themselves against today's most sophisticated cyber threats. Our cybersecurity platforms and services help secure enterprise users, networks, clouds, and endpoints by delivering comprehensive cybersecurity backed by industry leading artificial intelligence and automation. We are a leading provider of zero trust solutions, starting with next-generation zero trust network access to secure today's remote hybrid workforces and extending to securing all users, applications and infrastructure with zero trust principles. Our security solutions are designed to reduce customers' total cost of ownership by improving operational efficiency and eliminating the need for siloed point products. Our Company focuses on delivering value in five fundamental areas: Network Security, Secure Access Service Edge, Cloud Security, Security Operations, and Threat Intelligence and Security Consulting.

Our Corporate Values

Our corporate decisions are guided by our corporate values, which were co-created by our employees. Foremost among these is integrity, which is the foundation of everything we do and every decision we make. We believe that collaboration enhances our ability to disrupt entrenched beliefs, which we think ultimately leads to innovation. Our ability to execute on our innovations and deliver products and services that address the cybersecurity needs of our customers is critical to our long-term success. Finally, we are intentional about including diverse points of view, perspectives, experiences, backgrounds and ideas in our decision-making process. True inclusion and diversity exists when we have representation of all ethnicities, orientations and identities, and cultures in our workforce. We believe that our core values make us a better company.



"...Palo Alto is **#10** in our list of the 50 **best companies to work for women**; list created from millions of anonymous employer ratings and reviews by working women"

Sept. 2021 (InHerSight)



"...for the third consecutive year, received a **perfect score on the Human Rights Campaign Foundation's 2021 Corporate Equality Index (CEI)** and achieved **designation as a Best Place to Work for LGBTQ+ Equality**"

Jan. 2022 (Human Rights Campaign Foundation)



"...Palo Alto Networks in the **top 10%** of companies on **Comparably in its diversity score**, [which] provides insights into how diverse employees feel and rate their work experience across various culture dimensions"

Sept. 2021 (Comparably)



"...the companies that made this list are delivering the respect, care, and appreciation that it takes to create a positive workplace that nurtures talent [.] Newsweek recognized **PANW in the top 100 most loved workplaces of the Year**"

Oct. 2021 (Newsweek)

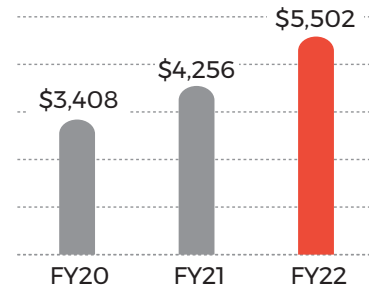
Our 2022 Financial and Business Highlights

We delivered another year of outstanding results for our stockholders in fiscal 2022, with a strong year of financial performance and execution. Highlights include:

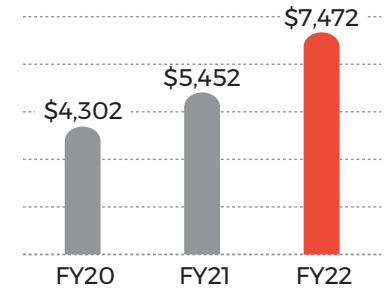
- Total revenue increased to \$5.5 billion, or by approximately 29% compared to fiscal 2021.
- Total billings increased to \$7.5 billion, or by approximately 37% compared to fiscal 2021.¹
- Next-Gen Security ARR increased to \$1.89 billion, or by approximately 60% compared to fiscal 2021.²
- In the fourth quarter of fiscal 2022, we achieved GAAP profitability.
- Continued to return capital to our stockholders through our stock repurchase program, totaling \$0.9 billion for fiscal 2022, for a total of \$3.6 billion during fiscal 2019 through fiscal 2022.
- Accelerated our product innovation efforts, with 49 major product releases.³

Building a Stronger Palo Alto Networks

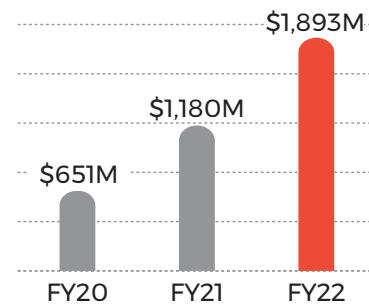
TOTAL REVENUE
(\$ in millions)



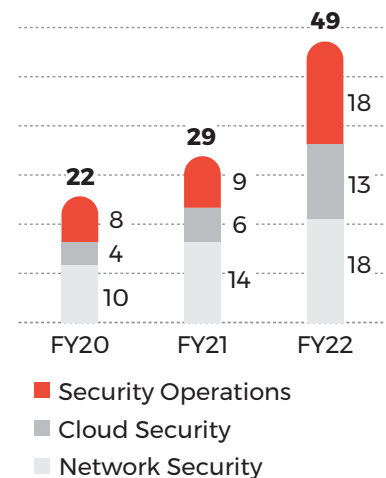
TOTAL BILLINGS
(\$ in millions)



NEXT-GEN SECURITY ARR



PRODUCT INNOVATION
Major Product Releases



RETURN OF CAPITAL

Fiscal 2022

\$0.9 Billion

Fiscal 2019-2022

\$3.6 Billion

¹ Total billings is a key financial metric calculated as total revenue plus change in total deferred revenue, net of total acquired deferred revenue. Appendix A includes a calculation of total billings.
² Next-Gen Security ARR is annualized allocated revenue of all active contracts as of the final day of the reporting period for Prisma and Cortex offerings inclusive of the VM-Series and related services, and certain cloud-delivered security services.
³ Major product release is defined as full or dot release with significant new capability, new or add-on modules, or subscription services, new software or hardware appliance models, significant PAN-OS, acquired capabilities and significant new platform support.

Stockholder Engagement

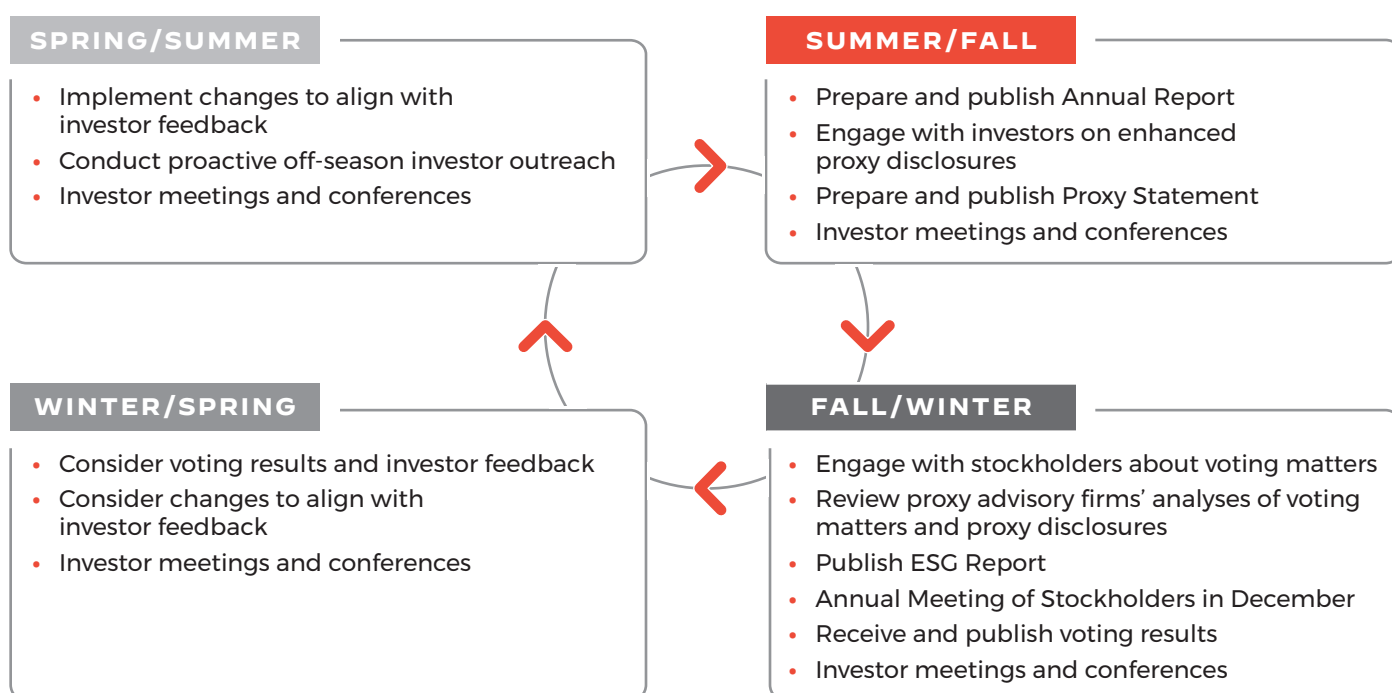
We are proud of our investor engagement program, and committed to maintaining outreach that is truly a dialogue with our stockholders. Our relationship with our stockholders is an important part of our Company's success. In fiscal 2022, we once again engaged in robust stockholder engagement, with a focus on executive compensation, environmental sustainability, social responsibility, and corporate governance (ESG), and other matters of particular import to our stockholders. Our Lead Independent Director played a central role in developing and implementing our program, and once again actively participated in our stockholder engagement efforts in fiscal 2022.

Our Lead Independent Director and management team regularly update our Board and Board committees on our engagement efforts, providing summaries and analyses of our stockholders' feedback. The feedback that we received from our stockholders resulted in significant improvement in our compensation and corporate governance practices, as described in detail in this proxy statement, including our adoption of majority voting for uncontested elections of our directors in May 2022.

We believe that our approach to engaging directly and openly with our investors drives increased corporate accountability, improves decision making, and ultimately creates long-term value.



Below are the key elements of our stockholder engagement cycle:



Executive Compensation

Our Compensation Best Practices

In fiscal 2022, we implemented our redesigned executive compensation programs, meeting the commitments we made to our stockholders in our 2021 proxy statement. Our compensation programs reflect recognized best practices and principles that align the compensation of our named executive officers with the long-term interests of our stockholders, and are supported by market benchmarks.

NEW FOR 2022

- ✓ 100% of equity compensation (aside from new hire awards) is performance-based, with different performance targets than the cash incentive plan
- ✓ Addition of ESG modifier to cash incentive plan, which modifies the annual incentive cash compensation (plus or minus 10%), based on our performance relative to an ESG scorecard with climate, inclusion and human capital metrics
- ✓ Increase to stock ownership guidelines
- ✓ One-year post-vesting holding period for all NEOs, including our Chief Executive Officer

ROBUST AND INDEPENDENT COMPENSATION DECISION-MAKING, ALIGNED WITH OUR CORPORATE VALUES

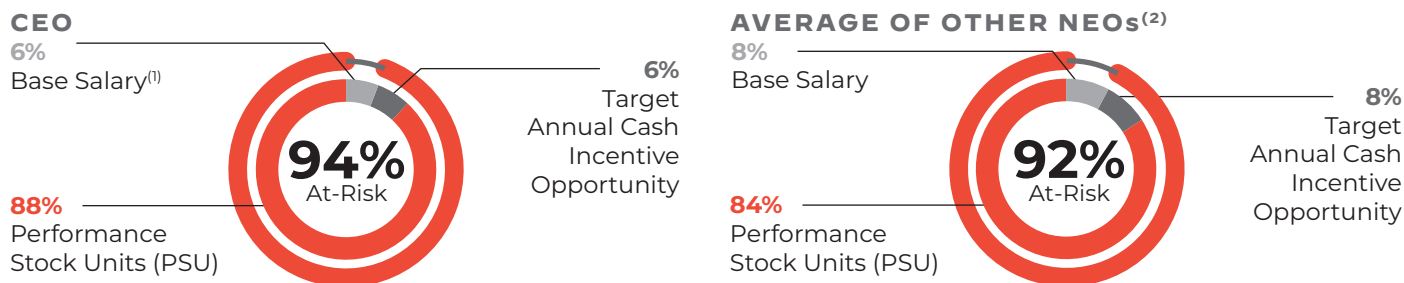
- ✓ 100% independent Compensation and People Committee
- ✓ Independent compensation consultants
- ✓ Annual review of compensation strategy
- ✓ Consideration of annual say-on-pay vote

COMPENSATION BEST PRACTICES

- ✓ Majority of compensation is performance-based and at-risk
- ✓ 100% of fiscal 2022 equity compensation for NEOs performance-based and at risk (excluding new hire grants)
- ✓ 100% of short-term incentive cash compensation is performance-based and at-risk
- ✓ No single trigger vesting of equity awards on occurrence of a change in control
- ✓ No dividends paid on unvested equity
- ✓ Robust stock ownership guidelines
- ✓ No hedging or pledging, except limited pledging permitted with the prior approval of the ESG and Nominating Committee
- ✓ Meaningful clawback policy
- ✓ Limited perquisites and personal benefits
- ✓ No defined benefit plans or SERPs
- ✓ Implementing the advice of independent compensation consultants

Significant At-Risk Compensation

Our executive compensation program is tied to our financial and operational performance. The graphs below illustrate the predominance of at-risk and performance-based components of our fiscal 2022 compensation program for our Chief Executive Officer and other named executive officers.



⁽¹⁾ Graph reflects Mr. Arora's target base salary of \$1 million, a significant portion of which he elected to forgo.

⁽²⁾ Excludes Mr. Jenkins' new hire RSUs which were granted to compensate him for a portion of our estimated value of the unvested equity that he forfeited upon joining us.

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This document includes forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements other than statements of historical or current facts, including statements regarding our social, environmental and sustainability plans and goals, and executive compensation plans, made in this document are forward-looking. We use words such as anticipates, plan, believes, expects, future, intends, and similar expressions to identify forward-looking statements. Forward-looking statements reflect management's current expectations and are inherently uncertain. Actual results could differ materially for a variety of reasons. Risks and uncertainties that could cause our actual results to differ significantly from management's expectations are described in our 2022 Annual Report on Form 10-K. Unless otherwise provided herein, all statements in this proxy statement are as of November 3, 2022.

References to our website in this proxy statement are not intended to function as a hyperlink and the information contained on our website is not intended to be part of this proxy statement.

In this proxy statement, the terms "the Company", "we," and "our" refer to Palo Alto Network, Inc. and the term "Board" refers to the Board of Directors of Palo Alto Networks, Inc.

To the extent that this proxy statement has been or will be specifically incorporated by reference into any other filing of the Company under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, the sections of this proxy statement titled "Report of the Audit Committee" and "Report of the Compensation Committee" shall not be deemed to be so incorporated, unless specifically stated otherwise in such filing.

Our Board at a Glance

Our Board consists of a diverse group of highly qualified leaders in their respective fields who bring unique perspectives to the Board. All directors have either held senior leadership positions at large companies or otherwise gained significant and wide-ranging management experience in their respective fields (including strategic, financial, public company financial reporting, compliance, risk management, and leadership development). Many of our directors also have public company experience (serving as chief executive officer, chief operating officer, or chief financial officer, or on boards of directors and board committees), and as a result have a deep understanding of corporate governance practices, including risk and management oversight.

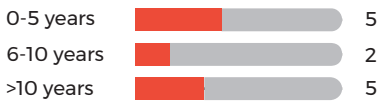
The tenure, age and certain other information as of July 31, 2022, for the members of the Board are set forth below.

BOARD SNAPSHOT

TENURE

Average

8.3 years



AGE

Average

56.5 years



GENDER DIVERSITY



ETHNIC DIVERSITY



John M. Donovan

LEAD INDEPENDENT DIRECTOR

Former Chief Executive Officer, AT&T Communications, AT&T Inc.

Director Since: 2012

Other Current Public Company Boards: Lockheed Martin Corporation

ENC (Chair), CDC (Chair) and SC (Chair), CC



Right Honorable Sir John Key

INDEPENDENT

Former Prime Minister of New Zealand

Director Since: 2019

Other Current Public Company Boards: ANZ Bank New Zealand Ltd, Australia & New Zealand Banking Group Ltd

CC (Chair), AC, SC



Mary Pat McCarthy

INDEPENDENT

Former Vice Chair, KPMG LLP

Director Since: 2016

Other Current Public Company Boards:

Micron Technologies, Inc.

AC (Chair), SC, CDC



Nir Zuk

Founder and Chief Technology Officer, Palo Alto Networks

Director Since: 2005

Other Current Public Company Boards:

None



Nikesh Arora

Chair and Chief Executive Officer,

Palo Alto Networks

Director Since: 2018

Other Current Public Company Boards:

Compagnie Financière Richemont S.A.



Aparna Bawa

INDEPENDENT

Chief Operating Officer and

Interim Chief Legal Officer, Zoom

Director Since: 2021

Other Current Public Company Boards:

None

AC, SC, CDC



CLASS I
CONTINUING DIRECTORS

CLAS



Our Corporate Governance at a Glance

1

BOARD COMPOSITION

► See Page 41

- Consider nominees and candidates in light of current skill sets and needs
- All candidates and nominees evaluated and considered for their expertise, experience, leadership and diversity, including gender, ethnicity and background
- Board comprised of diverse directors, including gender, ethnic, racial and experiential diversity
 - Appointed four new directors since 2019, including three who brought gender, ethnic and/or racial diversity to the Board

2

BOARD LEADERSHIP AND STRUCTURE

► See Page 31

- Board leadership reviewed annually
- Clearly defined roles for Board leadership
- Strong Lead Independent Director, who leads executive sessions of the Board
- Strong Board independence, with nine independent directors
- Independent Board committees, with frequent executive sessions
- Strong partnership between Chair and Lead Independent Director

3

BOARD EFFECTIVENESS

► See Page 36

- Annual Board evaluation process includes assessments and reviews of the Board, committees and individual directors
- Director orientation and continuing director education
- High standards of corporate governance
- Board meeting agendas set by Chair in collaboration with Lead Independent Director

4

ENGAGED OVERSIGHT

► See Page 34

- Frequent review of oversight, including over significant risks
 - culture, employee retention and human capital management (Compensation and People Committee oversight)
 - sustainability and corporate governance (ESG and Nominating Committee)
 - security and cybersecurity (Security Committee)
 - financial reporting, internal controls over financial reporting, and enterprise risk relating to financial matters (Audit Committee)
 - M&A and strategic transactions (Corporate Development Committee)
- Engaged in setting corporate strategy
- Engaged in management succession planning to ensure next generation of leadership
- Strong Lead Independent Director, who actively engages in management oversight

5

BOARD ACCOUNTABILITY

► See Page 28

- Transparent lines of accountability to our stockholders
- A robust and interactive stockholder engagement program based on dialogue, transparency and responsiveness to stockholder concerns
 - In response to stockholder feedback, adopted majority voting for uncontested elections of directors, including a resignation policy in the event a director does not receive a majority of the vote
- Appropriate director compensation structured in a manner that is aligned with stockholder interests

ESG at Palo Alto Networks

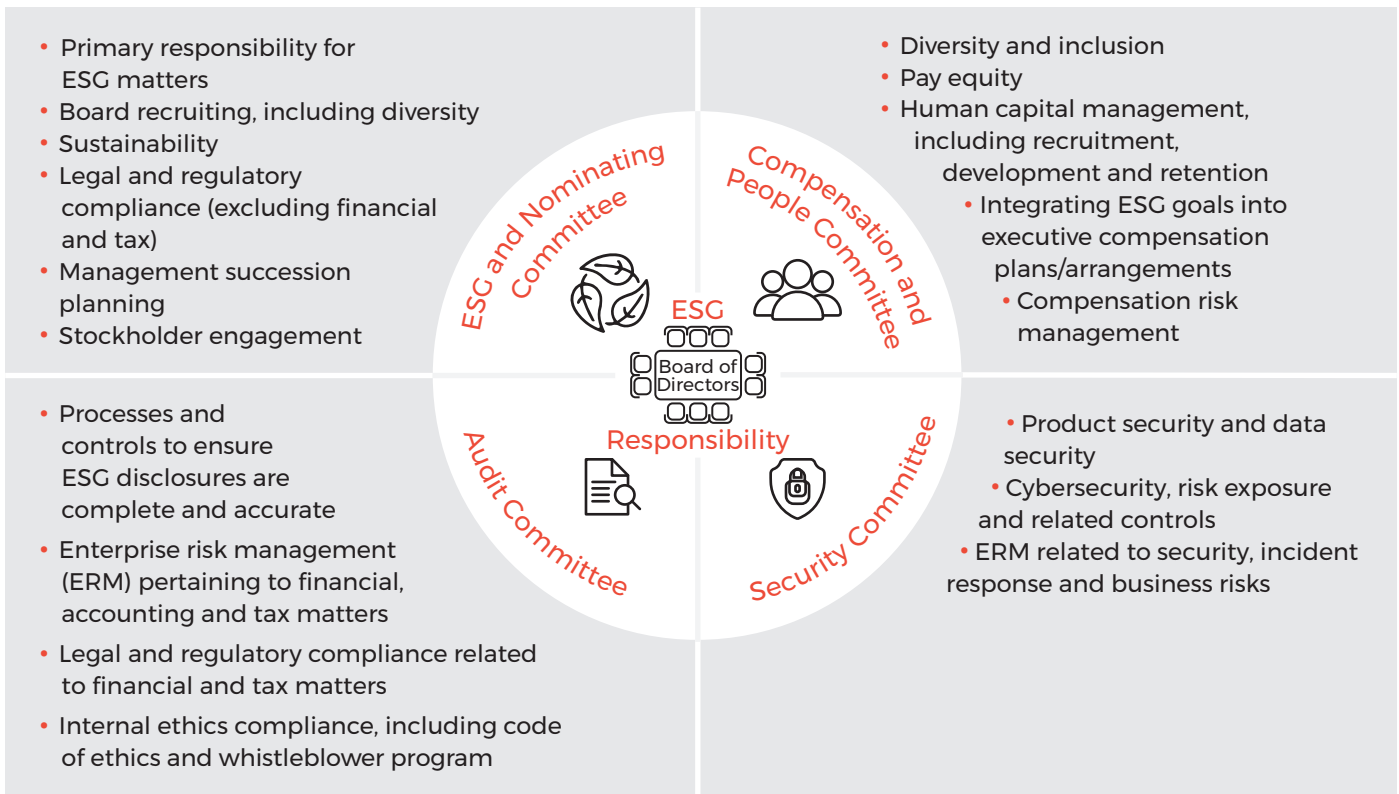
An Overview of Our ESG Strategies

Our values of execution, disruption, collaboration, inclusion and integrity are the foundation of everything we do—which extend into our approach to environmental, social and corporate governance (“ESG”) practices. From our climate commitments, our people strategy based on FLEXWORK, and our supplier responsibility initiatives, to our social impact programs and our dedication to integrity, ethics, security and privacy, we believe we are executing meaningful outcomes that reinforce our intention to respect our planet, uplift our communities and advance our industry. The content that follows summarizes the actions we have taken, the impact we believe we have had and our ongoing journey to demonstrate leadership in ESG.

ESG Oversight and Governance

ESG at Palo Alto Networks is overseen and governed at the highest levels and includes Board and committee oversight, executive-level leadership, and subject-matter experts who lead our ESG efforts across our business.

Board Oversight. The Board and its applicable committees provide guidance and oversight to management with respect to ESG matters. During fiscal 2022, we reconstituted our Nominating and Corporate Governance Committee as the ESG and Nominating Committee to enhance the Board’s oversight of ESG matters and reinforce the important role that ESG practices play in our business. The ESG and Nominating Committee is responsible for setting our ESG priorities and monitoring our performance. Our Compensation and People Committee, Audit Committee and Security Committee also serve an important role in ESG oversight. Our Lead Independent Director and management team share feedback received from our stockholders with the Board.



Management Leadership. A cross-functional, executive-level ESG leadership team sets our overall ESG strategy, objectives and initiatives, provides guidance on program implementation, and oversees the continuing enhancement of our approach to ESG. This committee which is led by our Chief Executive Officer and includes our General Counsel, Chief People Officer and Chief Financial Officer, receives analysis and presentations regarding current and emerging ESG-related risk topics and the status of our ESG programs.

Our executive-level ESG leadership team also empowers our ESG steering committee to implement our ESG programs and to pursue activities to achieve our objective and goals. The ESG steering committee is a cross functional team of employees, consisting of representatives from our accounting, internal audit, corporate responsibility, legal, investor relations and operations teams, and oversees the work of our subject matter experts in the implementation of our ESG programs.



Environmental

Climate change is a global crisis and we are committed to doing our part to reduce our environmental impacts. Aligned to the Climate Commitments we declared in early 2021, in fiscal 2022 we evolved our comprehensive Sustainability Strategy focused on three pillars: operational excellence (Sustainable Operations), a Sustainable Value Chain, and a Sustainable Ecosystem. In fiscal 2022, we engaged with external consultancies, conducted a comprehensive analysis of our global environmental footprint, and obtained third party assurance of our analysis and related emissions data, across all three pillars.



SUSTAINABLE OPERATIONS

Accelerate carbon and waste free growth across our FLEXWORK footprint through energy efficiency, decarbonization, renewable energy and science-based targets.



SUSTAINABLE VALUE CHAIN

Collaborate and partner with stakeholders throughout our value chain to drive to zero carbon, zero waste, 100% renewable energy and 100% circular cybersecurity products.



SUSTAINABLE ECOSYSTEM

Drive leading public commitments, policy advocacy and partnerships to elevate our thought leadership position in sustainable cybersecurity.

Raising Our Ambition

We raised the ambition of our Climate Commitments through developing and setting Science-Based Targets (“SBTs”) aligned to a climate scenario of 1.5° celsius. They are:

- Scope 1 and 2: Sustainable Operations**
 Palo Alto Networks commits to reduce Scope 1 and 2 GHG emissions by 35% by the end of fiscal 2027, as compared to fiscal 2021.
- Scope 3: Sustainable Supply Chain**
 Palo Alto Networks commits to get 65% of our suppliers (measured by total spend) to set Science-Based Targets by the end of fiscal 2027.
- Scope 3: Sustainable Customers (Use of Sold Products)**
 Palo Alto Networks commits to reduce emissions from our customers’ use of our products by 40% by the end of fiscal 2027.

Our SBTs were submitted to the Science-Based Targets Initiative for verification, which we expect to obtain in 2023.

In fiscal 2022, in line with the most reputable non-governmental organizations (“NGOs”), we refined and elevated our Carbon Neutral goal to be defined as “Net Zero” targets:

- We intend to achieve Net Zero across our Scope 1 and 2 emissions by fiscal 2030, by reducing emissions by 90%, as compared to fiscal 2021, and mitigating any remaining emissions through carbon removal investments.
- We intend to achieve Net Zero across all Scope 1, 2 and 3 emissions by fiscal 2040, aligned with The Climate Pledge, by reducing emissions by 90%, as compared to fiscal 2021, and mitigating any remaining emissions through carbon removal investments.

Through our climate ambition across our operations, value chain and ecosystem, we are confident that we can achieve these goals by the dates above.

Sustainable Operations

Early in fiscal 2022, we elevated our operational goals by committing to purchasing 100% true renewable energy, expanding operational excellence through deep energy efficiency, and driving decarbonization throughout our real estate footprint.

We continued to execute our sustainable approach to real estate and opened new LEED certified offices in multiple cities, including London and Bangalore, and expanded our LEED footprint through certifications in Tel Aviv, Bangalore and San Francisco. We launched multiple sustainability work groups to evaluate and act on implementing green packaging, waste reduction and resource conservation. To address the digital divide, promote reuse and reduce our e-waste, we engaged in an external partnership to efficiently donate obsolete equipment, accessories and furnishings for social benefit.

Sustainable Value Chain

Through our carbon footprint assessment, we gained a complete understanding of where our greatest impacts - and best opportunities - are, and we set 1.5° Celsius aligned Science-Based Targets to effectively address them. We set critical Scope 1 and 2 SBTs, but we know that our greatest impact is in our Scope 3 emissions. Because of this, we have set what we believe are ambitious SBTs to drive a Sustainable Value Chain across our purchased goods and services and the use by our customers of the products we sell to them.



Achieved a Supplier Engagement Rating of A- from CDP (2021)

Throughout fiscal 2022, we began the journey to engage stakeholders throughout our value chain, from suppliers to customers, to drive to zero carbon, zero waste, 100% renewable energy and 100% circularity in our cybersecurity products.

Sustainable Ecosystem

Recognizing that addressing climate change will require collaboration on systemic issues, we increased and expanded our engagements with environmental coalitions. By joining The Climate Pledge, formally committing to emissions reductions through the Science-Based Target initiative, our ongoing participation in the World Economic Forum’s Alliance of CEO Climate Leaders and other partnerships, we continued to demonstrate our eagerness to engage with others on this critical issue.



Achieved an Environmental QualityScore of 1 by Institutional Shareholder Services (2022) Highest score available, corresponding to the top decile

We believe thoughtful and ardent policy advocacy is one of the most effective tools for addressing climate change. In fiscal 2022, we signed on to a letter from Ceres supporting the Securities and Exchange Commission’s proposed rule mandating climate disclosure. We also engaged directly with several policy makers to reinforce the importance of climate action and its intersectionality with cybersecurity.

We remained committed to transparency by submitting our 2022 CDP Climate and Supply Chain disclosures for the third year in a row.

Social

During fiscal 2022, we continued to execute our People strategy and philosophy of FLEXWORK, engaged with our supply chain to reinforce our Code of Conduct expectations and invested in our Communities.

Our People

We believe our ongoing success depends on our employees. Development and investment in our people is, and will always be, central to who we are. Our People Strategy, built upon our philosophy of FLEXWORK, is a comprehensive approach to source, hire, onboard, integrate, develop, engage and reward employees. Caring for our global workforce of over 12,500, and inspiring them to do the best work of their careers is a critical element of our overall Company strategy and a demonstration of our values in action.

FLEXWORK

Throughout the COVID-19 pandemic, while prioritizing the health and safety of our employees, we have learned how to collaborate in a distributed hybrid work reality and to create opportunities for employees to maintain a sense of belonging and focus on well-being. Moving into the future, we aim to continue to disrupt the nature of work. Our philosophy is simple: place our employees at the center of their working life by providing them with flexibility, personalization, and choice regarding how they work, the benefits they choose, the way they consume learning and, where possible, when and where they work. We truly believe that the more our employees have choice and demonstrate mutual trust and respect, the more engaged they will be. We believe that FLEXWORK is a significant factor in positioning Palo Alto Networks as the cybersecurity *workplace* of choice.



Recognized by Newsweek among 100 of America's "Most Loved Workplaces"

FLEXWORK adds even more opportunity to scale our efforts to improve inclusion and diversity. It further enables us to recognize each individual as unique, with their own priorities and needs, and gives the employee greater agency to personalize their decisions and utilize our programs and initiatives to meet those interests and desires.

Source & Hire

Sourcing and hiring diverse talent and enabling them to create and execute is central to our comprehensive approach to talent acquisition, which we refer to as "The Way We Hire." Our talent acquisition team utilizes a number of methods to find subject experts in their respective fields, including the use of a variety of channels that focus on reaching underrepresented talents. Our university relations team partners with hundreds of academic institutions, including colleges and universities that focus on serving diverse populations, to provide career pathways for early-in-career candidates. Current employees also provide qualified candidates through our Employee Referral Program. During fiscal 2022, we "welcomed home" numerous employees who voluntarily left Palo Alto Networks and found they wanted to return. Through our Internal Mobility program, numerous hires during fiscal 2022 were internal, and many of those internal hires resulted in promotions for those individuals. We equip hiring managers with training so that they are made aware of potential unconscious biases and interview for the values and competencies that we believe enhance our culture. We require diverse interview panels to deliver a quality interview experience to a diverse slate of candidates.

Onboard & Integrate

We believe that a positive onboarding experience results in employees thriving and therefore rapid productivity. During the COVID-19 pandemic, we built and utilized virtual learning platforms and employee communication channels to provide new employees with inspirational, often personalized, onboarding experiences. For every employee, onboarding is a journey of integration that extends through the first year at Palo Alto Networks. In addition, we have built specialist learning tracks for interns and new graduates that have been recognized as best in class externally. As part of our merger and acquisition strategy, we have also established a robust integration program with the goal to enable individuals joining our teams to feel part of our culture at speed.

Develop & Motivate

Because we value disruption and innovation, we created FLEXLearn—a unique approach to personalized employee development. FLEXLearn is a learning experience platform that provides employees with a path based on their needs, interests, style, and career journey. Through FLEXLearn employees have full agency to direct their growth at their pace and choosing. Development information about core business elements, professional skill sets, working in a distributed hybrid environment, as well as required compliance training, such as Code of Conduct, privacy and security, anti-discrimination, anti-harassment, and anti-bribery training, is also deployed through the FLEXLearn platform for all employees. In addition, FLEXLearn provides employees with events and activities that motivate and spark critical thinking, on topics ranging from inclusion, to well-being and collaboration. On average, employees had completed 16 hours of development through the FLEXLearn platform during fiscal 2022.



Recognized among the "Top Workplaces for the Next Generation of Talent" as evaluated by Ripplmatch (2021)

Because we know that business leaders have unique learning and development needs and interests, we also created FLEXLead. Focused on providing tools and resources to those who manage teams and drive business functions, FLEXLead aims to increase the awareness of inclusion and diversity, coaching and mentorship, and the capacity for leaders to align employee priorities with our strategic business priorities.

Engage & Reward

We conduct regular executive listening sessions and "pulse surveys" to better understand employee engagement, sentiment, well-being, and the agility to transition to a distributed work model. These sessions and surveys, including employee feedback to external surveys and crowdsourcing platforms, have informed our holistic People Strategy and influenced our FLEXWORK philosophy, inclusion and diversity strategies, and Internal Mobility program. For example, our FLEXCircle program is the result of employee input, requesting new opportunities to meet and interact with employees who share common interests. And our FLEXAssist program was developed based on suggestions from employees looking for tools that help them identify key employee milestones and facilitate increased communication and collaboration.

Employee sentiment has continued to be highly positive, and we are proud of the external recognition we have received about our culture. We continue to use insights from an anonymous global employee engagement survey we conducted in fiscal 2021 to execute action plans that reinforce our culture of engagement. The survey indicated that employees have a strong sense of belonging, confidence in leadership, and an understanding of how their work contributes to the Company's goals. Equally important, our internal pulse surveys and other feedback mechanisms, including insights from external employee sentiment sources and employer brand recognition, indicate that employees continue to view Palo Alto Networks as a great place to work, with strong benefits, a commitment to inclusion and diversity and respected leadership.

Our comprehensive compensation program includes competitive base pay. In addition, all employees participate in one of two variable pay programs our sales incentive plans or our variable incentive program. All employees are also eligible to participate in our stock-based offerings through a generous Employee Stock Purchase Plan and a competitive Equity Incentive Plan, both of which are available to all of our employees where regulations permit. We conduct annual external audits of our pay practices. Our fairness and equity analysis includes gender for all global employees and race and ethnicity for employees in the U.S. As a result of these measures and corrections, we believe that our employees are paid fairly and equitably regardless of race/ethnicity (in the U.S.) or gender (globally).



Recognized by Comparably in 7 "Best of" categories including "Best Compensation" (#9)(2022)

As a global employer with a diverse employee population, we understand everyone's benefit needs are different. Our benefit plans include a variety of health, time-off, wellness and voluntary options. And, our FLEXBenefits program provides all employees with a funding allowance from which they can choose to obtain additional benefits.



Recognized by Comparably in 7 "Best of" categories including "Perks & Benefits" (#75)(2022)

We believe in an always-on feedback and rewards philosophy. From recurring 1:1 sessions and multiple feedback channels to use of our Cheers for Peers peer recognition program, employees get regular input about the value they bring to the organization. And while always-on practices are useful in providing real-time feedback, we also execute a Company-wide semi-annual performance review process so that leaders and employees have recurring constructive conversations aimed at elevating performance, increasing capability and executing with excellence.

Inclusion & Diversity

We are intentional about including diverse points of view, perspectives, experiences, backgrounds and ideas in our decision-making processes. We deeply believe that true diversity exists when we have representation of all ethnicities, genders, orientations and identities, and cultures in our workforce. Our inclusion and diversity (“I&D”) programs continue to advance those visions.

The diversity of our Board, with women representing 33% of the Board is an example of that vision in action. We have nine employee network groups (“ENGs”) which are employee-led groups that play a vital role in building understanding and awareness. Our ENGs are provided with a budget to fund activities for their communities and to make charitable grants to organizations advancing their causes. We involve our ENGs in listening sessions with executive teams and we work in partnership to develop our annual I&D plans, because we believe employee involvement is critical.

As referenced above, our I&D philosophy is fully embedded in our talent acquisition, learning and development and rewards and recognition programs. We believe that outcomes such as increases in gender and ethnic diversity, no differential in attrition based on gender or ethnicity, equity in performance evaluation and internal mobility are indicators that our efforts are making the desired progress. Further, the awards and recognition the Company has received during fiscal 2022, most of which are the direct result of employee input, reinforce our growth in this crucial topic.



Recognized by Comparably in 7 "Best of" categories including "Best CEOs for Diversity" (#15)(2022)



Achieved a perfect score of 100% on the Human Rights Campaign Corporate Equality Index (2022, 2021 & 2020)



Achieved a perfect score of 100% on the Disability Equality Index as evaluated by Disability:IN (2022)



Achieved "Gold" status as a Military Friendly Employer as evaluated by Military Friendly (2022)

Our Supply Chain

Through the deployment of our Global Supplier Code of Conduct, we continued to reach across our supply chain to communicate our expectations regarding labor standards, business practices and workplace health and safety conditions. During fiscal 2022, we maintained our affiliate membership in the Responsible Business Alliance and maintained our commitment to Supplier Diversity.

Our codes of conduct are useful in documenting our expectations that materials suppliers honor our commitment to human rights. That said, beyond communicating our expectations, we follow industry best practices when assessing risks for incidents of human rights violations within our supply chain. We take a risk-based and business impact approach and leverage the risk assessment resources of the Responsible Business Alliance to help identify suppliers who may be at high risk for child, forced or compulsory labor issues. If we believe additional research into a suppliers' ethical practices is necessary, we take action to do so.

We focus our risk assessments on suppliers where we have large annual spend, where Palo Alto Networks is a significant portion of their annual revenue, where the supplier's technology impacts our business, and where we have an overall strategic partnership with a supplier. Understanding risks related to human rights, among others, that these suppliers may pose is critical, from both a socially conscious and business impact perspective.

In addition, suppliers who may provide commodities or be within industries historically known to have high risks for labor incidents are subject to additional vetting processes. Lastly, suppliers who may be located in countries or regions where labor conditions have historically not been prioritized within those countries or regions are also considered high risk and managed appropriately.

We believe our strength as a company comes from building an inclusive environment and collaborating with individuals who bring diverse experiences. This extends to our global supply chain and our commitment to increase our awareness of and engagement with women- and minority-owned businesses. A cross-functional working group continues to explore best practices and is working with partners such as Western Regional Minority Supplier Development Council, to support our work to enhance our procurement policies and establish metrics to measure our progress in growing the diversity of our supply chain.

Our Communities

We value our role as a good corporate citizen and in fiscal 2022 continued to execute our social impact programs. In addition to ongoing efforts to help colleagues and communities impacted by the COVID-19 pandemic, we invested in cybersecurity awareness, education programs, scholarships, diversity and basic needs. Our employees continue to actively support the communities in which we live and work.



Recognized by Just Capital among Top 100 Companies Supporting Families and Communities (2022 & 2021)

Investing in Education and Key Cause Areas

We expanded our work to provide cybersecurity activities and curriculum to schools, universities and nonprofit organizations to help youth protect their digital way of life and to prepare diverse adults for careers in cybersecurity. Through our ongoing partnership with Girl Scouts of the USA hundreds of thousands of cybersecurity badges have been earned, including troops in Singapore through USA Girl Scouts Overseas. Moreover, our Cyber A.C.E.S. program continues to grow—not only reaching youth in the U.S. and Canada but now being used in Australia, Japan, Scotland, Singapore, and elsewhere. Our Cybersecurity Academy is now providing curriculum to thousands of high schools, colleges and universities in hundreds of countries around the world. In addition, by partnering with the IIT (BHU) Foundation and the Thurgood Marshall College Fund, we are funding scholarships to help make higher education more accessible to those in need.

Because inclusion and diversity is important to Palo Alto Networks, we allocate charitable funding to our ENGs to enable them to support non-profit organizations committed to reaching the needs of underrepresented communities. In fiscal 2022, we supported dozens of organizations to help them achieve their respective missions.

In addition to making charitable grants to support causes like mental health and wellness, hunger and basic needs, we invested in expanding the talent pipeline to underrepresented communities. We also supported environmental and social justice causes. Lastly, to address the digital divide, promote reuse, and reduce our e-waste we engaged in an external partnership to efficiently donate obsolete equipment, accessories and furnishings for social benefit.

Engaging Employees to Increase Impact

Employees continued to participate in our giving, matching and volunteer programs to make impacts in their local communities.

Aligned with our FLEXWORK philosophy, we continued to offer virtual volunteer projects so that employees had choice in how they support their communities, while at the same time supporting in-person volunteer activities. Employees volunteered as individuals and often in groups to make a meaningful difference. While employees always have choice in the causes they support, on occasion we also highlight causes through “drives” such as our Annual Hunger Campaign as well as relief for natural disasters and humanitarian efforts. Between our “Dollar-for-Doers” volunteer and matching gift programs, thousands of causes received funding.

Corporate Behavior

Ethics & Compliance

Palo Alto Networks is committed to conducting business with high degrees of honesty and integrity wherever we operate. Integrity is one of our core values and we respect our customers, partners, employees and stockholders.

Our Code of Business Conduct and Ethics summarizes the ethical standards and key policies that guide the business conduct of the directors, officers and employees of the Company, and we have a public Global Supplier Code of Conduct, both available on our corporate website. All employees, contractors and suppliers are informed about our governance expectations through our Codes of Conduct and compliance training programs.

We also have a policy focused on respect in the workplace and a corresponding training through our FLEXLearn platform. All new hires must complete the training and existing global employees are required to complete the training every other year. The training includes anti-discrimination, antiharassment and anti-retaliation lessons and hypotheticals. Our Audit Committee and ESG and Nominating Committee of the Board are responsible for oversight of our Code of Business Conduct and Ethics compliance program. Our Ethics Hotline is also publicly available.

Information Security & Privacy

Palo Alto Networks maintains a written information security program that is managed by our Chief Information Security Officer, who is responsible for overseeing and implementing the program; includes administrative, technical and physical safeguards reasonably designed to protect the confidentiality, integrity, and availability of end user data; and is appropriate to the nature, size and complexity of Palo Alto Networks' business operations. The Security Committee of our Board of Directors reviews data privacy and cybersecurity strategies and risks and provides oversight over risk mitigation related to cyber threats. Eight of our 12 Board Directors have cybersecurity and IT technology expertise. We provide annual information security and compliance training to all of our employees.

We engage external agencies to conduct background checks for personnel. We also maintain a security process to conduct appropriate due diligence prior to engaging contractors; assess the security capabilities of subcontractors on a periodic basis; and require subcontractors to adhere to our key information security policies and standards. We also restrict access to, control and monitor physical areas where we process end user data. Data centers that we operate are in alignment with industry standards such as ISO 27001 and SSAE 16 or ISAE 3402.

We deploy firewall technology and an intrusion detection system to generate, monitor and respond to alerts which could indicate potential compromise of our network. We also apply security by design principles throughout the software development lifecycle, track vulnerabilities of open-source software, and run internal and external network scans at least quarterly and after any material change in the network configuration. We conduct application security assessments using a qualified third party, such as our annual assessment for internet-facing applications that collect, transmit or display end user data.

Palo Alto Networks also develops, implements and maintains a business continuity management program to address the needs of the business and the products we provide to customers. To that end, we complete a minimum level of business impact analysis, crisis management, business continuity and disaster recovery planning.

Privacy is important to our customers and helps us build trust. Our privacy practices are informed by several key principles including:

- **Accountability.** We are responsible for the protection of personal information entrusted to us.
- **Transparency and Control.** We inform customers about our collection of their personal information and honor their preferences.
- **Third Parties Processing Our Information.** We choose trustworthy vendors and suppliers to process personal information and we require them to commit to adequate privacy and data security standards.
- **Privacy by Design.** We continue to build on this principle when designing and implementing products.

- **Data Integrity and Proportionality.** We collect personal information for specific and legitimate business purposes and store it safely and accurately.
- **Customer Benefit/Value for Customers.** We share with our customers the benefits and value we derive from processing their personal information.
- **Security.** We implement technical, organizational and physical security measures to confirm an appropriate level of security of the personal information we process. This includes employee training.

Our ESG Journey

Palo Alto Networks has always been a values-based company, and the core principles of ESG have been part of our day-to-day operations. Still, the Company has made a dedicated focus to continuously improve and further integrate ESG into the business. From elevated environmental initiatives, such as setting emissions reduction goals aligned to Science-Based Targets and constantly evolving social strategies like FLEXWORK to increased transparency in our governance and disclosures, including our fiscal 2021 ESG Supplement released in October 2021, we have made strides to advance our ESG journey.

We have made improvements and yet we recognize that we have more work to do, particularly as stakeholders become more and more interested in our efforts and as regulatory matters and ESG frameworks evolve. During fiscal 2022, our overall ESG performance improved across all of the rating institutions we measure against. We monitor these ratings so that we remain diligent in our practices and execute a path to achieve our place as industry leaders in ESG.



Recognized by Sustainalytics as "Industry Top Rated" for our overall ESG performance (2022, 2021)



Recognized by Institutional Shareholder Services (ISS) as Prime (2022)



Achieved "Gold" rating by EcoVadis (2021)



Recognized by JUST Capital as a "Top 100 Most JUST Company in America" (2022)

Corporate Governance

Board of Directors Corporate Governance Highlights

Our Board is governed by our Corporate Governance Guidelines, which are amended from time to time to incorporate certain current best practices in corporate governance. Our Corporate Governance Guidelines may be found on our website at <https://investors.paloaltonetworks.com>.

In addition to a strong, independent Board, we are committed to corporate governance structures that promote long-term stockholder value creation through a sound leadership structure and by providing our stockholders with both the opportunity to provide direct feedback, and substantive rights and policies to ensure accountability.

THE BOARD'S CORPORATE GOVERNANCE PRACTICES AND STOCKHOLDER RIGHTS INCLUDE THE FOLLOWING:

- ✓ **Majority voting for uncontested elections of board members, with an associated resignation policy**
- ✓ Strong Lead Independent Director
- ✓ Board Composed of 75% Independent Directors
- ✓ 100% Independent Audit Committee, ESG and Nominating Committee, Compensation and People Committee and Security Committee
- ✓ Annual Review of Board leadership Structure
- ✓ Board Refreshment
- ✓ Director Changes in Circumstances Actively Evaluated
- ✓ Board and Committee Access to Management
- ✓ Annual Board and Committee Evaluations
- ✓ Independent Compensation and People Committee Consultant
- ✓ Board Authority to Retain Outside Advisors
- ✓ Board and Committee Risk Oversight, including Security
- ✓ Board Continuing Education Program
- ✓ No Poison Pill
- ✓ Single Class of Shares
- ✓ **Formed the Security Committee of our Board to enhance oversight over security issues, including cybersecurity**
- ✓ Annual Review of Committee Charters and Governance Policies
- ✓ Fair Director Compensation Practices
- ✓ Active Management Succession Oversight
- ✓ Active Management of Director Conflicts of Interest
- ✓ Annual Say-on-Pay Vote
- ✓ Continuous Stockholder Engagement Program
- ✓ Stock Ownership Guidelines for Directors and Executive Officers
- ✓ Code of Business Conduct and Ethics for Directors, Officers and Employee
- ✓ Anti-Hedging Policy
- ✓ Restrictive Pledging Policy
- ✓ Clawback Policy
- ✓ Regular Meetings of Independent Directors Without Management Present
- ✓ Proxy Access Bylaws

Board Responsiveness to Investors in FY2022

Our Board is committed to actively engaging with our stockholders, and committed to maintaining outreach that is truly a dialogue with our stockholders. Through year-round engagement and outreach, we regularly provide stockholders with opportunities to deliver feedback on our corporate governance, executive and director compensation, and environmental and sustainability practices. We regularly meet with investors, prospective investors, and investment analysts. These meetings can include participation by our Chair and Chief Executive Officer, Chief Financial Officer, Chief Products Officer, General Counsel and Corporate Secretary or other business leaders, and are often focused on company strategy, financial performance, product strategy and ESG philosophy. Members of our Investor Relations team also participate in meetings with our stockholders and, on occasion, members of the Board participate as appropriate. In fiscal 2022, our Lead Independent Director participated in 30 meetings with our stockholders.

Following our 2021 annual meeting of stockholders, we reinvigorated our approach and practices to stockholder engagement and implemented a strategy that focused on extensive engagement on a wide range of topics. Our Lead Independent Director played an active and central role in our stockholder engagement efforts in fiscal 2022, and our management team regularly communicated topics discussed and stockholder feedback to the Board and our Board committees for consideration in their decision-making.



Who we met with

- Investors holding **60%** of shares outstanding engaged with in discussions
- Investors holding **39%** of shares outstanding engaged by Lead Independent Director







Our Primary engagement team



- Lead Independent Director (participated in **30** meetings)
- Investor Relations team
- General Counsel & Corporate Secretary
- People Team (human resources)
- Corporate responsibility team



What we discussed

- Executive compensation
- Board structure
- Board composition and governance, including Board refreshment and diversity
- Board oversight
- Board leadership
- Stockholder engagement
- ESG initiatives
- ESG disclosure and governance

WHAT WE HEARD	HOW WE RESPONDED
 <p>Board Governance Plurality voting for directors, dual role of CEO and Chairman and annual election of all Board members</p>	<ul style="list-style-type: none"> • Adopted a majority voting requirement for uncontested elections of directors, including a resignation policy in the event a director does not receive a majority of the vote. • Committed to maintaining our practice of annually reviewing our Board leadership structure, including whether an independent director should be the Chair of our Board. • Committed to maintaining our practice of annually reviewing whether maintaining a classified Board is appropriate for our Company.
 <p>Board Oversight of Risks, Including Cybersecurity and ESG Risks How the Board is addressing oversight of increased, varied and new risks.</p>	<ul style="list-style-type: none"> • Formed the Security Committee of our Board to enhance oversight over security issues facing our Company, including cybersecurity. • Reconstituted our Nominating and Corporate Governance Committee as the ESG and Nominating Committee to enhance the Board's oversight of ESG matters. • Reallocated ESG responsibilities among our Board Committees, clearly identifying the responsibilities of each Committee. • Added additional disclosure in this proxy statement relating to Board oversight.
 <p>Board Diversity and Refreshment The duration of Board service by certain long-standing directors, and the makeup of the Board and the rationale therefore.</p>	<ul style="list-style-type: none"> • The Board appointed Ms. Bawa and Dr. Gayle to our Board during fiscal 2021, increasing the gender, racial and ethnic diversity of the Board. Presently, four of our twelve directors are women. • During the period between April 2019 and May 2021, we appointed four new independent directors: Ms. Bawa, Dr. Gayle, Ms. Twohill and Rt Hon Sir John Key. • Expanded disclosure in this proxy statement of the rationales as to why each of our directors continue to serve on our Board.
 <p>Stockholder Engagement Continued 1:1 investor outreach on compensation, ESG and other matters of interest to our stockholders.</p>	<ul style="list-style-type: none"> • Conducted extensive stockholder and investor outreach. • Engaged in discussion with stockholders holding 60% of our outstanding shares. • Our Lead Independent Director participated in 30 investor meetings and engaged in discussion with stockholders holding 39% of our outstanding shares.

WHAT WE HEARD	HOW WE RESPONDED
 <p>ESG Initiatives, Disclosure and Governance Would like to see more information about how we develop and manage environmental, social and governance initiatives.</p>	<ul style="list-style-type: none"> • Published our first ESG report in fiscal 2022, in which we report on our carbon emissions. • Added more disclosure in our annual report on Form 10-K and this proxy statement describing our ESG initiatives and our ESG governance. • Adopted a set of Climate Commitments that include our strategies to be carbon neutral by 2030, use 100% renewable energy, reduce emissions aligned to Science-Based Targets and advocate for climate action. • Increased our social impact programs, to leverage our core competency in cybersecurity and align those efforts to help develop a diverse talent pipeline while uplifting communities. • Formed the Palo Alto Networks Cybersecurity Education Fund with a mission to fund education programs focused on cybersecurity that inspire youth. • Reconstituted our Nominating and Corporate Governance Committee as the ESG and Nominating Committee to enhance our focus on ESG matters. • Formalized our ESG governance structure by forming an ESG Steering Committee, with employees from accounting, internal audit, operations, legal and corporate responsibility to recommend strategies and lead implementation of ESG programs, which reports regularly to our ESG Executive Leadership Team and the Board.
 <p>Executive Compensation Modifications to the structure of our executive compensation program and enhanced disclosure.</p>	<ul style="list-style-type: none"> • 100% of our NEOs' equity compensation (aside from new hire awards) is performance-based, with different performance targets than the cash incentive plan awards. • Increased our stock ownership guidelines for our NEOs, including our Chief Executive Officer. • Added an ESG modifier to our cash incentive plan. • Established a one-year post-vesting holding period for all NEOs, including our Chief Executive Officer.

Leadership Structure

Our Corporate Governance Guidelines provide that our Board is free to choose its chairperson (the “Chair”) based on our Board’s view of what is in the best interest of the Company and our stockholders. The Chair and the Chief Executive Officer may, but need not be, the same person.

Annual Evaluation of Leadership Structure and Annual Election of Lead Independent Director

As part of its annual review and evaluation process, the Board reviews its leadership structure and whether combining or separating the roles of Chair and Chief Executive Officer is in the best interests of the Company and our stockholders. The Board also considers:

- The effectiveness of the policies, practices, and people in place at the Company to help ensure strong, independent Board oversight.
- The importance of consistent, unified leadership to execute and oversee the Company’s strategy.
- The strength of Mr. Arora’s vision for the Company and the quality of his leadership.
- Our performance and the effect the leadership structure could have on our performance.
- The Board’s performance and the effect the leadership structure could have on the Board’s performance.
- The meaningful and robust responsibilities and the performance of our Lead Independent Director.
- The views of our stockholders through our ongoing engagement efforts.
- The practices at other companies and trends in governance.
- The current state of our Company.

In the circumstance that the Board determines that it remains in the best interests of the Company and its stockholders that our Chief Executive Officer serve as our Chair, the independent members of the Board then elect a Lead Independent Director as provided in our Corporate Governance Guidelines.

Why Our Leaders Are Ideally Suited For Their Roles

The Board believes that the independent Board members should have the flexibility to respond to changing circumstances and choose the Board leadership structure that best fits the then-current situation. As it does annually, in August 2022, the Board reviewed our leadership structure. Following that review, the Board determined that the combination of the Chairman and Chief Executive Officer roles, along with the robust authority given to our experienced Lead Independent Director, effectively maintains independent oversight of management. The Board consists of nine independent directors, and exercises a strong, independent oversight function through frequent executive sessions, independent Board committees and by having a strong Lead Independent Director with clearly delineated and comprehensive duties.

The Board strongly believes that its leadership structure strikes the right balance of allowing our Chair and Chief Executive Officer to promote a clear, unified vision of the Company's strategies, while ensuring robust, independent oversight by the Board and our Lead Independent Director. The Board also believes there is value in presenting a single face to our customers through combining the Chair and Chief Executive Officer roles, and that this structure of having the Board and management operate under the unified leadership of a highly experienced Chief Executive Officer best positions the Company to successfully implement its next phase of growth.

Accordingly, in August 2022, the Board determined that it is in the best interests of our stockholders for Mr. Arora to serve as Chair and John Donovan to serve as Lead Independent Director.



Nikesh Arora
Chief Executive Officer
and Chairman



John M. Donovan
Lead Independent
Director

- Substantial knowledge and deep understanding of our business and the challenges we face
- Substantial international business experience and business acumen and valued strategic, financial and operational insights
- Day-to-day insight into our prospects, opportunities, strategies and challenges facilitates the timely deliberation by the Board of the most important matters
- Brings a unique, stockholder-focused insight to assist the Company to most effectively execute its strategy and business plans to maximize stockholder value
- Serves as an important bridge between the Board and management, and provides critical leadership for carrying out our strategic initiatives and confronting our challenges
- Provides the Board with more complete and timely information about the Company
- Provides a unified structure and consistent leadership direction internally and externally
- Proven success in leading Palo Alto Networks since joining the Company

- Independence, confidence and gravitas, enabling strong oversight of executive leadership
- Deep understanding of our business
- Strong working relationship with our Chair and Chief Executive Officer
- Strong working relationship with other management and our independent directors
- Substantial experience leading large multinational companies
- Strong background in corporate governance
- Dedicated to his service as Lead Independent Director, as demonstrated by the fact that he met with stockholders holding 39% of our outstanding shares during fiscal 2022
- Strength and effectiveness of communication with Mr. Arora, resulting in active and visible oversight of the issues, plans and prospects of Palo Alto Networks
- Promotes a collaborative and collegial environment for Board decision making

OVERVIEW OF LEAD INDEPENDENT DIRECTOR RESPONSIBILITIES

The responsibilities of the Lead Independent Director are well-defined. The Lead Independent Director engages in regular communication between the independent directors and Mr. Arora, keeping Mr. Arora apprised of any concerns, issues, or determinations made during the independent sessions, and consults with Mr. Arora on other matters pertinent to the Company and the Board. As part of the Board's annual review and evaluation, the Board further defined the role and responsibilities of our Lead Independent Director to include:

- Presiding at meetings of the Board at which the Chair is not present, including executive sessions of the independent directors.
- Serving as liaison between the Chair and the independent directors.
- Developing agendas for Board meetings in collaboration with the Chair, and communicating with independent Board members to ensure that matters of interest are being included on agendas for Board meetings.
- Communicating with independent Board members and with management to affirm that appropriate briefing materials are being provided to Board members sufficiently in advance of Board meetings to allow for proper preparation and participation at meetings.
- Having the authority to call meetings of the independent directors.
- Preparing agendas for meetings of the independent directors.
- Organizing and leading the Board's evaluation of the Chief Executive Officer.
- Leading the Board's annual self-evaluation.
- If requested by major stockholders, ensuring that he is available, as necessary after discussions with the Chair and Chief Executive Officer, for consultation and direct communication.

In addition to the responsibilities outlined above, our Lead Independent Director also:

- Has biennial one-on-one discussions with each independent director, as part of the Board's annual evaluation process.
- Has access to all committee materials.
- Has the authority to engage independent consultants.
- Interviews Board candidates.
- Spends time with senior management outside of Board meetings (as necessary) to ensure a deep understanding of the business and strategy of the Company.
- Participates in stockholder engagement planning and activities.

Independent Directors Sessions

A meeting of the independent directors is scheduled at every regular Board meeting and the independent directors meet in an executive session. These independent sessions are organized and chaired by our Lead Independent Director, and our Lead Independent Director provides direct feedback to Mr. Arora after these executive sessions.

Independent Committee Leadership

The Audit, Compensation and People, Security, and ESG and Nominating Committees are each composed solely of, and led by, independent directors, and provide independent oversight of management. In addition:

- Each committee chair meets with management in advance of meetings to review and refine agendas, add topics of interest, and review and comment on materials to be delivered to the committee.
- Every independent director has access to all committee materials.
- Each committee chair provides a report summarizing committee meetings to the full Board at each regular meeting of the Board.
- Each committee meeting includes adequate time for executive session and the committees meet in executive session on a regular basis with no members of management present (unless otherwise requested by the committee).
- Each committee effectively manages its Board-delegated duties and communicates regularly with the Chair, Lead Independent Director, the Board, and members of management.

Furthermore, the Compensation and People Committee has an effective process for monitoring and evaluating Mr. Arora's compensation and performance, as well as succession planning.

Board's Role in Strategy Oversight

Our Board is responsible for overseeing the development of the Company's strategy (including product development roadmaps), which articulates objectives for the business, helps establish and maintain effective risk management and internal controls frameworks, and provides direction to senior management to determine which business opportunities to pursue. The Board is also actively engaged in ensuring that Palo Alto Networks culture reflects our commitment to our core values of **disruption, execution, collaboration, integrity and inclusion**.



Annually holds a strategy offsite, receiving detailed presentations from, and engagement with, senior management across the Company



Annually reviews and approves the Palo Alto Networks operating plan



Quarterly engagement with senior management on critical business matters that tie to Palo Alto Network's overall strategy



Regularly interacts with the next generation of leadership to ensure the talent pipeline remains diverse, inclusive and up to the task

Board's Role in Risk Oversight

Risk is inherent with every business, including strategic, financial, business and operational, legal and compliance, and reputational. We have designed and implemented processes to manage risk in our operations. Management is responsible for the day-to-day management of risks our Company faces, while our Board, as a whole and assisted by its committees, has responsibility for the oversight of risk management. In its risk oversight role, our Board has the responsibility to satisfy itself that the risk management processes designed and implemented by management are appropriate and functioning as designed.

Our Board believes that open communication between management and our Board is essential for effective risk management and oversight.

While our Board is ultimately responsible for risk oversight, our Board committees assist our Board in fulfilling its oversight responsibilities in certain areas of risk.

BOARD OF DIRECTORS

- Meets with our Chief Executive Officer and other members of the senior management team at quarterly meetings of our Board, where, among other topics, they discuss risks facing our Company, as well as at such other times as they deem appropriate.
- Reviews strategic and operational risk in the context of reports from the management team, including data privacy, information security and cybersecurity, receives reports on all significant committee activities at each regular meeting, and evaluates the risks inherent in significant transactions.

AUDIT COMMITTEE

- Assists our Board in fulfilling its oversight responsibilities with respect to risk management in the areas of liquidity risk, internal control over financial reporting and disclosure controls and procedures, legal and regulatory compliance, and discusses with management and the independent auditor guidelines and policies with respect to risk assessment, risk management and risk mitigation.
- Reviews our antifraud programs and controls.
- Reviews our major financial risk exposures and the steps management has taken to monitor and control these exposures.

COMPENSATION AND PEOPLE COMMITTEE

- Assesses risks created by the incentives inherent in our compensation programs and policies, and determines whether they encourage excessive risk taking.

ESG AND NOMINATING COMMITTEE

- Assists our Board in fulfilling its oversight responsibilities with respect to the management of risk associated with Board organization, leadership, membership and structure, and corporate governance.
- Reviews and monitor compliance with the Company's Code of Business Conduct and Ethics.
- Oversees and periodically reviews the Company's risks relating to corporate social responsibility and environmental sustainability.
- Oversees and discusses, as needed, with management, compliance with applicable laws, regulations and internal compliance programs.

SECURITY COMMITTEE

- Assists our Board in fulfilling its oversight responsibilities with respect to the management of risk associated with cybersecurity, information security and physical security of Palo Alto Networks.

MANAGEMENT

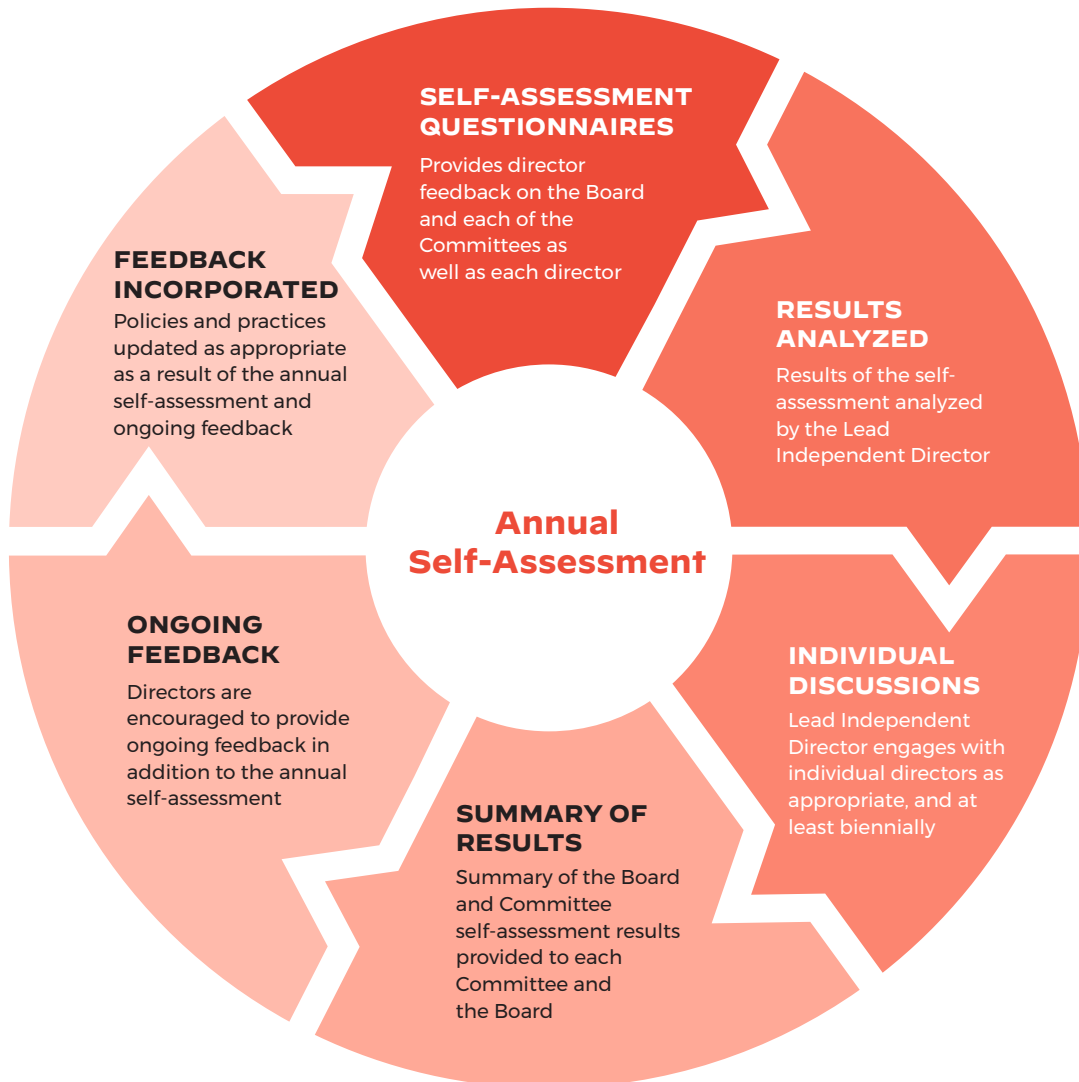
Responsible for the day-to-day management of risks our Company faces.

Annual Board and Committee Self-Evaluations

Our Board and each of its committees perform an annual self-assessment to evaluate the effectiveness of our Board and its committees in fulfilling their respective obligations. As part of this annual self-assessment, directors are able to provide feedback on the performance of other directors.

Our Lead Independent Director, who is also the Chair of our ESG and Nominating Committee, leads our Board in its review of the results of the annual self-assessment and takes further action as needed. In connection with the annual evaluation, each director receives a survey to complete to evaluate the Board and separate surveys for each committee on which they serve. These surveys include detailed questions regarding: the effectiveness and performance of the Board and committees; Board and committee composition and refreshment; timing, agenda, and content of Board and committee meetings; Board dynamics and function; peer reviews of other members; access to and performance of management; and executive succession planning. At least biennially our Lead Independent Director also conducts one-on-one meetings with each director to receive their feedback and assessment of the Board and its committees. A summary of the results is presented to the Board and each committee on an anonymous basis.

In addition, all members of our Board have the opportunity to attend director education programs to assist them in remaining current with best practices and developments in corporate governance.



Succession Planning

Our Board and management team recognize the importance of continually developing our talented employee base. Accordingly, our management team conducts an annual talent review of the current senior leadership positions. In addition, our Chief Executive Officer annually reviews a succession plan for the Chief Executive Officer position, using formal criteria to evaluate potential internal and external successors and interim candidates in the event of an emergency situation. In conducting its evaluation, our Board considers organizational needs, competitive challenges, leadership and management potential, and development and emergency situations. As a result of succession planning, BJ Jenkins became our President in August 2021 and Dipak Golechha became Executive Vice President and Chief Financial Officer in March 2021.

Director Independence

Our common stock is listed on The Nasdaq Stock Market (“Nasdaq”). Under Nasdaq listing standards, independent directors must comprise a majority of a listed company’s board of directors. In addition, the listing standards of Nasdaq require that, subject to specified exceptions, each member of a listed company’s audit and compensation committees be independent, and that the nomination of all directors be by either a majority of its independent directors or a committee comprised solely of independent directors. Under Nasdaq regulations, a director will only qualify as an “independent director” if, in the opinion of that listed company’s board of directors, that director does not have a relationship with the listed company, either directly or indirectly, that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

Audit committee members must also satisfy the additional independence criteria set forth in Rule 10A-3 under the Exchange Act and Nasdaq listing standards. In order to be considered independent for purposes of Rule 10A-3, a member of a listed company’s audit committee may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee: (1) accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries; or (2) be an affiliated person of the listed company or any of its subsidiaries.

Compensation committee members must also satisfy the additional independence criteria set forth in Rule 10C-1 under the Exchange Act and Nasdaq listing standards. In order for a member of a listed company’s compensation committee to be considered independent for purposes of Nasdaq listing standards, the listed company’s board of directors must consider all factors specifically relevant to determining whether a director has a relationship to the listed company that is material to that director’s ability to be independent from management in connection with the duties of a compensation committee member, including, but not limited to: (1) the source of compensation of such director, including any consulting, advisory, or other compensatory fee paid by the listed company to such director; and (2) whether such director is affiliated with the listed company, a subsidiary of the listed company, or an affiliate of a subsidiary of the listed company.

Our Board has undertaken a review of the independence of each of our directors. Based on information provided by each director concerning his or her background, employment, and affiliations, our Board has determined that each of Mmes. Bawa, McCarthy and Twohill, Dr. Gayle and each of Messrs. Chandna, Donovan, Eschenbach, Goetz, and the Rt Hon Sir John Key do not have a material relationship with our Company, either directly or indirectly, that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is “independent” as that term is defined under the applicable rules and regulations of the SEC and Nasdaq listing standards. In making these determinations, our Board considered the current and prior relationships that each non-employee director has with our Company and all other facts and circumstances our Board deemed relevant in determining their independence, including the beneficial ownership of our common stock by each non-employee director and the transactions involving them described in the section titled “Related Person Transactions.” There are no family relationships among any of the Company’s directors or executive officers.

Communications with the Board of Directors

Interested parties wishing to communicate with our Board or with an individual member or members of our Board may do so by writing to the Board or to the particular member or members of our Board, and mailing the correspondence to our General Counsel or our Legal Department, at Palo Alto Networks, Inc., 3000 Tannery Way, Santa Clara, California 95054. Our General Counsel or our Legal Department, in consultation with appropriate members of our Board, as necessary, will review all incoming communications and, if appropriate, all such communications will be forwarded to the appropriate member or members of our Board, or if none is specified, to the Chair.

Corporate Governance Guidelines and Code of Business Conduct and Ethics

Our Board has adopted Corporate Governance Guidelines. These guidelines address items such as the qualifications and responsibilities of our directors and director candidates and corporate governance policies and standards applicable to us in general. In addition, our Board has adopted a Code of Business Conduct and Ethics that applies to all our employees, officers and directors, including our Chief Executive Officer, Chief Financial Officer, and other executive and senior financial officers. Our Corporate Governance Guidelines and our Code of Business Conduct and Ethics are posted on the Investor Information portion of our website at investors.paloaltonetworks.com. We will post amendments to our Code of Business Conduct and Ethics or waivers of our Code of Business Conduct and Ethics for directors and executive officers on the same website.

Director Stock Ownership Guidelines

Our Board believes that our directors should hold a meaningful financial stake in our Company in order to further align their interests with those of our stockholders and therefore adopted stock ownership guidelines in fiscal 2017. Under the guidelines, each non-employee director must own Company stock with a value of five times the annual retainer for board service within five years of such director's initial appointment or election date. All of our non-employee directors comply with our stock ownership guidelines.

Compensation and People Committee Interlocks and Insider Participation

None of the members of our Compensation and People Committee is, or has been, an officer or employee of our Company. None of our executive officers currently serves, or in the past year has served, as a member of the board or compensation committee (or other board committee performing equivalent functions) of any entity that has one or more of its executive officers serving on our Board or Compensation and People Committee.

Voting Roadmap

PROPOSAL 1


Election of Directors

✓ The Board of Directors recommends a vote **“FOR”** each of the nominees named below.

Our Board is comprised of 12 members and is divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring.

The following Class II directors have been nominated for election to the Board at the 2022 annual meeting of stockholders:

- Dr. Helene D. Gayle
- James J. Goetz

 See page 40.

PROPOSAL 2

Ratification of Appointment of Independent Registered Public Accounting Firm

✓ The Board of Directors recommends a vote **“FOR”** the ratification of the appointment of Ernst & Young LLP.

Our Audit Committee has appointed Ernst & Young LLP (“EY”), independent registered public accountants, to audit our financial statements for our fiscal year ending July 31, 2023. EY has served as our independent registered public accounting firm since 2009.

 See page 57.

PROPOSAL 3

Advisory Vote on the Compensation of our Named Executive Officers

✓ The Board of Directors recommends a vote **“FOR”** the approval, on an advisory basis, of the compensation of our named executive officers.

We are providing our stockholders with the opportunity to vote to approve, on an advisory or non-binding basis, the compensation of our named executive officers as disclosed in the “Executive Compensation” section of this proxy statement.

 See page 60.

PROPOSAL 4

Approve Amendment to Palo Alto Networks, Inc. 2021 Equity Incentive Plan

✓ The Board of Directors recommends a vote **“FOR”** the approval of an amendment to our 2021 Equity Incentive Plan to increase plan shares reserved for issuance.

We are asking stockholders to approve an amendment to our equity incentive plan to increase plan shares reserved for issuance. The ability to grant equity awards is crucial to recruiting and retaining the best personnel. If stockholders do not approve the amendment to 2021 Equity Incentive Plan at our Annual Meeting, we may be unable to continue to grant equity awards as needed, which could prevent us from successfully attracting and retaining the highly skilled talent we need.

 See page 98.

PROPOSAL NO. 1

Election of Directors

Our Board is comprised of 12 members and is divided into three staggered classes of directors. At each annual meeting of stockholders, a class of directors will be elected for a three-year term to succeed the same class whose term is then expiring. Each director's term continues until the election and qualification of his or her successor, or such director's earlier death, resignation, or removal. Any increase or decrease in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of our directors. This classification of our Board may have the effect of delaying or preventing changes in control of the Company.

The following Class II directors have been nominated for election to the Board at the Annual Meeting:

- Dr. Helene D. Gayle
- James J. Goetz

Mark McLaughlin and Asheem Chandna will not stand for reelection to the Board of Directors when their terms expire at the conclusion of our 2022 Annual Meeting of Stockholders. The Board recognizes the contributions and character of Mark's leadership as the company's chief executive officer from August 2011 until June 2018, and his continued service on our Board of Directors since then, which have been instrumental in driving the company's growth and nurturing our unique culture. Likewise, without Asheem's technical expertise, financial acumen and, most notably, keen discernment of emerging technology trends, our transformation into the company we are today would have been less complete and consequential. On behalf of our employees and the entire Board of Directors, we express our deep appreciation to Mark and Asheem for their profound impacts on Palo Alto Networks.

The sections titled "Board Skills and Experience Matrix" and "Directors" on pages 42 and 43 of this proxy statement contain more information about the leadership skills and other experiences that caused the ESG and Nominating Committee and our Board to determine that these nominees should serve as directors of the Company. Immediately after the Annual Meeting, it is anticipated that the Board will be comprised of ten members.

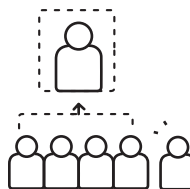
Following the Annual Meeting, we expect that our Board will reduce the number of members of the Board from twelve to ten, and will move a director, who currently serves as a Class I or Class III director, to serve as a Class II in order to distribute the number of directors among the three classes as evenly as possible.

REQUIRED VOTE

We have implemented a majority voting standard for elections of directors. Each director nominee will be elected by a vote of the majority of the votes cast. A majority of the votes cast means the number of votes cast "For" such nominee's election exceeds the number of votes cast "Against" that nominee. You may vote "For," "Against," or "Abstain" with respect to each director nominee. Broker non-votes and abstentions, if any, will have no effect on the outcome of the election.

Pursuant to our Corporate Governance Guidelines, a director shall promptly tender his or her resignation if he or she fails to receive the required number of votes for re-election. The ESG and Nominating Committee will act on a prompt basis to determine whether to recommend that our Board accept the director's resignation and will submit such recommendation for prompt consideration by our Board. Our Board may accept the resignation, refuse the resignation, or refuse the resignation subject to such conditions as our Board may impose. The Board will act within 90 days following certification of the stockholder vote, and will promptly publicly disclose its decision in a filing with the SEC. Additional details about this process are specified in our Corporate Governance Guidelines, which are available on our Investor Relations website at <https://investors.paloaltonetworks.com>.

Majority Voting Standard



In May 2022, adopted majority voting for uncontested elections of directors, including a resignation policy in the event a director does not receive a majority of the vote.

If you are a stockholder of record and you sign your proxy card or vote by telephone or over the Internet, but do not give instructions with respect to the voting of directors, your shares will be voted “For” the re-election of Dr. Gayle and Mr. Goetz. We expect that each of Dr. Gayle and Mr. Goetz will accept such nomination; however, in the event that a director nominee is unable or declines to serve as a director at the time of the Annual Meeting, the proxies will be voted for any nominee who shall be designated by our Board to fill such vacancy. If you wish to give specific instructions with respect to the voting of directors, you may do so by indicating your instructions on the accompanying proxy card or when you vote by telephone or over the Internet. If you are a street name stockholder and you do not give voting instructions to your broker or nominee, your shares will not be voted on this matter.

✓ Recommendation of the Board

The Board recommends that you vote “FOR” each of the nominees named above.

Director Tenure and Refreshment

The Board generally believes that a mix of long- and shorter-tenured directors promotes an appropriate balance of views and insights and allows the Board as a whole to benefit from the historical and institutional knowledge that longer-tenured directors possess and the fresh perspectives contributed by newer directors. With the additions of Aparna Bawa, Dr. Helene Gayle, Lorraine Twohill and Rt Hon Sir John Key in fiscal 2019 through fiscal 2021, we added directors who have brought their experiences and fresh perspectives to our Board’s deliberations.

As of July 31, 2022, our independent directors will have served an average of 7.6 years on the Board. Overall, our Board, including both independent and non-independent directors, will have an average tenure of 8.3 years. We believe that this mix of tenure on the Board represents a collection of individuals with both new perspectives and deep institutional knowledge.

Board Diversity

Our Corporate Governance Guidelines embody our Board’s commitment to actively seek out women and minority candidates as well as candidates with diverse backgrounds, experiences and skills. Our Board believes representation of gender, race, ethnic, geographic, cultural or other diverse perspectives expands the Board’s understanding of the needs and viewpoints of our customers, partners, employees and other stakeholders worldwide.

Our directors reflect diverse perspectives, including a complementary mix of skills, experience and backgrounds that we believe are paramount to our ability to represent your interests as stockholders. As part of our ongoing commitment to creating a balanced Board with diverse viewpoints and deep industry expertise, we added four new independent directors in fiscal 2019 through fiscal 2021 to infuse new ideas and fresh perspectives in the boardroom, two of whom were women of color. As of July 31, 2022, 56% of our independent directors as a group and 50% of our full Board can be considered diverse based on self-identified demographic background and 33% of our Board members self-identify as women.

DIRECTOR TENURE

7.6 years

(independent directors)

8.3 years

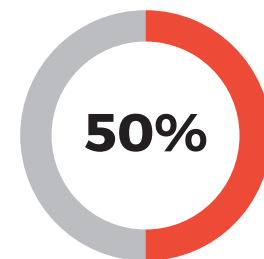
(all directors)

Since 2019:

4

new independent directors












BOARD DIVERSITY



50% of our Board can be considered diverse based on self-identified demographic background

Board Skills and Experience Matrix

Our Board has taken a thoughtful approach to board composition to ensure that our directors have backgrounds that collectively add significant value to the strategic decisions made by the Company and that enable them to provide oversight of management to ensure accountability to our stockholders. The Board and the ESG and Nominating Committee believe the skills, qualities, attributes, experience and diversity of backgrounds of our directors provide us with a diverse range of perspectives to effectively address our evolving needs and represent the best interests of our stockholders.

	Arora	Bawa	Chandna	Donovan	Eschenbach	Gayle	Goetz	Key	McCarthy	McLaughlin	Twohill	Zuk
 Industry and IT/Technical Expertise Deep insight in the cybersecurity and IT technology industry to oversee our business and the risks we face.	✓	✓	✓	✓	✓		✓			✓		✓
 Senior Leadership Experience Experience in senior leadership positions to analyze, advise and oversee management in decision making, operations and policies.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Financial Knowledge and Expertise Knowledge of financial markets, financing and accounting and financial reporting processes.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
 Diverse Backgrounds and Experiences Diverse backgrounds and experiences provide unique perspectives and enhance decision-making.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Cybersecurity / Information Security / Security Expertise to oversee cybersecurity, privacy, and information security management.	✓	✓	✓	✓	✓		✓			✓		✓
 Sales, Marketing and Brand Management Experience Sales, marketing, and brand management experience to provide expertise and guidance to grow sales and enhance our brand.	✓		✓	✓	✓					✓	✓	✓
 Global/International Experience Experience and knowledge of global operations, business conditions and culture to advise and oversee our global business.	✓	✓		✓	✓	✓		✓	✓	✓	✓	✓
 Risk Management Experience in risk oversight and management.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Emerging Technologies and Business Models Experience Experience identifying and developing emerging technologies and business models to advise, analyze and strategize regarding emerging technologies, business models and potential acquisitions.	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓
 Human Capital Management Experience attracting and retaining top talent to advise and oversee our people and compensation policies in our competitive environment.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
 Public Company Board Experience and Corporate Governance Experience to understand the dynamics and operation of a public company, and corporate governance requirements and compliance.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

DIRECTORS

Nominee Directors

Dr. Helene D. Gayle **INDEPENDENT**

Age: 66

Director Since: 2021

Skills and Experience:



Committee Membership:

ESG and Nominating Committee,
Security Committee

Other Current Public Company Boards:

Organon, The Coca-Cola Company



BACKGROUND

Dr. Helene D. Gayle has served as a member of our Board since May 2021. Dr. Gayle has been President of Spelman College since July 2022. Prior to this position, Dr. Gayle served as President and Chief Executive Officer of The Chicago Community Trust, a community foundation dedicated to improving the Chicago region through strategic grant making, civic engagement and inspiring philanthropy, from 2017 to 2022. Dr. Gayle previously served as Chief Executive Officer of McKinsey Social Initiative, an independent non-profit organization, from 2015 to 2017 and as President and Chief Executive Officer of CARE USA, a leading international humanitarian organization, from 2006 to 2015. From 2001 to 2006, she was an executive in the Global Health program at the Bill & Melinda Gates Foundation. Dr. Gayle began her career in public health at the U.S. Centers for Disease Control in 1984, and held positions of increasing responsibility over her 20-year tenure there, ultimately becoming the director of the National Center for HIV, STD and TB Prevention and achieving the rank of Assistant Surgeon General and Rear Admiral in the United States Public Health Service. Dr. Gayle earned a Bachelor of Arts degree in Psychology from Barnard College of Columbia University, an M.D. from University of Pennsylvania and a Masters in Public Health from Johns Hopkins University. She currently serves as a member of the board of directors of The Coca-Cola Company, a beverage company, and Organon & Co., a pharmaceutical company. Dr. Gayle previously served as a member of the board of directors of Colgate-Palmolive Company, a global consumer products company, from 2010 to 2021.

QUALIFICATIONS AND EXPERIENCE

Dr. Gayle was selected to serve on our Board because of her senior leadership and chief executive officer experience and broad international exposure and emerging market experience, as well as her governmental and non-profit expertise, risk management expertise and corporate governance experience as a director of private and public companies.

James J. Goetz **INDEPENDENT**

Age: 56

Director Since: 2005

Skills and Experience:



Committee Membership:

Audit Committee,
Security Committee

Other Current Public

Company Boards: Intel



BACKGROUND

James J. Goetz has served as a member of our Board since April 2005. Mr. Goetz has been a managing member of Sequoia Capital Operations, LLC, a venture capital firm, since June 2004, where he focuses on cloud, mobile, and enterprise companies. Mr. Goetz currently serves on the board of directors of Intel Corporation and several privately held companies. Mr. Goetz has previously served on the boards of directors of Barracuda Networks, Inc., a data security and storage company from 2009 to 2017, Nimble Storage, Inc., a data storage company, from 2007 to 2017, Jive Software, Inc., a provider of social business software, from 2007 until 2015, and Ruckus Wireless, Inc., a manufacturer of wireless (Wi-Fi) networking equipment, from 2012 until 2015. Mr. Goetz holds an M.S. in Electrical Engineering with a concentration in Computer Networking from Stanford University and a B.S. in Electrical Engineering with a concentration in Computer Engineering from the University of Cincinnati.

QUALIFICATIONS AND EXPERIENCE

Mr. Goetz was selected to serve on our Board because of his senior leadership, technology, information technology (IT), business development and cybersecurity experience, and knowledge of emerging technologies, arising from his experience as a partner of a venture capital firm, where he focuses on cloud mobile, and enterprise technology investments, as well as providing guidance and counsel to a wide variety of internet and technology companies. He also brings his experience as a senior management leader in network, data security and storage, software, and manufacturing companies, through various senior roles and other board experiences. Mr. Goetz also has extensive public company board experience.



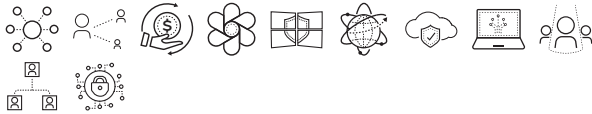
Continuing Directors

Nikesh Arora

Age: 54

Director Since: 2018

Skills and Experience:



Committee Membership:
None

Other Current Public
Company Boards:
Compagnie Financière Richemont



BACKGROUND

Nikesh Arora has served as the Chair of our Board and Chief Executive Officer since June 2018. Prior to joining us, from 2016 through 2018 Mr. Arora was an angel investor and from June 2016 through December 2017, Mr. Arora served as an advisor to SoftBank Group Corp., a multinational conglomerate company ("SoftBank"). From July 2015 through June 2016, Mr. Arora served as president and chief operating officer of SoftBank and from July 2014 through June 2015, Mr. Arora served as vice chair and chief executive officer of SoftBank Internet and Media, a subsidiary of SoftBank. Prior to SoftBank, from December 2004 through July 2014, Mr. Arora held multiple senior leadership operating roles at Google, Inc., including serving as senior vice president and chief business officer, from January 2011 to June 2014. Mr. Arora also serves on the board of Compagnie Financière Richemont S.A., a public Switzerland-based luxury goods holding company and is an advisor to Zoom Video Communications, Inc., a video communications company. Mr. Arora previously served on the boards of Sprint Corp., a communications services company, from November 2014 to June 2016, Colgate-Palmolive Company, a worldwide consumer products company focused on the production, distribution and provision of household, health care and personal care products, from March 2012 to September 2014, SoftBank from 2014 to 2016, and Yahoo! Japan, an internet company, from 2015 to 2016. Mr. Arora holds an M.S. in Business Administration from Northeastern University, an M.S. in Finance from Boston College, and a B.Tech in electrical engineering from the Institute of Technology at Banaras Hindu University.

QUALIFICATIONS AND EXPERIENCE

Mr. Arora was chosen to serve on our Board due to his leadership skills and experience as the chief architect of the Company's strategic vision, as well as his thorough knowledge of all aspects of our business. Through his extensive career in executive leadership, he brings expertise in leading and scaling technology businesses, risk management oversight, and in-depth knowledge of the cybersecurity and technology sectors.

Aparna Bawa **INDEPENDENT**

Age: 44

Director Since: 2021

Skills and Experience:



Committee Membership:
Audit Committee,
Security Committee, Corporate
Development Committee
Other Current Public
Company Boards: None



BACKGROUND

Aparna Bawa has served as a member of our Board since May 2021. Ms. Bawa has served as the Chief Operating Officer and Interim Chief Legal Officer of Zoom Video Communications, Inc., a video communications company, since May 2020. Ms. Bawa served as Zoom's Chief Legal Officer from August 2019 to May 2020, its General Counsel from September 2018 to May 2020 and its Secretary from December 2018 to November 2020. Prior to Zoom Video Communications, Ms. Bawa served as Senior Vice President and General Counsel of Magento, Inc., an e-commerce platform company, from June 2017 until its acquisition by Adobe Inc. in June 2018. From November 2012 to May 2017, Ms. Bawa served as Vice President, General Counsel and Secretary of Nimble Storage, Inc., an enterprise flash storage company, which was acquired by Hewlett Packard Enterprise in April 2017. Ms. Bawa holds a B.Sc. in Accounting from Marquette University and a J.D. from Harvard Law School.

QUALIFICATIONS AND EXPERIENCE

Ms. Bawa was selected to serve on our Board due to her senior leadership and management experience at public technology companies, risk management oversight expertise, and legal and business operations expertise. She has extensive experience in technology companies.

Industry and IT/Technical

Senior Leadership

Financial

Diverse Backgrounds and Experiences

Cybersecurity

Sales, Marketing and Brand Management

Global/International

Governance, Risk Oversight and Compliance

Emerging Technologies and Business Models

Human Capital Management

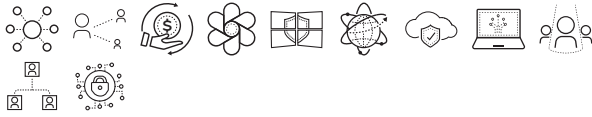
Public Company Board Experience

John M. Donovan **LEAD INDEPENDENT DIRECTOR**

Age: 61

Director Since: 2012

Skills and Experience:



Committee Membership:

Compensation and People Committee, ESG and Nominating Committee (Chair), Security Committee (Chair), Corporate Development Committee (Chair)

Other Current Public Company Boards:

Lockheed Martin



BACKGROUND

John M. Donovan has served as a member of our Board since September 2012. Since May 2019, Mr. Donovan has served as Chair of The President's National Security Telecommunications Advisory Committee. Mr. Donovan worked at AT&T Inc., a provider of telecommunication services, since April 2008, first as Chief Technology Officer and subsequently as Chief Executive Officer—AT&T Communications until his resignation, effective October 1, 2019. From November 2006 to April 2008, Mr. Donovan was Executive Vice President of Product, Sales, Marketing and Operations at Verisign. From November 2000 to November 2006, Mr. Donovan served as Chair and CEO of inCode Telecom Group Inc., a provider of strategy and consulting services to the telecommunications industry. Prior to joining inCode, Mr. Donovan was a Partner with Deloitte Consulting where he was the Americas industry practice director for telecommunications. Mr. Donovan serves on the board of directors of Lockheed Martin Corporation, an aerospace, defense and technology company. Mr. Donovan holds a B.S. in Electrical Engineering from the University of Notre Dame and an M.B.A. from the University of Minnesota.

QUALIFICATIONS AND EXPERIENCE

Mr. Donovan was selected to serve on our Board because of his technical knowledge and extensive business leadership, management, operations and risk management oversight experience, as a result of serving as the Chief Technology Officer and later the Chief Executive Officer of AT&T Communications. He is skilled in overseeing global information, software development, supply chain, network operations and big data organizations and has expertise in cybersecurity, artificial intelligence and machine learning.

Carl Eschenbach **INDEPENDENT**

Age: 55

Director Since: 2013

Skills and Experience:



Committee Membership:

Security Committee

Other Current Public Company Boards:

Zoom, Workday, Snowflake, UiPath, Aurora Innovation



BACKGROUND

Carl Eschenbach has served as a member of our Board since May 2013. Mr. Eschenbach has been a general partner at Sequoia Capital Operations, LLC, a venture capital firm, since April 2016. Prior to joining Sequoia Capital Operations, LLC, Mr. Eschenbach served as Chief Operating Officer and President of VMware, Inc., a provider of cloud and virtualization software and services, a role he held from December 2012 to February 2016. Mr. Eschenbach previously served as VMware's President and Chief Operating Officer from April 2012 to December 2012, as VMware's Co-President, Customer Operations from January 2011 to April 2012 and as VMware's Executive Vice President of Worldwide Field Operations from May 2005 to January 2011. Prior to joining VMware in 2002, he was Vice President of North America Sales at Inktomi from 2000 to 2002. Mr. Eschenbach also held various sales management positions with 3Com Corporation, Lucent Technologies Inc. and EMC. Mr. Eschenbach also serves on the board of directors of Zoom Video Communications, Inc., a video communications company, Workday, Inc., an on-demand financial management and human capital management software vendor, UiPath, Inc., a robotic process automation software company, Snowflake Inc., a cloud data platform company, and Aurora Innovation, a self-driving vehicle technology company. Mr. Eschenbach received an electronics technician diploma from DeVry University.

QUALIFICATIONS AND EXPERIENCE

Mr. Eschenbach was selected to serve on our Board because of his extensive experience in the technology industry and his previous public company management experience. He brings to our Board over 30 years of operational and sales experience in the technology industry, and has extensive experience in risk management oversight and scaling large organizations, as well as a deep knowledge of high-growth companies. Mr. Eschenbach also has extensive public company board experience.



Right Honorable Sir John Key **INDEPENDENT**

Age: 61

Director Since: 2019

Skills and Experience:



Committee Membership:

Audit Committee, Compensation and People Committee (Chair), Security Committee

Other Current Public Company Boards:

ANZ Bank New Zealand Ltd, Australia & New Zealand Banking Group Ltd



BACKGROUND

Right Honorable Sir John Key has served as a member of our Board since April 2019. Sir John was a Member of Parliament for Helensville in New Zealand until April 2017. Sir John served as Prime Minister of New Zealand from November 2008 to December 2016 having commenced his political career as a Member of Parliament for Helensville in July 2002. Prior to his political career, he had a nearly twenty-year career in international finance, primarily for Bankers Trust of New Zealand and Merrill Lynch in Singapore, London and Sydney. Sir John serves as the chair and member of the board of directors of ANZ Bank New Zealand Ltd and is a member of the board of directors of the parent Australia & New Zealand Banking Group Ltd, a public bank that provides various banking and financial products and services and also serves on the board of directors of several privately held companies. He previously served on the board of directors of Air New Zealand Limited, a public airline, from 2017 to 2020. Sir John has a Bachelor of Commerce in Accounting from the University of Canterbury.

QUALIFICATIONS AND EXPERIENCE

Sir John was selected to serve on our Board due to his global business leadership and extensive financial, capital markets, and management expertise as former Prime Minister of New Zealand, his extensive background in foreign affairs, and his career in investment banking and finance. He brings extensive experience in policy-making and a global business perspective from his experience and service on other boards, which is especially valuable to us as we grow internationally.

Mary Pat McCarthy **INDEPENDENT**

Age: 67

Director Since: 2016

Skills and Experience:



Committee Membership:

Audit Committee (Chair), Security Committee, Corporate Development Committee

Other Current Public Company Boards:

Micron Technology



BACKGROUND

Mary Pat McCarthy has served as a member of our Board since October 2016. Ms. McCarthy, now retired, served as Vice Chair of KPMG LLP, the U.S. member firm of the global audit, tax and advisory services firm, until 2011 after attaining such position in 1998. She joined KPMG LLP in 1977 and became a partner in 1987. She held numerous senior leadership positions in the firm, including Executive Director of the KPMG Audit Committee Institute from 2008 to 2011, Leader of the KPMG Client Care program from 2007 to 2008, U.S. Leader, Industries and Markets from 2005 to 2006, and Global Leader, Information, Communication and Entertainment Practice from 1998 to 2004. Ms. McCarthy also served on KPMG's Management and Operations Committees. Ms. McCarthy earned a Bachelor of Science degree in Business Administration from Creighton University and completed the University of Pennsylvania Wharton School's KPMG International Development Program. Ms. McCarthy serves as a director of Micron Technology, Inc., a producer of semiconductor devices and previously served on the board of directors of Mutual of Omaha, an insurance company, from 2012 to 2018 and Andeavor Corporation (formerly Tesoro Corporation), a global energy corporation from 2012 to 2018.

QUALIFICATIONS AND EXPERIENCE

Ms. McCarthy was selected to serve on our Board because of her deep technical expertise in financial and accounting matters from her experience as the Vice Chair of KPMG LLP, advising numerous companies on financial and accounting matters, as well as her leadership experience as a member of management at KPMG. She is an "audit committee financial expert" with over 40 years of experience in finance, operations and risk management oversight of technology companies, particularly publicly traded companies with knowledge of complex global financial and business matters. In addition, she brings a global business perspective and contributes valuable insights and perspectives to our business and operations from her service on other boards.

Industry and IT/Technical

Senior Leadership

Financial

Diverse Backgrounds and Experiences

Cybersecurity

Sales, Marketing and Brand Management

Global/International

Governance, Risk Oversight and Compliance

Emerging Technologies and Business Models

Human Capital Management

Public Company Board Experience

Lorraine Twohill **INDEPENDENT**

Age: 51

Director Since: 2019

Skills and Experience:



Committee Membership:

Compensation and People
Committee, ESG and Nominating
Committee, Security Committee

Other Current Public
Company Boards: None



BACKGROUND

Lorraine Twohill has served as a member of our Board of directors since April 2019. Ms. Twohill currently serves as Google LLC's (formerly Google, Inc.) Chief Marketing Officer, a position she has held since June 2009. From July 2003 until June 2009, Ms. Twohill served as Google's Head of Marketing Europe, Middle East and Africa. Ms. Twohill previously served on the board of directors of Williams-Sonoma, Inc., a consumer retail company that sells kitchenwares and home furnishings, from January 2012 until May 2017. Ms. Twohill holds joint honors degrees in International Marketing and Languages from Dublin City University.

QUALIFICATIONS AND EXPERIENCE

Ms. Twohill was selected to serve on our Board due to her leadership skills and extensive marketing knowledge, with over 25 years of experience. She has deep management and business operations experience, as well as risk management oversight experience. She provides the Board with valuable insights into brand management and the global issues facing technology companies today.

Nir Zuk

Age: 51

Director Since: 2005

Skills and Experience:



Committee Membership:

None

Other Current Public
Company Boards:
None



BACKGROUND

Nir Zuk is one of our founders and has served as our Chief Technology Officer and as a member of our Board since March 2005. From April 2004 to March 2005, Mr. Zuk was Chief Security Technologist at Juniper Networks, Inc., a supplier of network infrastructure products and services. From September 2002 until its acquisition by Juniper in April 2004, Mr. Zuk was Chief Technology Officer at NetScreen Technologies, Inc., a provider of ASIC-based Internet security systems. In December 1999, Mr. Zuk co-founded OneSecure, Inc., a provider of prevention and detection appliances, and was Chief Technical Officer until its acquisition by NetScreen in September 2002. From 1994 to 1999, Mr. Zuk served in several technical roles, including Principal Engineer at Check Point Software Technologies Ltd., an enterprise software security company. Mr. Zuk attended Tel Aviv University where he studied Mathematics.

QUALIFICATIONS AND EXPERIENCE

Mr. Zuk is a co-founder of Palo Alto Networks, a network security expert and brings a wealth of network security knowledge and industry experience to Palo Alto Networks. He brings business leadership, operational experience, risk management oversight experience, and experience developing technology. He has an in-depth knowledge of the technology and cybersecurity industries.



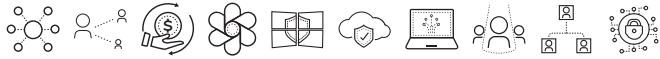
Non-Continuing Directors

Asheem Chandna

Age: 58

Director Since: 2005

Skills and Experience:



Committee Membership:

ESG and Nominating Committee,
Security Committee, Corporate
Development Committee

Other Current Public Company
Boards: None



BACKGROUND

Asheem Chandna has served as a member of our Board since April 2005. Mr. Chandna has been a Partner at Greylock Partners, a venture capital firm, since September 2003, where he focuses on investments in enterprise IT, including security products. From April 2003 to June 2013, Mr. Chandna was a director of Imperva, Inc., a provider of cyber security solutions. From April 1996 to December 2002, Mr. Chandna was Vice President, Business Development and Product Management at Check Point Software. Mr. Chandna currently serves on the board of directors of a number of privately held companies. Mr. Chandna holds a B.S. in Electrical Engineering and an M.S. in Computer Engineering from Case Western Reserve University.

QUALIFICATIONS AND EXPERIENCE

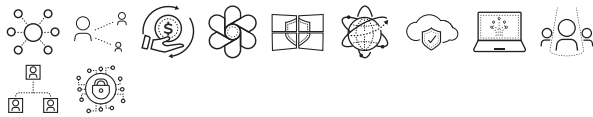
Mr. Chandna was selected to serve on our Board because of his specific experience with enterprise IT and security products, background with information technology and cybersecurity companies, and knowledge of emerging technologies. He also brings extensive financial and investment expertise as a venture capitalist, where he focuses investments in enterprise IT. He also brings perspective from his service on other public and private company boards.

Mark D. McLaughlin

Age: 56

Director Since: 2011

Skills and Experience:



Committee Membership:

Corporate
Development Committee

Other Current Public
Company Boards: Qualcomm



BACKGROUND

Mark D. McLaughlin has served as our Vice Chair since June 2018, and has been a member of our board of directors since August 2011. During that period, from April 2012 until June 2018 he served as Chair of our board of directors. Mr. McLaughlin served as our Chief Executive Officer from August 2011 until June 2018 and also served as President from August 2011 through August 2016. From August 2009 through July 2011, Mr. McLaughlin served as President and Chief Executive Officer and as a director at VeriSign, Inc., a provider of Internet infrastructure services, and from January 2009 to August 2009, Mr. McLaughlin served as President and Chief Operating Officer at VeriSign. From February 2000 through November 2007, Mr. McLaughlin served in several roles at VeriSign, including as Executive Vice President, Products and Marketing. Prior to joining VeriSign, Mr. McLaughlin was Vice President, Sales and Business Development at Signio Inc., an Internet payments company acquired by VeriSign in February 2000. In January 2011, President Barack Obama appointed Mr. McLaughlin to serve on the President's National Security Telecommunications Advisory Committee. Mr. McLaughlin currently serves on, and is the Chair of, the board of directors of Qualcomm, Inc., a global semiconductor company that designs and markets wireless telecommunications products and services, and previously served on the board of directors of Opower, Inc., a provider of cloud based software to the utility industry, from 2013 to 2016. Mr. McLaughlin holds a B.S. from the U.S. Military Academy at West Point and a J.D. from Seattle University School of Law.

QUALIFICATIONS AND EXPERIENCE

Mr. McLaughlin was selected to serve on our Board because of his perspective and experience as our former Chief Executive Officer, and his operational and management experience at several technology companies. He has an extensive background in the technology industry and risk oversight expertise. Mr. McLaughlin also served as Chair of The President's National Security Telecommunications Advisory Committee and serves as Chair of a large global semiconductor company.

Industry and IT/Technical

Senior Leadership

Financial

Diverse Backgrounds and Experiences

Cybersecurity

Sales, Marketing and Brand Management

Global/International

Governance, Risk Oversight and Compliance

Emerging Technologies and Business Models

Human Capital Management

Public Company Board Experience

The demographic information presented below for our directors is based on voluntary self-identification by each director. Each of the categories listed in the below table has the meaning as it is used in Nasdaq Listing Rule 5605(f). Additional biographical information of our directors and executive officers as of July 31, 2022 is set forth above.

BOARD DIVERSITY MATRIX (AS OF NOVEMBER 3, 2022)

Total Number of Directors	12			
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	4	8	0	0
Part II: Demographic Background				
African American or Black	1	0	0	0
Alaskan Native or Native American	0	0	0	0
Asian	1	2	0	0
Hispanic or Latinx	0	0	0	0
Native Hawaiian or Pacific Islander	0	0	0	0
White	2	6	0	0
Two or More Races or Ethnicities	0	0	0	0
LGBTQ+			0	
Did Not Disclose Demographic Background			3	

Board Committees and Responsibilities

Our Board has a standing Audit Committee, Compensation and People Committee, Corporate Development Committee, ESG and Nominating Committee and Security Committee, which have the composition and responsibilities described below. Directors serve on these committees until their resignation or until otherwise determined by our Board.

The membership and meetings during fiscal 2022 and the primary functions of each of the standing committees are described below.

Board of Directors	Audit Committee	Compensation and People Committee	Corporate Development Committee	ESG and Nominating Committee	Security Committee
Nikesh Arora					
Aparna Bawa*	●		●		●
Asheem Chandna*			●	●	●
John M. Donovan*		●	⦿	⦿	⦿
Carl Eschenbach*					●
Dr. Helene D. Gayle*				●	●
James J. Goetz*	●				●
Rt Hon Sir John Key*	●	⦿			●
Mary Pat McCarthy*^(SE)	⦿		●		●
Mark D. McLaughlin			●		
Lorraine Twohill*		●		●	●
Nir Zuk					

- Member
- ⦿ Committee Chair
- * Independent Director
- ^(SE) Financial Expert

Audit Committee

Chair:

Mary Pat McCarthy

Members:

Aparna Bawa

James J. Goetz

Right Honorable

Sir John Key

Number of meetings in fiscal 2022: **7**

Our Audit Committee is responsible for, among other things:

- selecting and hiring our independent registered public accounting firm, including leading the review and selection of the lead audit engagement partner;
- evaluating the performance and independence of our independent registered public accounting firm;
- approving the audit and pre-approving any non-audit services to be performed by our independent registered public accounting firm;
- reviewing our financial statements and related disclosures and reviewing our critical accounting policies and practices;
- reviewing and participating in the selection of our chief audit executive and periodically reviewing the activities and reports of the internal audit function and any major issues encountered in the course of the internal audit function's work;
- reviewing the adequacy and effectiveness of our internal control policies and procedures and our disclosure controls and procedures;
- overseeing procedures for the treatment of complaints on accounting, internal accounting controls, or audit matters;
- reviewing and discussing with management and the independent registered public accounting firm the results of our annual audit, our quarterly financial statements, and our publicly filed periodic reports;
- reviewing and approving or ratifying any proposed related person transactions; and
- preparing the Audit Committee report that the SEC requires in our annual proxy statement.

The composition of our Audit Committee meets the requirements for independence for audit committee members under the listing standards of Nasdaq and the rules and regulations of the SEC. Each member of our Audit Committee also meets the financial literacy and sophistication requirements of the listing standards of Nasdaq. In addition, our Board has determined that Ms. McCarthy is an "audit committee financial expert" within the meaning of the rules and regulations of the SEC.

Our Audit Committee operates under a written charter that was adopted by our Board and satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq. A copy of the charter of our Audit Committee is available on our website at <http://investors.paloaltonetworks.com>.

Compensation and People Committee

Chair:

**Right Honorable
Sir John Key**

Members:

**John M. Donovan
Lorraine Twohill**

Number of meetings in
fiscal 2022: **9**

Our Compensation and People Committee is responsible for, among other things:

- reviewing and approving our Chief Executive Officer's and other executive officers' annual base salaries, incentive compensation arrangements, including the specific goals and amounts, equity compensation, employment agreements, severance arrangements and change in control agreements, and any other benefits, compensation or arrangements;
- establishing and administering our equity compensation plans;
- overseeing our overall compensation philosophy and compensation plans;
- preparing the Compensation and People Committee report that the SEC requires to accompany the Compensation Discussion and Analysis contained in this proxy statement;
- overseeing our talent management and people management, including the Company's inclusion and diversity initiatives and results, the Company's pay equity reviews and results, and the Company's FLEXLearning, FLEXBenefits and FLEXWORK initiatives; and
- reviewing and discussing with management the risks arising from the Company's compensation philosophy and practices applicable to employees to mitigate such risks.

The composition of our Compensation and People Committee meets the requirements for independence for Compensation Committee members under the listing standards of Nasdaq and the rules and regulations of the SEC. Each member of our Compensation and People Committee is also a "non-employee director," as defined pursuant to Rule 16b-3 promulgated under the Exchange Act, and an "outside director," as defined pursuant to Section 162(m) of the Internal Revenue Code.

Our Compensation and People Committee operates under a written charter that was adopted by our Board and satisfies the applicable rules and regulations of the SEC and the listing standards of Nasdaq. A copy of the charter of our Compensation and People Committee is available on our website at <http://investors.paloaltonetworks.com>.

Our Compensation and People Committee may form subcommittees for any purpose and may delegate to such subcommittees such power and authority as our Compensation and People Committee deems appropriate, except such power or authority required by law, regulation or listing standard to be exercised by our Compensation and People Committee as a whole.

Corporate Development Committee

Chair:

John M. Donovan

Members:

**Aparna Bawa
Asheem Chandna
Mary Pat McCarthy
Mark McLaughlin**

Our Corporate Development Committee is responsible for, among other things:

- assisting the Board in fulfilling its responsibilities relating to the review, evaluation, and approval of certain acquisitions and strategic investment transactions;
- reviewing proposed acquisition and investment strategies with management; and
- reporting to the Board the Committee's approval or recommendation of acquisitions or investment transactions and of such activity in general.

Our Corporate Development Committee operates under a written charter that was adopted by our Board.

ESG and Nominating Committee

Chair:

John M. Donovan

Members:

Asheem Chandna

Dr. Helene D. Gayle

Lorraine Twohill

Number of meetings in fiscal 2022: **4**

Our ESG and Nominating Committee is responsible for, among other things:

- identifying and evaluating individuals who are qualified to become members of the board of directors and selecting and recommending to the Board individuals as director nominees and appointments to the board of directors;
- evaluating and making recommendations regarding the composition, organization, and governance of our board of directors and its committees, including issues of integrity, experience, expertise and diversity of membership;
- considering board of director leadership structure, including the separation of the chairperson and chief executive officer roles and the appointment of a lead independent director and making recommendations to the board of directors;
- evaluating and making recommendations regarding the creation of additional committees or the change in mandate or dissolution of committees;
- reviewing and making recommendations with regard to our corporate governance guidelines and compliance with laws and regulations;
- reviewing and approving conflicts of interest of our directors and corporate officers, other than related person transactions reviewed by our Audit Committee;
- overseeing our annual board of director and committee self-assessment process;
- overseeing our succession planning process for the chief executive officer and members of the management team; and
- overseeing our ESG efforts and related policies and programs.

The composition of our ESG and Nominating Committee meets the requirements for independence under the listing standards of Nasdaq and the rules and regulations of the SEC.

In February 2022, we reconstituted our Nominating and Corporate Governance Committee as the ESG and Nominating Committee to enhance our focus on ESG matters, giving it oversight of our ESG strategies and initiatives, including our short- and long-term goals, and to reinforce the important role that ESG practices play in our business. The ESG and Nominating Committee is responsible for setting our ESG priorities, and monitors our performance. The ESG and Nominating Committee receives regular updates on priority ESG issues, including information on actions and progress toward goals.

Our ESG and Nominating Committee operates under a written charter that was adopted by our Board and satisfies the applicable listing standards of Nasdaq. A copy of the charter of our ESG and Nominating Committee is available on our website at <http://investors.paloaltonetworks.com>.

Security Committee

Chair:

John M. Donovan

Members:

Aparna Bawa

Asheem Chandna

Carl Eschenbach

Dr. Helene D. Gayle

James J. Goetz

Rt Hon Sir John Key

Mary Pat McCarthy

Lorraine Twohill

Number of meetings in fiscal 2022: **2**

Our Security Committee is responsible for, among other things:

- overseeing (i) our policies, plans, metrics and programs relating to the physical security of our facilities and employees, and enterprise cybersecurity and data protection risks associated with our security-related infrastructure and related operations, and (ii) the effectiveness of our programs and practices for identifying, assessing and mitigating such risks across our business operations;
- overseeing our cyber crisis preparedness, security breach and incident response plans, communication plans, and disaster recovery and business continuity capabilities;
- overseeing the safeguards used to protect the confidentiality, integrity, availability, safety and resiliency of the Company's employees, facilities, intellectual property and business operations;
- reviewing and discussing with management the cybersecurity risks associated with our outside partners (such as vendors, suppliers, operations partners, etc.);
- overseeing our compliance with applicable information security and data protection laws and industry standards, new or updated legal implications of security, data privacy, or other regulatory or compliance risks to us or our employees, facilities and business operations and the threat landscape facing our business operations;
- reviewing and advising on our physical and cybersecurity strategy, crisis or incident management and security-related information technology planning processes and review strategy for investing in our security systems; and
- reviewing and discussing with management our public disclosures relating to the Company's security of its employees, facilities and information technology systems, including privacy, network security and data security.

In November 2021, our Board formed the Security Committee to facilitate Board oversight of security issues, including product security, data security, cybersecurity, security risk management, risk exposure and related controls and enterprise risk management related to these risks.

Our Security Committee operates under a written charter that was adopted by our Board. A copy of the charter of our Security Committee is available on our website at <http://investors.paloaltonetworks.com>.

Director Compensation

Our ESG and Nominating Committee has approved a policy for the compensation of the non-employee members of our Board (the “Director Compensation Policy”) to attract, retain and reward these individuals and align their financial interests with those of our stockholders. Only non-employee directors who are not affiliated with investment funds that hold shares of our common stock are eligible for compensation under the Director Compensation Policy. There is no cash compensation paid under the Director Compensation Policy.

Initial Award. Under the Director Compensation Policy, when an eligible director initially joins our Board, the eligible director receives an initial award of restricted stock units having a value of \$1 million (as determined based on the average closing price of our common stock on Nasdaq during the 30 calendar days prior to fifteenth day of the month in which the grant is made). This initial award will vest as to one third of the shares covered by the restricted stock unit award on the first anniversary of the date the eligible director joined our board of directors, and the remaining shares will vest quarterly over the following two years, subject to the director’s continued service as of each such date.

Annual Award. Under the Director Compensation Policy, at each annual meeting of stockholders, each eligible director receives an annual restricted stock unit award having a value equal to \$300,000 (as determined based on the average closing price of our common stock on Nasdaq during the 30 calendar days ending on the date of the annual meeting). In addition, at each annual meeting of stockholders, our Lead Independent Director receives an additional annual restricted stock unit award having a value equal to \$50,000 (as determined based on the average closing price of our common stock on Nasdaq during the 30 calendar days ending on the date of the annual meeting). All annual awards, including the annual awards to the Lead Independent Director, will vest quarterly over a period of one year, subject to the director’s continued service as of each such date.

Committee Awards. At each annual meeting of stockholders, the chairpersons and members of the five standing committees of our Board will receive additional annual restricted stock unit awards for committee service having the following values (as determined based on the average closing price of our common stock on Nasdaq during the 30 calendar days ending on the date of the annual meeting):

Board Committee⁽¹⁾	Chairperson Retainer	Member Retainer
Audit Committee	\$35,000	\$20,000
Compensation and People Committee	\$25,000	\$15,000
ESG and Nominating Committee	\$15,000	\$10,000
Security Committee	\$50,000	\$50,000

⁽¹⁾ No additional compensation is paid for serving on the Corporate Development Committee.

Any eligible director who serves as chairperson of a committee is not entitled to a member retainer for the same committee. The committee awards will vest quarterly over a period of one year, subject to the director’s continued service as of each such date.

Fiscal 2022 Director Compensation Table

The following table presents summary information regarding the compensation paid to our non-employee directors for our fiscal year ended July 31, 2022.

Director	Stock Awards ⁽¹⁾	Total
Aparna Bawa⁽²⁾	—	—
Asheem Chandna⁽³⁾	\$347,988	\$347,988
John M. Donovan⁽³⁾	\$415,638	\$415,638
Carl Eschenbach⁽³⁾	\$338,763	\$338,763
Dr. Helene D. Gayle⁽⁴⁾	—	—
James J. Goetz⁽⁵⁾	—	—
Rt Hon Sir John Key⁽³⁾	\$381,813	\$381,813
Mary Pat McCarthy⁽³⁾	\$372,588	\$372,588
Mark D. McLaughlin⁽⁶⁾	—	—
Lorraine Twohill⁽³⁾	\$362,338	\$362,338

⁽¹⁾ The amounts reported in this column represent the aggregate grant date fair value of these restricted stock units ("RSUs") as computed in accordance with Financial Accounting Standards Board Accounting Standards Codification Topic 718, Compensation—Stock Compensation, or ASC Topic 718. The assumptions used in the valuation of these awards are set forth in the notes to our consolidated financial statements, which are included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2022. These amounts do not necessarily correspond to the actual value that may be recognized by the director upon the vesting of such awards.

⁽²⁾ Ms. Bawa received an initial equity award upon her appointment to the Board in May 2021, which was reported in our fiscal 2021 proxy statement. Pursuant to our director compensation policy, she will first be eligible to receive equity grants equal to the value of the annual board and committee stock awards, at the upcoming Annual Meeting. As of July 31, 2022, Ms. Bawa held 5,697 RSUs (as adjusted for the three-for-one stock split effected in the form of a stock dividend in September 2022, or the "Stock Split").

⁽³⁾ As of July 31, 2022, Mr. Chandna held 1,017 RSUs, Mr. Donovan held 1,215 RSUs, Mr. Eschenbach held 990 RSUs, Rt Hon Sir John Key held 1,116 RSUs, Ms. McCarthy held 1,089 RSUs and Ms. Twohill held 1,059 RSUs (as adjusted for the Stock Split).

⁽⁴⁾ Dr. Gayle received an initial equity award upon her appointment to the Board in May 2021, which was reported in our fiscal 2021 proxy statement. Pursuant to our director compensation policy, she will first be eligible to receive equity grants equal to the value of the annual board and committee stock awards at the upcoming Annual Meeting. As of July 31, 2022, Dr. Gayle held 5,778 RSUs (as adjusted for the Stock Split).

⁽⁵⁾ Mr. Goetz receives no compensation under the Director Compensation Policy.

⁽⁶⁾ Mr. McLaughlin received no compensation for his services as a director. For the compensation paid to him as an employee, see "Related Person Transactions."

Identification and Evaluation of Director Nominees

Our ESG and Nominating Committee uses a variety of methods for identifying and evaluating director nominees. The ESG and Nominating Committee regularly assess the appropriate size, composition and needs of our Board and its respective committees, and the qualification of candidates considering these needs. Some of the qualifications that our ESG and Nominating Committee considers include issues of character, integrity, judgment, diversity (including gender and race), experience of relevance to us and the Board, independence, age, area of expertise, potential conflicts of interest and other commitments. These factors may be weighted differently depending on the individual being considered or the needs of the Board at the time.

Nominees must also be able to offer advice and guidance to our Chief Executive Officer based on past experience in positions with a high degree of responsibility and be leaders in the companies or institutions with which they are affiliated. Director candidates must have sufficient time available in the judgment of our ESG and Nominating Committee to perform all Board and committee responsibilities. Members of our Board are expected to prepare for, attend, and actively participate in all Board and applicable committee meetings.

Proposal No. 1 Election of Directors

Other than the foregoing, there are no stated minimum criteria for director nominees, although our ESG and Nominating Committee may also consider such other factors as it may deem, from time to time, are in our and our stockholders' best interests. Our ESG and Nominating Committee will also seek appropriate input from our Chief Executive Officer, from time to time, in assessing the needs of our Board for relevant background, experience, diversity and skills of its members.

Our ESG and Nominating Committee considers diversity (whether based on broader principles such as diversity of perspective, experiences, and expertise, as well as factors commonly associated with diversity such as gender, race or national origin) in connection with its evaluation of director candidates, including the evaluation and determination of whether to re-nominate incumbent directors. The committee also considers these and other factors as it oversees the annual Board and committee evaluations. The committee seeks qualified and diverse director candidates, including women and individuals from minority groups, to include in the pool from which director candidates are chosen. Any search firm retained by the committee to find director candidates would be instructed to account for these considerations, including diversity.

Stockholder Recommendations for Nominations to the Board of Directors

Our ESG and Nominating Committee will consider candidates for director recommended by stockholders, so long as such recommendations comply with our certificate of incorporation, amended and restated bylaws and applicable laws, rules and regulations, including those promulgated by Nasdaq and the SEC. The ESG and Nominating Committee will evaluate the recommendations in accordance with its charter, our amended and restated bylaws, our policies and procedures for director candidates, as well as the regular director nominee criteria described above. This process is designed to ensure that our Board includes members with diverse backgrounds, skills and experience, including appropriate financial and other expertise relevant to our business. Eligible stockholders wishing to recommend a candidate for nomination should contact our Corporate Secretary in writing. Such recommendations must include information about the candidate, a statement of support by the recommending stockholder, evidence of the recommending stockholder's ownership of our common stock and a signed letter from the candidate confirming willingness to serve on our Board. Our ESG and Nominating Committee has discretion to decide which individuals to recommend for nomination as directors.

Director Attendance

During our fiscal year ended July 31, 2022, the Board held five meetings (including regularly scheduled and special meetings), and no director attended fewer than 75% of the total number of meetings of the Board and the committees of which he or she was a member.

Although we do not have a formal policy regarding attendance by members of our Board at annual meetings of stockholders, we encourage, but do not require, our directors to attend. Eleven of our twelve directors attended our 2021 Annual Meeting of Stockholders, either telephonically or by video conference.

PROPOSAL NO. 2

Ratification of Appointment of Independent Registered Public Accounting Firm

Our Audit Committee has appointed Ernst & Young LLP (“EY”), independent registered public accountants, to audit our financial statements for our fiscal year ending July 31, 2023. EY has served as our independent registered public accounting firm since 2009.

At the Annual Meeting, our stockholders are being asked to ratify the appointment of EY as our independent registered public accounting firm for our fiscal year ending July 31, 2023. Our Audit Committee is submitting the selection of EY to our stockholders because we value our stockholders’ views on our independent registered public accounting firm and as a matter of good corporate governance. Representatives of EY will be present at the Annual Meeting, and they will have an opportunity to make statements and will be available to respond to appropriate questions from our stockholders.

Notwithstanding the selection of EY and even if our stockholders ratify the selection, our Audit Committee, in its discretion, may appoint another independent registered public accounting firm at any time during our fiscal year if our Audit Committee believes that such a change would be in the best interests of Palo Alto Networks and its stockholders. If our stockholders do not ratify the appointment of EY, our Audit Committee may reconsider the appointment.

Fees Paid to the Independent Registered Public Accounting Firm

The following table presents fees for professional audit services and other services rendered to our Company by EY for our fiscal years ended July 31, 2021 and 2022.

	2021	2022
Audit Fees ⁽¹⁾	\$6,757,000	\$6,139,000
Audit-Related Fees ⁽²⁾	688,000	—
Tax Fees ⁽³⁾	1,020,000	477,000
All Other Fees ⁽⁴⁾	4,000	5,000
	\$8,469,000	\$6,621,000

⁽¹⁾ Audit fees consist of professional services rendered in connection with (a) the audit of our annual consolidated financial statements, including audited financial statements presented in our Annual Report on Form 10-K, (b) review of our quarterly consolidated financial statements presented in our Quarterly Reports on Form 10-Q, (c) professional services provided for new and existing statutory audits of subsidiaries or affiliates of the Company, and (d) other regulatory filings.

⁽²⁾ Audit-Related fees consist of fees for professional services for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under “Audit Fees.” These services include acquisition due diligence services, technical accounting guidance and other attestation services.

⁽³⁾ Tax Fees consist of fees for professional services for federal, state and international tax compliance and tax planning.

⁽⁴⁾ All Other Fees includes fees for professional services other than these services reported above. These services specifically relate to subscriptions to an accounting regulatory database.

Auditor Independence

In our fiscal year ended July 31, 2022, there were no other professional services provided by EY that would have required our Audit Committee to consider their compatibility with maintaining the independence of EY.

Audit Committee Policy on Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm

Consistent with requirements of the SEC and the Public Company Accounting Oversight Board (the “PCAOB”) regarding auditor independence, our Audit Committee is responsible for the appointment, compensation and oversight of the work of our independent registered public accounting firm. In recognition of this responsibility, our Audit Committee has established a policy for the pre-approval of all audit and permissible non-audit services provided by our independent registered public accounting firm. These services may include audit services, audit-related services, tax services and other services.

Before engagement of the independent registered public accounting firm for the next year’s audit, the independent registered public accounting firm submits a detailed description of services expected to be rendered during that year for each of the following categories of services to our Audit Committee for approval:

- **Audit services.** Audit services include work performed for the audit of our financial statements and the review of financial statements included in our quarterly reports, as well as subsidiary audits, equity investment audits and other procedures required to be performed by the independent auditor to be able to form an opinion on our consolidated financial statements.
- **Audit-related services.** Audit-related services are for assurance and related services that are (1) reasonably related to the performance of the audit or review of our financial statements (2) are traditionally performed by our independent registered public accounting firm and (3) not covered above under “audit services.”
- **Tax services.** Tax services include all services performed by the independent registered public accounting firm’s tax personnel for tax compliance, tax advice and tax planning.
- **Other services.** Other services are those services not described in the other categories.

Our Audit Committee pre-approves particular services or categories of services on a case-by-case basis. The fees are budgeted, and our Audit Committee requires our independent registered public accounting firm and management to report actual fees versus budgeted fees periodically throughout the year by category of service. During the year, circumstances may arise when it may become necessary to engage the independent registered public accounting firm for additional services not contemplated in the original pre-approval. In those instances, (a) if the additional services do not require specific approval by the Audit Committee, a detailed description of the services will be submitted to the Chief Financial Officer or Chief Accounting Officer, who will determine whether such services are included within the list of services that have received the general pre-approval of the Audit Committee and the Audit Committee will be informed on a timely basis of any such services rendered by the independent auditor, or (b) if the additional services require specific approval by the Audit Committee, they will be submitted for pre-approval to the Audit Committee by both the independent auditor and the Chief Financial Officer or Chief Accounting Officer, and shall only be submitted if the independent auditor and such officer mutually agree that the request or application is consistent with the SEC’s rules on auditor independence. All fees paid to EY for our fiscal year ended July 31, 2022 were pre-approved by our Audit Committee.

Required Vote

The ratification of the appointment of EY as our independent registered public accounting firm requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the Annual Meeting and entitled to vote thereon. Abstentions are treated as shares present virtually or by proxy and entitled to vote at the Annual Meeting and, therefore, will have the same effect as a vote “Against” this proposal. Any broker non-votes will have no effect on the outcome of the vote.

Recommendation of the Board

The Board recommends that you vote “FOR” the ratification of the appointment of Ernst & Young LLP.

Report of the Audit Committee

The Audit Committee consists of Mmes. Bawa and McCarthy, Mr. Goetz and the Rt Hon Sir John Key. Each member of the committee is an independent director as required by the listing standards of Nasdaq and rules and regulations of the SEC. The Audit Committee operates under a written charter approved by the Board, which is available on the Investor Information portion of our website at <https://investors.paloaltonetworks.com/>. The composition of the Audit Committee, the attributes of its members and the responsibilities of the Audit Committee, as reflected in its charter, are intended to be in accordance with applicable requirements for corporate audit committees. The Audit Committee reviews and assesses the adequacy of its charter and the Audit Committee's performance on an annual basis.

The Audit Committee assists our Board in the Board's oversight and monitoring of:

- our accounting and financial reporting processes and internal controls as well as the audit and integrity of our financial statements;
- the qualifications, independence and performance of our independent registered public accounting firm;
- the performance of our internal audit function;
- our compliance with applicable law; and
- risk assessment and risk management pertaining to financial, accounting and tax matters of the Company.

With respect to the Company's financial reporting process, the management of the Company is responsible for (1) establishing and maintaining internal controls and (2) preparing the Company's consolidated financial statements. Our independent registered public accounting firm, EY, is responsible for auditing these financial statements. It is the responsibility of the Audit Committee to oversee these activities. It is not the responsibility of the Audit Committee to prepare or certify our financial statements or guarantee the audits or reports of the independent auditors. These are the fundamental responsibilities of management and our independent registered public accounting firm.

The Audit Committee is responsible for the appointment, compensation, retention, and oversight of the work performed by EY. In fulfilling its oversight responsibility, the Audit Committee carefully reviews the policies and procedures for the engagement of the independent registered public accounting firm, including the scope of the audit, audit fees, auditor independence matters, performance of the independent auditors, and the extent to which the independent registered public accounting firm may be retained to perform non-audit services.

In the performance of its oversight function, the Audit Committee has:

- reviewed and discussed the audited financial statements with management and EY;
- discussed with EY the applicable requirements of the PCAOB and the SEC; and
- received the written disclosures and the letter from EY required by applicable requirements of the PCAOB regarding the independent accountant's communications with the Audit Committee concerning independence, and has discussed with EY its independence.

Based on the Audit Committee's review and discussions with management and EY, the Audit Committee recommended to the Board that the audited financial statements be included in the Annual Report on Form 10-K for the fiscal year ended July 31, 2022, for filing with the Securities and Exchange Commission.

Respectfully submitted by the members of the Audit Committee of the Board:

Mary Pat McCarthy (Chair)
Aparna Bawa
James J. Goetz
Rt Hon Sir John Key

PROPOSAL NO. 3

Advisory Vote on the Compensation of our Named Executive Officers

We are providing our stockholders with the opportunity to vote to approve, on an advisory or non-binding basis, the compensation of our named executive officers as disclosed in accordance with the rules and regulations of the SEC in the “Executive Compensation” section of this Proxy Statement. This proposal, commonly known as a “say-on-pay” proposal, gives our stockholders the opportunity to express their views on our named executive officers’ compensation as a whole. This vote is not intended to address any specific item of compensation or any specific named executive officer, but rather the overall compensation of our named executive officers and the philosophy, policies and practices described in this Proxy Statement.

The say-on-pay vote is advisory, and therefore is not binding on us, our Compensation and People Committee or our Board. The say-on-pay vote will, however, provide information to us regarding stockholder sentiment about our executive compensation philosophy, policies and practices, which our Compensation and People Committee will be able to consider when determining executive compensation for the remainder of the current fiscal year and beyond. Our Board and our Compensation and People Committee value the opinions of our stockholders and to the extent there is any significant vote against the compensation of our named executive officers as disclosed in this proxy statement, we will endeavor to communicate with stockholders to better understand the concerns that influenced the vote and our Compensation and People Committee will evaluate whether any actions are necessary to address those concerns. We currently conduct advisory votes on our named executive officer compensation on an annual basis, and we expect to conduct our next advisory vote at our 2023 annual meeting of stockholders.

As a result of the feedback that we received from our stockholders through our extensive engagement efforts, our Compensation and People Committee made extensive changes to our executive compensation program. We believe that the information we have provided in this “Executive Compensation” section, and in particular the information discussed in the sections titled “Executive Compensation—Letter from our Compensation and People Committee” and “Executive Compensation—Compensation Discussion and Analysis,” which describe these changes in detail, demonstrates that our executive compensation program has been designed appropriately and is working to ensure management’s interests are aligned with our stockholders’ interests to support long-term value creation. Accordingly, we ask our stockholders to vote “FOR” the following resolution at the Annual Meeting:

“RESOLVED, that Palo Alto Networks, Inc.’s stockholders approve, on an advisory basis, the compensation of the named executive officers, as disclosed in Palo Alto Networks, Inc.’s proxy statement for the 2022 Annual Meeting of Stockholders pursuant to the compensation disclosure rules and regulations of the SEC, including the compensation discussion and analysis, the compensation tables and narrative discussion, and other related disclosure.”

Required Vote

The approval, on an advisory basis, of the compensation of our named executive officers requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the virtual Annual Meeting and entitled to vote thereon to be approved. You may vote “for,” “against,” or “abstain” with respect to this proposal. Abstentions are considered votes present and entitled to vote on this proposal, and thus will have the same effect as votes “against” this proposal. Broker non-votes will have no effect on the outcome of this proposal.

Although the advisory vote is non-binding, our Board values our stockholders’ opinions. The Compensation and People Committee will review the results of the vote and, consistent with our record of stockholder responsiveness, consider stockholders’ concerns and take into account the outcome of the vote when considering future decisions concerning our executive compensation program.

Recommendation of the Board

The Board recommends that you vote “FOR” the approval, on an advisory basis, of the compensation of our named executive officers.

Executive Compensation

Letter from our Compensation and People Committee

November 3, 2022

Dear Fellow Stockholders,

The Compensation and People Committee of the Palo Alto Networks Board of Directors is committed to ensuring that we have the right leadership team in place, and that our compensation programs appropriately compensate our executives, allowing us to retain and attract individuals of outstanding character and ability who are champions of our culture and mission. As a committee, we strongly believe in, and are committed to, executing a pay-for-performance compensation philosophy that closely aligns executive compensation to our financial and operational performance.

Fiscal 2022 was once again a year marked by disruption and uncertainty. The COVID-19 pandemic continued to create significant global economic and social uncertainty, as new variants of the disease disrupted workplaces and contributed to organizational disruption. Russia's invasion of Ukraine and other geopolitical tensions disrupted the global economy, and contributed to global economic uncertainty. Our management team once again embraced these challenges by mobilizing our people and resources to keep our employees healthy, safe and professionally fulfilled, while delivering very strong financial and operational performance.

We believe that Palo Alto Networks is at an inflection point in our mission to be the cybersecurity partner of choice. In speaking for the entire Board, we believe that Nikesh Arora is one of only a few leaders who can deliver the level of performance critical to our successful accomplishment of the next phase of our growth. Further, we believe that Nikesh has built a strong management team that we are committed to retaining because we also believe that continuity of our leadership team is critical to reaching our goals.

Consistent with our pay-for-performance philosophy, we designed our fiscal 2022 executive compensation program to provide strong rewards for strong performance. In designing the program, we sought the advice of independent compensation consultants, and carefully evaluated and tied program parameters to metrics that we believe significantly impact long-term value and return for our stockholders and other stakeholders.

- **Paid For Performance Based on Aggressive Targets:** We set our executive cash incentive and performance stock unit ("PSU") award targets above the guidance we provided in our August 23, 2021 earnings release, which aligns with our pay-for-performance philosophy of requiring strong performance for strong rewards.
- **Adopted Multiple Year Measurement Period:** 100% of fiscal 2022 named executive officer equity awards are performance based, require sustained performance over multiple years for any payout, and include a relative total stockholder return multiplier in addition to financial metrics, which aligns a significant portion of our executive compensation to long-term financial performance.
- **Eliminated Duplicative Metrics:** We eliminated duplicative performance metrics in our cash incentive plan and PSU awards, ensuring alignment of compensation with a broader set of financial performance metrics.
- **Tied Compensation to ESG Goals:** We added an ESG modifier to our cash incentive plan to ensure a linkage between compensation and our ESG goals, which provided for the calculated result to be adjusted up or down by up to 10% based on an ESG scorecard with climate, inclusion and diversity, and human capital metrics.
- **Implemented a One Year Holding Policy:** We implemented a policy requiring our name executive officers to hold all net shares for one year following vesting, subject to certain exceptions.

Executive Compensation

We are confident that our 2022 executive compensation program delivers on the commitments we made to our stockholders in our 2021 proxy statement.

We are again asking for your support of our executive compensation program. After gathering extensive feedback from stockholders and engaging an independent consulting firm, we believe that our Compensation and People Committee has implemented a sustainable, best-in-class program that is supported by market benchmarks aligned with best practices and the interests of our shareholders.

Thank you for your continued support and investment in Palo Alto Networks.

Sincerely,

The Compensation and People Committee

Rt Hon Sir John Key (Chair)

John Donovan

Lorraine Twohill

Compensation Discussion and Analysis

This Compensation Discussion and Analysis (“CD&A”) describes in detail our executive compensation programs and the resulting pay decisions for our named executive officers (“NEOs”).

Our Compensation and People Committee believes that the fiscal 2022 compensation of our NEOs is commensurate with our size and performance, the significant scope of their roles and responsibilities, and their strong leadership in a manner consistent with our corporate values of disruption, collaboration, execution, integrity and inclusion.

Named Executive Officers



Nikesh Arora
Chief Executive
Officer, Chair of
the Board



Dipak Golechha
Executive Vice
President, Chief
Financial Officer



**William “BJ”
Jenkins**
President*



Lee Klarich
Executive Vice
President, Chief
Product Officer



Nir Zuk
Executive Vice
President,
Founder, Chief
Technology
Officer

* Mr. Jenkins was appointed President in August 2021.

CD&A HIGHLIGHTS

- Our employees, led by our NEOs, continued to deliver strong financial results for our stockholders in fiscal 2022.
- Our financial performance has led to strong financial returns, a one-year total shareholder return (“TSR”) of 25.07% (or at the 92nd percentile of our compensation peer group), and a return of capital through our stock buyback program.
- We engaged in discussions with stockholders holding 60% of our outstanding shares (as of June 30, 2022), with a concentrated focus on the issues that mattered to them, including our executive compensation program.
- We followed through on the commitments we made to our stockholders in the proxy statement for our 2021 annual meeting of stockholders.
- Our fiscal 2022 executive compensation programs align with recognized best practices.

Philosophy and Objectives

As a global cybersecurity provider based in the San Francisco Bay Area, we operate in a highly competitive and rapidly evolving market, and we expect competition among companies in our market to continue to increase. We compete with many other technology companies in seeking to attract and retain highly skilled top talent. Our continued success has made our employees and executives more attractive as candidates for employment with other companies, and we are intently focused on maintaining competitive compensation programs, in part, to address recruiting efforts by other companies in the technology industry.

Executive Compensation

As a result, our compensation philosophy is designed to establish and maintain a compensation program that attracts and rewards talented individuals who possess the skills necessary to support our near-term objectives and create long-term value for our stockholders, grow our business and assist in the achievement of our strategic goals. We believe that a performance-based culture is crucial to our growth and success.

The specific objectives of our executive compensation program are to:



Drive the development of a successful and profitable business through our next phase of growth.



Create sustainable long-term value for our stockholders by aligning the interests of our executive officers with those of our stockholders.



Reward our executive officers for the successful achievement of our financial and strategic growth objectives.



Attract, motivate and retain highly qualified executives who possess the skills and leadership necessary to continue to grow our business, and provide compensation packages that are **comparable to our peers and the overall competitive market** and that are heavily weighted to be based on our performance.

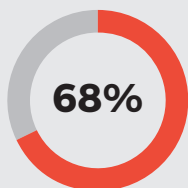
While remaining true to our compensation objectives, as well as sound compensation policies and practices, our compensation program also has the flexibility to incorporate feedback and evolving compensation practices that are important to us and our stockholders, such as the addition of an ESG modifier to our NEOs' cash incentive plan ensuring a linkage between NEO compensation and our ESG commitments.

Stockholder Engagement in Fiscal 2022

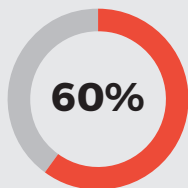
In fiscal 2022, we once again undertook extensive engagement efforts to obtain our stockholders' views on executive compensation, corporate governance and other matters, and to determine how best to respond to that feedback. Our Lead Independent Director once again played a central role in our stockholder engagement efforts in fiscal 2022. The Chair of our Compensation and People Committee also met with numerous stockholders to discuss their views regarding our executive compensation program.

Our Lead Independent Director and management team regularly update our Board on our engagement efforts, providing summaries of our stockholders' feedback. The continuous feedback that we receive from our stockholders has shaped the executive compensation program and practices implemented by our Compensation and People Committee.

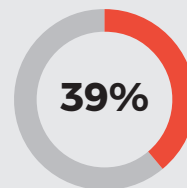
The discussions with our stockholders also provided valuable insights into the concerns that led to the low say-on-pay support that we received at our 2020 annual meeting of stockholders, and provided the foundation of our executive compensation program in fiscal 2021 and 2022. At our 2021 annual meeting of stockholders, we were pleased that approximately 81% of votes were cast in favor of our say-on-pay proposal, which was significantly higher than the approximately 40% support we received the prior year.



We reached out to stockholders representing 68% of our outstanding shares.




We engaged in discussions with investors representing 60% of our outstanding shares (which is all stockholders that indicated a willingness to engage with us).



Our Lead Independent Director participated in discussions (30 meetings) with investors representing 39% of our outstanding shares.

* Stockholder ownership, to our knowledge, as of June 30, 2022.

WHAT WE HEARD	HOW WE RESPONDED
 <p>Executive Compensation Modifications to the structure of our executive compensation program and enhanced disclosure.</p>	<ul style="list-style-type: none"> • 100% of our NEOs' equity compensation (aside from new hire awards) is performance-based, with different performance targets than the cash incentive plan awards. • We increased our stock ownership guidelines for our NEOs, including our Chief Executive Officer. • We added an ESG modifier to our cash incentive plan. • We established a one-year post-vesting holding period for all NEOs, including our Chief Executive Officer.

Our Compensation Best Practices

In line with the feedback that we received from our stockholders and our independent compensation consultants, we implemented extensive changes to our executive compensation program in fiscal 2021, and maintained these compensation practices in fiscal 2022.

We believe our executive compensation program represents recognized best practice and reflects principles that align the compensation of our NEOs with the long-term interests of our stockholders.

NEW FOR 2022

- ✓ 100% of equity compensation (aside from new hire awards) is performance-based, with different performance targets than the cash incentive plan
- ✓ Addition of ESG modifier to cash incentive plan, which modifies the annual incentive cash compensation (plus or minus 10%), based on our performance relative to an ESG scorecard with climate, inclusion and human capital metrics
- ✓ Increase to stock ownership guidelines
- ✓ One-year post-vesting holding period for all NEOs, including our Chief Executive Officer

ROBUST AND INDEPENDENT COMPENSATION DECISION-MAKING, ALIGNED WITH OUR CORPORATE VALUES

- ✓ 100% independent Compensation and People Committee
- ✓ Independent compensation consultants
- ✓ Annual review of compensation strategy
- ✓ Consideration of annual say-on-pay vote

COMPENSATION BEST PRACTICES

- ✓ Majority of compensation is performance-based and at-risk
- ✓ 100% short-term incentive cash compensation is performance-based and at-risk
- ✓ No single trigger vesting of equity awards on occurrence of a change in control
- ✓ No dividends paid on unvested equity
- ✓ Robust stock ownership guidelines
- ✓ No hedging or pledging, except limited pledging permitted with the prior approval of the ESG and Nominating Committee
- ✓ Meaningful clawback policy
- ✓ Limited perquisites and personal benefits
- ✓ No defined benefit plans or SERPs
- ✓ Implementing the advice of independent compensation consultants

We Followed Through On Our Commitments

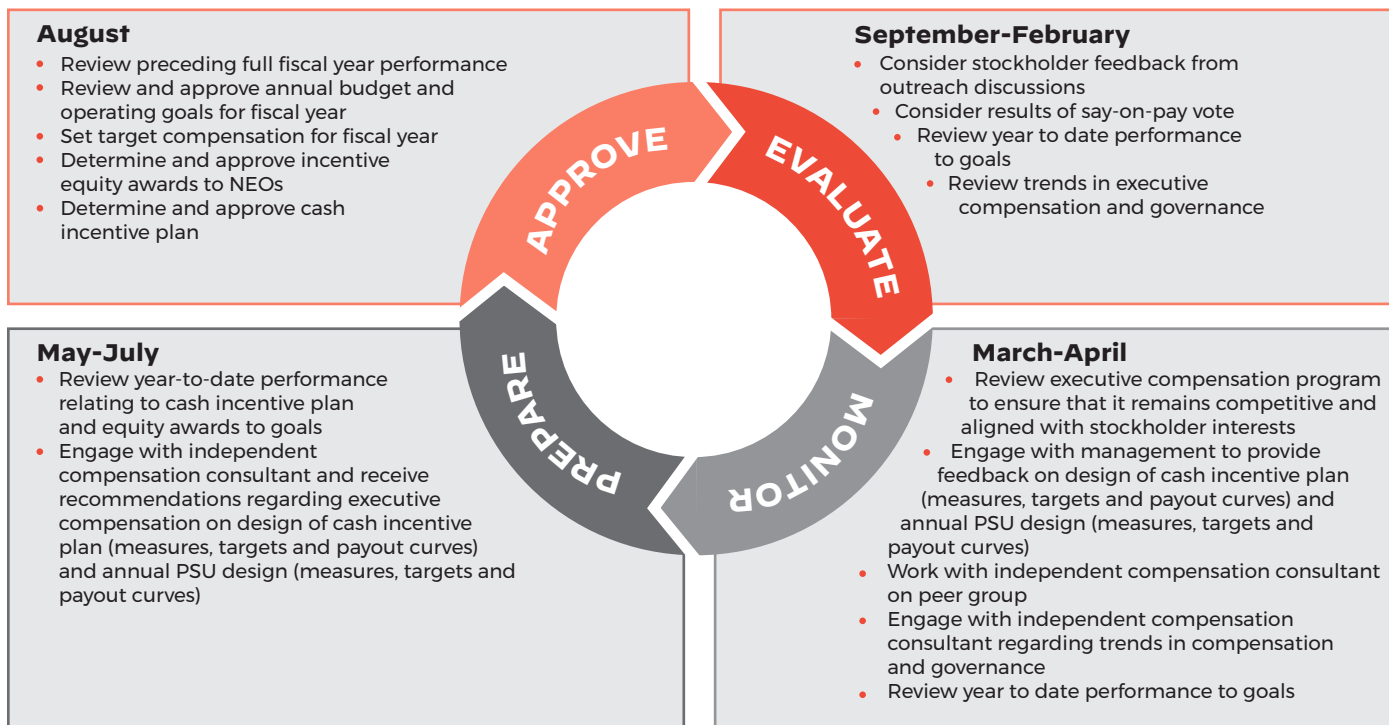
In the proxy statement for our 2021 annual meeting of stockholders, we made several commitments with respect to the design of our executive compensation program and related policies. We made these commitments following receipt of extensive feedback from our stockholders and advice from two independent compensation consultants, Pay Governance and Meridian Compensation Partners.

Summarized below are our fiscal 2022 commitments, and our follow through in meeting those commitments.

 OUR FISCAL 2022 COMMITMENTS	 OUR FOLLOW THROUGH
Maintain a robust stockholder outreach program	✓
Provide more transparency in our executive compensation disclosures, as well as more robust CD&A disclosures	✓
Disclose the target value of equity grants to our NEOs for the completed fiscal year in the CD&A	✓
Increase the CEO stock ownership guidelines to 10x base salary	✓
Make any one-time awards to NEOs a majority performance based and only make such grants in exceptional circumstances	✓
Annual equity grants to our NEOs to be at least 75% performance-based in line with market best practices	✓
Require a one year minimum vesting period for all grants to our Chief Executive Officer and other NEOs going forward, and implement a policy to require our Chief Executive Officer and other NEOs to hold all net shares for one year after vesting subject to certain exceptions	✓
Use a PSU award design that requires sustained performance over multiple years for any payout	✓
Include a relative TSR multiplier to our executive PSU awards	✓
Ensure that ongoing incentive goals are considered “challenging” with targets set at or above management guidance	✓
Disclose performance targets compared to actual results and corresponding payout scale	✓
Eliminate duplicate performance metrics in our cash incentive plan and PSU awards	✓
No upward discretion except for extraordinary circumstances (such as the COVID-19 pandemic)	✓
Incorporate an ESG metric into fiscal 2022 cash incentive plan to ensure linkage between compensation and our ESG goals	✓

Compensation-Setting Process Compensation Timeline and Process

The compensation setting timeline and process of our Compensation and People Committee is summarized below.



Our Compensation and People Committee makes compensation decisions after considering factors that include:

- The performance and experience of each executive officer;
- The scope and strategic impact of the executive officer’s responsibilities;
- Our past business performance and future expectations;
- Our long-term goals and strategies;
- The performance of our executive team as a whole;
- An analysis of competitive market conditions, with the assistance of its external compensation consultant(s);
- The incentives provided to our executives to remain with the Company and drive the Company’s continued growth;
- The value of each executive’s unvested equity holdings;
- For each executive officer, other than our CEO, the recommendation of our CEO based on an evaluation of his performance;
- The challenge and cost of replacing high-performing leaders with in-demand skills; and
- The internal parity of compensation among our executive officers.

Our Compensation and People Committee does not apply a formula or assign relative weights to specific compensation elements.

Roles and Responsibilities

PARTICIPANT	ROLE IN COMPENSATION DETERMINATION PROCESS
Compensation and People Committee	<ul style="list-style-type: none"> • Review, evaluate and approve the compensation arrangements, plans, policies, and practices for our NEOs • Oversee and administer cash-based and equity-based compensation plans • Review our executive compensation program, from time to time, to determine whether they are appropriate, properly coordinated, achieve their intended purposes and to make any modifications to existing plans and arrangements or to adopt new plans or arrangements • Retain the services of external advisors, including compensation consultants, legal counsel and other advisors, from time to time, as it sees fit, in connection with carrying out its duties
Management	<ul style="list-style-type: none"> • Together with our independent compensation consultants, the Chief Executive Officer and the Chief People Officer assist the Compensation and People Committee in the execution of its responsibilities by providing information on corporate and individual performance, market data with respect to compensation and management's perspective and recommendations on compensation matters • Chief Executive Officer makes recommendations to the Compensation and People Committee regarding compensation matters, including the compensation of executive officers (other than himself) • Chief Executive Officer participates in meetings of the Compensation and People Committee (other than portions of meetings that involve discussions of his own compensation) <p>While our Compensation and People Committee solicits the recommendations and proposals of our Chief Executive Officer with respect to compensation-related matters, these recommendations and proposals are only one factor in our Compensation and People Committee's decision-making process.</p>
<p>Independent Compensation Consultants</p> <p><i>For fiscal 2022 advice, the Compensation and People Committee engaged Pay Governance and Meridian Compensation Partners, national compensation consulting firms</i></p>	<ul style="list-style-type: none"> • Assist the Compensation and People Committee in executing the executive compensation strategy and guiding principles, assessing the current target total direct compensation opportunities of our executive officers, including comparing them against competitive market practices, developing a compensation peer group and advising on executive compensation decisions • Pay Governance and Meridian Compensation Partners did not provide any services to the Company other than the services provided to our Compensation and People Committee • Our Compensation and People Committee assessed the independence of Pay Governance and Meridian Partners taking into account, among other things, the factors set forth in Exchange Act Rule 10C-1 and the listing standards of Nasdaq and has concluded that no conflict of interest exists with respect to the work that Pay Governance and Meridian Compensation Partners perform for our Compensation and People Committee

Use of Competitive Data

To assess the competitiveness of our executive compensation program and to assist in setting compensation levels, at the Compensation and People Committee's request, Compensia, Inc., our prior independent compensation consultant, compiled market data from a compensation peer group approved by our Compensation and People Committee and industry surveys, including the Radford Global Technology Executive Compensation Survey. The Compensation and People Committee, with the assistance of Pay Governance and Meridian Partners, then analyzed the market and survey data when making fiscal 2022 compensation decisions.

Competitive Positioning

For fiscal 2022, our Compensation and People Committee continued to compare and analyze our executive compensation program and each component of executive compensation against data from a formal compensation peer group of companies.

In the context of our annual executive compensation review, with assistance from Compensia and input from management, in February 2021, our Compensation and People Committee reviewed the peer group of publicly-traded technology companies used to provide information regarding compensation practices for fiscal 2021 to determine if any changes were appropriate for use for fiscal 2022 pay decisions. In determining which companies to include in the peer group, our Compensation and People Committee considered companies that met some or all of the following updated criteria: (i) operated in a high-technology industry; (ii) had annual revenue between approximately \$1.8 billion and \$7.2 billion; (iii) had revenue growth greater than 20%; (iv) had a market capitalization between approximately \$8.6 billion and \$103.1 billion; and (v) had a market capitalization that was at least three times annual revenue. Based on our Compensation and People Committee's review of this updated criteria, no changes were made to the peer group, and the Company was at the 61st percentile of the peer group in terms of revenue and 51st percentile in terms of market capitalization.

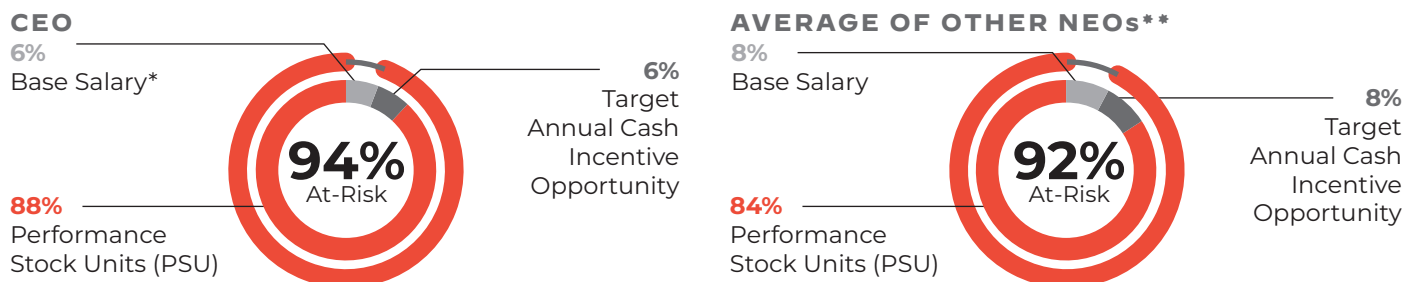
The following publicly-traded companies made up our compensation peer group for fiscal 2022:

Akamai Technologies, Inc.	Fortinet Inc.	ServiceNow, Inc.	SS&C Technologies Holdings, Inc.
Arista Networks Inc.	Norton LifeLock	Snap, Inc.	Synopsys, Inc.
Autodesk, Inc.	Okta, Inc.	Splunk Inc.	Twitter, Inc.
Cadence Design Systems	PayChex, Inc.	Square, Inc. (now Block)	Workday, Inc.
F5 Networks Inc.			

CEO and NEO Pay for Performance Alignment For Fiscal 2022

Pay for performance is a cornerstone of our compensation philosophy. We balance our **strong pay-for-performance compensation philosophy** – where the vast majority of our Chief Executive Officer and other NEO compensation is at-risk and performance-based – with our **need to recruit, incentivize, and retain** talented executives in a highly competitive market. The result is an executive compensation program that is significantly weighted toward at-risk compensation tied to our financial and operational performance.

The graphs below illustrate the predominance of at-risk and performance-based components of our fiscal 2022 compensation program for our Chief Executive Officer and other named executive officers.



* Graph reflects Mr. Arora's target base salary of \$1 million, a significant portion of which he elected to forego.

** Excludes Mr. Jenkins' new hire RSUs which were granted to compensate him for a portion of our estimated value of the unvested equity that he forfeited upon joining us.

In line with our pay for performance compensation philosophy, our Compensation and People Committee also focuses on awarding compensation commensurate with the position and responsibilities held by our NEOs. If an NEO's position or responsibilities change, our Compensation and People Committee undertakes a review of that NEO's compensation to ensure that it remains commensurate with the new position and responsibilities.

How We Compensate Our Chief Executive Officer

As a result of feedback from our stockholders requesting detailed insights into the compensation of our Chief Executive Officer, we include in this section a summary of the rationale for the decisions reached by our Board and Compensation and People Committee regarding Mr. Arora's compensation since he joined the Company in June 2018.

MR. ARORA'S LEADERSHIP TRANSFORMED OUR COMPANY

After Mr. Arora joined the Company, we set an ambition to become the cybersecurity partner of choice, to innovate and to stay ahead of the curve. To make this a reality, Mr. Arora established three strategic priorities critical to our long-term success: transforming network security, delivering comprehensive cloud native security and revolutionizing security operations. Under Mr. Arora's leadership, our successful implementation of this strategy has led to:

- A \$27.8 billion increase in market capitalization (as measured by our market capitalization as of July 31, 2019 and July 31, 2022).
- \$3.6 billion returned to our stockholders in fiscal 2019 through fiscal 2022 through our stock repurchase program.
- Compound annual growth rates of 24% and 29% in revenue and billings, respectively, over fiscal 2019 through fiscal 2022, culminating in fiscal year 2022 with record revenue of \$5.5 billion and record billings of \$7.5 billion.
- An acceleration of our product development efforts, from 22 major product introductions in fiscal 2020 to 49 in fiscal 2022.

Additionally, Mr. Arora successfully steered the Company through the unprecedented global impact of the COVID-19 pandemic, without laying off a single employee, and personally forgoing \$1 million in salary to donate to our COVID-19 pandemic relief fund in fiscal 2021. Mr. Arora subsequently forwent an additional \$1 million in salary.

Transformed Our Business Through Innovation

A transformation that has born a differentiated position that spans our three platforms

- **Network Security** – Comprehensive SASE capability, market-leading VM position, and innovation through advanced subscriptions
- **Cloud Security** – 9 modules, broadest cloud security portfolio, and strong consumption
- **Security Operations** – Pioneered XDR category, XSOAR and Xpanse point product

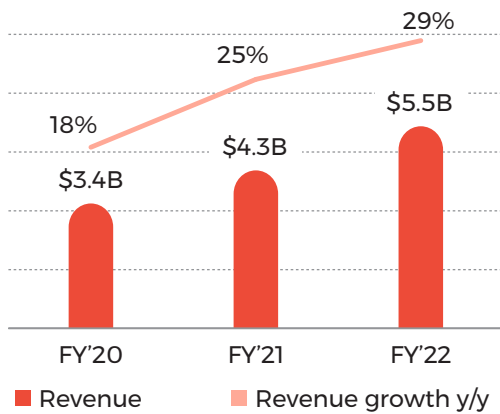
Became an innovation leader by delivering

- 49 product releases across our three platforms in fiscal 2022
- Next generation cloud access security broker (CASB)
- Cloud next generation firewall (NGFW)
- Cloud code security
- Industry first agent and agentless cloud security posture management (CSPM)

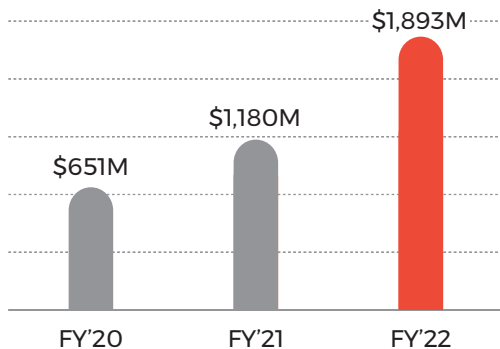
Delivered Zero Trust Security

Delivered Strong Financial Performance and Stockholder Return

ACCELERATING REVENUE GROWTH

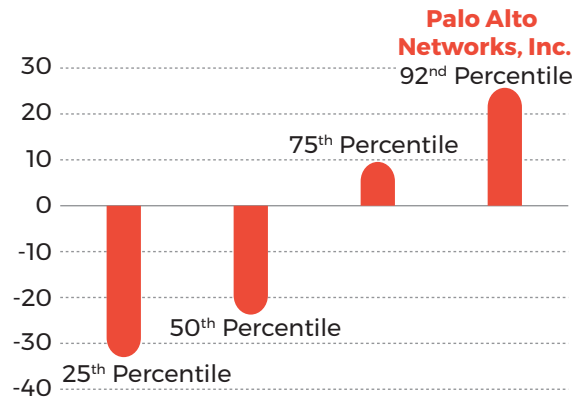


ACCELERATING NEXT-GEN SECURITY ARR GROWTH

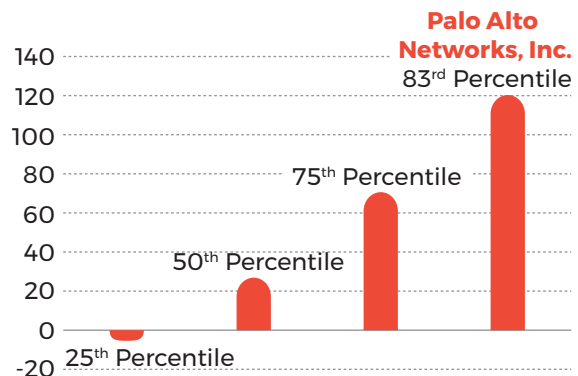


DELIVERING TOTAL SHAREHOLDER RETURN

1-Year TSR Palo Alto Networks vs. Percentiles of Peer Group



3-Year TSR Palo Alto Networks vs. Percentiles of Peer Group



MARKET COMPETITIVE PAY LEVELS AND EVOLVING COMPENSATION IN DIRECT RESPONSE TO STOCKHOLDER FEEDBACK

Our Board believes that Mr. Arora is uniquely qualified to lead our Company. In designing Mr. Arora's compensation packages since he joined the Company in 2018, our Board and Compensation and People Committee sought to deliver market-competitive compensation commensurate with Mr. Arora's capabilities and experience and reflective of the considerable challenge of leading the Company's transformation from a provider of hardware delivered security to a provider of security delivered through the cloud, with multiple products to protect our customers' enterprise, cloud, endpoints, security operation centers and more.

After a disappointing "say-on-pay" vote at our 2020 annual meeting of stockholders, we conducted a comprehensive review of our executive compensation practices. Mr. Arora, in his capacity as Chair of the Board, gave his full support to this process and encouraged our Board and Compensation and People Committee to look at all aspects of our executive compensation program and make the necessary changes to respond to stockholder feedback and further align our program with best practices. As a result of this root and branch examination, our Compensation and People Committee significantly reduced the size of the target value of Mr. Arora's annual equity grant to \$15.0 million in fiscal 2022, from \$21.0 million in fiscal 2021 and \$22.0 million in fiscal 2020. Mr. Arora's fiscal 2022 target direct compensation is at the 75th percentile of Company's compensation peer group. We delivered TSR at the 92nd percentile of our compensation peer group for fiscal 2022.

Our Compensation and People Committee also made other significant changes to Mr. Arora's compensation structure for fiscal 2022:

- A new design for PSUs featuring multi-year financial measures and a relative TSR modifier that requires sustained performance above target, for multiple years, to receive an above target payout.
- An increase in his stock ownership requirement to 10x base salary.
- A one-year post-vesting holding period for equity awards.

CEO COMPENSATION

	FY21 Target	FY22 Target
Annual Salary ⁽¹⁾	\$1.0M	\$1.0M
Target Bonus	\$1.0M	\$1.0M
Time-Based RSUs	n/a	n/a
Performance Stock Units	\$21.0M vesting over 4 years	\$15.0M
Total Target	\$23M	\$17M
Year-Over-Year Change (total compensation)	-4.2%	-26.1%
Performance-Based (total compensation)	95.7%	94.1%

⁽¹⁾ Mr. Arora forwent a portion of his annual salary (in the case of fiscal 2021, in connection with our funding efforts to support colleagues and communities impacted by the COVID-19 pandemic). He opted to receive only approximately \$0.3 million of his salary in fiscal 2021, approximately \$0.25 million of his salary in fiscal 2022, and approximately \$0.75 million of his salary in fiscal 2023.

Fiscal 2022 Executive Compensation Program

Our executive compensation programs are tied to the Company's financial and operational performance, support our commitment to good compensation governance and provide market-based opportunities to attract, retain and motivate our executives in an intensely competitive market for qualified talent.

FISCAL 2022 PROGRAM HIGHLIGHTS

- No base salary or target annual incentive opportunity increases in fiscal 2022 for continuing NEOs.
- Equity compensation granted in fiscal 2022 was 100% performance-based PSUs (aside from new hire RSUs).
- Performance measures aligned with business strategy.
- Chief Executive Officer donated 75% of his fiscal 2022 base salary and 25% of his fiscal 2023 base salary.
- Mr. Jenkins appointed President.
- Outstanding performance resulted in 150% achievement for our NEOs for cash incentive plan and 100% performance for the portion of the PSUs granted to our NEOs in July 2019 that were eligible to vest based on fiscal 2022 annual revenue growth.

The following table lists the pay elements of our fiscal 2022 programs and the purpose they served:

	Pay Element	Purpose	Performance Period	Performance Metric
Fixed Pay	Base Salary	Designed to be market-competitive and attract and retain talent	n/a	n/a
	Annual Cash Incentive Opportunity	Incentivize achievement of near-term financial and operational objectives, consistent with longer-term goals	Annual	Annual normalized billings for fiscal 2022 Annual organic operating margin for fiscal 2022
At Risk Pay	Revenue/TSR Performance Stock Units (PSU)	Reward long-term profitability and long-term performance relative to peers Create alignment with stockholders Facilitate executive retention	Two years and three years	Annual revenue growth for fiscal 2022, 2023, and 2024 and TSR of the Company relative to indexed companies for fiscal 2022 through 2024 ("rTSR")

Quantum of Compensation

Palo Alto Networks delivered another year of outstanding results for our stockholders in fiscal 2022, with a strong year of financial performance and execution. Our TSR for fiscal 2022 was 25.07%, placing us at the 92nd percentile of our compensation peer group.

The table below shows the targeted value of total compensation to our Chief Executive Officer and each other NEO for fiscal 2022, as compared to fiscal 2021.

Name	Targeted Value of Total Compensation for fiscal 2021	Targeted Value of Total Compensation for fiscal 2022	Percentage Change
Mr. Arora	\$23,000,000	\$17,000,000	-26.1%
Mr. Golechha*	\$ 5,200,000	\$ 5,200,000	0
Mr. Jenkins**	n/a	\$15,500,000	n/a
Mr. Klarich	\$11,100,000	\$11,100,000	0
Mr. Zuk	\$ 3,900,000	\$ 4,400,000	12.8%

* Mr. Golechha joined the Company in December 2020 and was promoted to CFO in March 2021. Targeted value of total compensation for fiscal 2021 includes (a) annualized base salary and cash incentive compensation as CFO for fiscal 2021 and (b) PSUs with a target value of \$4,000,000, but excludes RSUs with a target value of \$4,000,000 that he received in connection with his hire, which are not reflected in the table.

** Mr. Jenkins joined the Company as President in August 2021. Targeted value of total compensation for fiscal 2022 includes (a) annualized base salary and cash incentive compensation as President for fiscal 2022 and (b) PSUs with a target value of \$14,000,000, but excludes RSUs with a target value of \$10,000,000 that he received in connection with his hire, which are not reflected in the table. See "BJ Jenkins Compensation Arrangements" below for further detail.

Fiscal 2022 Executive Compensation Program Components

BASE SALARY

Base salary is the primary fixed component of our executive compensation program. We use base salary to compensate our executive officers for services rendered during the fiscal year and to ensure that we remain competitive in attracting and retaining executive talent.

Generally, we establish the initial base salaries of our executive officers through arm's-length negotiation at the time of hire taking into account his or her position, qualifications, experience, prior salary level, and the base salaries of our other executive officers. Thereafter, our Compensation and People Committee reviews the base salaries of each NEO annually and makes adjustments as it determines to be reasonable and necessary in line with the factors described under "Compensation Timeline and Process" above.

NO INCREASE IN BASE SALARY FOR ANY NEO IN FISCAL 2022.

The table below shows the base salary for each NEO for fiscal 2022.

Name	Base Salary End of Fiscal 2021	Base Salary End of Fiscal 2022	Percentage Increase
Mr. Arora⁽¹⁾	\$1,000,000	\$1,000,000	0%
Mr. Golechha	600,000	\$ 600,000	0%
Mr. Jenkins⁽²⁾	n/a	\$ 750,000	n/a
Mr. Klarich	\$ 550,000	\$ 550,000	0%
Mr. Zuk⁽³⁾	₪1,482,000	₪1,482,000 ⁽³⁾	0%

⁽¹⁾ Mr. Arora has elected to forgo his base salary of \$1 million for the period beginning on November 1, 2021 through October 31, 2022.

⁽²⁾ Mr. Jenkins' annual base salary for fiscal 2022 was set at \$750,000 in connection with his hire in August 2021.

⁽³⁾ Mr. Zuk is employed by our Israel subsidiary and his base salary is expressed in Israeli currency.

ANNUAL CASH INCENTIVE COMPENSATION

We use annual cash incentive compensation to motivate our NEOs to achieve our annual financial and operational objectives, while making progress towards our longer-term strategic and growth goals.

FISCAL 2022 CASH INCENTIVE PLAN

In August 2021, our Compensation and People Committee adopted a cash incentive plan for all employees not paid commissions (including our NEOs) and approved the target levels for the annual financial objectives at levels that were challenging and required substantial skill and effort on the part of senior management. The cash incentive plan included an annual performance period with (i) payouts of up to 100% of the target cash incentive compensation opportunities made on a semi-annual basis based on year to date results and (ii) payouts for over-performance (referred to as accelerator payments and discretionary payments, as described below) made after the end of the fiscal year. See the section titled “Fiscal 2022 Cash Incentive Plan Measure and Curves” below for additional information regarding the target payout and actual payout under our cash incentive plan.

TARGET ANNUAL INCENTIVE COMPENSATION OPPORTUNITIES

As in prior years, the target annual cash incentive compensation opportunities for our NEOs were expressed as a percentage of their respective base salaries.

NO INCREASE IN TARGET ANNUAL CASH INCENTIVE COMPENSATION FOR ANY NEO IN FISCAL 2022.

The table below shows the target annual cash incentive compensation percentage for fiscal 2022 and the corresponding target and maximum dollar values:

Name	Target Annual Incentive Compensation Opportunity (as a % of base salary) at end of Fiscal 2022	Fiscal 2022 Target Annual Incentive Compensation Opportunity	Fiscal 2022 Maximum Annual Incentive Compensation Opportunity
Mr. Arora	100%	\$1,000,000	\$1,650,000
Mr. Golechha	100%	\$ 600,000	\$ 990,000
Mr. Jenkins ⁽¹⁾	100%	\$ 750,000	\$1,237,500
Mr. Klarich	100%	\$ 550,000	\$ 907,500
Mr. Zuk	100%	₪1,482,000 ⁽²⁾	₪2,445,300 ⁽²⁾

⁽¹⁾ Mr. Jenkins’ target annual cash incentive compensation opportunity was set at 100% of his annual base salary in connection with his hire in August 2021.

⁽²⁾ Mr. Zuk is employed by our Israel subsidiary and his target annual cash incentive compensation opportunity is expressed in Israeli currency.

CORPORATE PERFORMANCE MEASURES

For fiscal 2022, our Compensation and People Committee selected annual normalized billings and annual organic operating margin as the corporate performance measures.

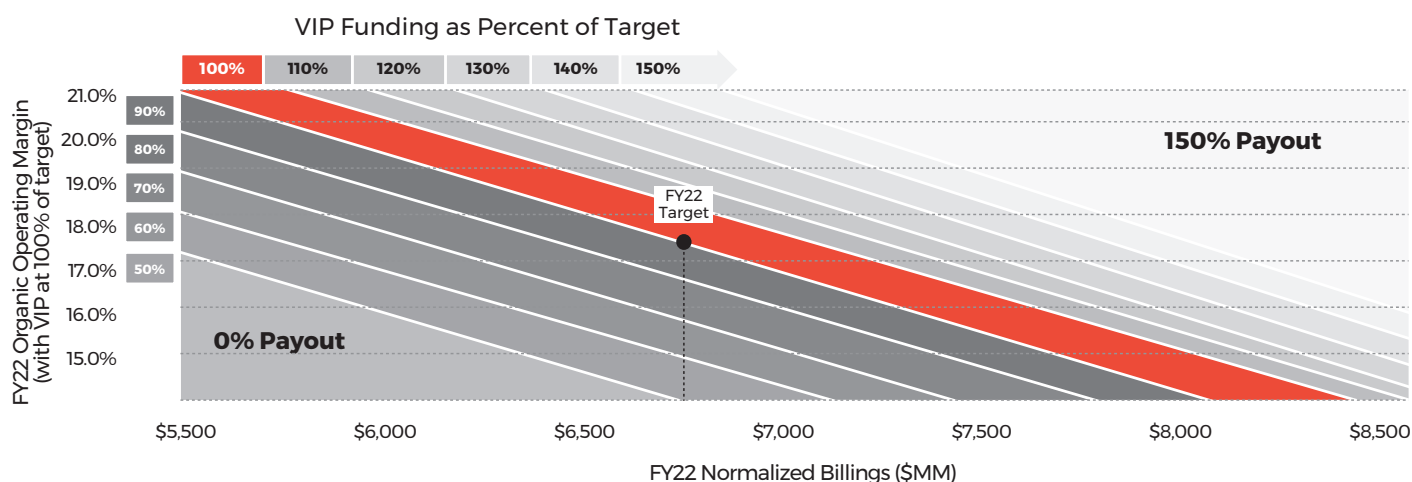
Corporate Performance Metric	What It Is	Why It’s Important
Annual normalized billings	Fiscal 2022 billings as reported in our Form 10-K, less billings from entities acquired in fiscal 2022	A billings metrics better reflects in-period organic performance and aligns with the shift in our business model to one focused on annual recurring revenue
Annual organic operating margin	Fiscal 2022 non-GAAP operating margin, excluding the effects of acquisitions and dispositions in fiscal 2022 and bonus payout in excess of 100% of the target cash incentive under our cash incentive plan	This profitability measure is tied to management performance and profit we generate for stockholders

Potential payouts under the plan were based on a set of curves representing different levels of organic operating margin and normalized billings performance.

- **Design:** To provide an incentive to management to make appropriate trade off decisions between investments in growth and profitability.
- **Pay and Performance Relationship:** The curves were designed to require significant performance above each curve to move to the next curve so that performance slightly above target would not result in an above target payout. Performance below the minimum curve would result in 0% of target payout and performance above the maximum curve would result in a formulaic payment maximum of 150% regardless of the level of overperformance.
- **Target Setting:** Our fiscal 2022 operating plan approved in August 2021, which was used to set the incentive plan targets, provided normalized billings and organic operating margin targets. Performance above the high end of the targets were required for an above 100% payout.
- **Difficulty of Achieving Targets:** Fiscal 2022 target for normalized billings represented growth of 24% above the prior year actual billings. When we set the targets in August 2021, we decided that these targets were set at an appropriate level of stretch performance based on our internal financial projections and the macro economic environment. The fiscal 2022 target for billings growth was set above the guidance we provided in our August 23, 2021 earnings release.

The graph below contains the curves used to determine payouts in the fiscal 2022 cash incentive plan.

FISCAL 2022 CASH INCENTIVE PLAN MEASURES AND CURVES



* Represents normalized billings of \$6,734 million and non-GAAP operating margin of 17.6% for fiscal 2022.

	FY22 Targets	FY22 Actual	FY22 Payout
Normalized Billings	\$6,734M	\$7,472M	150% of Target
Organic Operating Margin	17.6%	20.0%	Target

The calculation of normalized billings and organic operating margin is provided in [Appendix A](#) to this Proxy Statement.

PERFORMANCE REQUIREMENTS AND ESG MODIFIER

Under the cash incentive plan, funding would be made as the organic operating margin target and the normalized billings target are achieved as per the chart above. Achievement above the minimum achievement would increase funding on a non-linear basis, with achievement of 100% of both performance targets resulting in funding at 100% of the target cash incentive compensation opportunity. Payouts of up to 100% of the target cash incentive compensation opportunities are made on a semi-annual basis and any payouts for performance exceeding 100% of the annual targets (referred to as accelerator payments) are paid out as described in the following paragraph.

Executive Compensation

To ensure a linkage between compensation and our ESG goals, we added an ESG modifier for our NEOs in the cash incentive plan for fiscal 2022, which provided for the calculated result to be adjusted up or down by up to 10% based on an ESG scorecard with climate, inclusion and diversity, and human capital metrics. For achievement in excess of 100%, funding would increase on a non-linear basis, based on overperformance on normalized billings and/or organic operating margin versus the annual targets.

For fiscal 2022, no adjustments to our NEOs' calculated payouts under the cash incentive plan were made as a result of the ESG modifier, and our Compensation and People Committee made no discretionary changes to cash incentive plan payouts.

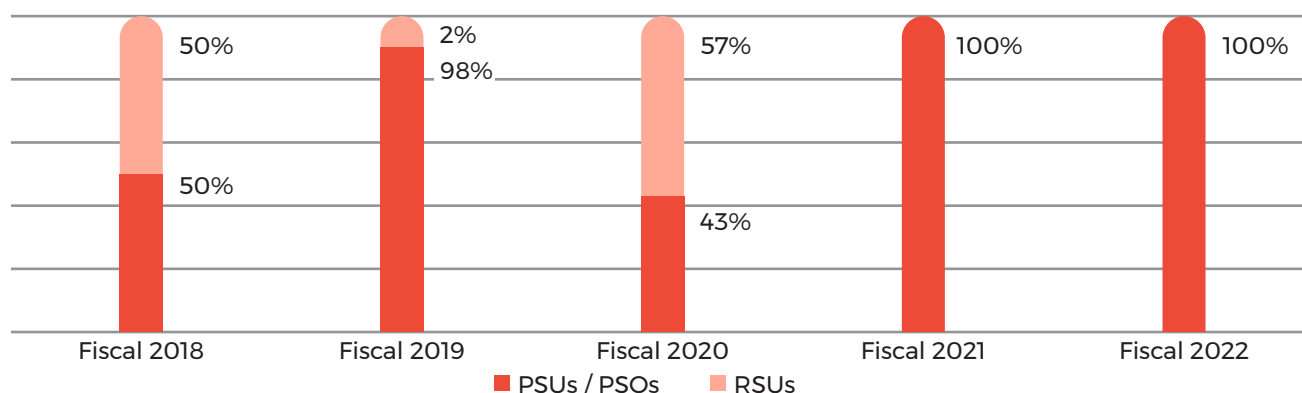
The total potential payouts under the cash incentive plan to all participants (which includes any accelerator and/or discretionary payments) were capped at 150% of the target amounts.

The following table sets forth the fiscal 2022 scorecard measures and results related to the ESG modifier to our fiscal 2022 cash incentive plan.

	FY22 Scorecard Measures	FY22 Results
ESG Modifier (0.9x to 1.1x modifier)	Climate	Fiscal 2022 progress towards our 2030 climate commitment <ul style="list-style-type: none"> Conducted full emissions footprint assessment to establish Science Based Targets aligned to 1.5° scenario. Initiated multiple projects across Operations, Services, Places, Accounting, Information Technology and Travel with explicit goals to reduce energy consumption and emissions CO2e/\$M - maintain flat over fiscal 2021 baseline
	Inclusion & Diversity	Leadership Representation (Women globally; URM in US) <ul style="list-style-type: none"> Women: Increased at Director and above Underrepresented Minority (URM): Increased at Director and above
	Human Capital Practices	Employee engagement <ul style="list-style-type: none"> Attrition: Increased but still below market benchmarks. No material differences for Women/URM Awards: Numerous employer awards, including Newsweek Most Loved, 100% on HRC Equality Index, 100% on Disability Index and Gold Status by Military Friendly.
		<ul style="list-style-type: none"> Committee assessment objectively based on the totality of fiscal 2022 results on the scorecard. Measures determine the modifier of 0.9X to 1.1X that will be applied to final fiscal 2022 payout. Overall external ESG ratings increased across every rating agency that the Company monitors.

LONG-TERM EQUITY COMPENSATION

Our long-term equity compensation is designed to encourage executives to achieve stretch goals in key performance metrics selected to drive long-term performance of our Company and value creation for stockholders. As shown in the graph below, in fiscal 2022, 100% of the long-term equity compensation granted to our NEOs was performance-based (aside from new-hire grants, which include a restricted stock unit grant).

RSU VS PSU/PSO MIX⁽¹⁾

⁽¹⁾ Values above represent the target value of annual awards to NEOs. Certain grants that were made in July 2019 represented advanced grants for fiscal year 2020 and are reflected as fiscal year 2020 above. Values exclude any new hire awards.

FISCAL 2022 EQUITY COMPENSATION

100% OF ANNUAL EQUITY GRANTED TO NEOs IN FISCAL 2022 WAS PERFORMANCE-BASED, EXCLUDING NEW HIRE AWARDS.

In fiscal 2022, 100% of the annual equity awards granted to our NEOs continued to be in the form of PSUs (excluding new hire awards), resulting in the entirety of such equity awards being at risk and performance-based. The Compensation and People Committee determined the size of the awards based on the strong performance, leadership skills and valuable contributions to the Company of our NEOs, especially in the context of the significant transition in our business to expand to a more cloud-centric platform. For all continuing NEOs (except Mr. Zuk), the size of the fiscal 2022 PSU award was equal to or less than the size of their fiscal 2021 PSU award.

The table below shows the targeted value of PSU grants made to our NEOs in fiscal 2021 and fiscal 2022, with the actual target number of shares subject to the fiscal 2022 PSUs determined based on (i) in the case of Mr. Jenkins, the average closing price over the 30 calendar days prior to August 15, 2021, and (ii) in the case of each other NEOs, the 14-day average closing price prior to August 20, 2021.

Name	Targeted Value for PSUs Granted for fiscal 2021 (\$)*	Targeted Value for PSUs Granted in fiscal 2022 (\$)	Percentage change
Mr. Arora	21,000,000	15,000,000	-29%
Mr. Golechha	4,000,000	4,000,000	0
Mr. Jenkins*	n/a	14,000,000	n/a
Mr. Klarich	10,000,000	10,000,000	0
Mr. Zuk	3,000,000	3,500,000	+17%

* Mr. Jenkins received the PSU award in connection with his hire. He also received RSUs with a target value of \$10,000,000 in connection with his hire, which are not reflected in the table. See “BJ Jenkins Compensation Arrangements” below for further detail.

The fiscal 2022 PSUs were allocated into separate tranches, each of which vests based on the achievement of the performance goals for the Company’s 2022, 2023, and 2024 fiscal years, as follows:

- for each NEO (other than Mr. Jenkins), (i) 50% of the PSUs vest based on the achievement of the performance goals for the Company’s 2022 and 2023 fiscal years, and (ii) 50% of the PSUs vest based on the achievement of the performance goals for the Company’s 2022, 2023, and 2024 fiscal years; and
- for Mr. Jenkins, (i) 33% of the PSUs vest based on the achievement of the revenue goal for the Company’s 2022 fiscal year (“**Jenkins Tranche 1**”), (ii) 33% of the PSUs vest based on the achievement of the performance goals for the Company’s 2022 and 2023 fiscal years (“**Jenkins Tranche 2**”), and (iii) 34% of the PSUs vest based on the achievement of the performance goals for the Company’s 2022, 2023, and 2024 fiscal years (“**Jenkins Tranche 3**”).

Executive Compensation

The number of PSUs covered by a tranche that become eligible to vest (“**Eligible PSUs**”) will be equal to the product of (i) the target number of PSUs for the tranche and (ii) the average of the Payout Percentages for each fiscal year in the tranche (as defined below). The Payout Percentage for a fiscal year will be determined based on whether annual revenue growth for the fiscal year is below, at or exceeds the target annual revenue growth for the fiscal year, as follows: (i) if the annual revenue growth is 500bps below the target annual revenue growth, the Payout Percentage will be 50%, (ii) if the annual revenue growth is at the target annual revenue growth, the Payout Percentage will be 100%, and (iii) if the annual revenue growth is at least 500bps above the target annual revenue growth, the Payout Percentage will be 200%. If the annual revenue growth is between any of these thresholds, the Payout Percentage will be determined based on linear interpolation between the corresponding Payout Percentages for those thresholds. If the annual revenue growth is more than 500bps below the target annual revenue growth, the Payout Percentage will be 0%. The target annual revenue growth will be (i) for the Company’s 2022 fiscal year, 27.5%, and (ii) for each other fiscal year, a percentage to be determined by the Compensation and People Committee by the end of the first month of such fiscal year.

For each NEO (except Mr. Jenkins), the number of fiscal 2022 PSUs that vest in a tranche (up to a maximum of 300% of the target number) will be equal to the product of (x) the number of Eligible PSUs for the tranche and (y) the rTSR modifier for the tranche, subject to the applicable NEO’s continued service through the certification date. For Mr. Jenkins, the number of fiscal 2022 PSUs that vest in Jenkins Tranche 1 (up to a maximum of 200% of the target number) will be equal to the number of Eligible PSUs for the tranche; and the number of fiscal 2022 PSUs that vest in each of Jenkins Tranche 2 and Jenkins Tranche 3 (up to a maximum of 300% of the target number for the Tranche) will be equal to the product of (x) the number of Eligible PSUs for the Tranche and (y) the rTSR modifier for the Tranche, as applicable, subject to Mr. Jenkins’ continued service through the certification date.

The rTSR modifier for a tranche will be determined based on the TSR of the Company during the applicable performance period relative to the TSRs of the indexed companies (which are the companies that are a component of the S&P 500 Index or any successor index on the last day of the performance period and were also a component of such index on the first day of the performance period) during such performance period (the “relative TSR” or “rTSR”), as follows: (i) if the relative TSR is at the 90th percentile or above, the rTSR modifier will be 1.5, (ii) if the relative TSR is at the 75th percentile, the rTSR modifier will be 1.25, (iii) if the relative TSR is at the 50th percentile, the rTSR modifier will be 1.0, and (iv) if the relative TSR is at the 25th percentile or below, the rTSR modifier will be 0.75. If the relative TSR is between any of these thresholds, the rTSR modifier will be determined based on linear interpolation between the corresponding numbers for those thresholds. Any fiscal 2022 PSUs that do not become Eligible PSUs due to the minimum performance metrics threshold not being achieved are forfeited without consideration.

Based on our actual annual revenue growth of 29.3% (compared to a target of 27.5%), our Compensation and People Committee determined a payout percentage of 136% to determine the number of shares that will vest for the fiscal 2022 performance period.

OUR APPROACH TO ONE-TIME AWARDS TO NAMED EXECUTIVES

The Compensation and People Committee believes it may be necessary from time-to-time to make one-time awards outside of the normal grant cycle in certain circumstances, primarily to attract new executives, internally promote an executive or counter an external competing offer to one of our existing executives for retention purposes.

In considering these awards, the Compensation and People Committee follows the following principles:

- For new hire awards, time vested equity should compensate the executive for a portion of the unvested equity they would forfeit from their current role or forgo from a competing offer. Any additional upside should be delivered through performance based equity, such that a majority of the total equity value is performance based.
- For promotion and retention awards, the majority of the award should be performance based and any time vested equity should be granted only if the employee’s existing unvested equity is low compared to market benchmarks or internal peers.

In fiscal 2022, the new hire award for BJ Jenkins, our President, was made with a majority of the award in performance based equity and time vested equity was used only to compensate him for a portion of the unvested value that he would forfeit upon resigning his current position.

FISCAL 2022 ACHIEVEMENT WITH RESPECT TO JULY 2019 REVENUE GROWTH PSUs

In fiscal 2019, Messrs. Arora, Klarich and Zuk were granted PSUs that had performance criteria based on revenue growth in each of fiscal 2020, fiscal 2021 and fiscal 2022. Based on our annual revenue growth of 29.3% from fiscal 2021 to fiscal 2022 (compared to a target of 20% annual growth), our Compensation and People Committee determined an achievement level of 100% for the portion of the July 2019 PSUs eligible to vest based on fiscal 2022 annual revenue growth.

FISCAL 2022 ACHIEVEMENT WITH RESPECT TO PERFORMANCE-BASED STOCK OPTIONS

We granted performance-based stock options (the “PSOs”) to Mr. Arora upon his hire in June 2018 and to Messrs. Klarich and Zuk in fiscal 2019 to further incentivize long-term stockholder value creation. Each of the PSOs had a per share exercise price equal to fair market value on the date of grant and they were only eligible to vest upon achievement of stock price growth against a measurement price of \$198.50. Achievement is determined in four performance tranches, and there is an additional service-based requirement based on service since the grant date.

The performance tranches are:

- A 30 trading days average stock price of 150% of the measurement price within 4 years of grant.
- A 30 trading days average stock price of 200% of the measurement price within 5 years of grant.
- A 30 trading days average stock price of 250% of the measurement price within 6 years of grant.
- A 30 trading days average stock price of 300% of the measurement price within 7 years of grant.

The first tranche was achieved in fiscal 2021 and the second, third and fourth tranches were achieved in fiscal 2022 (August 2021, November 2021 and April 2022, respectively) and these tranches vested in accordance with individual vesting schedules over four years from the initial grant date.

OUTSTANDING PERFORMANCE-BASED AWARDS

The following table shows outstanding performance based grants made to our NEOs as of July 31, 2022 which have remaining performance targets. This table illustrates that a significant portion of performance-based awards remain outstanding and continue to incentivize our NEOs’ performance going forward.

Grant	% of Total PSU Grant	Measure Type	FY22	FY23	FY24	FY25	FY26
Executive PSU Program							
	50% (Transition Grant)	Financial Metrics	Revenue Growth FY22 Target 27.5% FY22 Actual 29.3%	Revenue Growth			
FY22 Grant (Made August 2021)		Relative TSR	2 Year Relative TSR vs. S&P 500				
	50%	Financial Metrics	Revenue Growth FY22 Target 27.5% FY22 Actual 29.3%	Revenue Growth	FY24 Target TBD		
		Relative TSR	3 Year Relative TSR vs. S&P 500				

Final Payout = Average of Annual Financial Metric Payouts X Relative TSR Modifier

Start and End of Performance Period

BJ Jenkins Compensation Arrangements

On August 10, 2021, we announced that William “BJ” Jenkins joined the Company as our President. To determine Mr. Jenkins’ compensation, the Compensation and People Committee considered the following factors:

- His qualifications and proven experience, including his most recent role as the President and Chief Executive Officer of Barracuda Networks.
- A review of market data for base salaries, target annual cash incentive compensation opportunities and equity compensation of executives holding similar positions at comparable companies.
- The fiscal 2022 changes to our executive compensation programs and our principle to make the majority of new hire awards performance based.
- Our estimate of Mr. Jenkins’ unvested equity in his prior role as Chief Executive Officer of a privately held company.
- The input and advice from outside advisers on the quantum of each component and the design of the equity grant.

The Compensation and People Committee approved an offer letter setting forth the following terms:

- No special sign on benefits, such as a sign on bonus.
- Annual base salary of \$750,000.
- Target annual incentive compensation of 100% of his base salary.
- \$10,000,000 restricted stock unit award to compensate him for a portion of our estimated value of the unvested equity that he forfeited, with 40% vesting on the one-year anniversary of the date of grant, 30% during the second year in equal quarterly increments, 20% during the third year in equal quarterly increments and 10% during the fourth year in equal quarterly increments, subject to his continued employment with the Company on each vesting date.
- \$14,000,000 PSU award to provide upside compensation, but only if the multiple year performance targets are achieved and subject to his continued employment with the Company on each vesting date. The PSUs were granted under the Company’s new fiscal 2022 executive PSU program (with the same achievement targets as the grants made to our NEOs) and vest as follows:
 - 33% of the PSU shares attained will vest on the first anniversary of the grant date based on fiscal year 2022 revenue growth.
 - 33% of the PSU shares attained will vest on the second anniversary of the grant date based on the Company’s financial performance and relative total stockholder return performance for fiscal years 2022 and 2023.
 - 34% of the PSU shares attained will vest on the third anniversary of the grant date based on the Company’s financial performance and relative total stockholder return performance for fiscal years 2022, 2023 and 2024.

Our Board recognizes the significant investment represented by Mr. Jenkins’ new hire compensation. We intend for Mr. Jenkins’ compensation to be awarded based on the principles we discussed in this CD&A, including future annual equity grants to be at least 75% performance-based in line with market best practices and PSU awards designed to include a TSR multiplier and require sustained performance over multiple years for any payout.

Other Aspects of Our Executive Compensation Programs

Employment Agreements

Each of our NEOs is a party to an employment arrangement setting forth the material terms of his employment. For a summary of the material terms and conditions of these arrangements, see the section titled “—Executive Employment Agreements.”

Post-Employment Compensation

The employment arrangement for each of our NEOs provides for payments and/or benefits related to an involuntary termination of employment, including in connection with a change in control of our Company, on a “double trigger” basis. We believe that these protections assist us in retaining the services of these individuals. We also believe that these protections serve our business objectives by helping our NEOs maintain continued focus and dedication to their responsibilities to maximize stockholder value, including in the event that there is a potential transaction that could involve a change in control of our Company. The terms of these post-employment compensation arrangements were determined after our Board and Compensation and People Committee reviewed our retention goals for each NEO and an analysis of relevant market data. In the cases of Messrs. Golechha and Mr. Jenkins, these post-employment compensation arrangements were added through addenda to their offer letters in February 2022.

For a summary of the material terms and conditions of these post-employment compensation arrangements, as well as an estimate of the amounts potentially payable pursuant to such arrangements, see the sections titled “—Executive Employment Agreements” and “—Potential Payments Upon Termination or Change in Control.”

In February 2022, our Compensation and People Committee adopted a continued service policy as an additional tool to serve several critical interests when circumstances warrant. These interests include maintaining distinctive executive ability; providing continuity of expertise in servicing our customers; minimizing the business disruption that can follow executive attrition; and solidifying succession planning.

Employees holding the title of Senior Vice President or higher are eligible for continued vesting of equity awards if such employee (i) voluntarily resigns from full-time employment; (ii) has attained the age of 55 years and has been continuously employed by the Company as a full-time employee for at least five years as of the date of such resignation or has been continuously employed by the Company as a full-time employee for at least 10 years as of the date of such resignation or transition; and (iii) maintains a continued service relationship with the Company, including by transitioning employment to an advisory role, whether as employee or independent contractor. Eligible employees are not guaranteed benefits under the policy. Each award of benefits under the policy will be individually assessed and determined by the administrator of the policy (which is our Board or Compensation and People Committee), including the determination of which equity awards that will be subject to continued vesting and the related terms and conditions. Eligible employees will enter into a continued service agreement with the Company in a form approved by the administrator.

Executive Officer Stock Ownership Guidelines

Purpose

Our Board believes that our executive officers should hold a meaningful financial stake in our Company to closely align their interests with those of our stockholders and has therefore adopted stock ownership guidelines as part of our corporate governance guidelines.

Ownership Definition

Unvested PSUs, RSUs, and unexercised stock options do not count toward satisfying these ownership guidelines.

Ownership

The following is a summary of our robust stock ownership guidelines. Our Chief Executive Officer and executive officers who report directly to our Chief Executive Officer must accumulate and hold shares of our common stock based on a multiple of base salary within five years of their appointment as, or promotion to, an executive officer.

As of September 30, 2022, each of our NEOs have met their respective ownership guideline in advance of the deadline.

The following table lists the specific ownership requirements for our NEOs, their status in meeting the guidelines, and their deadlines to meet the current requirements.

Executive Compensation

Officer	Multiple of Base Salary Requirement	Status	Deadline
Nikesh Arora	10x	Met	June 2023
Dipak Golechha	1x	Met	March 2026
William “BJ” Jenkins	1x	Met	August 2026
Lee Klarich	1x	Met	May 2011
Nir Zuk	1x	Met	February 2010

Risk Assessment and Compensation Practices

Our management assesses and discusses with our Compensation and People Committee our compensation policies and practices as they relate to our risk management. Based upon this assessment, the Compensation and People Committee believes that any risks arising from such policies and practices are not reasonably likely to have a material adverse effect on us.

In reaching this conclusion, we have considered, among other things, the following factors:

- our cash incentive plan reflects a “pay for performance philosophy” that rewards our NEOs and other eligible employees for achievement of performance targets;
- discretionary bonuses are reserved for extraordinary performance and achievement;
- total compensation features a balance of short- and long-term incentives (LTI), with the majority of pay delivered in LTI for senior executives;
- our equity awards include multi-year vesting schedules requiring long-term employee commitment;
- our performance expectations reward long-term value creation, profitability and excellence;
- our use of multiple performance measures in incentive plans;
- our regular monitoring of short-term and long-term compensation practices to determine whether management’s objectives are satisfied;
- performance goals require sufficient “stretch,” yet are achievable;
- both the short-term and long-term incentive programs have caps for significant upside performance; and
- our independent compensation consultant evaluated and assessed our compensation policies and practices and confirmed that our practices do not encourage excessive risk taking.

Compensation Recovery Policy

We have adopted a Clawback Policy through which we may seek the recovery of performance-based incentive compensation paid by us under certain circumstances. The Clawback Policy applies to our Chief Executive Officer and to all officers who report directly to the Chief Executive Officer, including our NEOs (the “covered executives”). The Clawback Policy provides that if (i) we restate our financial statements as a result of a material error; (ii) the amount of cash incentive compensation or performance-based equity compensation that was paid, or is payable based on achievement of specific financial results, to a covered executive would have been less if the financial statements had been correct; (iii) no more than two years have elapsed since the original filing date of the financial statements upon which the incentive compensation was determined; and (iv) our Compensation and People Committee unanimously concludes, in its sole discretion, that fraud or intentional misconduct by such covered executive caused the material error and it would be in our best interests to seek from such covered executive recovery of the excess compensation, then our Compensation and People Committee may, in its sole discretion, seek repayment from such covered executive.

Hedging and Pledging Policies

Our insider trading policy prohibits our executive officers and members of our board of directors from engaging in derivative securities transactions, including hedging or other transactions that offset, or are designed to hedge or offset, any decrease in the market value of our equity securities and from pledging Company securities as collateral or holding Company securities in a margin account, except, in the case of pledging, with the prior approval of the ESG and Nominating Committee. This policy does not restrict ownership of, or transactions related to, Company-granted

awards, such as PSUs, RSUs, employee stock options, and other securities issued by the Company or the deferral of equity awards pursuant to our non-qualified deferred compensation plan.

Our executive officers have significant holdings of our stock to align their interests to those of our stockholders. Establishing a conservative pledging policy enables our executive officers to continue to hold those shares, while providing them flexibility in financial planning and allowing them to achieve financial diversification. By enabling our executives to maintain their stock ownership in the Company, our conservative pledging program helps ensure that they continue to have a meaningful financial interest in the success of the Company under their leadership. For these reasons, in fiscal 2022, the Board adopted a conservative policy that allows limited pledging of our stock by our executive officers.

Our pledging policy establishes the parameters of pledging arrangements, and provides that any pledging arrangement must be approved in advance by our ESG and Nominating Committee, as well as sets an overall limit of \$100 million on the total value of shares pledged by our executive officers (as a group). Under this policy, all pledges of shares of Company stock by employees must comply with the following requirements:

- any proposed pledge of shares must be approved in advance by the ESG and Nominating Committee;
- the loan amount against which shares are pledged must not exceed 30% of the aggregate fair market value of the individual's total stock ownership at the time the arrangement is executed;
- only outstanding shares held by an individual may be pledged (*i.e.*, no shares subject to options or unvested RSUs, PSUs or other unvested equity awards may be pledged);
- no shares may be pledged that would cause the total value of all pledged shares of our executive officers in the aggregate (as a group) to exceed \$100 million;
- pledged shares cannot consist of any shares that remain subject to the Company's One Year Hold Policy; and
- the stock ownership requirements applicable to our executives are in addition to, and cannot include, pledged shares.

When approving a pledging arrangement, in addition to the requirements above, the ESG and Nominating Committee will consider any other factors deemed relevant by the Committee, including, without limitation, the total number of shares of Company stock beneficially owned by the applicable executive, the pledged shares as a percentage of the executive's aggregate beneficially owned shares, the pledged shares as a percentage of the Company's total outstanding shares, whether the pledged shares were purchased by the executive, and whether the executive has entered into any other pledging arrangement.

Tax and Accounting Considerations

Deductibility of Executive Compensation. Section 162(m) of the Code generally disallows public companies a tax deduction for federal income tax purposes of remuneration in excess of \$1 million paid to the chief executive officer and certain other highly compensated executive officers in any taxable year.

While our Compensation and People Committee is mindful of the benefit of being able to fully deduct the compensation paid to our NEOs, our Compensation and People Committee believes that we should retain the flexibility to provide compensation to our NEOs that is not fully tax deductible when it believes that such payments are appropriate to attract and retain executive talent or meet other business objectives. Our Compensation and People Committee intends to continue to compensate our NEOs in a manner consistent with the best interests of our Company and our stockholders even if any portion of such compensation is non-deductible.

TAXATION OF "PARACHUTE" PAYMENTS

Sections 280G and 4999 of the Code provide that executive officers and directors who hold significant equity interests and certain other service providers may be subject to significant additional taxes if they receive payments or benefits in connection with a change in control that exceeds certain prescribed limits and that we (or a successor) may forfeit a deduction on the amounts subject to this additional tax. We did not provide any of our NEOs with a "gross-up" or other reimbursement payment for any tax liability that the NEO might owe as a result of the application of Sections 280G or 4999 during fiscal 2022, and we have not agreed and are not otherwise obligated to provide any NEO with such a "gross-up" or other reimbursement in the future.

ACCOUNTING FOR SHARE-BASED COMPENSATION

We follow ASC Topic 718 for our share-based compensation awards. ASC Topic 718 requires companies to measure the compensation expense for all share-based compensation awards made to employees and directors, including stock options and other stock-based awards, based on the grant date “fair value” of these awards. This calculation is performed for accounting purposes and reported in the compensation tables below, even though our NEOs may never realize any value from their awards. ASC Topic 718 also requires companies to recognize the compensation cost of their share-based compensation awards in their income statements over the period that an executive officer is required to render service in exchange for the option or other award.

Perquisites and Other Personal Benefits

Retirement Plans. We have established a U.S. tax-qualified Section 401(k) retirement plan for all employees who satisfy certain eligibility requirements, including requirements relating to age and length of service. We currently match contributions made to the plan by our employees up to \$1,000, including our NEOs. In fiscal 2022, Messrs. Golechha, Jenkins and Klarich participated in our Section 401(k) retirement plan and each received a matching contribution of \$1,000. We intend for the plan to qualify under Section 401(a) of the Internal Revenue Code, or the Code, so that contributions by employees to the plan, and income earned on plan contributions, are not taxable to employees until withdrawn from the plan. We made payments for Mr. Zuk to certain Israeli pension and severance funds available to employees of our Israel subsidiaries.

Health and Welfare Plans. In addition, we provide other benefits to our NEOs on the same basis as all of our full-time employees in the country in which they are resident. These benefits include medical, dental, and vision benefits, medical and dependent care flexible spending accounts, short-term and long-term disability insurance, accidental death and dismemberment insurance, and basic life insurance coverage. We design our employee benefits programs to be affordable and competitive in relation to the market, as well as compliant with applicable laws and practices. We adjust our employee benefits programs as needed based upon regular monitoring of applicable laws and practices and the competitive market.

Deferred Compensation Plan. In May 2022, our Compensation and People Committee adopted a deferred compensation plan, which is a non-qualified deferred compensation plan established in compliance with Section 409A of the Code. Participation in the deferred compensation plan is voluntary and limited to U.S. employees of the Company and affiliates that are at the Vice President level or above, as determined by the administrator of the deferred compensation plan, and includes the Company’s executive officers. For a summary of the material terms and conditions of the deferred compensation plan, see the section titled “–Executive Compensation Tables.”

Other Personal Benefits. In November 2019, the Company retained a leading global risk management and security consulting firm to analyze and determine if there was a bona-fide business related security concern for Mr. Arora. Based on the results of its investigation (which included a personal security incident involving Mr. Arora), this firm determined that there was a bona-fide, business related security concern for Mr. Arora and credible threat actors existed with both the willingness and resources necessary for conducting an attack on Mr. Arora. Accordingly, the firm recommended that the Company take various steps to ensure the safety of Mr. Arora. In turn, our Compensation and People Committee determined that, if any harm occurred to our Chief Executive Officer, our business operations, investor confidence and employee productivity would be severely impacted.

As a result, we implemented an overall security program for Mr. Arora that continued in fiscal 2022. Our Compensation and People Committee believes that amounts paid by the Company for this security program have been reasonable, necessary and for our benefit. We require these security measures for the Company’s benefit because of the importance of Mr. Arora to the Company, and we believe that the scope and costs of these security programs are appropriate and necessary.

Our Compensation and People Committee periodically reviews the nature and cost of this program in relation to his security profile. Despite the fact that this security program was put in place for business reasons, the component of the program that includes security at Mr. Arora’s residence and during personal travel is a perquisite under the relevant SEC disclosure rules and is included in the “All Other Compensation” column in the Summary Compensation Table. The amount paid in fiscal 2022 was \$965,653.

The Board continued to take reasonable steps to ensure the safety and security of Mr. Arora, considering the nature of the position and its criticality to the operation of the Company. Consistent with and as an extension of those efforts, in fiscal 2022, our Compensation and People Committee approved an amendment to our chartered aircraft policy to require the use of chartered aircraft for business and personal-related air travel by our Chief Executive Officer. The value of Mr. Arora's use of chartered aircraft for personal travel in fiscal 2022 was \$657,424. Mr. Arora recognizes imputed income when aircraft is used for personal travel. On occasion, guests of the Chief Executive Officer also may accompany him, at a de minimis incremental cost to the Company, on the private aircraft.

In addition, the Company provided a relocation allowance of \$250,000 to Mr. Golechha, the Chief Financial Officer, in connection with his move to the San Francisco bay area for business purposes.

In the future, we may provide perquisites or other personal benefits in limited circumstances, such as where we believe it is appropriate to assist an individual NEO in the performance of his or her duties, to make our NEOs more efficient and effective, and for recruitment, motivation, or retention purposes. All future practices with respect to perquisites or other personal benefits will be approved and subject to periodic review by our Compensation and People Committee.

Report of the Compensation Committee

Our Compensation and People Committee has reviewed and discussed the Compensation Discussion and Analysis with management. Based on such review and discussion, our Compensation and People Committee has recommended to our board of directors that the Compensation Discussion and Analysis be included in this proxy statement.

Respectfully submitted by the members of the Compensation and People Committee of our Board:

Rt Hon Sir John Key (Chair)

John Donovan

Lorraine Twohill

Executive Compensation Tables

Fiscal 2022 Summary Compensation Table

The following table presents summary information regarding the compensation paid to, or earned by, our Named Executive Officers for our fiscal year ended July 31, 2022.

Name and Principal Position	Year	Salary (\$)	Stock Awards (\$) ⁽¹⁾	Non-Equity Incentive Plan Compensation (\$)	All Other Compensation (\$)	Total (\$)
Nikesh Arora Chief Executive Officer	2022	250,000 ⁽²⁾	7,007,348	1,500,000	1,653,129 ⁽³⁾	10,410,477
	2021	333,333	20,355,789	1,500,000	1,094,736	23,283,858
	2020	666,667	—	925,000	615,118	2,206,785
Dipak Golechha Chief Financial Officer	2022	600,000	1,868,557	900,000	251,946 ⁽⁴⁾	3,620,503
	2021	325,821	8,292,144	368,407	3,929	8,990,301
William “BJ” Jenkins⁽⁵⁾ President	2022	734,375	17,835,150	1,125,000	1,996 ⁽⁶⁾	19,696,521
Lee Klarich Chief Product Officer	2022	550,000	4,671,565	825,000	1,996 ⁽⁶⁾	6,048,561
	2021	550,000	9,693,233	825,000	1,957	11,070,190
	2020	550,000	—	508,750	1,957	1,060,707
Nir Zuk⁽⁷⁾ Founder and Chief Technology Officer	2022	459,420	1,635,031	689,130	83,576 ⁽⁸⁾	2,867,157
	2021	444,073	2,907,970	666,900	63,227	4,082,170
	2020	430,000	—	372,891	144,495	947,386

⁽¹⁾ The amounts reported in the Stock Awards column represent the grant date fair value of the restricted stock units granted to our Named Executive Officers as computed in accordance with ASC Topic 718. With respect to the performance-based restricted stock units, in fiscal year 2022, we approved only the fiscal year 2022 performance targets. As a result, only these portions of the performance-based restricted stock unit awards (covering 42% of the performance-based restricted stock units for Mr. Arora, Golechha, Klarich and Zuk and 61% of the performance-based restricted stock units for Mr. Jenkins) have a reportable grant date fair value under ASC Topic 718 and are included in this table. The remaining performance-based restricted stock units do not have a reportable grant date fair value under ASC Topic 718 and are not included in this table. The assumptions used in calculating the grant date fair value of the restricted stock units reported in this column are set forth in the notes to our audited consolidated financial statements included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2022. For more information, see footnote 3 to the Fiscal 2022 Grants of Plan Based Awards Table. Note that the amounts reported in this column do not correspond to the actual economic value that may be received by our Named Executive Officers from their restricted stock units. The value of the awards of performance-based restricted stock units at the grant date assuming that the highest level of performance conditions will be achieved is \$18,607,578 for Mr. Arora, \$4,961,947 for Mr. Golechha, \$19,689,043 for Mr. Jenkins, \$12,405,420 for Mr. Klarich, and \$4,341,658 for Mr. Zuk.

⁽²⁾ From November 1, 2021 to July 31, 2022, Mr. Arora elected to forgo his salary.

⁽³⁾ Consists of life insurance premiums of \$661, disability insurance premiums of \$335, reimbursement of expenses related to participation at certain Company events and nominal gift cards of \$1,305, health insurance premiums paid by Company to compensate for Mr. Arora's forgoing his salary of \$5,375, personal security costs of \$965,653 based on the invoices provided by the third party security company, and approximately \$657,424 for costs related to personal usage of private aircraft and \$22,376 of taxes on imputed income paid by us due to him forgoing his salary related to personal usage of private aircraft. For purposes of reporting the value of personal usage of private aircraft in this table, we use costs provided by the applicable charter company, which include contracted hourly charges, and fuel charges. On occasion, guests of the Named Executive Officer also may accompany him, at a de minimis incremental cost to the Company, on the private aircraft. For more information regarding Mr. Arora's overall security program, and personal usage of private aircraft, see the section entitled "Compensation Discussion and Analysis-Perquisites and Other Benefits" above.

⁽⁴⁾ Consists of life insurance premiums of \$624, disability insurance premiums of \$322, 401(k) plan matching contributions by our Company of \$1,000 and a relocation allowance of \$250,000 in connection with Mr. Golechha's relocation to the Bay Area.

⁽⁵⁾ Mr. Jenkins was appointed our President effective August 9, 2021. The amounts reported in the Stock Awards column for fiscal 2022 include time-based restricted stock units and performance-based restricted stock units granted to him in connection with his appointment as President.

⁽⁶⁾ Consists of life insurance premiums of \$661, disability insurance premiums of \$335 and 401(k) plan matching contributions by our Company of \$1,000

⁽⁷⁾ For fiscal 2022, Mr. Zuk's base salary, non-equity incentive compensation and all other compensation was paid in Israeli currency.

The amounts set forth in the table reflect the conversion from Israeli currency to U.S. dollars using an average exchange rate of 0.31 U.S. dollars for one Israeli new shekel for fiscal 2022.

- ^(b) Consists of \$2,476 for expenses related to attendance at certain Company events, and nominal gift cards, \$867 for health insurance contributions, \$41,963 contributed for social security and pension benefits and \$38,270 contributed for severance benefits under Israeli government schemes.

CEO Pay Ratio

Under SEC rules, we are required to provide information regarding the relationship between the annual total compensation of our Chief Executive Officer and the annual total compensation of our median employee. As permitted by SEC rules, we used the same median employee for fiscal 2022 that we identified for fiscal 2020 because there have been no significant changes to our workforce or pay design for fiscal 2022 that we believe would significantly change our Chief Executive Officer pay ratio results. For our last completed fiscal year, which ended July 31, 2022:

- The median of the annual total compensation of all employees (other than Mr. Arora) of our company and our consolidated subsidiaries in fiscal 2022 was approximately \$268,463. This annual total compensation was calculated in accordance with Item 402(c)(2)(x) of Regulation S-K, and reflects, among other things, salary, all bonuses earned, 401(k) contribution matches, life and disability insurance premiums paid by the Company and the aggregate “grant date fair value” of equity awards granted during fiscal 2022.
- Mr. Arora’s annual total compensation, as reported in the Fiscal 2022 Summary Compensation Table included in this Proxy Statement, was \$10,410,477.
- Based on the above, for fiscal 2022, the ratio of Mr. Arora’s annual total compensation to the median of the annual total compensation of all employees was approximately 39 to 1.

This pay ratio is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K under the Securities Act of 1933, as amended, and based upon our reasonable judgment and assumptions. The SEC rules do not specify a single methodology for identification of the median employee or calculation of the pay ratio, and other companies may use assumptions and methodologies that are different from those used by us in calculating their pay ratio. Accordingly, the pay ratio disclosed by other companies may not be comparable to our pay ratio as disclosed above.

Fiscal 2022 Grants of Plan-Based Awards

The following table presents information regarding the amount of equity awards granted to our Named Executive Officers during our fiscal year ended July 31, 2022.

Name	Grant Date	Date of Board or Committee Action to Grant the Award	Estimated Future Payouts Under Non-Equity Incentive Plan Awards ⁽¹⁾			Estimated Future Payouts Under Equity Incentive Plan Awards ⁽²⁾			All Other Stock Awards: Number of Shares of Stock or Units (#) ⁽²⁾	Grant Date Fair Value of Stock Awards (\$) ⁽³⁾
			Threshold (\$)	Target (\$)	Maximum (\$)	Threshold (#)	Target (#)	Maximum (#)		
Mr. Arora	—	—	450,000	1,000,000	1,650,000	—	—	—	—	—
	8/20/21	8/17/21	—	—	—	18,989	50,636	151,908	—	7,007,348
Mr. Golechha	—	—	270,000	600,000	990,000	—	—	—	—	—
	8/20/21	8/17/21	—	—	—	5,064	13,503	40,509	—	1,868,557
Mr. Jenkins	—	—	337,500	750,000	1,237,500	—	—	—	—	—
	8/20/21	8/15/21	—	—	—	—	—	—	76,542 ⁽⁴⁾	9,375,377
	8/20/21	8/17/21	—	—	—	28,866	65,189	160,204	—	8,459,773
Mr. Klarich	—	—	247,500	550,000	907,500	—	—	—	—	—
	8/20/21	8/17/21	—	—	—	12,659	33,758	101,274	—	4,671,565
Mr. Zuk⁽⁵⁾	—	—	206,739	459,420	758,043	—	—	—	—	—
	8/20/21	8/17/21	—	—	—	4,431	11,815	35,445	—	1,635,031

⁽¹⁾ Amounts in the “Estimated Future Payouts Under Non-Equity Incentive Plan Awards” columns relate to target incentive compensation opportunities under the fiscal 2022 cash incentive plan and assumes achievement at target levels for our corporate performance measures. For achievement in excess of target, overperformance could be rewarded with a payout of up to 165% of each NEO’s target. The actual amounts paid to our NEOs are set forth in the “Fiscal 2022 Summary Compensation Table” above and the calculation of the actual amounts paid is discussed more fully in the section titled “Fiscal 2022 Executive Compensation Program—Fiscal 2022 Executive Compensation Program Components—Annual Cash Incentive Compensation.”

⁽²⁾ Represents performance-based restricted stock unit awards (“PSUs”) and restricted stock unit awards (“RSUs”) which were granted under our Palo Alto Networks, Inc. 2012 Equity Incentive Plan (“2012 Plan”) (as adjusted for the three-for-one stock split effected in the form of a stock dividend in September 2022, or the “Stock Split”). The threshold is calculated as if the threshold of Company performance measure and the lowest TSR multiplier was reached. The maximum is calculated assuming all maximum Company performance targets were met and the relative TSR modifier was also at the maximum value. For more information, see the section titled “Fiscal 2022 Executive Compensation Program—Fiscal 2022 Executive Compensation Program Components—Fiscal 2022 Equity Compensation.”

⁽³⁾ The amounts reported in the Grant Date Fair Value of Stock Awards column represent the grant date fair value of the awards of restricted stock units (including PSUs) granted in fiscal 2022, calculated in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value of the PSUs and restricted stock unit awards reported in this column are set forth in the notes to our audited consolidated financial statements included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2022. The value of the PSUs is calculated using a Monte-Carlo simulation valuation performed as of the date of grant by an independent third party. Because the grant date for a PSU occurs when performance targets are approved, and we approved performance targets only with respect to fiscal year 2022, PSU values in this column include for Mr. Arora, Golechha, Klarich and Zuk 42% and for Mr. Jenkins 61% of the PSUs. Note that the amounts reported in this column do not correspond to the actual economic value that may be received by our NEOs from their performance-based restricted stock unit awards.

⁽⁴⁾ Represents RSUs which were granted upon Mr. Jenkins’ hiring as President. Vests over a four-year period with forty percent (40%) of the restricted stock units vesting on the one-year anniversary of the grant date; thirty percent (30%) of the restricted stock units vesting quarterly during the second year; twenty percent (20%) of the restricted stock units vesting quarterly during the third year; and ten percent (10%) of the restricted stock units vesting quarterly during the fourth year.

⁽⁵⁾ The amounts set forth in the table for Mr. Zuk for estimated future payouts under Non-Equity Incentive Plan Awards reflect the conversion from Israeli currency to U.S. dollars using an average exchange rate of 0.31 U.S. dollars for one Israeli new shekel for fiscal 2022.

Fiscal 2022 Outstanding Equity Awards at Fiscal Year-End

The following table presents information regarding outstanding stock options and other equity awards held by our Named Executive Officers as of July 31, 2022, as adjusted for the Stock Split.

Named Executive Officer	Grant Date	Option Awards—Number of Securities Underlying Unexercised Options (#) Exercisable	Option Awards—Number of Securities Underlying Unexercised Options (#) Unexercisable	Option Awards—Option Exercise Price (\$)	Option Awards—Option Expiration Date	Stock Awards—Number of Shares or Units of Stock That Have Not Vested (#)	Stock Awards—Market Value of Shares or Units of Stock That Have Not Vested (\$) ⁽¹⁾	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)
Mr. Arora	8/20/21 ⁽²⁾	—	—	—	—	—	—	364,581	60,655,341
	10/20/2020 ⁽³⁾	—	—	—	—	453,000	75,365,610	—	—
	7/31/2019 ⁽⁴⁾	—	—	—	—	46,387	7,717,405	—	—
	6/7/2018 ⁽⁵⁾	—	—	—	—	255,348	42,482,247	—	—
	6/7/2018 ⁽⁶⁾	3,474,300	—	66.17	12/6/25	—	—	—	—
Mr. Golechha	8/20/21 ⁽²⁾	—	—	—	—	—	—	97,218	16,174,159
	3/20/2021 ⁽⁷⁾	—	—	—	—	45,714	7,605,438	—	—
	12/20/2020 ⁽⁸⁾	—	—	—	—	25,212	4,194,520	—	—
Mr. Jenkins	8/20/21 ⁽²⁾	—	—	—	—	48,093	8,001,232	215,392	35,834,767
	8/20/21 ⁽⁹⁾	—	—	—	—	76,542	12,734,293	—	—
Mr. Klarich	8/20/21 ⁽²⁾	—	—	—	—	—	—	243,054	40,436,894
	10/20/2020 ⁽¹⁰⁾	—	—	—	—	136,716	22,745,441	—	—
	7/31/2019 ⁽¹¹⁾	—	—	—	—	5,520	918,362	—	—
	7/31/2019 ⁽⁴⁾	—	—	—	—	21,085	3,507,911	—	—
	10/20/2018 ⁽¹²⁾	1,509,063	503,016	64.50	4/19/26	—	—	—	—
Mr. Zuk	8/20/21 ⁽²⁾	—	—	—	—	—	—	85,068	14,152,763
	10/20/2020 ⁽¹³⁾	—	—	—	—	61,974	10,310,614	—	—
	7/31/2019 ⁽¹¹⁾	—	—	—	—	2,760	459,181	—	—
	7/31/2019 ⁽⁴⁾	—	—	—	—	10,542	1,753,873	—	—
	10/20/2018 ⁽¹²⁾	1,131,801	377,256	64.50	4/19/26	—	—	—	—
	1/21/2013 ⁽¹⁴⁾	45,000	—	18.45	1/20/23	—	—	—	—

⁽¹⁾ The market value of unvested or unearned shares is calculated by multiplying the number of unvested or unearned shares held by the applicable NEO by the closing market price of our common stock on the Nasdaq on July 29, 2022 (the last trading day of our fiscal year), which was \$166.37 per share (as adjusted for the Stock Split).

⁽²⁾ Represents PSUs which were granted under our 2012 Plan (as adjusted for the Stock Split). Values included in the Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested and Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested columns include the maximum values for number of shares and market value (i.e., calculated assuming all maximum company performance targets were met and the relative TSR modifier was also at the maximum value). For more information, see the section titled “Discussion of our Fiscal 2022 Executive Compensation Program—Fiscal 2022 Executive Compensation Program Components—Equity Compensation.”

⁽³⁾ Represents PSUs which were granted under our 2012 Plan. A specified performance metric having been achieved, the PSUs that became eligible to vest will vest over a four-year period with 15% of such PSUs vesting in equal quarterly increments during year two with the first vesting on January 20, 2022; 42.5% of such PSUs vesting in equal quarterly increments during year three; and 42.5% of such PSUs vesting in equal quarterly increments during year four, in each case subject to the executive’s continued service through the applicable vesting date.

⁽⁴⁾ After achievement of a specified performance metric, these PSUs vested as to one-third of the PSUs that became eligible to vest on October 20, 2020, vested as to one-third of the PSUs that became eligible to vest on October 20, 2021 and will vest as to one-third of the PSUs that became eligible to vest on October 20, 2022, in each case subject to the executive’s continued service through the applicable vesting date.

⁽⁵⁾ Vested as to 1/7th of the restricted stock units on June 7, 2019 and the remaining restricted stock units vest in equal increments each quarter thereafter with full vesting occurring on June 7, 2025, in each case subject to the executive’s continued service through the applicable vesting date.

⁽⁶⁾ All shares subject to this PSO have vested due to the achievement of certain stock price targets and continued service. For more information, see the section titled “Discussion of our Fiscal 2022 Executive Compensation Program—Fiscal 2022 Executive Compensation Program Components—Equity Compensation.”

Executive Compensation

- ⁽⁷⁾ A specified performance metric having been achieved, the PSUs that became eligible to vest will vest over a four-year period with one fourth (1/4th) of such PSUs vesting on the one-year anniversary of the grant date; and one-sixteenth (1/16th) of such PSUs vesting quarterly thereafter, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽⁸⁾ Vests over a four-year period with one fourth (1/4th) of the restricted stock units vesting on the one-year anniversary of the grant date; and one-sixteenth (1/16th) of the restricted stock units vesting quarterly thereafter, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽⁹⁾ Vests over a four-year period with forty percent (40%) of the restricted stock units vesting on the one-year anniversary of the grant date; thirty percent (30%) of the restricted stock units vesting in equal quarterly increments during the second year; twenty percent (20%) of the restricted stock units vesting in equal quarterly increments during the third year; and ten percent (10%) of the restricted stock units vesting in equal quarterly increments during the fourth year, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽¹⁰⁾ A specified performance metric having been achieved, the PSUs that became eligible to vest will vest over a four-year period, with 25% of such PSUs having vested on October 20, 2021; 25% of such PSUs vesting in equal quarterly increments during year two; 25% of such PSUs vesting in equal quarterly increments during year three; and 25% of such PSUs vesting in equal quarterly increments during year four, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽¹¹⁾ Vested as to 1/12th of the restricted stock units on January 20, 2020 and the remaining restricted stock units vest in equal increments each quarter thereafter with full vesting occurring on October 20, 2022, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽¹²⁾ All shares subject to this PSO became eligible to vest due to the achievement of certain stock price targets. Three-fourths (3/4th) of the shares subject to this PSO have vested and one-fourth (1/4th) of the shares subject to this PSO will vest on October 20, 2022, subject to the executive's continued service through such vesting date.
- ⁽¹³⁾ A specified performance metric having been achieved, the PSUs that became eligible to vest will vest over a four-year period with 20% of such PSUs vesting during year two with the first vest on January 20, 2022; 40% of such PSUs vesting in equal quarterly increments during year three; and 40% of such PSUs vesting in equal quarterly increments during year four, in each case subject to the executive's continued service through the applicable vesting date.
- ⁽¹⁴⁾ All shares subject to this option have vested.

Fiscal 2022 Option Exercises and Stock Vested

The following table presents information regarding the exercise of stock options and the vesting of stock awards by our NEOs during our fiscal year ended July 31, 2022.

Named Executive Officer	Option Awards— Number of Shares Acquired on Exercise (#)	Option Awards—Value Realized on Exercise (\$)	Stock Awards— Number of Shares Acquired on Vesting (#)	Stock Awards— Value Realized on Vesting (\$) ⁽¹⁾
Mr. Arora	—	—	311,385	54,039,670
Mr. Golechha	—	—	35,907	6,520,699
Mr. Jenkins	—	—	—	—
Mr. Klarich	—	—	155,832	27,461,433
Mr. Zuk	—	—	38,361	6,815,090

⁽¹⁾ Based on the market price of our Company's Common Stock on the vesting date, multiplied by the number of shares vested (as adjusted for the Stock Split).

We did not sponsor any defined benefit pension or other actuarial plan for our NEOs during our fiscal year ended July 31, 2022.

Nonqualified Deferred Compensation

In May 2022, our Compensation and People Committee adopted a deferred compensation plan, which is a non-qualified deferred compensation plan established in compliance with Section 409A of the Code. Participation in the deferred compensation plan is voluntary and limited to U.S. employees of the Company and affiliates that are at the Vice President level or above, as determined by the administrator of the deferred compensation plan, and includes the Company's executive officers, except Mr. Zuk who is not a U.S. employee. The plan allows eligible participants to defer up to 50% of their annual base salary and up to 100% of their annual incentive cash payment and 100% equity compensation. There were no executive contributions or Company contributions made during fiscal 2022.

Executive Employment Agreements

We have entered into employment offer letters with each of our NEOs in connection with his or her commencement of employment with us.

In December 2011, we entered into confirmatory new employment agreements with Messrs. Klarich and Zuk to achieve consistency in the employment terms and conditions of our then-serving executive officers. In February 2022, we entered into addendums to the offer letters of Messrs. Jenkins and Golechha to achieve consistency in the employment terms and conditions of our then-serving executive officers.

Each of our NEOs is eligible to receive certain severance payments and/or benefits in connection with his or her termination of employment under various circumstances, including following a change in control, pursuant to written severance and change in control arrangements.

For a summary of the material terms and conditions of these arrangements, as well as an estimate of the potential payments and/or benefits payable to our NEOs under these arrangements, see the description below and the section titled “—Potential Payments Upon Termination or Change in Control” below. The estimated potential severance payments and/or benefits payable to each NEO in the event of termination of employment as of July 31, 2022, pursuant to the arrangements under the employment agreements, are described below.

The actual amounts that would be paid or distributed to our NEOs as a result of one of the termination events occurring in the future may be different than those presented below as many factors will affect the amount of any payments and/or benefits upon a termination of employment. For example, some of the factors that could affect the amounts payable include the NEO’s base salary and the market price of our common stock. Although we have entered into written arrangements to provide severance payments and/or benefits to our NEOs in connection with a termination of employment under particular circumstances, we or an acquirer may mutually agree with the NEOs on severance terms that vary from those provided in these pre-existing arrangements. Finally, in addition to the amounts presented below, each NEO would also be able to exercise any previously-vested stock options that he or she held. For more information about the NEOs outstanding equity awards as of July 31, 2022, see the section titled “—Fiscal 2022 Outstanding Equity Awards at Fiscal Year-End.”

Along with the severance payments and/or benefits described in an NEO’s individual severance and change in control arrangement, they are eligible to receive any benefits accrued under our broad-based benefit plans, such as accrued vacation pay, in accordance with those plans and policies.

Termination of Employment Unrelated to a Change in Control

MR. ARORA

In the event of an involuntary termination of employment (a termination of employment by us without “cause”), at any time before a “change in control” or more than 12 months following a “change in control,” provided that he executes an appropriate release and waiver of claims, Mr. Arora will be entitled to receive:

- continued payment of his then-current base salary for a period of 12 months and reimbursement of 12 months of COBRA premiums; and
- accelerated vesting of the time-based restricted stock units, investment restricted stock units and eligible option shares for shares that would vest through the date 12 months after termination of employment.

TERMINATION OF EMPLOYMENT— OTHER NAMED EXECUTIVE OFFICERS

None of the remaining NEOs are eligible to receive any specific payments or benefits in the event of an involuntary termination of employment unrelated to a change in control.

Termination of Employment in Connection with a Change in Control

MR. ARORA

In the event of an involuntary termination of employment (a termination of employment by us or our successor without “cause or a termination of employment for “good reason”) within 12 months following a “change in control,” provided that he executes an appropriate release and waiver of claims, Mr. Arora will be entitled to receive:

- a lump sum payment equal to his then-current annual base salary;
- 100% of his incentive compensation for that fiscal year;
- reimbursement of 12 months of COBRA premiums;
- accelerated vesting of each of his awards of time-based restricted stock units or investment restricted stock units as to the greater of: (x) 50% of the then-unvested portion of such award or (y) the portion of such award that would vest through the date 24 months after termination of employment; and
- accelerated vesting of 100% of his eligible option shares subject to the performance option.

MESSRS. GOLECHHA, JENKINS, KLARICH, AND ZUK

In the event of an involuntary termination of employment (a termination of employment by us without “cause” or a termination of employment for “good reason”) within 12 months following a “change in control,” provided that the executive officer executes an appropriate release and waiver of claims, provided that they each execute an appropriate release and waiver of claims, Messrs. Golechha, Jenkins, Klarich and Zuk will each be entitled to receive:

- a lump sum cash payment equal to 12 months of his base salary as in effect as of the date of termination;
- a lump sum cash payment equal to 100% of his target incentive payment for that fiscal year;
- a lump sum cash payment equal to the amount payable for premiums for continued COBRA benefits for a period of 12 months (except Mr. Zuk); and
- accelerated vesting of each of his then outstanding time-based equity awards, as to (i) in the cases of Messrs. Golechha and Jenkins, 12 months’ vesting of such award, or (ii) in the cases of Messrs. Klarich and Zuk, the greater of 12 months’ vesting of such award and 50% of the then-unvested portion of such award.

APPLICABLE DEFINITIONS

Generally, for purposes of the foregoing provisions, a “change in control” means:

- the sale or other disposition of all or substantially all of our assets;
- any sale or exchange of our capital stock by stockholders in a transaction or series of related transactions where more than 50% of the outstanding voting power of our company is acquired by a person or entity or group of related persons or entities;
- any reorganization, consolidation, or merger of our company where our outstanding voting securities immediately before the transaction represent or are converted into less than 50% of the outstanding voting power of the surviving entity (or its parent organization) immediately after the transaction; or
- the consummation of the acquisition of 51% or more of our outstanding stock pursuant to a tender offer validly made under any state or federal law (other than a tender offer by us).

Generally, for purposes of the foregoing provisions, “cause” is limited to:

- conviction of any felony or any crime involving moral turpitude or dishonesty;
- participation in intentional fraud or an act of willful dishonesty against us;
- willful breach of our policies that materially harms us;
- intentional damage of a substantial amount of our property;
- willful and material breach of the NEO’s employment offer letter, employment agreement or his employee invention assignment and confidentiality agreement; or
- a willful failure or refusal in a material respect to follow the lawful, reasonable policies or directions of us as specified by our board of directors or Chief Executive Officer after being provided with notice of such failure, which failure is not remedied within 30 days after receipt of written notice from us.

Generally, for purposes of the foregoing provisions, “good reason” means a resignation within 12 months following the occurrence, without the Named Executive Officer’s written consent, of one or more of the following:

- there is a material reduction in the NEO’s authority, status, obligations, or responsibilities;
- there is a reduction in the NEO’s total annual compensation of more than 10% unless such reduction is no greater (in percentage terms) than compensation reductions imposed on substantially all of our employees pursuant to a directive of our board of directors;
- any failure by us to pay the NEO’s base salary; or
- the relocation of the principal place of our business to a location that is more than a specified number of miles further away from the NEO’s home than our current location.

A resignation for “good reason” will not be deemed to have occurred unless the NEO gives us written notice of one of the above conditions within 90 days of its occurrence, and we fail to remedy the condition within 30 days of receipt of such notice.

Potential Payments Upon Termination or Change in Control

Termination of Employment Unrelated to a Change in Control

Named Executive Officer	Salary Continuation (\$)	Target Annual Cash Bonus (\$)	Value of Accelerated Equity Awards (\$)		Value of Continued Health Care Coverage Premiums (\$)	Total (\$)
			Restricted Stock and Restricted Stock Units ⁽¹⁾	Options		
Mr. Arora	1,000,000	—	52,130,209	—	31,394	53,161,603

⁽¹⁾ The amounts reported in the table reflect the aggregate market value of the unvested shares of our common stock underlying outstanding RSUs and PSUs which remain subject to time-based vesting only. The aggregate market value is computed by multiplying (i) the number of unvested shares of our common stock, subject to outstanding RSUs and PSUs which remain subject to time-based vesting only on July 31, 2022, that would become vested by (ii) \$166.37 (the closing market price of our common stock on the Nasdaq on July 29, 2022, the last trading day in the fiscal year ended July 31, 2022 (as adjusted for the Stock Split)).

Termination of Employment in Connection with a Change in Control

Named Executive Officer	Salary Continuation (\$)	Target Annual Cash Bonus (\$)	Value of Accelerated Equity Awards (\$)		Value of Continued Health Care Coverage Premiums (\$)	Total (\$)
			Restricted Stock and Restricted Stock Units ⁽¹⁾	Options ⁽²⁾		
Mr. Arora	1,000,000	1,000,000	102,381,602	—	31,394	104,412,996
Mr. Golechha	600,000	600,000	4,444,076	—	31,394	5,675,470
Mr. Jenkins	750,000	750,000	15,960,539	—	31,394	17,491,933
Mr. Klarich	550,000	550,000	15,798,993	51,240,580	31,394	68,170,967
Mr. Zuk	459,420	459,420	7,368,361	38,429,824	—	46,717,025

⁽¹⁾ The amounts reported in this column reflect the aggregate market value of the unvested shares of our common stock underlying outstanding RSUs and PSUs which remain subject to time-based vesting only. The aggregate market value is computed by multiplying (i) the number of unvested shares of our common stock subject to outstanding RSUs and PSUs which remain subject to time-based vesting only on July 31, 2022, that would become vested by (ii) \$166.37 (the closing market price of our common stock on the Nasdaq on July 29, 2022, the last trading day in the fiscal year ended July 31, 2022 (as adjusted for the Stock Split)).

⁽²⁾ The amounts reported in this column reflect the accelerated vesting of outstanding performance stock options valued at the closing stock price on July 29, 2022 of \$166.37 minus the exercise price of the options.

Executive Officers

The following table identifies certain information about our executive officers as of October 14, 2022. Officers are appointed by our board of directors to hold office until their successors are elected and qualified.

Name	Age	Position(s)
Nikesh Arora	54	Chief Executive Officer and Chairman
Dipak Golechha	48	Executive Vice President and Chief Financial Officer
William “BJ” Jenkins	56	President
Lee Klarich	47	Chief Product Officer
Nir Zuk	51	Chief Technology Officer and Director

Nikesh Arora. For a brief biography of Mr. Arora, please see “*Proposal No. 1 - Election of Directors - Directors - Continuing Directors.*”

Dipak Golechha has served as our Chief Financial Officer since March 2021. Mr. Golechha joined the Company in December 2020 as Senior Vice President, Finance. Prior to joining the Company, from August 2020 until December 2020, Mr. Golechha served as senior advisor at Boston Consulting Group, a management consulting firm. From December 2016 to April 2020, Mr. Golechha was President and Chief Executive Officer of Excelligence Learning Corporation, a tech-enabled platform company in early childhood education. From August 2014 through July 2016, Mr. Golechha served as the chief financial officer of NBTY Inc., also known as The Nature’s Bounty Company, a manufacturer of vitamins, minerals and health supplements. During 2014, Mr. Golechha served as the chief financial officer of Chobani, a yogurt company. Prior to Chobani, Mr. Golechha worked at The Procter & Gamble Company, an American multinational consumer goods corporation, for 18 years, most recently serving as chief financial officer / chief operating officer of the Global Feminine Care / Adult Care Division from August 2012 to December 2013. Mr. Golechha holds a bachelor’s degree and a master’s degree from St. John’s College, Cambridge University in Economics.

William “BJ” Jenkins has served as our President since August 2021. Prior to joining the Company, Mr. Jenkins served as President and CEO of Barracuda Networks, Inc., a computer security and data storage company, from November 2012 through July 2021. Prior to this position, Mr. Jenkins held multiple business unit and sales and marketing leadership roles at EMC Corporation, a provider of enterprise storage systems, software, and networks. Mr. Jenkins holds an engineering degree from the University of Illinois and an M.B.A. from Harvard Business School.

Lee Klarich has served as our Chief Product Officer since August 2017. Prior to this appointment, Mr. Klarich served as our Executive Vice President of Product Management, a role he held since November 2015. From November 2012 to November 2015, Mr. Klarich served as our Senior Vice President, Product Management and our Vice President, Product Management from May 2006 to November 2012. Prior to joining us, Mr. Klarich held various positions at NetScreen Technologies, Juniper Networks, Excite@Home, and Packard Bell-NEC. Mr. Klarich holds a B.S. in Engineering from Cornell University.

Nir Zuk. For a brief biography of Mr. Zuk, please see “*Proposal No. 1 - Election of Directors - Directors - Continuing Directors.*”

Equity Compensation Plan Information

The following table provides information as of July 31, 2022 (as adjusted for the Stock Split), with respect to the shares of our common stock that may be issued under our existing equity compensation plans.

Plan Category	(a) Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	(b) Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (\$) ⁽²⁾	(c) Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
Equity compensation plans approved by stockholders ⁽¹⁾	25,307,469	\$64.59	28,482,339
Equity compensation plans not approved by stockholders	576,387	—	—
Total	25,883,856		28,482,339

⁽¹⁾ Includes the following plans: the 2012 Plan, 2021 Equity Incentive Plan and 2012 Employee Stock Purchase Plan (“2012 ESPP”). Our 2012 ESPP provides that on the first day of each fiscal year beginning with fiscal year 2014 the number of shares authorized for issuance under the 2012 ESPP is automatically increased by a number equal to the lesser of (i) 6,000,000 shares of common stock, (ii) one percent (1.0%) of the aggregate number of shares of common stock outstanding on such date, or (iii) an amount determined by our board of directors or a duly authorized committee of our board of directors.

⁽²⁾ The weighted average exercise price does not take into account outstanding restricted stock, PSUs or RSUs, which have no exercise price.

PROPOSAL NO. 4

Amendment to Our 2021 Equity Incentive Plan

We are asking our stockholders to approve an amendment to our 2021 Equity Incentive Plan (the “2021 Plan”) to increase the number of shares of our common stock (“Shares”) reserved for issuance under the 2021 Plan by 5,985,000 Shares. Other than this increase, no changes have been made to the 2021 Plan. All Share numbers in this Proposal No. 4 have been adjusted for our Stock Split.

Why Should Stockholders Vote to Approve the Amendment to the 2021 Plan?

The Amendment to the 2021 Plan Will Allow Us to Continue Attracting and Retaining the Best Talent

Our Board believes that our success depends on the ability to attract and retain the best available personnel for positions of substantial responsibility and that the ability to grant equity awards is crucial to recruiting and retaining the services of these individuals. In addition, our Board believes that equity awards provide additional incentive to our employees, directors and consultants and promote our success. If stockholders do not approve the amendment to the 2021 Plan at the Annual Meeting, we may be unable to continue granting equity awards as needed, which could prevent us from successfully attracting and retaining the highly skilled talent we need.

A Reasonable Number of Shares Will Be Added to the 2021 Plan

If our stockholders approve the amendment to the 2021 Plan, 5,985,000 Shares will be added to the 2021 Plan. We anticipate these Shares will be enough to meet our expected needs for the next one to two years.

- *Number of Shares Remaining under the 2021 Plan.* As of October 14, 2022, 10,428,915 Shares remained available for issuance under the 2021 Plan.
- *Overhang.* As of October 14, 2022, outstanding equity awards under our 2012 Equity Incentive Plan (the “2012 Plan”) and the 2021 Plan covered 27,705,573 Shares, which represented approximately 9% of our outstanding Shares as of that date.
- *Historical Grant Practices.* In fiscal 2020, 2021 and 2022, we granted equity awards (excluding RSUs assumed in acquisitions) covering 11.4 million, 14.1 million and 6.6 million Shares, respectively, for approximately 32.1 million equity awards over that three-year period.
- *Forecasted Grants.* To determine how long the Shares to be added to the 2021 Plan will enable us to make grants of equity awards, our Compensation and People Committee and our Board reviewed a forecast that considered these factors: (i) the remaining number of Shares available for future grants under the 2021 Plan and (ii) forecasted future grants, with the future grant numbers determined based on assumptions about stock price and the competitive dollar value to be delivered to the grant recipient. Because we generally determine the size of equity awards to be granted based on the value of the award, if the stock price used to determine the number of Shares subject to an award differs significantly from the stock price assumed in the forecast (which was \$167 to \$200 per share), our actual Share usage will deviate significantly from our forecasted Share usage. For example, if our stock price used to determine the number of Shares subject to an award is lower than the stock price assumed in the forecast, we would need a larger number of Shares than anticipated to deliver the same intended value to participants.

We Have Used our Equity Plans Responsibly

We recognize the dilutive impact of our equity compensation on our stockholders and continuously strive to balance this concern with the competition for talent. In the process it used to determine the number of Shares to be added to the 2021 Plan, our Compensation and People Committee and Board reviewed analyses prepared by Meridian Compensation Partners, independent compensation consultant, which included analysis of the burn rate and overhang metrics discussed below. If approved, the Shares added to the 2021 Plan would represent approximately 2% of our 300,395,286 outstanding Shares as of October 14, 2022. Our Board believes the potential dilution to stockholders is reasonable and sustainable to meet our business goals.

Gross burn rate can be used by some to assess a company’s use of equity compensation. Gross burn rate is defined as the number of shares underlying equity awards granted in a given fiscal year (excluding any RSUs assumed in acquisitions) divided by the number of shares of weighted average common stock outstanding (“CSO”).

Potential actual dilution to stockholders is often measured by analyzing the net burn rate. Net burn rate is defined as (i) the number of shares underlying equity awards granted in a given fiscal year (excluding any RSUs assumed in acquisitions) minus shares subject to outstanding equity awards forfeited during the year and returned to the plan divided by (ii) CSO. This measure indicates the rate at which we actually create potential future stockholder dilution. We have managed our net burn rate to 2.0% in fiscal 2020, 3.7% in fiscal 2021, and 1.0% in fiscal 2022. Our burn rates are lower in fiscal 2022 primarily due to stock price appreciation.

The following table shows our gross and net burn rate over the past three fiscal years and the average CSO of those three years.

in millions	Fiscal 2020	Fiscal 2021	Fiscal 2022	Average
Performance-based stock options (“PSOs”) granted	0	0.6	0	0.2
PSOs earned	0	1.2	5.6	2.3
Restricted Stock Units (“RSUs”) granted ⁽¹⁾	10.2	11.1	5.7	9.0
Performance-based restricted stock units (“PSUs”) granted ⁽²⁾	1.2	2.4	0.9	1.5
PSUs earned	0.3	0.3	1.2	0.6
Total awards granted ⁽³⁾	11.4	14.1	6.6	10.7
Weighted average common stock outstanding	290.7	289.2	295.5	291.8
Gross Burn Rate	3.9%	4.9%	2.2%	4.0%
Forfeitures of Options	0	0	0	0
Forfeitures of PSOs	2.7	0.6	0.3	1.2
Forfeitures of RSUs and PSUs	3.0	2.7	3.3	3.0
Net Burn Rate	2.0%	3.7%	1.0%	2.2%

⁽¹⁾ Excludes RSUs assumed in acquisitions.

⁽²⁾ For PSUs, shares granted represent the aggregate maximum number of shares that may be earned and issued with respect to these awards over their full terms.

⁽³⁾ Includes RSUs granted, PSOs granted and PSUs granted.

The 2021 Plan Includes Compensation and Governance Best Practices

The 2021 Plan includes provisions considered best practices for compensation and corporate governance purposes. These provisions protect our stockholders’ interests:

- **Administration.** The 2021 Plan is administered by our Compensation and People Committee, which consists entirely of independent non-employee directors.
- **Repricing is Not Allowed without Stockholder Approval.** The 2021 Plan does not permit awards to be repriced or exchanged for other awards unless stockholders approve the repricing or exchange.

- **No Single-Trigger Vesting Acceleration upon a Change in Control for Employees and Consultants.** Awards under the 2021 Plan will be treated in a change in control (as defined in the 2021 Plan) in the manner determined by the administrator, and except for awards granted to our non-employee directors for their service as non-employee directors, the terms of the 2021 Plan provide for no automatic vesting of awards upon a change in control unless the award is not assumed or substituted.
- **Limited transferability.** Awards under the 2021 Plan generally may not be sold, assigned, hypothecated, transferred, or disposed of in any manner, unless otherwise approved by the administrator (on such terms as the administrator deems appropriate) or required by applicable laws.
- **No Tax Cross-ups.** The 2021 Plan does not provide for any tax gross-ups.
- **Forfeiture Events.** Each award under the 2021 Plan and any other incentive compensation paid to a participant is subject to our clawback policy that was in effect when the 2021 Plan was originally adopted and any clawback policy that we establish or amend to comply with applicable laws, and the administrator may require a participant to forfeit, return, or reimburse all or a portion of the award or other compensation and any amounts paid under the award or other compensation to comply with such clawback policy or applicable laws.
- **Reasonable Annual Limits on Non-Employee Director Compensation.** The 2021 Plan sets limits as to the total compensation that non-employee directors may receive (for service as a non-employee director) during each fiscal year.
- **No Dividends on Unvested Awards.** No dividends or other distributions may be paid with respect to any Shares underlying the unvested portion of an award.

Our executive officers and directors have an interest in the approval of the amendment to the 2021 Plan because they are eligible to receive equity awards under the 2021 Plan.

Required Vote

The approval of an amendment of our 2021 Equity Incentive Plan requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the virtual Annual Meeting and entitled to vote thereon to be approved. You may vote “for,” “against,” or “abstain” with respect to this proposal. Abstentions are considered votes present and entitled to vote on this proposal, and thus will have the same effect as votes “against” this proposal. Broker non-votes will have no effect on the outcome of this proposal.

Recommendation of the Board

The Board recommends that you vote “FOR” the approval of the amendment to the 2021 Equity Incentive Plan and the number of shares reserved for issuance under the 2021 Plan.

Summary of the 2021 Plan

The following paragraphs summarize the principal features of the 2021 Plan, as amended, and its operation. However, this summary is not a complete description of the provisions of the 2021 Plan and is qualified in its entirety by the specific language of the 2021 Plan. A copy of the 2021 Plan is provided as Appendix B to this proxy statement.

Purpose of the 2021 Plan

The purpose of the 2021 Plan is to attract and retain the best available personnel for positions of substantial responsibility, provide additional incentive to employees, directors, and consultants, and promote the success of our business. These incentives can be provided through the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, and performance shares.

Shares Available for Issuance

Subject to the adjustment provisions in the 2021 Plan, the number of Shares reserved for issuance under the 2021 Plan is equal to (a) 19,185,000 new Shares plus (b) any Shares subject to awards previously granted under the 2012 Plan that, on or after the date our stockholders initially approve the 2021 Plan, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by us for payment of an exercise price or for tax withholding obligations, or that are forfeited to or repurchased by us due to failure to vest, with the maximum number of shares to be added under the foregoing clause equal to 31,740,063 Shares. If we substitute equity awards for equity awards of acquired entities in connection with mergers, reorganizations, separations, or other transactions as described in the 2021 Plan, the grant of such substituted awards will not decrease the number of Shares available for issuance under the 2021 Plan. Shares may be authorized, but unissued, or reacquired common stock.

If an award granted under the 2021 Plan expires or becomes unexercisable without having been exercised in full or is forfeited to or repurchased by us due to failure to vest, then the expired, unexercised, forfeited, or repurchased Shares subject to that award will become available for future grant or sale under the 2021 Plan. If an award of stock appreciation rights is exercised, the gross number of Shares underlying the portion of a stock appreciation right that is exercised will cease to be available under the 2021 Plan. Shares actually issued under the 2021 Plan under any award will not be returned to the 2021 Plan and will not become available for future grant or sale under the 2021 Plan; provided, however, that if Shares issued under awards of restricted stock, restricted stock units, performance shares or performance units are repurchased by us or are forfeited to us due to failure to vest, such Shares will become available for future grant under the 2021 Plan. Shares used to pay the exercise price of an award or to satisfy tax withholding obligations related to an award will not become available for future grant or sale under the 2021 Plan. If an award is paid in cash rather than Shares, such payment will not reduce the number of Shares available for issuance under the 2021 Plan.

In the event of certain dividends or other distributions (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase or exchange of Shares or other securities or other change in the corporate structure affecting our Shares, the 2021 Plan administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the 2021 Plan, will adjust the number and class of shares that may be delivered under the 2021 Plan, and/or the number, class and price of shares of stock subject to outstanding awards, and the award grant limitations discussed above.

During the term of the 2021 Plan, we will at all times reserve and keep available a number of Shares sufficient to satisfy the requirements of the 2021 Plan.

Limitations

The 2021 Plan also provides that no non-employee director may be paid compensation for service as a non-employee director that, in the aggregate, exceeds \$2,000,000 for any fiscal year of ours, increased to \$4,000,000 for the non-employee director for our fiscal year in which he or she joins our Board as a non-employee director. For these purposes, compensation includes equity awards (including any awards issued under the 2021 Plan), with the value of such equity awards measured based on their grant date fair value (determined under U.S. generally accepted accounting principles), and any other compensation (such as cash retainers or fees) for director service. Any award granted to a participant while he or she was an employee or a consultant (other than a non-employee director) will not count for this limitation.

Administration

Our Board, any committee of individuals satisfying applicable laws appointed by our Board, or any duly authorized committee of our Board acts as the “administrator” of the 2021 Plan. Different administrators may administer the 2021 Plan with respect to different groups of service providers. Our Board has designated our Compensation and People Committee as an administrator of the 2021 Plan. To make grants to certain officers and key employees, the members of the committee must qualify as “non-employee directors” under Rule 16b-3 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”).

Proposal No. 4 Amendment to Our 2021 Equity Incentive Plan

Subject to the terms of the 2021 Plan, the administrator has the authority to make any determinations and perform any actions that it deems necessary or advisable to administer the 2021 Plan, such as the authority to: determine the fair market value of a Share, select the service providers who will receive awards; determine the number of Shares covered by each award and the terms of each award; approve forms of award agreements for use with the 2021 Plan; interpret, modify or amend each award (subject to the repricing restrictions of the 2021 Plan), including to accelerate vesting or waive forfeiture restrictions; interpret the 2021 Plan; and delegate ministerial duties to any of our employees. The administrator may allow a participant to defer the receipt of payment of cash or delivery of Shares otherwise due to such participant. The administrator may make rules and regulations relating to the 2021 Plan, including rules, regulations, and sub-plans to facilitate compliance with applicable non-U.S. laws, easing the administration of the 2021 Plan, and/or take advantage of tax-favorable treatment of awards granted to service providers outside the U.S., and may make all other determinations deemed necessary or advisable for administering the 2021 Plan.

Eligibility

All types of awards, other than incentive stock options, may be granted to our non-employee directors and to employees and consultants of ours or any parent or subsidiary corporation of ours. Incentive stock options may be granted only to employees of ours or any parent or subsidiary corporation of ours. As of July 31, 2022, we and our parent and subsidiary corporations had approximately 12,561 employees (including three employee directors), nine non-employee directors, and approximately 11 consultants.

Stock Options

An option gives a participant the right to purchase a specified number of Shares for a fixed exercise price during a specified period. Each option granted under the 2021 Plan will be evidenced by an award agreement specifying the number of Shares subject to the option and the other terms of the option, consistent with the 2021 Plan.

The exercise price per Share of each option may not be less than the fair market value of a Share on the date of grant (except, in the case of a nonstatutory stock option, as otherwise required by applicable laws). However, any incentive stock option granted to a person who at the time of grant owns stock representing more than 10% of the total combined voting power of all classes of our stock or any parent or subsidiary corporation of ours (a “ten percent stockholder”) must have an exercise price per Share equal to at least 110% of the fair market value of a Share on the date of grant. The aggregate fair market value of the Shares (determined on the grant date) covered by incentive stock options which first become exercisable by any participant during any calendar year also may not exceed \$100,000. For this purpose, the fair market value of a Share is generally the closing sales price of our stock, as reported on the primary stock exchange on which it is traded. On October 14, 2022, the closing price of a Share on Nasdaq was \$154.83.

Options will be exercisable at such times or under such conditions as determined by the administrator and set forth in the award agreement. When a participant’s service ends, the unvested portion of the participant’s option generally expires. The vested portion of the option will remain exercisable for the period following the end of the participant’s service that was determined by the administrator and specified in the participant’s award agreement, and if no such period was specified in the award agreement, the vested portion of the option will remain exercisable for: (i) 3 months following the end of the participant’s service provider status for reasons other than death or disability or (ii) 12 months following the end of the participant’s service provider status due to death or disability. In addition, a participant’s award agreement may provide for an extension of the post-service exercise period if the participant’s service ends for reasons other than his or her death or disability and the exercise of the option following the termination of service would result in liability under Section 16(b) of the Exchange Act or would violate the registration requirements under the Securities Act of 1933, as amended (the “Securities Act”).

The term of an option will be specified in the award agreement, but the term of an incentive stock option may not be more than ten years (or five years for an incentive stock option granted to a ten percent stockholder).

The administrator will determine the acceptable form(s) of consideration for exercising an option. An option will be deemed exercised when we receive the notice of exercise and full payment for the Shares to be exercised, together with any amounts necessary to satisfy withholding obligations for tax-related items. At any time after the grant of an option, the administrator has the discretion to accelerate the time at which the option will vest or become exercisable.

Stock Appreciation Rights

A stock appreciation right gives a participant the right to receive the appreciation in the value of a Share between the date an award is granted and the date it is exercised. Upon exercise of a stock appreciation right, the holder of the award will be entitled to receive an amount determined as the product of: (i) the difference between the fair market value of a Share on the date of exercise and the exercise price per Share and (ii) the number of Shares covered by the exercised portion of the stock appreciation right. We may pay that amount in cash, Shares, or a combination of both. Each stock appreciation right granted under the 2021 Plan will be evidenced by an award agreement specifying the exercise price and the other terms of the award.

The exercise price per Share of each stock appreciation right may not be less than the fair market value of a Share on the date of grant, unless otherwise required by applicable laws.

Stock appreciation rights will be exercisable at such times or under such conditions as determined by the administrator and set forth in the award agreement. The terms relating to the period of exercise of stock appreciation rights following the termination of a participant's service are similar to those for options described above. At any time after the grant of a stock appreciation right, the administrator has the discretion to accelerate the time at which the stock appreciation right will vest or become exercisable.

Restricted Stock Awards

Awards of restricted stock are rights to acquire or purchase Shares that vest under the terms established by the administrator in its sole discretion. Unless the administrator provides otherwise, participants holding Shares of restricted stock will have voting rights with respect to such Shares without regard to vesting. After an award of restricted stock has been granted, the administrator has the discretion to reduce or waive any restrictions and to accelerate the time at which any restrictions will lapse or be removed.

Restricted Stock Units

A restricted stock unit represent a right to receive cash or Shares if the performance goals or other vesting criteria set by the administrator are achieved or the restricted stock unit otherwise vests. Each award of restricted stock units granted under the 2021 Plan will be evidenced by an award agreement specifying the number of Shares subject to the award and other terms of the award.

The administrator may set vesting conditions based upon the achievement of company-wide, divisional, business unit or individual goals (such as continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the administrator, in its discretion.

After an award of restricted stock units has been granted, the administrator has the discretion to reduce or waive any restrictions or vesting criteria that must be met to receive a payout or to accelerate the time at which any restrictions will lapse or be removed. A participant will forfeit any unearned restricted stock units on the date specified in the participant's award agreement. The administrator in its sole discretion may pay earned restricted stock units in cash, Shares, or a combination of both.

Performance Units and Performance Shares

Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. Performance units will have an initial value established by the administrator on or before the date of grant. Each performance share will have an initial value equal to the fair market value of a Share on the grant date. Performance units and performance shares will result in a payment to a participant only if the performance goals or other vesting criteria set by the administrator are achieved or the awards otherwise vest.

Each award of performance units or performance shares granted under the 2021 Plan will be evidenced by an award agreement specifying the performance period and other terms of the award. The administrator may set vesting criteria based upon the achievement of company-wide, divisional, business unit or individual goals (such as continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the administrator, in its discretion.

After an award of performance units or performance shares has been granted, the administrator has the discretion to accelerate, reduce or waive any performance objectives or other vesting provisions for such performance units or performance shares.

The administrator has the discretion to pay earned performance units or performance shares in the form of cash, Shares (which will have an aggregate fair market value equal to the earned performance units or performance shares at the close of the performance period), or a combination of both.

A participant will forfeit any performance units or performance shares not earned and not vested as of the date specified in the participant's award agreement.

Transferability of Awards

Unless otherwise specified by the administrator or required by applicable laws, awards are not transferable other than by will or by the laws of descent or distribution. The administrator may permit an award to be transferred (i) under a domestic relations order, official marital settlement agreement, or other divorce or separation agreement, or (ii) to the extent permitted by Form S-8 under the Securities Act and any other applicable laws. Any individual or entity to whom an award is transferred will be subject to all of the terms and conditions applicable to the participant who transferred the award, including the terms and conditions in the 2021 Plan and the award agreement. If an award is unvested, then the service of the participant will continue to determine whether the award will vest and when it will terminate.

Dissolution or Liquidation

In the event of our proposed dissolution or liquidation, the administrator will notify each participant as soon as practicable prior to the effective date of such proposed transaction. An award will terminate immediately prior to consummation of such proposed action to the extent the award has not been previously exercised.

Merger or Change in Control

The 2021 Plan provides that, in the event of a merger or change in control, each award will be treated as the administrator determines without a participant's consent. The administrator will not be required to treat all awards, all awards held by a participant, all awards of the same type, or all portions of awards the same in the transaction.

If the successor corporation does not assume or substitute for the award (or portion thereof), the participant will vest in and may exercise all of the participant's outstanding options and stock appreciation rights (or portion thereof) that is not assumed or substituted for, all restrictions on restricted stock and restricted stock units will lapse. With respect to awards with performance-based vesting that are not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels, and all other terms met, in each case, unless specifically provided otherwise under the applicable award agreement. In addition, if an option or stock appreciation right (or its applicable portion) is not assumed or substituted for, the administrator will notify the participant in writing or electronically that the option or stock appreciation right will be exercisable for a period of time determined by the administrator, in its sole discretion, and the option or stock appreciation right (or its applicable portion) will terminate upon the expiration of such period.

For awards granted to each of our non-employee directors, in the event of a change in control, (i) the non-employee director will fully vest in and have the right to exercise all of his or her outstanding options and stock appreciation rights, (ii) all restrictions on the non-employee director's restricted stock and restricted stock units will lapse, and (iii) with respect to the non-employee director's awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions will be deemed met, unless specifically provided otherwise under the applicable award agreement.

Forfeiture Events

Each award under the 2021 Plan and any other compensation paid or payable to a participant (including, but not limited to, equity awards issued outside of the 2021 Plan) will be subject to any clawback policy of ours, and the administrator also may specify in an award agreement that the participant's rights, payments, and benefits regarding an award will be subject to reduction, cancellation, forfeiture, recoupment, reimbursement, or reacquisition upon the occurrence of certain specified events. An award will be subject to the Company's clawback policy in effect when the award is granted and any other clawback policy of ours as established and/or amended to comply with applicable laws (such as under the listing standards of any national securities exchange or association on which our securities are listed or as required by the Dodd-Frank Wall Street Reform and Consumer Protection Act). The administrator may require a participant to forfeit, return, or reimburse all or a portion of the award and any amounts paid under the award to comply with such clawback policy or applicable laws.

No recovery of compensation under a clawback policy or otherwise will constitute an event that triggers or contributes to any right of a participant to resign for "good reason" or "constructive termination" (or similar term) under any agreement with us or any of our parent or subsidiary corporations, unless the 2021 Plan provisions described in the prior paragraph specifically are mentioned and waived in an award agreement or other document.

Termination or Amendment

The administrator may amend, alter, suspend, or terminate the 2021 Plan at any time, provided that no amendment may be made without stockholder approval to the extent approval is necessary to comply with any applicable laws. No amendment, alteration, suspension, or termination may materially impair the rights of any participant with respect to his or her outstanding awards unless mutually agreed otherwise between the participant and the administrator. The 2021 Plan will continue until terminated by the administrator, but no incentive stock option may be granted after the tenth anniversary of the date the 2021 Plan was originally adopted by our Board.

Notwithstanding the prior paragraph, the Administrator may amend the terms of any one or more awards without an affected participant's consent even if it does materially impair the participant's rights, subject to the limitations of applicable laws, if any, if such amendment is done (i) in a manner expressly permitted under the 2021 Plan; (ii) to maintain the qualified status of the award as an incentive stock option under Section 422 of the Code; (iii) to change the terms of an incentive stock option, if such change results in impairment of the award only because it impairs the qualified status of the award as an incentive stock option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the award into compliance with, Section 409A of the Code; or (v) to comply with other applicable laws.

Summary of U.S. Federal Income Tax Consequences

The following summary is intended only as a general guide to the U.S. federal income tax consequences of participation in the 2021 Plan. The summary is based on existing U.S. laws and regulations, and there can be no assurance that those laws and regulations will not change. The summary is not complete and does not discuss the tax consequences upon a participant's death, or the income tax laws of any municipality, state, or non-U.S. country in which a participant may reside. Tax consequences for any particular participant may vary based on individual circumstances.

Incentive Stock Options

A participant recognizes no taxable income for regular income tax purposes because of the grant or exercise of an option that qualifies as incentive stock option under Section 422 of the Code. If a participant exercises the option and then later sells or otherwise disposes of the Shares acquired through the exercise the option after both the two-year anniversary of the date the option was granted and the one-year anniversary of the exercise, the participant will recognize a capital gain or loss equal to the difference between the sale price of the Shares and the exercise price.

However, if the participant disposes of such Shares either on or before the two-year anniversary of the date of grant or on or before the one-year anniversary of the date of exercise (a “disqualifying disposition”), any gain up to the excess of the fair market value of the Shares on the date of exercise over the exercise price generally will be taxed as ordinary income, unless the Shares are disposed of in a transaction in which the participant would not recognize a loss (such as a gift). Any gain in excess of that amount will be a capital gain. If a loss is recognized, there will be no ordinary income, and such loss will be a capital loss.

For purposes of the alternative minimum tax, the difference between the option exercise price and the fair market value of the Shares on the exercise date is treated as an adjustment item in computing the participant’s alternative minimum taxable income in the year of exercise. In addition, special alternative minimum tax rules may apply to certain subsequent disqualifying dispositions of the Shares or provide certain basis adjustments or tax credits.

Nonstatutory Stock Options

A participant generally recognizes no taxable income as the result of the grant of a nonstatutory stock option. However, upon exercising the option with respect to any Shares, the participant normally recognizes ordinary income equal to the amount that the fair market value of such Shares on such date exceeds the exercise price for such Shares. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of the Shares acquired by exercising a nonstatutory stock option, any gain or loss (based on the difference between the sale price and the fair market value on the exercise date) will be taxed as capital gain or loss.

Stock Appreciation Rights

A participant generally recognizes no taxable income as the result of the grant of a stock appreciation right. However, upon exercising the stock appreciation right with respect to any Shares, the participant normally recognizes ordinary income equal to the amount that the fair market value of such Shares on such date exceeds the exercise price for such Shares. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of the Shares acquired by exercising a stock appreciation right, any gain or loss (based on the difference between the sale price and the fair market value on the exercise date) will be taxed as capital gain or loss.

Restricted Stock Awards

A participant acquiring Shares of restricted stock generally will recognize ordinary income equal to the amount that the fair market value of the Shares on the vesting date exceeds the purchase price paid by the participant for such Shares (if any). If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. The participant may elect, under Section 83(b) of the Code, to accelerate the ordinary income tax event to the date of acquisition by filing an election with the Internal Revenue Service no later than thirty days after the date the Shares are acquired. Upon the sale of Shares acquired under a restricted stock award, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Restricted Stock Unit Awards

There are no immediate tax consequences of receiving an award of restricted stock units. A participant who is awarded restricted stock units generally will have to recognize ordinary income equal to the fair market value of Shares issued to such participant at the end of the applicable vesting period or, if later, the settlement date elected by the administrator or a participant. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Any additional gain or loss recognized upon any later disposition of any Shares received would be capital gain or loss.

Performance Shares and Performance Unit Awards

A participant generally will recognize no income upon the grant of a performance share or a performance unit award. Upon the settlement of such awards, participants normally will recognize ordinary income in the year of receipt in an amount equal to the cash received and the fair market value of any cash or unrestricted Shares received. If the participant is an employee, such ordinary income generally is subject to withholding of income and employment taxes. Upon the sale of any Shares received, any gain or loss, based on the difference between the sale price and the fair market value on the date the ordinary income tax event occurs, will be taxed as capital gain or loss.

Section 409A

Section 409A provides certain requirements for non-qualified deferred compensation arrangements with respect to an individual's deferral and distribution elections and permissible distribution events. Awards granted under the 2021 Plan with a deferral feature will be subject to the requirements of Section 409A. If an award is subject to and fails to satisfy the requirements of Section 409A, the recipient of that award may recognize ordinary income on the amounts deferred under the award, when vested, which may be before the compensation is actually or constructively received. Also, if an award subject to Section 409A violates Section 409A's provisions, Section 409A imposes an additional 20% federal income tax on compensation recognized as ordinary income and potentially penalties and interest on such deferred compensation.

Tax Effect for Us

We generally will be entitled to a tax deduction in connection with an award under the 2021 Plan equal to the ordinary income realized by a participant when the participant recognizes such income (for example, the exercise of a nonstatutory stock option or the disqualifying disposition of Shares acquired through the exercise of an incentive stock option) except to the extent such deduction is limited by applicable provisions of the Code. Special rules limit the deductibility of compensation paid to our chief executive officer and other "covered employees" as determined under Section 162(m) and applicable guidance. Under Section 162(m), the annual compensation paid to any of these specified executives will be deductible only to the extent that it does not exceed \$1,000,000.

THE SUMMARY ABOVE IS ONLY A SUMMARY OF THE EFFECT OF U.S. FEDERAL INCOME TAXATION ON PARTICIPANTS AND US WITH RESPECT TO AWARDS UNDER THE 2021 PLAN. IT IS NOT INTENDED TO BE COMPLETE AND MAY NOT DISCUSS THE IMPACT OF EMPLOYMENT OR OTHER TAX REQUIREMENTS, THE TAX CONSEQUENCES OF A PARTICIPANT'S DEATH, OR THE PROVISIONS OF THE INCOME TAX LAWS OF ANY MUNICIPALITY, STATE, OR NON-U.S. COUNTRY IN WHICH THE PARTICIPANT MAY RESIDE.

Number of Awards Granted to Employees, Consultants, and Directors

The number of awards that an employee, director, or consultant may receive under the 2021 Plan is in the discretion of the administrator and therefore cannot be determined in advance. The following table sets forth: (i) time-based restricted stock units ("RSUs"), and performance-based restricted stock units ("PSUs") granted under the 2012 Plan and the 2021 Plan during fiscal 2022 to each of our named executive officers; our executive officers, as a group; our directors who are not executive officers, as a group; and all of our employees who are not executive officers, as a group; and (ii) the aggregate grant date fair value of such RSUs and PSUs.

Proposal No. 4 Amendment to Our 2021 Equity Incentive Plan

Name of Individual or Group	Number of Shares Subject to RSUs and PSUs Granted ⁽¹⁾	Dollar Value of Shares Subject to RSUs and PSUs Granted ⁽¹⁾
Nikesh Arora Chief Executive Officer and Chair of the Board	50,636 ⁽²⁾	\$ 7,007,348
Dipak Golechha Executive Vice President, Chief Financial Officer	13,503 ⁽²⁾	\$ 1,868,557
William “BJ” Jenkins President	141,731 ⁽³⁾	\$ 17,835,150
Lee Klarich Chief Product Officer	33,758 ⁽²⁾	\$ 4,671,565
Nir Zuk Chief Technology Officer	11,815 ⁽²⁾	\$ 1,635,031
All executive officers, as a group	251,433	\$ 33,017,651
All directors who are not executive officers, as a group	12,990 ⁽⁴⁾	\$ 2,219,125
All employees who are not executive officers, as a group	5,986,680	\$987,175,002

⁽¹⁾ The amounts reported represent the grant date fair value of the PSUs and the RSUs granted in fiscal 2022, calculated in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value of the PSUs and the RSUs reported in this column are set forth in the notes to our audited consolidated financial statements included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2022. The value of the PSUs is calculated using a Monte-Carlo simulation valuation performed as of the date of grant by an independent third party. With respect to the performance-based restricted stock units, in fiscal year 2022, we approved only the fiscal year 2022 performance targets. As a result, only these portions of the performance-based restricted stock unit awards (covering 42% of the performance-based restricted stock units for Messrs. Arora, Golechha, Klarich and Zuk and 61% of the performance-based restricted stock units for Mr. Jenkins) have a reportable grant date fair value under ASC Topic 718 and are included in this table. The remaining performance-based restricted stock units do not have a reportable grant date fair value under ASC Topic 718 and are not included in this table. In addition, the target number of shares subject to PSUs granted in fiscal 2022, which have a reportable grant date fair value under ASC Topic 718, are shown in this table.

⁽²⁾ Consists of PSUs only.

⁽³⁾ Consists of 76,542 RSUs and 65,189 PSUs.

⁽⁴⁾ Consists of RSUs only.

Additional Equity Plan Information

The following table provides certain additional information regarding our equity compensation plans, excluding the Employee Stock Purchase Plan:

	As of 10/14/2022
Total Stock Options (including PSOs) Outstanding	8,017,260
Weighted-Average Exercise Price of Stock Options Outstanding	\$64.59 per share
Weighted-Average Remaining Duration of Stock Options Outstanding	2.95 years
Total Restricted Stock Units (including PSUs) Outstanding	19,688,313
Total Shares Available for Grant under the 2021 Equity Incentive Plan and the 2012 Equity Incentive Plan ⁽¹⁾	10,629,453

⁽¹⁾ Shares available for grant under the 2012 Equity Incentive Plan are limited to performance-based restricted stock units which do not yet have approved performance targets established. These performance-based restricted stock units do not yet have a reportable grant date fair value under ASC Topic 718.

For more information regarding our equity compensation plans, including the Employee Stock Purchase Plan, please see “Equity Compensation Plan Information.”

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of September 30, 2022 for:

- each of our directors and nominees for director;
- each of our NEOs;
- all of our current directors and executive officers as a group; and
- each person or group, who beneficially owned more than 5% of our common stock.

We have determined beneficial ownership in accordance with the rules and regulations of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of common stock that they beneficially owned, subject to applicable community property laws.

Applicable percentage ownership is based on 300,395,166 shares of our common stock outstanding at September 30, 2022. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares of common stock subject to options held by the person that are currently exercisable or exercisable (or issuable upon vesting of restricted stock units or performance stock unit awards) within 60 days of September 30, 2022. However, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Palo Alto Networks, Inc., 3000 Tannery Way, Santa Clara, California 95054. The information provided in the table below is based on our records, information filed with the SEC and information provided to us, except where otherwise noted. All shares reported have been adjusted for the Stock Split.

	Number of Shares	Percent of Shares Outstanding
5% Stockholders:		
The Vanguard Group ⁽¹⁾	25,699,323	8.6%
BlackRock, Inc. ⁽²⁾	17,107,173	5.7%
Named Executive Officers and Directors:		
Nikesh Arora⁽³⁾	4,197,196	1.4%
Mark D. McLaughlin⁽⁴⁾	242,235	*
William “BJ” Jenkins⁽⁵⁾	70,095	*
Dipak Golechha⁽⁶⁾	60,024	*
Lee Klarich⁽⁷⁾	2,586,043	*
Nir Zuk⁽⁸⁾	3,749,580	1.2%
Aparna Bawa⁽⁹⁾	714	*
Asheem Chandna⁽¹⁰⁾	346,119	*
John M. Donovan⁽¹¹⁾	139,737	*
Carl Eschenbach⁽⁶⁾	21,849	*
Helene D. Gayle⁽¹²⁾	4,335	*
James J. Goetz⁽¹³⁾	504,777	*
Rt Hon Sir John Key⁽⁶⁾	15,240	*
Mary Pat McCarthy⁽⁶⁾	41,268	*
Lorraine Twohill⁽⁶⁾	16,146	*
All current directors and executive officers as a group (15 Persons) ⁽¹⁴⁾	11,995,358	3.9%

Security Ownership of Certain Beneficial Owners and Management

* Represents beneficial ownership of less than one percent (1%).

- ⁽¹⁾ According to a Schedule 13G/A filed with the SEC on February 10, 2022, The Vanguard Group, Inc. ("Vanguard"), as investment advisor, has sole voting power with respect to none of the reported shares, shared voting power with respect to 280,020 of the reported shares, sole dispositive power with respect to 25,063,716 of the reported shares and shared dispositive power with respect to 635,607 of the reported shares. The address of Vanguard is 100 Vanguard Blvd., Malvern, PA 19355.
- ⁽²⁾ According to a Schedule 13G/A filed with the SEC on February 3, 2022, BlackRock, Inc. ("BlackRock") has sole voting power with respect to 15,340,071 of the reported shares, and sole dispositive power with respect to 17,107,173 of the reported shares. The address of BlackRock is 55 East 52nd Street, New York, NY 10055.
- ⁽³⁾ Consists of (i) 641,364 shares held of record by Mr. Arora, (ii) 16,005 shares held of record by Bacchey Investments L.P., of which Bacchey Management LLC (the "LLC") is the General Partner, Mr. Arora is the manager of the LLC and the sole member of the LLC is the Aurora Trust, for which Mr. Arora serves as a trustee, (iii) 65,527 shares issuable upon the vesting of performance stock unit awards within 60 days of September 30, 2022 and (iv) 3,474,300 PSOs exercisable within 60 days of September 30, 2022.
- ⁽⁴⁾ Consists of (i) 128,529 shares held of record by Mr. McLaughlin and (ii) 113,706 shares held of record by the Mark McLaughlin Revocable Living Trust.
- ⁽⁵⁾ Consists of (i) 16,263 shares held of record by Mr. Jenkins and (ii) 53,832 shares issuable upon the vesting of restricted stock units and performance stock unit awards within 60 days of September 30, 2022.
- ⁽⁶⁾ Consists of shares held of record by the director or officer.
- ⁽⁷⁾ Consists of (i) 532,167 shares held of record by Mr. Klarich, (ii) 41,797 shares that are issuable upon the vesting of restricted stock units and performance stock unit awards within 60 days of September 30, 2022 and (iii) 2,012,079 PSOs exercisable within 60 days of September 30, 2022.
- ⁽⁸⁾ Consists of (i) 1,903,665 shares held of record by Mr. Zuk, (ii) 274,914 shares held by the Cliff Family Trusts, for which Mr. Zuk serves as a trustee, (iii) 45,000 shares that are issuable pursuant to stock options exercisable within 60 days of September 30, 2022, (iv) 16,944 shares that are issuable upon the vesting of restricted stock units and performance stock unit awards within 60 days of September 30, 2022 and (v) 1,509,057 PSOs exercisable within 60 days of September 30, 2022.
- ⁽⁹⁾ Consists of 714 shares issuable upon the vesting of restricted stock units within 60 days of September 30, 2022.
- ⁽¹⁰⁾ Consists of (i) 34,023 shares held of record by Mr. Chandna and (ii) 312,096 shares held of record by the Chandna Family Revocable Trust DTD 4/13/98.
- ⁽¹¹⁾ Consists of (i) 81,273 shares held of record by Mr. Donovan and (ii) 58,464 shares held of record by SRJ Norway Partners LP, for which Mr. Donovan serves as the general partner.
- ⁽¹²⁾ Consists of (i) 3,612 shares held of record by Dr. Gayle and (ii) 723 shares issuable upon the vesting of restricted stock units within 60 days of September 30, 2022.
- ⁽¹³⁾ Consists of (i) 460,935 shares held of record by Mr. Goetz and (ii) 43,842 shares held of record by the Goetz Children's Trust 4/24/1998.
- ⁽¹⁴⁾ Consists of (i) 4,775,385 shares beneficially owned by the current directors and executive officers, (ii) 45,000 shares issuable pursuant to stock options exercisable within 60 days of September 30, 2022; (iii) 179,537 shares issuable upon the vesting of restricted stock units and performance stock unit awards within 60 days of September 30, 2022 and (iv) 6,995,436 PSOs exercisable within 60 days of September 30, 2022.

Related Person Transactions

The Audit Committee of the Board of Directors has adopted a written policy and procedures for the review, approval and ratification, if necessary, of the transactions among the Company and its directors, executive officers and their related interests.

We have entered into employment arrangements with our executive officers. Pursuant to Mr. McLaughlin's offer letter dated May 31, 2018, in fiscal 2022, he received an annual salary of \$500,000 and received benefits available to other employees. See also the section titled "*Discussion of our Fiscal 2022 Executive Compensation Program—Executive Employment Agreements.*"

We have also entered into indemnification agreements with our directors and executive officers. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Ms. Twohill, one of our independent directors, is currently Chief Marketing Officer at Google. Since the beginning of our last fiscal year through September 30, 2022, we sold an aggregate of approximately \$34.5 million of our products and services to Google and Google's parent company, Alphabet, Inc. in arm's length transactions, on terms generally available to third parties under the same or similar circumstances. We also listed our products and services on the Google marketplace. Sales to third parties of our products and services from these listings totaled approximately \$220.6 million, for which the fee payable by us to Google totaled approximately \$6.3 million. We have purchased an aggregate of approximately \$228.0 million of Google products and services, all in arm's length transactions. Ms. Bawa, who joined our board in May 2021 is the COO and interim Chief Legal Officer of Zoom Video Communications, Inc. ("Zoom"). Since the beginning of our last fiscal year through September 30, 2022, both directly and through our channel partners, we have sold an aggregate of approximately \$0.5 million of products and services to Zoom and have purchased an aggregate of \$2.7 million of Zoom products and services, all in arm's length transactions.

None of the foregoing transactions is material to Mmes. Bawa or Twohill. Additionally, none of Mmes. Bawa or Twohill take part in discussion of transactions with us and (a) Google for Ms. Twohill, or (b) Zoom for Ms. Bawa, when such transactions are reviewed by our Audit Committee or Board. All transactions with Google and Zoom are subject to our related person transactions review process and policy, as further described below.

Policies and Procedures for Related Person Transactions

Our Audit Committee has the primary responsibility for reviewing and approving or ratifying transactions with related persons.

We have a formal written policy providing that any transactions in which the aggregate amount exceeds or may be expected to exceed \$120,000 between us and a related person (defined as an executive officer, director, nominee for election as director, beneficial owner of more than 5% of any class of our capital stock, any member of the immediate family of any of the foregoing persons, and any firm, corporation or other entity in which any of the foregoing persons is employed, is a general partner or principal or in a similar position, or in which such person has a 5% or greater beneficial ownership interest) are reviewed and approved or ratified quarterly by our Audit Committee. In approving or rejecting any such proposal, our Audit Committee is to consider the relevant facts and circumstances available and deemed relevant to our Audit Committee, including, whether the transaction is on terms generally available to an unaffiliated third party under the same or similar circumstances, and the extent of the related person's interest in the transaction. In addition, it is our policy that directors interested in a related person transaction will recuse themselves from any discussion or vote on a related person transaction in which they may have an interest.

About the Annual Meeting

Why are you holding a virtual meeting and how can stockholders attend?

We have adopted a virtual meeting format for our Annual Meeting this year to protect our stockholders and employees in light of the ongoing coronavirus (COVID-19) pandemic. In addition, a virtual meeting format will provide a consistent experience to all stockholders regardless of geographic location and enhance stockholder access and engagement. To participate in our virtual Annual Meeting, including to vote, ask questions and to view the list of registered stockholders as of the record date during the meeting, visit www.virtualshareholdermeeting.com/PANW2022 with your 16-digit control number included on the accompanying proxy card, or in the instructions that accompanied your proxy materials. If you did not receive a 16-digit control number, please reach out to your broker for instructions. If you are not a stockholder or do not have a control number, you may still access the meeting as a guest, but you will not be able to submit questions or vote at the meeting.

How can I ask questions during the Annual Meeting?

The virtual format allows stockholders to communicate with us during the Annual Meeting. Stockholder questions may be submitted in the field provided in the web portal prior to or during the Annual Meeting for consideration. Detailed guidelines for submitting written questions during the Annual Meeting are available at <http://www.virtualshareholdermeeting.com/PANW2022>. You can submit questions in advance of the Annual Meeting by visiting www.proxyvote.com. The chairperson of the meeting will review the questions and determine whether the questions are relevant to the subject matter of the meeting and otherwise appropriate for answering at the meeting. We reserve the right to edit profanity or other inappropriate language and to exclude questions regarding topics that are not pertinent to meeting matters or our business, or are otherwise not appropriate for answering at the meeting. If we receive substantially similar questions, we may group such questions together and provide a single response to avoid repetition.

Who is entitled to vote?

Only holders of our common stock as of the close of business on October 14, 2022 (the “Record Date”), are entitled to vote at the Annual Meeting. As of the Record Date, 300,395,286 shares of our common stock were outstanding and entitled to vote. For each proposal at the Annual Meeting, each stockholder will be entitled to one vote for each share of our common stock held by them on the Record Date. Stockholders may not cumulate votes in the election of directors.

Registered Stockholders of Record. If shares of our common stock are registered directly in your name with our transfer agent, you are considered the stockholder of record with respect to those shares, and the proxy materials were provided to you directly by us. As the stockholder of record, you have the right to grant your voting proxy directly to the individuals listed on the accompanying proxy card, or to vote online, by telephone or virtually at the virtual Annual Meeting as described above. Throughout this proxy statement, we refer to these registered stockholders as “stockholders of record.”

Street Name Stockholders. If shares of our common stock are held on your behalf in a brokerage account or by a bank or other nominee, you are considered to be the beneficial owner of shares that are held in “street name,” and the proxy materials were forwarded to you by your broker, bank or other nominee, who is considered the stockholder of record with respect to those shares. As the beneficial owner, you have the right to direct your broker, bank or other nominee as to how to vote your shares. Beneficial owners are also invited to participate in and vote online at the Annual Meeting; however, since a beneficial owner is not the stockholder of record, you may not vote your shares of our common stock virtually at the virtual Annual Meeting unless you follow your broker’s procedures for obtaining a legal proxy. If you request a printed copy of our proxy materials by mail, your broker, bank or other nominee will provide a voting instruction form for you to use. Throughout this proxy statement, we refer to stockholders who hold their shares through a broker, bank or other nominee as “street name stockholders.”

How do I vote?

If you are a stockholder of record, there are four ways to vote:

- by Internet, prior to the virtual Annual Meeting at <http://www.proxyvote.com>, 24 hours a day, seven days a week (have your proxy card in hand when you visit the website);
- by toll-free telephone at 1-800-690-6903 until 11:59 p.m. Eastern Standard Time, on December 12, 2022 (have your proxy card in hand when you call);
- by completing and mailing the accompanying proxy card in the envelope provided so it is received prior to the Annual Meeting or
- by attending and voting during the virtual Annual Meeting by visiting www.virtualshareholdermeeting.com/PANW2022. Please have your 16-digit control number to join the virtual Annual Meeting.

Even if you plan to attend the virtual Annual Meeting, we recommend that you also vote by Internet, telephone, or returning a proxy card so that your vote will be counted if you later decide not to attend the virtual Annual Meeting.

If you are a street name stockholder, you will receive voting instructions from your broker, bank or other nominee. You must follow the voting instructions provided by your broker, bank or other nominee in order to direct your broker, bank or other nominee on how to vote your shares. Street name stockholders should generally be able to vote by returning a voting instruction form, or by telephone or on the Internet. However, the availability of telephone and Internet voting will depend on the voting process of your broker, bank or other nominee. As discussed above, if you are a street name stockholder, you may not vote your shares online at the virtual Annual Meeting unless you obtain a legal proxy from your broker, bank, or other nominee.

Can I change my vote or revoke my proxy?

Yes. If you are a stockholder of record, you can change your vote or revoke your proxy any time before the Annual Meeting by:

- entering a new vote by Internet or by telephone on a later date;
- completing and returning a later-dated proxy card;
- sending a written notice of revocation to the Corporate Secretary of Palo Alto Networks, at Palo Alto Networks, Inc., 3000 Tannery Way, Santa Clara, CA 95054; or
- attending and voting online during the virtual Annual Meeting by visiting www.virtualshareholdermeeting.com/PANW2022. Please have your 16-digit control number to join the Annual Meeting.

If you are a street name stockholder, your broker, bank or other nominee can provide you with instructions on how to change your vote or revoke your proxy.

How many votes are needed for approval of each proposal?

- **Proposal No. 1:** Each director nominee will be elected by a vote of the majority of the votes cast. A majority of the votes cast means the number of votes cast “For” such nominee’s election exceeds the number of votes cast “Against” that nominee. An affirmative vote of a majority means the number of votes cast “for” such nominee’s election exceeds the number of votes cast “against” that nominee. You may vote “for,” “against,” or “abstain” on each of the nominees for election as a director. Broker non-votes and abstentions will have no effect on the outcome of this proposal.
- **Proposal No. 2:** The ratification of the appointment of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2023 requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the virtual Annual Meeting and entitled to vote thereon to be approved. You may vote “for,” “against,” or “abstain” with respect to this proposal. Abstentions are considered votes present and entitled to vote on this proposal, and thus will have the same effect as a vote “against” this proposal. Broker non-votes will have no effect on the outcome of this proposal.
- **Proposal No. 3:** The approval, on an advisory basis, of the compensation of our named executive officers requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the virtual Annual Meeting and entitled to vote thereon to be approved. You may vote “for,” “against,” or “abstain” with

About the Annual Meeting

respect to this proposal. Abstentions are considered votes present and entitled to vote on this proposal, and thus will have the same effect as votes “against” this proposal. Broker non-votes will have no effect on the outcome of this proposal. Although the advisory vote is non-binding, our board of directors values our stockholders’ opinions. The Compensation and People Committee will review the results of the vote and, consistent with our record of stockholder responsiveness, consider stockholders’ concerns and take into account the outcome of the vote when considering future decisions concerning our executive compensation program.

- **Proposal No. 4:** The approval of an amendment of our 2021 Equity Incentive Plan requires the affirmative vote of a majority of the shares of our common stock present virtually or by proxy at the virtual Annual Meeting and entitled to vote thereon to be approved. You may vote “for,” “against,” or “abstain” with respect to this proposal. Abstentions are considered votes present and entitled to vote on this proposal, and thus will have the same effect as votes “against” this proposal. Broker non-votes will have no effect on the outcome of this proposal.

What is the effect of giving a proxy?

Proxies are solicited by and on behalf of our Board. The persons named in the proxy have been designated as proxies by our Board. When a proxy card is properly dated, executed and returned, the shares represented by such proxies will be voted at the virtual Annual Meeting in accordance with the instruction of the stockholder. If a proxy card is signed, but no specific instructions are given, the shares represented by such proxy card will be voted in accordance with the recommendations of our board of directors, as described above. If any matters not described in this proxy statement are properly presented at the Annual Meeting, the proxy holders will use their own judgment to determine how to vote the shares subject to proxies. If the Annual Meeting is adjourned, the proxy holders can vote your shares subject to proxies when the Annual Meeting is rescheduled, unless you have properly revoked your proxy instructions, as described above.

What is a quorum?

A quorum is the minimum number of shares required to be present for the virtual Annual Meeting to be properly held under our amended and restated bylaws and Delaware law. The presence, virtually or by proxy, of a majority of all issued and outstanding shares of our common stock entitled to vote at the virtual Annual Meeting will constitute a quorum at the virtual Annual Meeting. A proxy submitted by a stockholder may indicate that all or a portion of the shares represented by the proxy are not being voted (“stockholder withholding”) with respect to a particular matter. Similarly, a broker may not be permitted to vote shares held in street name on a particular matter in the absence of instructions from the beneficial owner of such shares (“broker non-vote”). See the question below titled “How may my broker, bank or other nominee vote my shares if I fail to timely provide voting instructions?” The shares of our common stock subject to a proxy that are not being voted on a particular matter because of either stockholder withholding or a broker non-vote will count for purposes of determining the presence of a quorum. Abstentions are also counted in the determination of a quorum.

Where can I find the voting results of the Annual Meeting?

We will announce preliminary voting results at the Annual Meeting. We will also disclose voting results on a Current Report on Form 8-K that we will file with the SEC within four business days after the Annual Meeting. If final voting results are not available to us in time to file a Current Report on Form 8-K within four business days after the Annual Meeting, we will file a Current Report on Form 8-K to publish preliminary voting results and will provide the final voting results in an amendment to the Current Report on Form 8-K as soon as they become available.

How are proxies solicited for the Annual Meeting?

Our Board is soliciting proxies for use at the Annual Meeting. All expenses associated with this solicitation will be borne by us. We will reimburse brokers, banks or other nominees for reasonable expenses that they incur in sending our proxy materials to you if a broker, bank or other nominee holds your shares of our common stock. In addition to using the internet, our directors, officers and employees may solicit proxies in person and by mail, telephone, facsimile, or electronic transmission, for which they will not receive any additional compensation. We have retained Georgeson LLC to assist us in soliciting proxies for a fee of approximately \$37,000, plus reasonable out-of-pocket expenses incurred in the process of soliciting proxies.

How may my broker, bank or other nominee vote my shares if I fail to timely provide voting instructions?

Brokerage firms, banks or other nominees holding shares of our common stock in street name for beneficial owners are generally required to vote such shares in the manner directed by the beneficial owner. In the absence of timely directions, your broker, bank or other nominee will have discretion to vote your shares on our sole “routine” matter, the proposal to ratify the appointment of Ernst & Young LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2023. Your broker will not have discretion to vote on any other proposals, which are “non-routine” matters, absent direction from you.

I share an address with another stockholder, and we received only one paper copy of the proxy materials. How may I obtain an additional copy of the proxy materials?

We have adopted a procedure called “householding,” which the SEC has approved. Under this procedure, we deliver a single copy of our proxy materials to multiple stockholders who share the same address unless we receive contrary instructions from one or more of the stockholders sharing the same address. This procedure reduces our printing costs, mailing costs, and fees. Stockholders who participate in householding will continue to be able to access and receive separate copies of our proxy materials. Upon written or oral request, we will deliver promptly separate copies of our proxy materials, to any stockholder at a shared address which we delivered a single copy of any of these materials. To receive a separate copy, or, if a stockholder is receiving multiple copies, to request that we only send a single copy of our proxy materials, stockholders may contact us at our principal executive address: Palo Alto Networks, Inc., Attention: Investor Relations, 3000 Tannery Way, Santa Clara, California 95054 or Tel: (408) 753-4000.

Stockholders who hold shares of our common stock in street name may contact their brokerage firm, bank, broker-dealer or other similar organization to request information about householding.

What is the deadline to propose actions for consideration at next year’s annual meeting of stockholders or to nominate individuals to serve as directors?

STOCKHOLDER PROPOSALS

Stockholders may present proper proposals for inclusion in our proxy statement and for consideration at the next annual meeting of stockholders pursuant to Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) by submitting their proposals in writing to our Corporate Secretary in a timely manner. For a Rule 14a-8 stockholder proposal to be considered for inclusion in our proxy statement for our 2023 annual meeting of stockholders, our Corporate Secretary must receive the written proposal at our principal executive offices not later than July 6, 2023. In addition, stockholder proposals must comply with the requirements of Rule 14a-8 under the Exchange Act regarding the inclusion of stockholder proposals in Company-sponsored proxy materials. Stockholder proposals should be addressed to:

Palo Alto Networks, Inc., Attention: Corporate Secretary, 3000 Tannery Way, Santa Clara, California 95054.

About the Annual Meeting

Our amended and restated bylaws also establish an advance notice procedure for stockholders who wish to present a proposal before an annual meeting of stockholders but do not intend for the proposal to be included in our proxy statement pursuant to Rule 14a-8. Our amended and restated bylaws provide that the only business that may be conducted at an annual meeting is business that is (i) specified in our proxy materials with respect to such annual meeting, (ii) otherwise properly brought before the annual meeting by or at the direction of our board of directors, or (iii) properly brought before the annual meeting by a stockholder of record entitled to vote at the annual meeting who has delivered timely written notice to our Corporate Secretary, which notice must contain the information specified in our amended and restated bylaws. To be timely for our 2023 annual meeting of stockholders, our Corporate Secretary must receive the proper written notice at our principal executive offices:

- not earlier than the close of business on August 15, 2023; and
- not later than the close of business on September 14, 2023.

In the event that we hold our 2023 annual meeting of stockholders more than 30 days before or more than 60 days after the one-year anniversary of the Annual Meeting, then notice of a stockholder proposal that is not intended to be included in our proxy statement must be received no earlier than the close of business on the 120th day before such annual meeting and no later than the close of business on the later of the following two dates:

- the 90th day prior to such annual meeting; or
- the 10th day following the day on which public announcement of the date of such annual meeting is first made.

If a stockholder who has notified us of his, her or its intention to present a proposal at an annual meeting does not appear to present his, her or its proposal at such annual meeting, we are not required to present the proposal for a vote at such annual meeting.

DIRECTOR NOMINATIONS

Stockholders may propose director candidates for consideration by our ESG and Nominating Committee. Any such recommendations should include the nominee's name and qualifications for membership on our Board of Directors and should be directed to our Corporate Secretary at the address set forth above. For additional information regarding stockholder recommendations for director candidates, see the section titled "Identification and Evaluation of Director Nominees—Stockholder Recommendations for Nominations to the Board of Directors" beginning on page 56 of this proxy statement.

In addition, our amended and restated bylaws permit stockholders to nominate directors for election at an annual meeting of stockholders. To nominate a director, the stockholder must provide the information required by our amended and restated bylaws, which includes the information required by Rule 14a-19 of the Exchange Act. In addition, the stockholder must give timely notice to our Secretary in accordance with our amended and restated bylaws, which, in general, require that the notice be received at the address set forth above within the time periods described above under the section titled "Stockholder Proposals" for stockholder proposals that are not intended to be included in a proxy statement.

Furthermore, our amended and restated bylaws permit stockholders or a group of stockholders that wish to nominate one or more directors through proxy access for inclusion in our proxy statement. To nominate a director using this process, the stockholder must provide the information required by the proxy access provision of our amended and restated bylaws. In addition, the stockholder must give timely notice to our Corporate Secretary in accordance with our amended and restated bylaws, which, in general, require that the notice be received by our Corporate Secretary at our principal executive offices:

- not earlier than the close of business on June 6, 2023; and
- not later than the close of business on July 6, 2023.

AVAILABILITY OF BYLAWS

A copy of our amended and restated bylaws may be obtained by accessing our public filings on the SEC's website at www.sec.gov. You may also contact our Corporate Secretary at our principal executive offices for a copy of the relevant bylaw provisions regarding the requirements for making stockholder proposals and nominating director candidates.



Other Matters

Delinquent Section 16(a) Reports

Section 16(a) of the Exchange Act requires the Company's officers and directors and persons who beneficially own more than 10% of the Company's common stock (collectively, "Reporting Persons") to file reports of beneficial ownership and changes in beneficial ownership with the SEC. Based solely on our review of filed reports or written representations from certain Reporting Persons relating to fiscal 2022, the Company believes that all reports were filed on a timely basis.

Fiscal Year 2022 Annual Report and SEC Filings

Our financial statements for our fiscal year ended July 31, 2022, are included in our Annual Report on Form 10-K, which we will make available to stockholders at the same time as this proxy statement. This proxy statement and our annual report are posted on our website at www.paloaltonetworks.com and are available from the SEC at its website at www.sec.gov. You may also obtain a copy of our annual report without charge by sending a written request to Investor Relations, Palo Alto Networks, Inc., 3000 Tannery Way, Santa Clara, California 95054.

* * *

The board of directors does not know of any other matters to be presented at the Annual Meeting. If any additional matters are properly presented at the Annual Meeting, the persons named in the enclosed proxy card will have discretion to vote the shares of our common stock they represent in accordance with their own judgment on such matters.

It is important that your shares of our common stock be represented at the Annual Meeting, regardless of the number of shares that you hold. You are, therefore, urged to vote by telephone or by using the Internet as instructed on the enclosed proxy card or execute and return, at your earliest convenience, the enclosed proxy card in the envelope that has also been provided.

THE BOARD OF DIRECTORS

Santa Clara, California
November 3, 2022

Appendix A

Calculation of Normalized Billings and Organic Operating Margin

CALCULATION OF NORMALIZED BILLINGS

(in millions):

Billings	FY'22
Total Revenue	\$5,501.5
Add: Change in total deferred revenue, net of acquired revenue	1,970.0
Total billings	7,471.5
Less: billings from acquired entities ⁽¹⁾	(0.0)
Normalized billings	\$7,471.5

⁽¹⁾ Consists of billings from the entities acquired in fiscal 2022.

CALCULATION OF ORGANIC OPERATING INCOME AND ORGANIC OPERATING MARGIN

\$ In millions

Organic Operating Income and Operating Margin:	FY'22	
	\$	%
GAAP operating loss	(\$188.8)	-3.4%
Share-based compensation-related charges	1,072.0	19.5%
Acquisition-related costs ⁽¹⁾	5.5	0.1%
Amortization expense of acquired intangible assets	125.8	2.3%
Litigation-related charges ⁽²⁾	7.1	0.1%
Restructuring and other costs	21.2	0.4%
Non-GAAP operating income and operating margin	\$1,042.8	19.0%
Operating loss from acquired entities ⁽³⁾	2.8	0.0%
Incremental bonus payout ⁽⁴⁾	53.8	1.0%
Organic operating income and operating margin	\$1,099.4	20.0%

⁽¹⁾ Consists of acquisition transaction costs, share-based compensation related to the cash settlement of certain equity awards, and costs to terminate certain employment, operating lease, and other contracts of the acquired companies.

⁽²⁾ Consists of the amortization of intellectual property licenses and covenant not to sue.

⁽³⁾ Consists of operating loss from the entities acquired in fiscal 2022.

⁽⁴⁾ Consists of bonus payout in excess of 100% of the target cash incentive of the 2022 Incentive Compensation Plan.

Non-GAAP Financial Measures and Other Key Metrics

Palo Alto Networks has provided in this Proxy Statement financial information that has not been prepared in accordance with generally accepted accounting principles in the United States (GAAP). The Company uses these non-GAAP financial measures and other key metrics internally to set targets for employee compensation programs.

Non-GAAP Operating Margin. Palo Alto Networks defines non-GAAP operating margin as operating margin plus share-based compensation-related charges, including share-based payroll tax expense, acquisition-related costs, amortization expense of acquired intangible assets, litigation-related charges, including legal settlements, along with certain non-recurring expenses. The Company believes that excluding these items from non-GAAP operating margin provides management and investors with greater visibility into the underlying performance of the Company's core business operating results, meaning its operating performance excluding these items and, from time to time, other discrete charges that are infrequent in nature, over multiple periods.

Organic operating margin. Palo Alto Networks defines organic operating margin as non-GAAP operating margin, excluding the effects of acquisitions and dispositions and bonus payout in excess of 100% of the target cash incentive under the 2022 Cash Incentive Compensation Plan.

Billings. Palo Alto Networks defines billings as total revenue plus the change in total deferred revenue, net of acquired deferred revenue, during the period. The Company considers billings to be a key metric used by management to manage the Company's business and believes billings provides investors with an important indicator of the health and visibility of the Company's business because it includes subscription and support revenue, which is recognized ratably over the contractual service period, and product revenue, which is recognized at the time of shipment, provided that all other conditions for revenue recognition have been met. The Company considers billings to be a useful metric for management and investors, particularly if sales of subscriptions continue to increase and the Company experiences strong renewal rates for subscriptions and support.

Normalized billings. Palo Alto Networks defines normalized billings as billings defined above, less billings from entities acquired in fiscal 2022.

Next-Gen Security ARR is annualized allocated revenue of all active contracts as of the final day of the reporting period for Prisma and Cortex offerings inclusive of the VM-Series and related services, and certain cloud-delivered security services.

Investors are cautioned that there are a number of limitations associated with the use of non-GAAP financial measures and key metrics as analytical tools. In particular, the billings metric reported by the Company includes amounts that have not yet been recognized as revenue. Furthermore, these non-GAAP financial measures are not based on any standardized methodology prescribed by GAAP.

Appendix B

Amended and Restated 2021 Equity Incentive Plan

**PALO ALTO NETWORKS, INC.
2021 EQUITY INCENTIVE PLAN**

(As amended and restated, subject to, and contingent upon, stockholder approval at the 2022 annual meeting of the Company's stockholders)

1. Purpose of the Plan. The purpose of this Plan is to:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units and Performance Shares.

2. Definitions. The following definitions are used in this Plan:

- (a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.
- (b) "Applicable Laws" means the legal and regulatory requirements relating to the administration of equity-based awards and issuance of shares of Common Stock, including under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any non-U.S. country or jurisdiction where Awards are, or will be, granted under the Plan. Reference to a specific section of an Applicable Law or regulation related to that section shall include such section or regulation, any valid regulation or other official guidance issued under that section, and any comparable provision of any future legislation or regulation amending, supplementing or superseding that section or regulation.
- (c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares.
- (d) "Award Agreement" means the written or electronic agreement between the Company and Participant setting forth the terms and provisions applicable to an Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.
- (e) "Board" means the Board of Directors of the Company.
- (f) "Change in Control" means the occurrence of any of the following events:
 - (i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company; provided, however, that for purposes of this subsection, if any one Person is already considered to own more than 50% of the total voting power of the stock of the Company, the acquisition of additional stock by such Person will not be considered a Change in Control; or
 - (ii) Change in Effective Control of the Company. A change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any 12-month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this subsection (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

- (iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the 12-month period ending on the date of the most recent acquisition by such Person) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this subsection (iii), the following will not constitute a change in the ownership of a substantial portion of the Company's assets: (A) a transfer to an entity that is controlled by the Company's stockholders immediately after the transfer, or (B) a transfer of assets by the Company to: (1) a stockholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's stock, (2) an entity, 50% or more of the total value or voting power of which is owned, directly or indirectly, by the Company, (3) a Person, that owns, directly or indirectly, 50% or more of the total value or voting power of all the outstanding stock of the Company, or (4) an entity, at least 50% of the total value or voting power of which is owned, directly or indirectly, by a Person described in subsection (iii)(B)(3). For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this definition, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Section 409A. Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (x) its primary purpose is to change the jurisdiction of the Company's incorporation, or (y) its primary purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

- (g) "Code" means the U.S. Internal Revenue Code of 1986.
- (h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or a duly authorized committee of the Board, in accordance with Section 4 hereof.
- (i) "Common Stock" means the common stock of the Company.
- (j) "Company" means Palo Alto Networks, Inc., a Delaware corporation, or any successor thereto.
- (k) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary of the Company to render bona fide services to such entity, provided the services (i) are not in connection with the offer or sale of securities in a capital-raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities, in each case, within the meaning used with respect to Form S-8 promulgated under the Securities Act, and provided, further, that a Consultant will include only those persons to whom the issuance of Shares may be registered under Form S-8 promulgated under the Securities Act.
- (l) "Director" means a member of the Board.
- (m) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.
- (n) "Employee" means any person, including Officers and Inside Directors, providing services as an employee to the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.
- (o) "Exchange Act" means the U.S. Securities Exchange Act of 1934.
- (p) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced. As described in Section 4(i), the Administrator may not institute an Exchange Program.

- (q) “Fair Market Value” means, as of any date, the value of Common Stock determined as follows:
- (i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation Nasdaq Global Select Market, Nasdaq Global Market or Nasdaq Capital Market of Nasdaq Stock Market or the New York Stock Exchange, its Fair Market Value will be the closing sales price for such stock (or, the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported by such source as the Administrator deems reliable;
 - (ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or the closing bid, if no sales were reported), as reported by such source as the Administrator deems reliable; or
 - (iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

If the Fair Market Value is to be determined under subsection (i) or (ii) above and the determination date for the Fair Market Value occurs on a day other than a Trading Day, the Fair Market Value will be the price as determined under subsection (i) or (ii) above, as applicable, on the immediately preceding Trading Day, unless otherwise determined by the Administrator. In addition, for purposes of determining the fair market value of shares for any reason other than the determination of the exercise price of Options or Stock Appreciation Rights, fair market value will be determined by the Administrator in a manner compliant with Applicable Laws and applied consistently for such purpose. Note that the determination of fair market value for purposes of withholding Tax-Related Items may be made in the Administrator’s sole discretion subject to Applicable Laws and is not required to be consistent with the determination of Fair Market Value for other purposes.

- (r) “Fiscal Year” means the fiscal year of the Company.
- (s) “Incentive Stock Option” means an Option that is intended to qualify, and actually qualifies, as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.
- (t) “Inside Director” means a Director who is an Employee.
- (u) “Nonstatutory Stock Option” means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.
- (v) “Officer” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.
- (w) “Option” means a stock option granted pursuant to the Plan.
- (x) “Outside Director” means a Director who is not an Employee.
- (y) “Parent” means a “parent corporation” of the Company, whether now or hereafter existing, as defined in Section 424(e) of the Code.
- (z) “Participant” means the holder of an outstanding Award.
- (aa) “Performance Share” means an Award denominated in Shares which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine pursuant to Section 10.
- (bb) “Performance Unit” means an Award denominated in Shares or cash, which may be earned in whole or in part upon attainment of performance goals or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 10.
- (cc) “Period of Restriction” means the period (if any) during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.
- (dd) “Plan” means this Palo Alto Networks, Inc. 2021 Equity Incentive Plan.
- (ee) “Restricted Stock” means Shares issued pursuant to a Restricted Stock award under Section 7 of the Plan, or issued pursuant to the early exercise of an Option.

- (ff) “Restricted Stock Unit” means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 8. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.
- (gg) “Rule 16b-3” means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.
- (hh) “Section 16(b)” means Section 16(b) of the Exchange Act.
- (ii) “Section 409A” means Section 409A of the Code.
- (jj) “Securities Act” means the U.S. Securities Act of 1933.
- (kk) “Service Provider” means an Employee, Director or Consultant.
- (ll) “Share” means a share of the Common Stock, as adjusted in accordance with Section 14 of the Plan.
- (mm) “Stock Appreciation Right” means an Award, granted alone or in connection with an Option, that pursuant to Section 9 is designated as a Stock Appreciation Right.
- (nn) “Subsidiary” means a “subsidiary corporation” of the Company whether now or hereafter existing, as defined in Section 424(f) of the Code.
- (oo) “Substituted Award” means an Award granted in substitution for an equity award of an acquired entity in connection with a merger, reorganization, separation, or other transaction to which Section 424(a) of the Code applies.
- (pp) “Tax-Related Items” means any U.S. and non-U.S. federal, state, or local taxes (including, without limitation, income tax, social insurance, payroll tax, fringe benefits tax, payment on account and any other tax-related items) related to a Participant’s participation in the Plan and legally applicable or deemed applicable to the Participant, or have been transferred to the Participant.
- (qq) “Trading Day” means a day that the primary stock exchange, national market system, or other trading platform, as applicable, upon which the Common Stock is listed is open for trading.

3. Stock Subject to the Plan.

- (a) Stock Subject to the Plan. Subject to the provisions of Section 14 of the Plan, the maximum aggregate number of Shares that may be issued under the Plan is (i) 19,185,000 Shares, plus (ii) any Shares subject to awards granted under the Company’s 2012 Equity Incentive Plan, as amended, that, on or after the date stockholders initially approve the Plan, expire or otherwise terminate without having been exercised or issued in full, are tendered to or withheld by the Company for payment of an exercise price or for tax withholding obligations, or are forfeited to or repurchased by the Company due to failure to vest, with the maximum number of Shares to be added to the Plan pursuant to clause (ii) equal to 31,740,063 Shares. In addition, Shares may become available for issuance under the Plan pursuant to Section 3(b). The Shares may be authorized, but unissued, or reacquired Common Stock. If the Committee grants Substituted Awards in substitution for equity awards outstanding under a plan maintained by an entity acquired by or consolidated with the Company, the grant of those Substituted Awards will not decrease the number of Shares available for issuance under the Plan.
- (b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, or, with respect to Restricted Stock, Restricted Stock Units, Performance Units or Performance Shares, is forfeited to or repurchased by the Company due to failure to vest, then the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights, the forfeited or repurchased Shares) that were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, the gross number of Shares underlying the portion of a Stock Appreciation Right that is exercised will cease to be available under the Plan. Shares that actually have been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company due to failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price or purchase price of an Award or to satisfy the tax withholding obligations related to an Award will not become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not reduce the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 14, the

maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Section 422 of the Code and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to this Section 3(b).

- (c) Share Reserve. The Company, at all times during the term of this Plan, will reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

- (i) General. The Plan will be administered by (A) the Board or (B) a Committee constituted to satisfy Applicable Laws. The Board or Committee will be the Administrator. Different Administrators may administer the Plan with respect to different groups of Service Providers. The Board may retain the authority to concurrently administer the Plan with a Committee and may, at any time, revoke the delegation of some or all authority previously delegated.
- (ii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

- (b) Powers of the Administrator. Subject to the Plan, any limitations on delegations specified by the Board, and any requirements imposed by Applicable Laws, the Administrator will have the authority, in its sole discretion, to make any determinations and perform any actions deemed necessary or advisable to administer the Plan including to:

- (i) determine the Fair Market Value;
- (ii) select the Service Providers to whom Awards may be granted hereunder;
- (iii) determine the number of Shares to be covered by each Award granted hereunder;
- (iv) approve forms of Award Agreements for use under the Plan;
- (v) determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. The terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating to an Award;
- (vi) establish, amend and rescind rules and regulations and adopt sub-plans relating to the Plan, including rules, regulations, and sub-plans for the purposes of facilitating compliance with non-U.S. laws, easing the administration of the Plan and/or taking advantage of tax-favorable treatment for Awards granted to Service Providers outside the U.S.;
- (vii) interpret the Plan and make any decision necessary to administer the Plan;
- (viii) interpret, modify or amend each Award (subject to Section 17(c) of the Plan), including without limitation the discretionary authority to extend the post-termination exercisability period of Awards;
- (ix) allow Participants to satisfy tax withholding obligations in a manner prescribed in Section 15 of the Plan;
- (x) authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;
- (xi) delegate ministerial duties to any of the Company's employees;
- (xii) temporarily suspend the exercisability of an Award if the Administrator deems such suspension to be necessary or appropriate for administrative purposes;
- (xiii) allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to the Participant under an Award; and
- (xiv) make all other determinations deemed necessary or advisable for administering the Plan.

- (c) Grant Date. The grant date of an Award ("Grant Date") will be the date that the Administrator makes the determination granting such Award or may be a later date if such later date is designated by the Administrator on the date of the determination or under an automatic grant policy. Notice of the determination will be provided to each Participant within a reasonable time after the Grant Date.

- (d) Waiver. The Administrator may waive any terms, conditions or restrictions.
 - (e) Fractional Shares. Except as otherwise provided by the Administrator, any fractional Shares that result from the adjustment of Awards will be cancelled. Any fractional Shares that result from vesting percentages will be accumulated and vested on the date that an accumulated full Share is vested.
 - (f) Electronic Delivery. The Company may deliver by e-mail or other electronic means (including posting on a website maintained by the Company or its agent) all documents relating to the Plan or any Award and all other documents that the Company is required to deliver to its security holders (including prospectuses, annual reports and proxy statements).
 - (g) Choice of Law; Choice of Forum. The Plan, all Awards and all determinations made and actions taken under the Plan, to the extent not otherwise governed by the laws of the United States, will be governed by the laws of the State of Delaware without giving effect to principles of conflicts of law. For purposes of litigating any dispute that arises under this Plan, a Participant's acceptance of an Award is his or her consent to the jurisdiction of the State of Delaware, and agreement that any such litigation will be conducted in Delaware Court of Chancery, or the federal courts for the United States for the District of Delaware, and no other courts, regardless of where a Participant's services are performed.
 - (h) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards and will be given the maximum deference permitted by Applicable Laws.
 - (i) Exchange Program. The Administrator may not institute an Exchange Program.
5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.
6. Stock Options.
- (a) Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options to Service Providers in such amounts as the Administrator determines in its sole discretion.
 - (b) Stock Option Agreement. Each Option will be evidenced by an Award Agreement that will specify the exercise price, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator determines in its sole discretion.
 - (c) Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds \$100,000, such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.
 - (d) Term of Option. The term of each Option will be stated in the Award Agreement. In the case of an Incentive Stock Option, the term will be 10 years from the Grant Date or such shorter term as may be provided in the Award Agreement. Moreover, in the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be 5 years from the Grant Date or such shorter term as may be provided in the Award Agreement.
 - (e) Option Exercise Price and Consideration.
 - (i) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, subject to the following:
 - (1) In the case of an Incentive Stock Option

- (A) granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than 10% of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the Grant Date.
 - (B) granted to any Employee other than an Employee described in paragraph (A) immediately above, the per Share exercise price will be no less than 100% of the Fair Market Value per Share on the Grant Date.
 - (2) In the case of a Nonstatutory Stock Option, the per Share exercise price will be determined by the Administrator and may no less than 100% of the Fair Market Value per Share on the Grant Date unless otherwise required by Applicable Laws.
 - (3) Notwithstanding the foregoing, Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the Grant Date pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.
 - (ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.
 - (iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check or wire transfer; (3) promissory note, to the extent permitted by Applicable Laws; (4) other Shares, provided that such Shares have a fair market value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under a broker-assisted (or other) cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) net exercise, under which Shares are withheld from otherwise deliverable Shares that has been approved by the Board or a Committee; (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or (8) any combination of the foregoing methods of payment.
- (f) Exercise of Option.
- (i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. Notwithstanding the foregoing, at any time after the grant of an Option, the Administrator, in its sole discretion, may accelerate the time at which the Option will vest or become exercisable. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in accordance with the procedures that the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with any amounts necessary to satisfy withholding obligations for Tax-Related Items). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant and approved by the Administrator, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 14 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

- (ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the cessation of the Participant's Service Provider status as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of cessation of the Participant's Service Provider status (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 3 months following cessation of the Participant's Service Provider status. Unless otherwise provided by the Administrator, if on the date of cessation of the Participant's Service Provider status the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If, after cessation of the Participant's Service Provider status, the Participant does not exercise his or her Option within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.
- (iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of cessation of the Participant's Service Provider status (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 12 months following cessation of the Participant's Service Provider status. Unless otherwise provided by the Administrator, if on the date of cessation of the Participant's Service Provider status the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If, after cessation of the Participant's Service Provider status, the Participant does not exercise his or her Option within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.
- (iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the Option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided the Administrator has permitted the designation of a beneficiary and provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If the Administrator has not permitted the designation of a beneficiary or if no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for 12 months following the Participant's death. Unless otherwise provided by the Administrator, if at the time of death, the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified in the Award Agreement or herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.
- (v) Tolling Expiration. A Participant's Award Agreement may also provide that:
 - (1) if the exercise of the Option following the cessation of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would result in liability under Section 16(b), then the Option will terminate on the earlier of (A) the expiration of the term of the Option set forth in the Award Agreement, or (B) the 10th day after the last date on which such exercise would result in liability under Section 16(b); or
 - (2) if the exercise of the Option following the cessation of the Participant's status as a Service Provider (other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of Shares would violate the registration requirements

under the Securities Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option or (B) the expiration of a period of 30 days after the cessation of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

7. Restricted Stock.

- (a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator determines in its sole discretion.
- (b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify any Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator determines in its sole discretion. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.
- (c) Transferability. Except as provided in this Section 7 of the Award Agreement, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of any applicable Period of Restriction.
- (d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.
- (e) Removal of Restrictions. Except as otherwise provided in this Section 7, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of any applicable Period of Restriction or at such other time as the Administrator may determine. Notwithstanding the foregoing, at any time after the grant of an Option, the Administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.
- (f) Voting Rights. During any applicable Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.
- (g) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

8. Restricted Stock Units.

- (a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units under the Plan, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.
- (b) Restricted Stock Unit Agreement. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify vesting criteria, the number of Restricted Stock Units granted, and such other terms and conditions as the Administrator determines in its sole discretion.
- (c) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit, or individual goals (including, but not limited to, continued employment or service), applicable U.S. or non-U.S. federal or state securities laws or any other basis determined by the Administrator in its discretion.
- (d) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator. Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.
- (e) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units only in cash, Shares, or a combination of both.

- (f) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

9. Stock Appreciation Rights.

- (a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.
- (b) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator determines in its sole discretion. Notwithstanding the foregoing, at any time after the grant of a Stock Appreciation Right, the Administrator, in its sole discretion, may accelerate the time at which the Stock Appreciation Right will vest or become exercisable.
- (c) Number of Shares. The Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Service Provider.
- (d) Exercise Price and Other Terms. The per share exercise price for the Shares to be issued pursuant to exercise of a Stock Appreciation Right will be determined by the Administrator and will be no less than 100% of the Fair Market Value per Share on the Grant Date. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.
- (e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date as determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the tolling and expiration rules of Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.
- (f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined as the product of:
- (i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; and
 - (ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.
- At the discretion of the Administrator, the payment upon exercise of a Stock Appreciation Right may be in cash, in Shares of equivalent value, or in some combination of both.

10. Performance Units and Performance Shares.

- (a) Grant of Performance Units/Shares. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. The Administrator will have complete discretion in determining the number of Performance Units and Performance Shares granted to each Participant.
- (b) Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the Grant Date. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the Grant Date.
- (c) Performance Objectives and Other Terms. The Administrator will set performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Service Providers. The time period during which the performance objectives or other vesting provisions must be met will be called the "Performance Period." Each Award of Performance Units/Shares will be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator determines in its sole discretion. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable U.S. or non-U.S. federal or state securities laws, or any other basis determined by the Administrator in its discretion.

- (d) Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. Notwithstanding the foregoing, at any time after the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.
- (e) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.
- (f) Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

11. Award Limitations.

- (a) Outside Director Award Limitations. No Outside Director may be paid compensation for service as an Outside Director that, in the aggregate, exceeds \$2,000,000, increased to \$4,000,000 for such Outside Director for the Fiscal Year in which he or she joins the Board as an Outside Director. Compensation includes equity awards, including any Awards issued under this Plan, the value of which will be based on their grant date fair value determined in accordance with U.S. generally accepted accounting principles and any other compensation (including without limitation any cash retainers or fees). Any Awards or other compensation paid or provided to an individual for his or her services as an Employee, or for his or her services as a Consultant (other than as an Outside Director), will not count for purposes of the limitation under this Section 11(a).
- (b) Dividends and Other Distributions. No dividends or other distributions shall be paid with respect to any Shares underlying any unvested portion of an Award.

12. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise or Applicable Laws require otherwise, vesting of Awards will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or the Participant's employer or (ii) transfers between locations of the Company or between the Company, its Parent, or any of its Subsidiaries. For purposes of Incentive Stock Options, no such leave may exceed 3 months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company or the Participant's employer is not so guaranteed, then 6 months following the 1st day of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

13. Transferability of Awards.

- (a) General Rule. Unless determined otherwise by the Administrator, or otherwise required by Applicable Laws, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, the Award will be limited by any additional terms and conditions imposed by the Administrator. Any unauthorized transfer of an Award will be void.
- (b) Domestic Relations Orders. If approved by the Administrator, an Award may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulations Section 1.421-1(b)(2). An Incentive Stock Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.
- (c) Limited Transfers for the Benefit of Family Members. The Administrator may permit an Award or Share issued under this Plan to be assigned or transferred subject to the applicable limitations, set forth in the General Instructions to Form S-8 Registration Statement under the Securities Act, if applicable, and any other Applicable Laws. For the avoidance of doubt, during the lifetime of the Participant, no Award may be assigned or transferred to a third-party financial institution.

- (d) Permitted Transferees. Any individual or entity to whom an Award is transferred will be subject to all of the terms and conditions applicable to the Participant who transferred the Award, including the terms and conditions in this Plan and the Award Agreement. If an Award is unvested, then the service of the Participant will continue to determine whether the Award will vest and when it will terminate.

14. Adjustments; Dissolution or Liquidation; Merger or Change in Control; Death.

- (a) Adjustments. In the event that any extraordinary dividend or other extraordinary distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs (other than any ordinary dividends or other ordinary distributions), the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of shares of stock that may be delivered under the Plan and/or the number, class, and price of shares of stock covered by each outstanding Award, and the numerical Share limits in Section 3 of the Plan.
- (b) Dissolution or Liquidation. In the event of a proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.
- (c) Merger or Change in Control. In the event of a merger of the Company with or into another corporation or other entity or a Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the following paragraph) without a Participant's consent, including, without limitation, that each Award be assumed or an equivalent option or right substituted by the successor corporation or its Parent. The Administrator will not be obligated to treat all Awards, all Awards held by a Participant, all Awards of the same type, or all portions of Awards, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise the Participant's outstanding Option and Stock Appreciation Right (or portion thereof) that is not assumed or substituted for, including Shares as to which such Award would not otherwise be vested or exercisable, all restrictions on Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units (or portions thereof) not assumed or substituted for will lapse, and, with respect to such Awards with performance-based vesting (or portions thereof) not assumed or substituted for, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, in each case, unless specifically provided otherwise under the applicable Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable. In addition, if an Option or Stock Appreciation Right (or portion thereof) is not assumed or substituted for in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that such Option or Stock Appreciation Right (or its applicable portion) will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right (or its applicable portion) will terminate upon the expiration of such period.

For the purposes of this Section 14(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, Performance Unit or Performance Share, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 14(c) to the contrary, and unless otherwise provided in an Award Agreement or other written agreement between the Participant and the Company or any of its Subsidiaries or Parents, as applicable, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 14(c) to the contrary, if a payment under an Award Agreement is subject to Section 409A and if the change in control definition contained in the Award Agreement or other written agreement related to the Award does not comply with the definition of "change in control" for purposes of a distribution under Section 409A, then any payment of an amount that otherwise is accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Section 409A without triggering any penalties applicable under Section 409A.

- (d) Outside Director Awards. With respect to Awards granted to Outside Directors for their service as Outside Directors, in the event of a Change in Control, such Participants will fully vest in and have the right to exercise Options and/or Stock Appreciation Rights as to all of the Shares underlying such Awards, including those Shares which would not be vested or exercisable, all restrictions on such Participants' Restricted Stock and Restricted Stock Units will lapse, and, with respect to such Participants' Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and all other terms and conditions met, unless specifically provided otherwise under the applicable Award Agreements or other written agreements between the Participants and the Company or any of its Subsidiaries or Parents, as applicable.

15. Tax Matters.

- (a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof) or such earlier time as any withholding obligations for Tax-Related Items are due, the Company (or any of its Subsidiaries, Parents or affiliates employing or retaining the services of a Participant, as applicable) will have the power and the right to deduct or withhold, or require a Participant to remit to the Company (or any of its Subsidiaries, Parents or affiliates, as applicable), an amount sufficient to satisfy any Tax-Related Items required to be withheld with respect to such Award (or exercise thereof).
- (b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such withholding obligation for Tax-Related Items, in whole or in part by (without limitation) (i) paying cash, check or other cash equivalents, (ii) electing to have the Company withhold otherwise deliverable Shares having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or such greater amount as the Administrator may determine (including up to a maximum statutory amount) if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, (iii) delivering to the Company already-owned Shares having a fair market value equal to the minimum statutory amount applicable in a Participant's jurisdiction or such greater amount as the Administrator may determine (including up to a maximum statutory amount), in each case, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) to cover the amount of the withholding obligation for Tax-Related Items, (v) having the Company or a Parent or Subsidiary withhold from wages or any other cash amount due or to become due to the Participant and payable by the Company or any Parent or Subsidiary, (vi) any other method of withholding determined by the Administrator, or (vii) any combination of the foregoing methods of payment. The withholding amount will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum statutory rates applicable in a Participant's jurisdiction with respect to the Award on the date that the amount of Tax-Related Items to be withheld is to be determined or such greater amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion. The fair market value of the Shares to be withheld or delivered will be determined as of the date that the amount of Tax-Related Items to be withheld is calculated.

- (c) Compliance With Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Section 409A such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A. In no event will the Company or any of its Subsidiaries or Parents have any obligation or liability under the terms of this Plan to reimburse, indemnify, or hold harmless any Participant or any other person in respect of Awards, for any taxes, interest or penalties imposed, or other costs incurred, as a result of Section 409A.

16. Miscellaneous.

- (a) Stockholder Approval and Term of Plan. The Plan will become effective upon its approval by the Company's stockholders within 12 months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws. The Plan will continue in effect until terminated earlier under Section 17 of the Plan, but no Incentive Stock Options may be granted after 10 years from the date the Plan is adopted by the Board.
- (b) Legal Compliance. Shares will not be issued pursuant an Award unless the exercise or vesting of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.
- (c) Investment Representations. As a condition to the exercise or vesting of an Award, the Company may require the person exercising or vesting in such Award to represent and warrant at the time of any such exercise or vesting that the Shares are being acquired only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.
- (d) Inability to Obtain Authority. If the Company determines it to be impossible or impracticable to obtain authority from any regulatory body having jurisdiction or to complete or comply with the requirements of any registration or other qualification of the Shares under any U.S. state or federal law or non-U.S. law or under the rules and regulations of the U.S. Securities and Exchange Commission, the stock exchange on which Shares of the same class are then listed, or any other governmental or regulatory body, which authority, registration, qualification or rule compliance is deemed by the Company's counsel to be necessary or advisable for the issuance and sale of any Shares hereunder, the Company will be relieved of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority, registration, qualification or rule compliance will not have been obtained.
- (e) No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider, nor interfere in any way with the Participant's right or the right of the Company and its Subsidiaries or Parents, as applicable, to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.
- (f) Forfeiture Events. The Administrator may specify in an Award Agreement that the Participant's rights, payments, and benefits with respect to an Award will be subject to reduction, cancellation, forfeiture, recoupment, reimbursement, or reacquisition upon the occurrence of certain specified events, in addition to any otherwise applicable vesting or performance conditions of an Award. Notwithstanding any provisions to the contrary under this Plan, an Award and any other compensation paid or payable to a Participant (including, but not limited to, equity awards issued outside of this Plan) (such compensation, "Other Compensation") will be subject to the Company's clawback policy in effect as of the adoption of this Plan, and will be subject to any other clawback policy of the Company as may be established and/or amended from time to time to comply with Applicable Laws (including without limitation pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as may be required by the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act) (the "Clawback Policy"). The Administrator may require a Participant to

forfeit, return or reimburse the Company all or a portion of the Award or Other Compensation and any amounts paid thereunder pursuant to the terms of the Clawback Policy or as necessary or appropriate to comply with Applicable Laws. Unless this subsection (f) specifically is mentioned and waived in an Award Agreement or other document, no recovery of compensation under a Clawback Policy or otherwise will constitute an event that triggers or contributes to any right of a Participant to resign for “good reason” or “constructive termination” (or similar term) under any agreement with the Company or any Parent or Subsidiary.

17. Amendment and Termination of the Plan.

- (a) Amendment and Termination. The Administrator, at any time, may amend, alter, suspend or terminate the Plan.
- (b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.
- (c) Consent of Participants Generally Required. Subject to Section 17(d) below, no amendment, alteration, suspension or termination of the Plan or an Award under it will materially impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator’s ability to exercise the powers granted to it regarding Awards granted under the Plan prior to such termination.
- (d) Exceptions to Consent Requirement.
 - (i) A Participant’s rights will not be deemed to have been impaired by any amendment, alteration, suspension or termination if the Administrator, in its sole discretion, determines that the amendment, alteration, suspension or termination taken as a whole, does not materially impair the Participant’s rights, and
 - (ii) Subject to the limitations of Applicable Laws, if any, the Administrator may amend the terms of any one or more Awards without the affected Participant’s consent even if it does materially impair the Participant’s right if such amendment is done
 - (1) in a manner expressly permitted under the Plan;
 - (2) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code;
 - (3) to change the terms of an Incentive Stock Option, if such change results in impairment of the Award only because it impairs the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code;
 - (4) to clarify the manner of exemption from, or to bring the Award into compliance with, Section 409A; or
 - (5) to comply with other Applicable Laws.

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended July 31, 2022

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number 001-35594

Palo Alto Networks, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

20-2530195
(I.R.S. Employer
Identification No.)

3000 Tannery Way
Santa Clara, California 95054
(Address of principal executive offices, including zip code)

(408) 753-4000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, \$0.0001 par value per share	PANW	The Nasdaq Stock Market LLC (Nasdaq Global Select Market)

Securities registered pursuant to Section 12(g) of the Act:

None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer
Non-accelerated filer Smaller reporting company
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

The aggregate market value of voting stock held by non-affiliates of the registrant was \$49,978,456,856 as of January 31, 2022, the last business day of the registrant's most recently completed second fiscal quarter (based on the closing sales price for the common stock on the Nasdaq Global Select Market on such date). Shares of common stock held by each executive officer and director have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

On August 22, 2022, 99,737,936 shares of the registrant's common stock, \$0.0001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the information called for by Part III of this Annual Report on Form 10-K is hereby incorporated by reference from the definitive proxy statement for the registrant's 2022 annual meeting of stockholders, which will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended July 31, 2022.

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PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K, including the sections entitled “Business,” “Risk Factors,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect,” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

These forward-looking statements include, but are not limited to, statements concerning the following:

- the effects of supply chain challenges and the global chip and component shortages and other factors affecting the manufacture, delivery and cost of certain of our products;
- expectations regarding drivers of and factors affecting growth in our business;
- the performance advantages of our products and subscription and support offerings and the potential benefits to our customers;
- statements regarding trends in billings, our mix of product and subscription and support revenue, cost of revenue, gross margin, cash flows, operating expenses, including future share-based compensation expense, income taxes, investment plans and liquidity;
- our ability to and expectation that we will continue to grow our installed end-customer base;
- expected recurring revenues resulting from expected growth in our installed base and increased adoption of our products and cloud-based subscription services;
- our expectations regarding future investments in research and development, customer support, in our employees and in our sales force, including expectations regarding growth in our sales headcount;
- our ability to develop or acquire new product, subscription, and support offerings, improve our existing product, subscription, and support offerings, and increase the value of our product, subscription, and support offerings, including through deployment of new capabilities via security applications developed by third parties;
- our expectation that we will continue to expand internationally;
- our expectation that we will continue to renew existing contracts and increase sales to our existing customer base;
- expectations regarding our revenues, including the seasonality and cyclical nature from quarter to quarter;
- expected impact of the adoption of certain recent accounting pronouncements and the anticipated timing of adopting such standards;
- our expectation that we will expand our facilities or add new facilities as we add employees and enter new geographic markets and expectations related to charges incurred in connection with exiting our former headquarter facilities;
- our expectations regarding the future results of our People Strategy;
- our expectation that we will increase our customer financing activities;
- the sufficiency of our cash flow from operations with existing cash, cash equivalents and investments to meet our cash needs for the foreseeable future;
- our expectations regarding the impact of the discontinuance of the LIBOR Rate upon our liquidity or financial position;
- future investments in product development, subscriptions, or technologies, and any related delays in the development or release of new product and subscription offerings;
- our ability to successfully acquire and integrate companies and assets;
- expectations and intentions with respect to the products and technologies that we acquire and introduce;
- the timing and amount of capital expenditures and share repurchases;
- our expectations regarding the impacts on our business, the business of our customers, suppliers and partners, and the economy as a result of the global COVID-19 pandemic and related public health measures; and
- other statements regarding our future operations, financial condition and prospects, and business strategies.

These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described in “Risk Factors” included in Part I, Item 1A and elsewhere in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment, and new risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the forward-looking events and circumstances discussed in this Annual Report on Form 10-K may not occur, and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. We undertake no obligation to revise or publicly release the results of any revision to these forward-looking statements, except as required by law. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements.

ITEM 1. BUSINESS

General

Palo Alto Networks, Inc. is a global cybersecurity provider with a vision of a world where each day is safer and more secure than the one before. We were incorporated in 2005 and are headquartered in Santa Clara, California.

We empower enterprises, organizations, service providers, and government entities to protect themselves against today's most sophisticated cyber threats. Our cybersecurity platforms and services help secure enterprise users, networks, clouds, and endpoints by delivering comprehensive cybersecurity backed by industry leading artificial intelligence and automation. We are a leading provider of zero trust solutions, starting with next-generation zero trust network access to secure today's remote hybrid workforces and extending to securing all users, applications and infrastructure with zero trust principles. Our security solutions are designed to reduce customers' total cost of ownership by improving operational efficiency and eliminating the need for siloed point products. Our company focuses on delivering value in five fundamental areas:

Network Security:

- Our network security platform, which includes our ML-Powered Next-Generation Firewalls, available in a number of form factors, including physical, virtual, and containerized appliances, as well as a cloud-delivered service, has been recognized as a leader in the industry. Our network security platform also includes our Cloud-Delivered Security Services, such as Threat Prevention, Advanced Threat Prevention, WildFire®, Advanced URL Filtering, DNS Security, IoT Security, GlobalProtect™, SD-WAN, Enterprise Data Loss Prevention (“Enterprise DLP”), AIOps, SaaS Security API, and SaaS Security Inline. Through these add-on security services, our customers are able to secure their content, applications, users, and devices across our network security platform as well as the Prisma® and Cortex® product lines. Panorama™, our network security management solution, available as hardware or virtual machine, can centrally manage our network security platform irrespective of form factor, location, or scale.

Secure Access Service Edge:

- Prisma Access is our next-generation Zero Trust Network Access (“ZTNA”) platform that provides secure network access for all employees with unified policy management and continuous threat inspection. We have recently introduced ZTNA 2.0, which addresses major shortcomings in the first-generation ZTNA products in the industry (which we refer to as ZTNA 1.0). Prisma Access delivers granular least-privileged access along with continuous trust verification and security inspection, and protects security for all applications and data across the enterprise infrastructure. Prisma Access, when combined with Prisma SD-WAN, provides a comprehensive single-vendor Secure Access Service Edge (“SASE”) offering that is used to secure remote workforces and enable the cloud-delivered branch.

Cloud Security:

- We enable cloud native security through our Prisma Cloud platform. As a comprehensive Cloud Native Application Protection Platform (“CNAPP”), Prisma Cloud secures hybrid and multi-cloud environments for applications, data, and the entire cloud native technology stack across the full development lifecycle; from code to runtime. For inline network security on multi and hybrid-cloud environments, we also offer our VM-Series and CN-Series Firewall offerings.

Security Operations:

- We deliver the next generation of endpoint security, security analytics and security automation solutions through our Cortex portfolio. These include our industry-leading extended detection and response platform Cortex XDR® to prevent, detect, and respond to complex cybersecurity attacks, Cortex XSOAR® for security orchestration, automation, and response (“SOAR”), Cortex Xpanse® for attack surface management (“ASM”), and Cortex Data Lake allowing our customers to collect and analyze large amounts of context-rich data across endpoints, networks, and clouds. These products are delivered as software subscriptions or SaaS subscriptions.

Threat Intelligence and Security Consulting (Unit 42):

- We enable security teams with up-to-date threat intelligence and deep cybersecurity expertise before, during and after attacks through our Unit 42 threat research and security consulting team. Unit 42 offers incident response, risk management, board advisory, and proactive cybersecurity assessment services.

Product, Subscription, and Support

Our products are available in the form of the product, subscription, and support offerings described below.

Products

Firewall Appliances and Software. Our ML-Powered Next Generation Firewalls embed machine learning in the core of the firewall and employ inline deep learning in the cloud, empowering our customers to stop zero-day threats in real time, see and secure their entire enterprise including IoT, and reduce errors with automatic policy recommendations. All of our firewall appliances and software incorporate our PAN-OS® operating system and come with the same rich set of features ensuring consistent operation across our entire product line. The content, applications, users, and devices—the elements that run a business—become integral components of an enterprise’s security policy via our Content-ID™, App-ID™, User-ID™, and Device-ID technology. In addition to these components, key features include site-to-site virtual private network (“VPN”), remote access Secure Sockets Layer (“SSL”) VPN, and Quality-of-Service (“QoS”). Our appliances and software are designed for different performance requirements throughout an organization and are classified based on throughput, ranging from our PA-410, which is designed for small organizations and branch offices, to our top-of-the-line PA-7080, which is designed for large-scale data centers and service provider use. Our firewall appliances come in a physical form factor, a containerized form factor, called CN-Series, as well as a virtual form factor, called VM-Series, that is available for virtualization and cloud environments from companies such as VMware, Inc. (“VMware”), Microsoft Corporation (“Microsoft”), Amazon.com, Inc. (“Amazon”), and Google, Inc. (“Google”), and in Kernel-based Virtual Machine (“KVM”)/OpenStack environments. We also offer Cloud NGFW, a managed next-generation firewall (“NGFW”) offering, to secure customers’ applications on Amazon Web Services (“AWS”).

Panorama. Panorama is our centralized security management solution for global control of all of our firewall appliances and software deployed on a customer’s network, as well as in their instances in public or private cloud environments. Panorama can be deployed as a virtual appliance or a physical appliance. Panorama is used for centralized policy management, device management, software licensing and updates, centralized logging and reporting, and log storage. Panorama controls the security, network address translation (“NAT”), QoS, policy-based forwarding, decryption, application override, captive portal, and distributed denial of service/denial of service (“DDoS/DoS”) protection aspects of the appliances, software, virtual and containerized systems under management. Panorama centrally manages device software and associated updates, including SSL-VPN clients, SD-WAN, dynamic content updates, and software licenses. Panorama offers network security monitoring through the ability to view logs and run reports from all managed appliances and software in one location without the need to forward the logs and reliably expands log storage for long-term event investigation and analysis.

Virtual System Upgrades. Virtual System Upgrades are available as extensions to the Virtual System capacity that ships with our physical appliances. Virtual Systems provide a mechanism to support multiple distinct security policies and administrative access for tenants on the same hardware device, which is applicable to our large enterprise and service provider customers.

Subscriptions

We offer a number of subscriptions as part of our portfolio. Of these subscription offerings, cloud-delivered security services like Threat Prevention, Advanced Threat Prevention, WildFire, Advanced URL Filtering, DNS Security, IoT Security, SaaS Security Inline, GlobalProtect, SD-WAN, Enterprise DLP and AIOps are sold as options to our firewall appliances and software, whereas Prisma Cloud, Prisma Access, Prisma SD-WAN, SaaS Security API, Cortex XDR, Cortex XSOAR, Cortex Xpanse and Cortex Data Lake are sold on a per-user, per-endpoint, or capacity-based basis. Our subscription offerings include:

Cloud-delivered Security Services:

- **Threat Prevention.** This cloud-delivered security service provides intrusion detection and prevention capabilities and blocks vulnerability exploits, viruses, spyware, buffer overflows, denial-of-service attacks, and port scans from compromising and damaging enterprise information resources. It includes mechanisms such as protocol decoder-based analysis, protocol anomaly-based protection, stateful pattern matching, statistical anomaly detection, heuristic-based analysis, custom vulnerability and spyware “phone home” signatures, and workflows to manage popular open-source signature formats to extend our leading coverage.
- **Advanced Threat Prevention.** This cloud-delivered security service builds on all of the capabilities of Threat Prevention, adding the industry’s first Inline Deep Learning protection engine for Command-and-Control (“C2”). It delivers real-time detection and prevention of unknown, evasive, and targeted C2 communications over HTTP, unknown-TCP, unknown-UDP and encrypted over SSL. Advanced Threat Prevention is the first offering to protect patient zero from unknown command and control in real-time.

- **WildFire.** This cloud-delivered security service (which can also be delivered as an appliance) provides protection against targeted malware and advanced persistent threats and provides a near real-time analysis engine for detecting previously unseen malware while resisting attacker evasion techniques. The core component of this subscription goes beyond traditional sandbox environments and can operate on an end-customers' local environment, private cloud or our public cloud. WildFire combines dynamic and static analysis, recursive analysis, and a custom-built analysis environment with network traffic profiling and fileless attack detection to discover even the most sophisticated and evasive threats. A machine learning module derived from the cloud sandbox environment is now delivered inline on the ML-Powered Next-Generation Firewalls to identify the majority of unknown threats without cloud connectivity. Once identified, whether in the cloud or inline, preventive measures are automatically generated and delivered in seconds or less across networks, clouds, endpoints, or wherever WildFire-enabled sensors are deployed. By providing this as a cloud-based subscription, all of our end-customers benefit from malware found on any of our end-customers' networks.
- **Advanced URL Filtering.** This cloud-delivered security service offers the industry's first Inline Deep Learning powered web protection engine. It delivers real-time detection and prevention of unknown, evasive, and targeted web-based threats such as phishing, malware, and command-and-control. While many vendors use machine learning to categorize web content or prevent malware downloads, Advanced URL Filtering is the industry's first inline web protection engine capable of detecting never-before-seen web-based threats and preventing them in real-time. In addition, it includes a cloud-based URL filtering database which consists of millions of URLs across many categories and is designed to analyze web traffic and prevent web-based threats such as phishing, malware, and command-and-control.
- **DNS Security.** This cloud-delivered security service uses machine learning to proactively block malicious domains and stops attacks in progress. Unlike other solutions, it does not require endpoint routing configurations to be maintained and therefore cannot be bypassed. It allows firewalls access to DNS signatures that are generated using advanced predictive analysis, machine learning, and malicious domain data from a growing threat intelligence sharing community of which we are a part. Expanded categorization of DNS traffic and comprehensive analytics allow deep insights into threats, empowering security personnel with the context to optimize their security posture. It offers comprehensive DNS attack coverage and includes industry-first protections against multiple emerging DNS-based network attacks.
- **IoT Security.** IoT Security is a cloud-delivered security service on our ML-Powered Next-Generation Firewalls with backward compatibility to older versions of PAN-OS. Using machine learning and our App-ID technology, it can accurately identify and classify various IoT and operational technology ("OT") devices, including never-been-seen-before devices, mission critical OT devices and unmanaged legacy systems. It uses machine learning to baseline normal behavior, identify anomalous activity, assess risk, and provide policy recommendations to allow trusted behavior with a new Device-ID policy construct on our ML-Powered Next-Generation Firewalls. Our existing subscription-based security services have also been enhanced with IoT context to prevent threats on various devices, including IoT and OT devices.
- **SaaS Security API.** SaaS Security API (formerly Prisma SaaS) is a multi-mode, cloud access security broker service that helps govern sanctioned SaaS application usage across all users and helps prevent breaches and non-compliance. Specifically, the service enables the discovery and classification of data stored across the supported SaaS applications, protects sensitive data from accidental exposure, identifies and protects against known and unknown malware, and performs user activity monitoring to identify potential misuse or data exfiltration. It delivers complete visibility and granular enforcement across all user, folder, and file activity within sanctioned SaaS applications, and can be combined with SaaS Security Inline for a complete integrated cloud access security broker ("CASB").
- **SaaS Security Inline.** SaaS Security Inline is a recent cloud-delivered security service on our ML-Powered Next Generation Firewalls that adds an inline service to automatically gain visibility and control over the tens of thousands of known and new sanctioned, unsanctioned and tolerated SaaS applications in use within organizations today. It provides enterprise data protection and compliance across all SaaS applications and prevents cloud threats in real time with best-in-class security. The solution is easy to deploy being natively integrated on our range of ML-Powered Next-Generation Firewalls, eliminating the architectural complexity of traditional CASB products, while offering low total cost of ownership. It can be combined with SaaS Security API as a complete integrated CASB.
- **GlobalProtect.** This appliance-based subscription provides protection for users of both traditional laptop and mobile devices. It expands the boundaries of the end-users' physical network, effectively establishing a logical perimeter that encompasses remote laptop and mobile device users irrespective of their location. When a remote user logs into the device, GlobalProtect automatically determines the closest gateway available to the roaming device and establishes a secure connection. Regardless of the operating systems, laptops, tablets and phones will stay connected to the corporate network when they are on a network of any kind and, as a result, are protected as if they never left the corporate campus. GlobalProtect ensures that the same secure application enablement policies that protect users at the corporate site are enforced for all users, independent of their location.

- **SD-WAN.** Our SD-WAN subscription is integrated with PAN-OS, so that our end-customers can get the security features of our PAN-OS ML-Powered Next-Generation Firewall together with SD-WAN functionality. The SD-WAN overlay supports dynamic, intelligent path selection based on the applications, services and conditions of the links that each application or service is allowed to use, allowing applications to be prioritized based on criteria such as whether the application is mission-critical, latency-sensitive, or meets certain health criteria.
- **Enterprise DLP.** This cloud-delivered security service provides consistent, reliable protection of sensitive data, such as personally identifiable information (“PII”) and intellectual property, for all traffic types, applications, and users. Native integration with our products makes it simple to deploy, and advanced machine learning minimizes management complexity. Enterprise DLP allows organizations to consistently discover, classify, monitor, and protect sensitive data, wherever it may reside. It helps minimize the risk of a data breach both on-premises and in the cloud—such as in Office/Microsoft 365™, Salesforce®, and Box—and assists in meeting stringent data privacy and compliance regulations, including GDPR, CCPA, PCI DSS, HIPAA, and others.
- **AIOps for NGFW:** AIOps for NGFW is a new cloud-delivered security service available on ML-Powered Next-Generation Firewalls and Panorama that run on PAN-OS 10.0 and above, and is available in both free and licensed premium versions. AIOps for NGFW redefines firewall operational experience by empowering security teams to proactively strengthen security posture and resolve firewall disruptions. AIOps for NGFW provides continuous best practice recommendations powered by machine learning (“ML”) based on industry standards, security policy context, and advanced telemetry data collected from all Palo Alto Networks® firewalls to improve security posture. It also intelligently predicts firewall health, performance, and capacity problems up to seven days in advance and provides actionable insights to resolve the predicted disruptions.

Cloud Security:

- **Prisma Cloud.** Prisma Cloud is a comprehensive CNAPP, securing both cloud native and lift-and-shift applications across hybrid- and multi-cloud environments. With broad security and compliance coverage and a flexible agentless, as well as agent-based, architecture, Prisma Cloud protects cloud-native applications spanning hosts, containers, serverless architectures and other platform as a service (“PaaS”) offerings across cloud platforms. It dynamically discovers public cloud resources as they are deployed and correlates cloud data services (resource configurations, flow logs, audit logs, host and container logs, etc.) to provide timely security and compliance insights for cloud applications. The platform uses machine learning to profile user, workload, and application behaviors to identify and prevent advanced threats.

For security and development and operations teams, Prisma Cloud removes the impedance mismatch between security and cloud-driven agility by integrating with continuous integration and continuous development (“CI/CD”) tool chains to provide full lifecycle vulnerability management, compliance, infrastructure-as-code scanning, and runtime defense. With a comprehensive library of compliance frameworks, it vastly simplifies the task of maintaining compliance. Prisma Cloud accomplishes this through deep context-sharing that spans infrastructure, PaaS, users, development platforms, data, and application workloads. Seamless integration with security orchestration tools ensures rapid remediation of vulnerabilities and security issues.

Prisma Cloud delivers cloud security posture management, cloud workload protection platform, cloud network security, cloud code security, and cloud identity security capabilities that provide continuous visibility and protection across an organization’s hybrid, and multi-cloud infrastructure.

Secure Access Service Edge:

- **Prisma Access.** Prisma Access is a cloud-delivered security offering that helps organizations deliver consistent security to remote networks and mobile users. Located in more than 100 locations around the world, Prisma Access consistently inspects all traffic across all ports and provides bidirectional networking to enable branch-to-branch and branch-to-headquarter traffic. Prisma Access consolidates more point-products into a single converged cloud-delivered offering than any competing solution, transforming network security and allowing organizations to enable secure hybrid workforces. Unlike competing solutions, only Prisma Access protects all application traffic with complete, best-in-class security while ensuring an exceptional user experience with industry-leading service-level agreements (“SLA”)s.
- **Prisma SD-WAN.** Our Prisma SD-WAN solution is a next-generation SD-WAN solution that makes the secure cloud-delivered branch possible. Prisma SD-WAN enables organizations to replace traditional Multiprotocol Label Switching (“MPLS”) based WAN architectures with affordable broadband and internet transport types that promote improved bandwidth availability, redundancy and performance at a reduced cost. Prisma SD-WAN leverages real-time application performance SLAs and visibility to control and intelligently steer application traffic to deliver an exceptional user experience. Unlike legacy SD-WAN solutions that introduce cost and complexity, our Prisma SD-WAN ensures an excellent user experience with application-defined policies and simplifies network and security operations using machine learning and automation.

Security Operations:

- **Cortex XDR.** This cloud-based subscription enables organizations to collect telemetry from endpoint, network, identity and cloud data sources and apply advanced analytics and machine learning across all data, to quickly find and stop targeted attacks, insider abuse, and compromised endpoints. Cortex XDR has two product tiers: XDR Prevent and XDR Pro. XDR Prevent delivers enterprise-class endpoint security focused on preventing attacks. XDR Pro extends endpoint detection and response (“EDR”) to include cross-data analytics, including network, cloud and identity data. These capabilities build on each other such that a customer can start with XDR Prevent, then upgrade to XDR Pro for endpoints or XDR Pro for cross-data analytics. Going beyond EDR, Cortex XDR detects the most complex threats using analytics across key data sources and reveals the root cause, which can significantly reduce investigation time as compared to siloed tools and manual processes.
- **Cortex XSOAR.** Available as a cloud-based subscription or an on-premises appliance, Cortex XSOAR is a comprehensive SOAR offering that unifies playbook automation, case management, real-time collaboration, and threat intelligence management to serve security teams across the incident lifecycle. With Cortex XSOAR, security teams can standardize processes, automate repeatable tasks and manage incidents across their security product stack to improve response time and analyst productivity. It learns from the real-life analyst interactions and past investigations to help SOC teams with analyst assignment suggestions, playbook enhancements, and best next steps for investigations. Many of our customers see significantly faster SOC response times and a significant reduction in SOC alerts which require human intervention.
- **Cortex Xpanse.** This cloud-based subscription provides attack surface management, which is the ability for an organization to identify what an attacker would see amongst all of its sanctioned and unsanctioned Internet-facing assets. In addition, Cortex Xpanse detects risky or out-of-policy communications between Internet-connected assets that can be exploited for data breaches or ransomware attacks. Cortex Xpanse continuously identifies Internet assets, risky services or misconfigurations in third parties to help secure a supply chain or identify risks for mergers and acquisitions due diligence. Finally, compliance teams use Cortex Xpanse to improve their audit processes and stay in compliance by assessing their access controls against regulatory frameworks.
- **Cortex Data Lake.** This cloud-based subscription allows our customers to collect and analyze large amounts of context-rich network security data. This includes a collection of enhanced network logs generated by our security offerings, including those of our ML-Powered Next-Generation Firewalls and Prisma Access subscription, eliminating the need to plan for local data storage.

Support

Customer Support. Global customer support helps our customers achieve their security outcomes with services and support capabilities covering the customer's entire journey with Palo Alto Networks. This post-sales, global organization advances our customers' security maturity, supporting them when, where, and how they need it. We offer Standard Support, Premium Support, Four-Hour Premium Support and Platinum Support to our end-customers and channel partners. Our channel partners that operate a Palo Alto Networks Authorized Support Center (“ASC”) typically deliver level-one and level-two support. We provide level-three support 24 hours a day, seven days a week through regional support centers that are located worldwide. We also offer a service offering called Focused Services that includes Customer Success Managers (“CSM”) to provide support for end-customers with unique or complex support requirements. We offer our end-customers ongoing support for hardware, software and certain cloud offerings in order to receive ongoing security updates, PAN-OS upgrades, bug fixes, and repair. End-customers typically purchase these services for a one-year or longer term at the time of the initial product sale and typically renew for successive one-year or longer periods. Additionally, we provide expedited replacement for any defective hardware. We use a third-party logistics provider to manage our worldwide deployment of spare appliances and other accessories.

Threat Intelligence, Incident Response and Security Consulting. Unit 42 brings together world-renowned threat researchers, incident responders and security consultants to create an intelligence-driven, response-ready organization that is passionate about helping clients proactively manage cyber risk. We help security leaders assess and test their security controls, transform their security strategy with a threat-informed approach and respond to incidents rapidly. The Unit 42 Threat Intelligence team provides threat research that enables security teams to understand adversary intent and attribution, while enhancing protections offered by our products and services to stop advanced attacks. Our security consultants serve as trusted partners with state-of-the-art cyber risk expertise and incident response capabilities, helping customers focus on their business before, during, and after a breach.

Professional Services. Professional services are primarily delivered directly by Palo Alto Networks and through a global network of authorized channel partners to our end-customers and include on-location and remote, hands-on experts who plan, design, and deploy effective security solutions tailored to our end-customers' specific requirements. These services include architecture design and planning, implementation, configuration, and firewall migrations for all our products including Prisma and Cortex deployments. Customers can also purchase on-going technical experts to be part of customer's security teams to aid in the implementation and operation of their Palo Alto Networks capabilities. Our education services include certifications, as well as free online technical courses and in-classroom training, which are primarily delivered through our authorized training partners.

Research and Development

Our research and development efforts are focused on developing new hardware and software and on enhancing and improving our existing product and subscription offerings. We believe that hardware and software are both critical to expanding our leadership in the enterprise security industry. Our engineering team has deep networking, endpoint, and security expertise and works closely with end-customers to identify their current and future needs. In addition to our focus on hardware and software, our research and development team is focused on research into applications and threats, which allows us to respond to the rapidly changing application and threat landscape. We supplement our own research and development efforts with technologies and products that we license from third parties. We test our products thoroughly to certify and ensure interoperability with third-party hardware and software products.

We believe that innovation and timely development of new features and products is essential to meeting the needs of our end-customers and improving our competitive position. During fiscal 2022, we introduced several new offerings, including: Prisma Cloud 3.0, Prisma Access 3.0, AIOps for NGFW, PAN-OS 10.2, and Cloud NGFW for AWS. Additionally, we acquired productive investments that fit well within our long-term strategy.

We plan to continue to significantly invest in our research and development efforts as we evolve and extend the capabilities of our portfolio.

Intellectual Property

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. In particular, leading companies in the enterprise security industry have extensive patent portfolios and are regularly involved in both offensive and defensive litigation. We continue to grow our patent portfolio and own intellectual property and related intellectual property rights around the world that relate to our products, services, research and development, and other activities, and our success depends in part upon our ability to protect our core technology and intellectual property. We file patent applications to protect our intellectual property and believe that the duration of our issued patents is sufficient when considering the expected lives of our products.

We actively seek to protect our global intellectual property rights and to deter unauthorized use of our intellectual property by controlling access to and use of our proprietary software and other confidential information through the use of internal and external controls, including contractual protections with employees, contractors, end-customers and partners, and our software is protected by U.S. and international copyright laws. Despite our efforts to protect our intellectual property rights, our rights may not be successfully asserted in the future or may be invalidated, circumvented or challenged. In addition, the laws of various foreign countries where our offerings are distributed may not protect our intellectual property rights to the same extent as laws in the United States. See “Risk Factors-Claims by others that we infringe their intellectual property rights could harm our business,” “Risk Factors-Our proprietary rights may be difficult to enforce or protect, which could enable others to copy or use aspects of our products or subscriptions without compensating us,” and “Legal Proceedings” below for additional information.

Government Regulation

We are subject to numerous U.S. federal, state, and foreign laws and regulations covering a wide variety of subject matters. Like other companies in the technology industry, we face scrutiny from both U.S. and foreign governments with respect to our compliance with laws and regulations. Our compliance with these laws and regulations may be onerous and could, individually or in the aggregate, increase our cost of doing business, impact our competitive position relative to our peers, and/or otherwise have an adverse impact on our business, reputation, financial condition, and operating results. For additional information about government regulation applicable to our business, see Part I, Item 1A “Risk Factors” in this Form 10-K.

Competition

We operate in the intensely competitive enterprise security industry that is characterized by constant change and innovation. Changes in the application, threat, and technology landscape result in evolving customer requirements for the protection from threats and the safe enablement of applications. Our main competitors fall into five categories:

- large companies that incorporate security features in their products, such as Cisco Systems, Inc. (“Cisco”), or those that have acquired, or may acquire, large network and endpoint security vendors and have the technical and financial resources to bring competitive solutions to the market;
- independent security vendors, such as Check Point Software Technologies Ltd. (“Check Point”), Fortinet, Inc. (“Fortinet”), and Zscaler, Inc. (“Zscaler”), that offer a mix of network and endpoint security products;
- startups and single-vertical vendors that offer independent or emerging solutions across various areas of security;
- public cloud vendors and startups that offer solutions for cloud security (private, public and hybrid cloud); and

- large and small companies, such as CrowdStrike, Inc. (“CrowdStrike”), that offer solutions for security operations and endpoint security.

As our market grows, it will attract more highly specialized vendors, as well as larger vendors that may continue to acquire or bundle their products more effectively.

The principal competitive factors in our market include:

- product features, reliability, performance, and effectiveness;
- product line breadth, diversity, and applicability;
- product extensibility and ability to integrate with other technology infrastructures;
- price and total cost of ownership;
- adherence to industry standards and certifications;
- strength of sales and marketing efforts; and
- brand awareness and reputation.

We believe we generally compete favorably with our competitors on the basis of these factors as a result of the features and performance of our portfolio, the ease of integration of our products with technological infrastructures, and the relatively low total cost of ownership of our products. However, many of our competitors have substantially greater financial, technical, and other resources, greater name recognition, larger sales and marketing budgets, broader distribution, more diversified product lines, and larger and more mature intellectual property portfolios.

Sales, Marketing, Services and Support

Customers. Our end-customers are predominantly medium to large enterprises, service providers, and government entities. Our end-customers operate in a variety of industries, including education, energy, financial services, government entities, healthcare, Internet and media, manufacturing, public sector, and telecommunications. Our end-customers deploy our portfolio of products for a variety of security functions across a variety of deployment scenarios. Typical deployment scenarios include the enterprise perimeter, the enterprise data center, and the distributed enterprise perimeter. Our end-customer deployments typically involve at least one pair of our products along with one or more of our subscriptions, depending on size, security needs and requirements, and network complexity. No single end-customer accounted for more than 10% of our total revenue in fiscal 2022, 2021, or 2020.

Distribution. We primarily sell our products and subscription and support offerings to end-customers through our channel partners utilizing a two-tier, indirect fulfillment model whereby we sell our products and subscription and support offerings to our distributors, which, in turn, sell to our resellers, which then sell to our end-customers. Sales are generally subject to our standard, non-exclusive distributor agreement, which provides for an initial term of one year, one-year renewal terms, termination by us with 30 to 90 days written notice prior to the renewal date, and payment to us from the channel partner within 30 to 45 calendar days of the date we issue an invoice for such sales. For fiscal 2022, 53.6% of our total revenue was derived from sales to three distributors.

We also sell our VM-Series virtual firewalls directly to end-customers through Amazon’s AWS Marketplace, Microsoft’s Azure Marketplace, and Google’s Cloud Platform Marketplace under a usage-based licensing model.

Sales. Our sales organization is responsible for large-account acquisition and overall market development, which includes the management of the relationships with our channel partners, working with our channel partners in winning and supporting end-customers through a direct-touch approach, and acting as the liaison between our end-customers and our marketing and product development organizations. We expect to continue to grow our sales headcount to expand our reach in all key growth sectors.

Our sales organization is supported by sales engineers with responsibility for pre-sales technical support, solutions engineering for our end-customers, and technical training for our channel partners.

Channel Program. Our NextWave Channel Partner program is focused on building in-depth relationships with solutions-oriented distributors and resellers that have strong security expertise. The program rewards these partners based on a number of attainment goals, as well as provides them access to marketing funds, technical and sales training, and support. To promote optimal productivity, we operate a formal accreditation program for our channel partners’ sales and technical professionals. As of July 31, 2022, we had more than 6,700 channel partners.

Global Customer Success. Our Global Customer Success (“GCS”) organization is responsible for delivering professional, educational and support services directly to our channel partners and to end-customers. We leverage the capabilities of our channel partners and train them in the delivery of professional, educational and support services to enable these services to be locally delivered. We believe that a broad range of support services is essential to the successful customer deployment and ongoing support of our products, and we have hired support engineers with proven experience to provide those services.

Marketing. Our marketing is focused on building our brand reputation and the market awareness of our portfolio and driving pipeline and end-customer demand. Our marketing team consists primarily of product marketing, brand, demand generation, field marketing, digital marketing, communications, analyst relations and marketing analytics functions. Marketing activities include pipeline development through demand generation, social media and advertising programs, managing the corporate website and partner portal, trade shows and conferences, analyst relationships, customer advocacy, and customer awareness. Every year we organize multiple signature events, such as our end-customer conference “Ignite” and focused conferences such as “Cortex Symphony” and “SASE Converge.” We also publish threat intelligence research such as the Unit 42 Cloud Threat Report and the Unit 42 IoT Threat Report, which are based on data from our global threat intelligence team, Unit 42. These activities and tools benefit both our direct and indirect channels and are available at no cost to our channel partners.

Backlog. Orders for subscription and support offerings for multiple years are generally billed upfront upon fulfillment and are included in deferred revenue. Contract amounts that are not recorded in deferred revenue or revenue are considered backlog. We expect backlog related to subscription and support offerings will change from period to period for various reasons, including the timing and duration of customer orders and varying billing cycles of those orders. Products are billed upon shipment. The majority of our product revenue comes from orders that are received and shipped in the same quarter. However, insufficient supply and inventory may delay our hardware product shipments. As such, we do not believe that our product backlog at any particular time is necessarily indicative of our future operating results.

Seasonality. Our business is affected by seasonal fluctuations in customer spending patterns. We have begun to see seasonal patterns in our business, which we expect to become more pronounced as we continue to grow, with our strongest sequential revenue growth generally occurring in our fiscal second and fourth quarters.

Manufacturing

We outsource the manufacturing of our products to various manufacturing partners, which include our electronics manufacturing services provider (“EMS provider”) and original design manufacturers. This approach allows us to reduce our costs as it reduces our manufacturing overhead and inventory and also allows us to adjust more quickly to changing end-customer demand. Our EMS provider is Flextronics International, Ltd. (“Flex”), who assembles our products using design specifications, quality assurance programs, and standards that we establish, and procures components and assembles our products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions.

The component parts within our products are either sourced by our manufacturing partners or by us from various component suppliers. Our manufacturing and supply contracts, generally, do not guarantee a certain level of supply or fixed pricing, which increases our exposure to supply shortages or price increases.

Human Capital

We believe our ongoing success depends on our employees. Development and investment in our people is central to who we are, and will continue to be so. With a global workforce of 12,561 as of July 31, 2022, we take our People Strategy and FLEXWORK philosophy seriously and care for our employees. This is a critical element of our overall company strategy. Our People Strategy is a comprehensive approach to source, hire, onboard, integrate, develop, engage and reward employees.

FLEXWORK. Throughout the COVID-19 pandemic, while prioritizing the health and safety of our employees, we have learned how to collaborate in a distributed hybrid work reality and to create opportunities for employees to maintain a sense of belonging and focus on well-being. In the future, we aim to continue to disrupt the nature of work. Our philosophy is simple: place our employees at the center of their working life by providing employees flexibility, personalization, and choice regarding how they work, the benefits they choose, the way they consume learning and, where possible, where and when they work. We believe that the more our employees have choice and demonstrate mutual trust and respect, the more engaged they will be.

FLEXWORK adds even more opportunity to scale our efforts to improve Inclusion and Diversity (“I&D”). It further enables us to recognize each individual as unique, with their own priorities and needs, and gives the employee greater agency to personalize their decisions and utilize our programs and initiatives to meet those interests and desires.

Source & Hire. Sourcing and hiring diverse talent and enabling them to create and execute is central to our comprehensive approach to talent acquisition, which we refer to as “The Way We Hire.” Our talent acquisition team utilizes a number of methods to find subject experts in their respective fields, including the use of a variety of channels that focus on reaching underrepresented talents. Our university relations team partners with hundreds of academic institutions, including colleges and universities that focus on serving diverse populations, to provide career pathways for early-in-career candidates. We also encourage current employees to provide qualified referrals, and to utilize our internal mobility program to grow their careers. We equip hiring managers with training so that they are made aware of potential unconscious biases and interview for the values and competencies that we believe enhance our culture. We have diverse interview panels to deliver a quality interview experience to a diverse slate of candidates.

Onboard & Integrate. We believe that a positive onboarding experience is foundational to our employees thriving and therefore to rapid productivity. During the COVID-19 pandemic, we built and utilized virtual learning platforms and employee communication channels to provide new employees with inspirational, often personalized, onboarding experiences. Onboarding is a journey of integration that extends through the first year at Palo Alto Networks for every employee. In addition, we have built specialist learning tracks for interns and new graduates that have been recognized as best in class externally. As part of our merger and acquisition strategy, we have also established a robust integration program with the goal to enable individuals joining our teams to feel part of our culture at speed.

Develop & Motivate. FLEXLearn is our unique approach to personalized employee development. FLEXLearn is a learning experience platform that provides employees with a path based on their needs, interests, style, and career journey. Through FLEXLearn, employees have full agency to direct their growth at their pace and choosing. Development information about core business elements, professional skill sets, working in a distributed hybrid environment, as well as required company-wide compliance training, such as Code of Conduct, privacy and security, anti-discrimination, anti-harassment, and anti-bribery training, is also deployed through the FLEXLearn platform for all employees. In addition, FLEXLearn provides employees with events and activities that motivate and spark critical thinking, on topics ranging from inclusion, to well-being and collaboration. On average, employees had completed 16 hours of development through the FLEXLearn platform during fiscal 2022.

Engage & Reward. We conduct regular executive listening sessions and “pulse surveys” to better understand employee engagement, sentiment, well-being, and the ability to transition to a distributed work model. Many of these sessions have informed our holistic People Strategy, our FLEXWORK philosophy, I&D strategies, and Internal Mobility program.

Employee sentiment has continued to be highly positive. We continue to use insights from an anonymous global employee engagement survey we conducted in 2021 to execute action plans that reinforce our culture of engagement. Our internal pulse surveys and other feedback mechanisms, including insights from external employee sentiment sources and employer brand recognition, indicate that employees have a strong sense of belonging, confidence in leadership, and an understanding of how their work contributes to the Company’s goals.

In addition to a comprehensive compensation and diverse benefits program, we believe in an always-on feedback and rewards philosophy. From recurring 1:1 sessions and quarterly performance feedback to use of our Cheers for Peers peer recognition program, employees get continuous input about the value they bring to the organization.

Inclusion & Diversity. We are intentional about including diverse points of view, perspectives, experiences, backgrounds and ideas in our decision-making processes. We deeply believe that true diversity exists when we have representation of all ethnicities, genders, orientations and identities, and cultures in our workforce. Our I&D programs continue to advance those visions. The diversity of our board of directors, with women representing 33% of our board as of July 31, 2022, is an example of that vision in action. We have nine employee network groups (“ENG”s) which are employee-led groups that play a vital role in building understanding and awareness. Over 26% of our global workforce was involved in at least one ENG as of July 31, 2022. Our ENGs are provided with a budget to fund activities for their communities and to make charitable grants to organizations advancing their causes. We involve our ENGs in listening sessions with executive teams and we work in partnership to develop our annual I&D plans, because we believe involvement is critical. Our I&D philosophy is fully embedded in our talent acquisition, learning and development and rewards and recognition programs.

Environmental, Social & Governance

We recognize our duty to address environmental, social and governance (“ESG”) practices. From our Climate Commitment and our social impact programs to our Supplier Responsibility initiatives and Code of Business Conduct and Ethics, we value the opportunity to have meaningful outcomes that reinforce our intention to respect our planet, uplift our communities and advance our industry.

Environmental. We recognize climate change is a global crisis and are committed to doing our part to reduce environmental impacts. Aligned to the Climate Commitments we declared in February 2021, we remain committed to utilizing 100% renewable energy, reducing our greenhouse gas (“GHG”) emissions and working across our value chain, and with coalitions, to achieve these goals by 2030. During fiscal 2022, we conducted a comprehensive analysis of our global environmental footprint and developed Science Based Targets aligned to a warming scenario of 1.5° Celsius. We joined The Climate Pledge during fiscal 2022 demonstrating our eagerness to engage in coalitions to advocate for climate action. We are committed to being transparent about our progress over time through annual reporting.

Social. In addition to our FLEXWORK People Strategy described in the section titled “Human Capital” above, we prioritized the health and safety of our employees during the COVID-19 pandemic. Through the deployment of our Global Supplier Code of Conduct, we continued to reach across our supply chain to communicate our expectations regarding labor standards, business practices and workplace health and safety conditions. During fiscal 2022, we maintained our affiliate membership in the Responsible Business Alliance and maintained our commitment to Supplier Diversity. We value our role as a good corporate citizen and in fiscal 2022 continued to execute our social impact programs. In addition to ongoing efforts to help colleagues and communities impacted by the COVID-19 pandemic, we invested in education programs, scholarships, diversity and basic needs. We expanded our work to provide cybersecurity curriculum to schools, universities and nonprofit organizations to help youth protect their digital way of life and to prepare diverse adults for careers in cybersecurity. Employees continued to participate in our giving, matching and volunteer programs to make impacts in their local communities.

Governance. Integrity is one of our core values. Our corporate behavior and leadership practices model ethical decision making. Employees and suppliers are informed about our governance expectations through our Codes of Conduct, compliance training programs and ongoing communications. Our board of directors is governed by Corporate Governance Guidelines, which are amended from time to time to incorporate best practices in corporate governance. Reinforcing the importance of our ESG performance, the charter of the ESG and Nominating Committee of the board of directors includes the primary oversight of ESG.

Available Information

Our website is located at www.paloaltonetworks.com, and our investor relations website is located at investors.paloaltonetworks.com. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), are available free of charge on the Investors portion of our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (“SEC”). We also provide a link to the section of the SEC’s website at www.sec.gov that has all of our public filings, including Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, our Proxy Statements, and other ownership-related filings.

We also use our investor relations website as a channel of distribution for important company information. For example, webcasts of our earnings calls and certain events we participate in or host with members of the investment community are on our investor relations website. Additionally, we announce investor information, including news and commentary about our business and financial performance, SEC filings, notices of investor events, and our press and earnings releases, on our investor relations website. Investors and others can receive notifications of new information posted on our investor relations website in real time by signing up for email alerts and RSS feeds. Further corporate governance information, including our corporate governance guidelines, board committee charters, and code of conduct, is also available on our investor relations website under the heading “Governance.” The contents of our websites are not incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any references to our websites are intended to be inactive textual references only. All trademarks, trade names, or service marks used or mentioned herein belong to their respective owners.

ITEM 1A. RISK FACTORS

Our operations and financial results are subject to various risks and uncertainties including those described below. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, also may become important factors that affect us. If any of the following risks or others not specified below materialize, our business, financial condition, and operating results could be materially adversely affected, and the market price of our common stock could decline. In addition, the impacts of COVID-19 and any worsening of the economic environment may exacerbate the risks described below, any of which could have a material impact on us. This situation is changing rapidly, and additional impacts may arise that we are not currently aware of.

RISK FACTOR SUMMARY

Our business is subject to numerous risks and uncertainties. These risks include, but are not limited to, the following:

- The ongoing global COVID-19 pandemic could harm our business and results of operations.
- Our business and operations have experienced growth in recent periods, and if we do not effectively manage any future growth or are unable to improve our systems, processes, and controls, our operating results could be adversely affected.
- Our operating results may vary significantly from period to period and be unpredictable, which could cause the market price of our common stock to decline.
- Our operating results may be adversely affected by unfavorable economic and market conditions and the uncertain geopolitical environment.
- Our revenue growth rate in recent periods may not be indicative of our future performance.
- We have a history of losses, anticipate increasing our operating expenses in the future, and may not be able to achieve or maintain profitability or maintain or increase cash flow on a consistent basis, which could cause our business, financial condition, and operating results to suffer.
- If we are unable to sell new and additional product, subscription, and support offerings to our end-customers, our future revenue and operating results will be harmed.
- We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.
- A network or data security incident may allow unauthorized access to our network or data, harm our reputation, create additional liability and adversely impact our financial results.
- Reliance on shipments at the end of the quarter could cause our revenue for the applicable period to fall below expected levels.
- Seasonality may cause fluctuations in our revenue.
- If we are unable to hire, integrate, train, retain, and motivate qualified personnel and senior management, our business could suffer.
- If we are not successful in executing our strategy to increase sales of our products, subscriptions and support offerings to new and existing enterprise end-customers, our operating results may suffer.
- We rely on revenue from subscription and support offerings, and because we recognize revenue from subscription and support over the term of the relevant service period, downturns or upturns in sales of these subscription and support offerings are not immediately reflected in full in our operating results.
- Defects, errors, or vulnerabilities in our products, subscriptions, or support offerings, the failure of our products or subscriptions to block a virus or prevent a security breach or incident, misuse of our products, or risks of product liability claims could harm our reputation and adversely impact our operating results.
- False detection of applications, viruses, spyware, vulnerability exploits, data patterns, or URL categories could adversely affect our business.
- We rely on our channel partners to sell substantially all of our products, including subscriptions and support, and if these channel partners fail to perform, our ability to sell and distribute our products and subscriptions will be limited, and our operating results will be harmed.
- If we do not accurately predict, prepare for, and respond promptly to rapidly evolving technological and market developments and successfully manage product and subscription introductions and transitions to meet changing end-customer needs in the enterprise security industry, our competitive position and prospects will be harmed.

- Our current research and development efforts may not produce successful products, subscriptions, or features that result in significant revenue, cost savings or other benefits in the near future, if at all.
- We may acquire other businesses, which could subject us to adverse claims or liabilities, require significant management attention, disrupt our business, adversely affect our operating results, may not result in the expected benefits of such acquisitions and may dilute stockholder value.
- Because we depend on manufacturing partners to build and ship our products, we are susceptible to manufacturing and logistics delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and end-customers.
- Managing the supply of our products and product components is complex. Insufficient supply and inventory would result in lost sales opportunities or delayed revenue, while excess inventory would harm our gross margins.
- Because some of the key components in our products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which has disrupted or delayed our scheduled product deliveries to our end-customers, increase our costs and may result in the loss of sales and end-customers.
- The sales prices of our products, subscriptions and support offerings may decrease, which may reduce our gross profits and adversely impact our financial results.
- We generate a significant amount of revenue from sales to distributors, resellers, and end-customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.
- We are exposed to fluctuations in foreign currency exchange rates, which could negatively affect our financial condition and operating results.
- We are exposed to the credit and liquidity risk of some of our channel partners and end-customers, and to credit exposure in weakened markets, which could result in material losses.
- A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.
- Our ability to sell our products and subscriptions is dependent on the quality of our technical support services and those of our channel partners, and the failure to offer high-quality technical support services could have a material adverse effect on our end-customers' satisfaction with our products and subscriptions, our sales, and our operating results.
- Claims by others that we infringe their intellectual property rights could harm our business.
- Our proprietary rights may be difficult to enforce or protect, which could enable others to copy or use aspects of our products or subscriptions without compensating us.
- Our use of open source software in our products and subscriptions could negatively affect our ability to sell our products and subscriptions and subject us to possible litigation.
- We license technology from third parties, and our inability to maintain those licenses could harm our business.

Risks Related to Our Business and Our Industry

The ongoing global COVID-19 pandemic could harm our business and results of operations.

The novel strain of COVID-19 identified in late 2019 has spread globally, including within the United States, and has resulted in government authorities implementing numerous measures to try to contain the virus, such as travel bans and restrictions, quarantines, shelter in place orders, and shutdowns. This pandemic has negatively impacted and will likely continue to have a negative impact on, worldwide economic activity and financial markets and has impacted, and will further impact, our workforce and operations, the operations of our end-customers, and those of our respective channel partners, vendors and suppliers. In light of the uncertain and rapidly evolving situation relating to the spread of this virus and various government restrictions and guidelines, we have taken measures intended to mitigate the spread of the virus and minimize the risk to our employees, channel partners, end-customers, and the communities in which we operate. Through our FLEXWORK program, our employees may choose to work from home or in the office for a set number of days per week. Although we continue to monitor the situation and may adjust our current policies as more information and public health guidance become available, including progress made through vaccinations, these precautionary measures that we have adopted could negatively affect our customer success efforts, sales and marketing efforts, delay and lengthen our sales cycles, and create operational or other challenges, any of which could harm our business and results of operations. In addition, COVID-19 will likely continue to disrupt the operations of our end-customers and channel partners for an indefinite period of time, including as a result of travel restrictions and/or business shutdowns, all of which could negatively impact our business and results of operations, including cash flows.

The ongoing impact of COVID-19 is fluid and uncertain, but it has caused and may continue to cause various negative effects, including an inability to meet with our existing or potential end-customers; our end-customers deciding to delay or abandon their planned purchases; increased requests for delayed payment terms or product discounts by our end-customers and channel partners; us delaying, canceling, or withdrawing from user and industry conferences and other marketing events, including some of our own; and changes in the demand for our products, which has caused us to reprioritize our engineering and research and development efforts and make changes to our original offering roadmap. We have also seen supply chain challenges increase significantly, including chip and component shortages (in some cases, attributable to labor shortages), and at times we do not have sufficient inventory of certain of our products to promptly meet customer demand. As a result, we have experienced at times extended delivery time and increased costs for chips and components compared to historic levels; our demand generation activities, and our ability to close transactions with end-customers and partners may be negatively impacted; our ability to provide 24x7 worldwide support and/or replacement parts to our end-customers may be adversely affected; and it has been and, until the COVID-19 outbreak is contained and global economic activity stabilizes, will continue to be more difficult for us to forecast our operating results.

More generally, the pandemic has not only significantly and adversely increased economic and demand uncertainty, but it has caused a global economic slowdown, and continuing global economic uncertainty which could decrease technology spending and adversely affect demand for our offerings and harm our business and results of operations.

Our business and operations have experienced growth in recent periods, and if we do not effectively manage any future growth or are unable to improve our systems, processes, and controls, our operating results could be adversely affected.

We have experienced growth and increased demand for our products and subscriptions over the last few years. As a result, our employee headcount has increased significantly, and we expect it to continue to grow over the next year. For example, from the end of fiscal 2021 to the end of fiscal 2022, our headcount increased from 10,473 to 12,561 employees. In addition, as we have grown, our number of end-customers has also increased significantly, and we have increasingly managed more complex deployments of our products and subscriptions with larger end-customers. The growth and expansion of our business and product, subscription, and support offerings places a significant strain on our management, operational, and financial resources. To manage any future growth effectively, we must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems and controls, and our ability to manage headcount, capital, and processes in an efficient manner, all of which may be more difficult to accomplish the longer that our employees must work remotely from home.

We may not be able to successfully implement or scale improvements to our systems, processes, and controls in an efficient or timely manner. In addition, our existing systems, processes, and controls may not prevent or detect all errors, omissions, or fraud. We may also experience difficulties in managing improvements to our systems, processes, and controls or in connection with third-party software licensed to help us with such improvements. Any future growth would add complexity to our organization and require effective coordination throughout our organization. Failure to manage any future growth effectively could result in increased costs, disrupt our existing end-customer relationships, reduce demand for or limit us to smaller deployments of our products, or harm our business performance and operating results.

Our operating results may vary significantly from period to period and be unpredictable, which could cause the market price of our common stock to decline.

Our operating results, in particular, our revenues, gross margins, operating margins, and operating expenses, have historically varied from period to period, and even though we have experienced growth, we expect variation to continue as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- our ability to attract and retain new end-customers or sell additional products and subscriptions to our existing end-customers;
- the budgeting cycles, seasonal buying patterns, and purchasing practices of our end-customers;
- changes in end-customer, distributor or reseller requirements, or market needs;
- price competition;
- the timing and success of new product and service introductions by us or our competitors or any other change in the competitive landscape of our industry, including consolidation among our competitors or end-customers and strategic partnerships entered into by and between our competitors;
- changes in the mix of our products, subscriptions, and support, including changes in multi-year subscriptions and support;
- our ability to successfully and continuously expand our business domestically and internationally, particularly in the current global economic slowdown and the escalation of military conflicts such as Russia's invasion of Ukraine;
- changes in the growth rate of the enterprise security industry;
- deferral of orders from end-customers in anticipation of new products or product enhancements announced by us or our competitors;
- the timing and costs related to the development or acquisition of technologies or businesses or strategic partnerships;
- lack of synergy or the inability to realize expected synergies, resulting from acquisitions or strategic partnerships;
- our inability to execute, complete, or integrate efficiently any acquisitions that we may undertake;
- increased expenses, unforeseen liabilities, or write-downs and any impact on our operating results from any acquisitions we consummate;
- our ability to increase the size and productivity of our distribution channel;
- our obligation to repay the aggregate principal amount of the Notes as holders exercise their conversion rights under the Notes;
- decisions by potential end-customers to purchase security solutions from larger, more established security vendors or from their primary network equipment vendors;
- changes in end-customer penetration or attach and renewal rates for our subscriptions;
- timing of revenue recognition and revenue deferrals;
- our ability to manage production and manufacturing related costs, global customer service organization costs, inventory excess and obsolescence costs, and warranty costs, especially due to disruptions in our supply chain as a result of COVID-19 and the global semiconductor chip and component shortage;
- our ability to manage cloud hosting service costs and scale the cloud-based subscription offerings;
- insolvency or credit difficulties confronting our end-customers, including due to the continuing effects of COVID-19 and adversely affect their ability to purchase or pay for our products and subscription and support offerings in a timely manner or at all, or confronting our key suppliers, including our sole source suppliers, which could disrupt our supply chain;
- any disruption in our channel or termination of our relationships with important channel partners, including as a result of consolidation among distributors and resellers of security solutions;
- our inability to timely fulfill our end-customers' orders due to supply chain delays or events that impact our manufacturers or their suppliers, including due to the effects of COVID-19 and the global semiconductor chip and component shortage;
- the cost and potential outcomes of litigation, which could have a material adverse effect on our business;
- seasonality or cyclical fluctuations in our markets;
- future accounting pronouncements or changes in our accounting policies;

- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates, as an increasing amount of our expenses is incurred and paid in currencies other than the U.S. dollar;
- political, economic and social instability caused by the United Kingdom’s exit from the European Union (“Brexit”), Russia’s invasion of Ukraine, continued hostilities in the Middle East, terrorist activities, any disruptions from COVID-19 and any disruption these events may cause to the broader global industrial economy; and
- general macroeconomic conditions, both domestically and in our foreign markets that could impact some or all regions where we operate, including inflation, and global economic uncertainty due to the continuing effects of COVID-19.

Any one of the factors above, or the cumulative effect of some of the factors referred to above, may result in significant fluctuations in our financial and other operating results. This variability and unpredictability could result in our failure to meet our revenue, margin, or other operating result expectations or those of securities analysts or investors for a particular period. If we fail to meet or exceed such expectations for these or any other reasons, the market price of our common stock could fall substantially, and we could face costly lawsuits, including securities class action suits.

Our operating results may be adversely affected by unfavorable economic and market conditions and the uncertain geopolitical environment.

We operate globally, and as a result, our business and revenues are impacted by global economic and geopolitical conditions. The instability in the global credit markets, inflation, shortages and delays related to the global supply chain challenges, uncertainties related to the timing of the lifting of governmental restrictions to mitigate the spread of COVID-19, the current economic challenges in China, changes in public policies such as domestic and international regulations, taxes, increase in interest rates, fluctuations in foreign currency exchange rates, or international trade agreements, international trade disputes, government shutdowns, geopolitical turmoil and other disruptions to global and regional economies and markets continue to add uncertainty to global economic conditions. Military actions or armed conflict, including Russia’s invasion of Ukraine and any related political or economic responses and counter-responses, and uncertainty about or changes in government and trade relationships, policies and treaties could also lead to worsening economic and market conditions and the geopolitical environment. In response to Russia’s invasion of Ukraine, the United States, along with the European Union, has imposed restrictive sanctions on Russia, Russian entities, and Russian citizens (“Sanctions on Russia”). We are subject to these governmental sanctions and export controls, which may subject us to liability if we are not in full compliance with applicable laws. Any continued or further uncertainty, weakness or deterioration in economic and market conditions or the geopolitical environment could have a material and adverse impact on our business, financial condition and results of operations, including reductions in sales of our products and subscriptions, longer sales cycles, reductions in subscription or contract duration and value, slower adoption of new technologies, alterations in the spending patterns or priorities of current and prospective customers (including delaying purchasing decisions), increased costs for the chips and components to manufacture our products and increased price competition.

Our revenue growth rate in recent periods may not be indicative of our future performance.

We have experienced revenue growth rates of 29.3% and 24.9% in fiscal 2022 and fiscal 2021, respectively. Our revenue for any prior quarterly or annual period should not be relied upon as an indication of our future revenue or revenue growth for any future period. If we are unable to maintain consistent or increasing revenue or revenue growth, the market price of our common stock could be volatile, and it may be difficult for us to achieve and maintain profitability or maintain or increase cash flow on a consistent basis.

We have a history of losses, anticipate increasing our operating expenses in the future, and may not be able to achieve or maintain profitability or maintain or increase cash flow on a consistent basis, which could cause our business, financial condition, and operating results to suffer.

Other than fiscal 2012, we have incurred losses in all fiscal years since our inception. As a result, we had an accumulated deficit of \$1.7 billion as of July 31, 2022. We anticipate that our operating expenses will continue to increase in the foreseeable future as we continue to grow our business. Our growth efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenues sufficiently, or at all, to offset increasing expenses. Revenue growth may slow or revenue may decline for a number of possible reasons, including the downturn in the global and U.S. economy due to COVID-19, slowing demand for our products or subscriptions, increasing competition, a decrease in the growth of, or a demand shift in, our overall market, or a failure to capitalize on growth opportunities. We have also entered into a substantial amount of capital commitments for operating lease obligations and other purchase commitments. Any failure to increase our revenue as we grow our business could prevent us from achieving or maintaining profitability or maintaining or increasing cash flow on a consistent basis or satisfying our capital commitments. In addition, we may have difficulty achieving profitability under U.S. GAAP due to share-based compensation expense and other non-cash charges. If we are unable to navigate these challenges as we encounter them, our business, financial condition, and operating results may suffer.

If we are unable to sell new and additional product, subscription, and support offerings to our end-customers, our future revenue and operating results will be harmed.

Our future success depends, in part, on our ability to expand the deployment of our portfolio with existing end-customers and create demand for our new offerings, including cloud security, AI, and analytics offerings. This may require increasingly sophisticated and costly sales efforts that may not result in additional sales. The rate at which our end-customers purchase additional products, subscriptions, and support depends on a number of factors, including the perceived need for additional security products, including subscription and support offerings, as well as general economic conditions. Further, existing end-customers have no contractual obligation to and may not renew their subscription and support contracts after the completion of their initial contract period. Our end-customers' renewal rates may decline or fluctuate as a result of a number of factors, including their level of satisfaction with our subscriptions and our support offerings, the frequency and severity of subscription outages, our product uptime or latency, and the pricing of our, or competing, subscriptions. Additionally, our end-customers may renew their subscription and support agreements for shorter contract lengths or on other terms that are less economically beneficial to us. We also cannot be certain that our end-customers will renew their subscription and support agreements. If our efforts to sell additional products and subscriptions to our end-customers are not successful or our end-customers do not renew their subscription and support agreements or renew them on less favorable terms, our revenues may grow more slowly than expected or decline.

We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The industry for enterprise security products is intensely competitive, and we expect competition to increase in the future from established competitors and new market entrants. Our main competitors fall into five categories:

- large companies that incorporate security features in their products, such as Cisco Systems, Inc. (“Cisco”), or those that have acquired, or may acquire, large network and endpoint security vendors and have the technical and financial resources to bring competitive solutions to the market;
- independent security vendors, such as Check Point Software Technologies Ltd. (“Check Point”), Fortinet, Inc. (“Fortinet”), and Zscaler, Inc. (“Zscaler”), that offer a mix of network and endpoint security products;
- startups and single-vertical vendors that offer independent or emerging solutions across various areas of security;
- public cloud vendors and startups that offer solutions for cloud security (private, public and hybrid cloud); and
- large and small companies, such as CrowdStrike, Inc. (“CrowdStrike”), that offer solutions for security operations and endpoint security.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

- greater name recognition and longer operating histories;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with distribution partners and end-customers;
- greater customer support resources;
- greater resources to make strategic acquisitions or enter into strategic partnerships;
- lower levels of indebtedness;
- lower labor and development costs;
- newer or disruptive products or technologies;
- larger and more mature intellectual property portfolios; and
- substantially greater financial, technical, and other resources.

In addition, some of our larger competitors have substantially broader and more diverse product and services offerings, which may make them less susceptible to downturns in a particular market and allow them to leverage their relationships based on other products or incorporate functionality into existing products to gain business in a manner that discourages users from purchasing our products and subscriptions, including through selling at zero or negative margins, offering concessions, product bundling, or a closed technology offering. Many of our smaller competitors that specialize in providing protection from a single type of security threat are often able to deliver these specialized security products to the market more quickly than we can.

Organizations that use legacy products and services may believe that these products and services are sufficient to meet their security needs or that our offerings only serve the needs of a portion of the enterprise security industry. Accordingly, these organizations may continue allocating their information technology budgets for legacy products and services and may not adopt our security offerings. Further, many organizations have invested substantial personnel and financial resources to design and operate their networks and have established deep relationships with other providers of networking and security products. As a result, these organizations may prefer to purchase from their existing suppliers rather than add or switch to a new supplier such as us, regardless of product performance, features, or greater services offerings or may be more willing to incrementally add solutions to their existing security infrastructure from existing suppliers than to replace it wholesale with our solutions.

Conditions in our market could change rapidly and significantly as a result of technological advancements, partnering or acquisitions by our competitors, or continuing market consolidation. New start-up companies that innovate and large competitors that are making significant investments in research and development may invent similar or superior products and technologies that compete with our products and subscriptions. Some of our competitors have made or could make acquisitions of businesses that may allow them to offer more directly competitive and comprehensive solutions than they had previously offered and adapt more quickly to new technologies and end-customer needs. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources.

These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins, and loss of market share. Any failure to meet and address these factors could seriously harm our business and operating results.

A network or data security incident may allow unauthorized access to our network or data, harm our reputation, create additional liability and adversely impact our financial results.

Increasingly, companies are subject to a wide variety of attacks on their networks on an ongoing basis. In addition to traditional computer “hackers,” malicious code (such as viruses and worms), phishing attempts, employee theft or misuse, and denial of service attacks, sophisticated nation-state and nation-state supported actors engage in intrusions and attacks (including advanced persistent threat intrusions and supply chain attacks) and add to the risks to our internal networks, cloud-deployed enterprise and customer-facing environments and the information they store and process. Incidences of cyberattacks and other cybersecurity breaches and incidents have increased and are likely to continue to increase. We and our third-party service providers face security threats and attacks from a variety of sources. Despite our efforts and processes to prevent breaches of our internal networks, systems and websites, our data, corporate systems, our systems and security measures, as well as those of our third-party service providers, are still vulnerable to computer viruses, break-ins, phishing attacks, ransomware attacks, or other types of attacks from outside parties, or breaches due to employee error, malfeasance, a combination of these, or otherwise. We cannot guarantee that the measures we have taken to protect our networks, systems and websites will provide adequate security. Furthermore, as a well-known provider of security solutions, we may be a more attractive target for such attacks. The conflict in Ukraine and associated activities in Ukraine and Russia may increase the risk of cyberattacks on various types of infrastructure and operations, and the United States government has warned companies to be prepared for a significant increase in Russian cyberattacks in response to the Sanctions on Russia.

A security breach or incident or an attack against our service availability suffered by us, or our third-party service providers, could impact our networks or networks secured by our products and subscriptions, creating system disruptions or slowdowns and exploiting security vulnerabilities of our products, and the information stored or otherwise processed on our networks or those of our third-party service providers could be accessed, publicly disclosed, altered, lost, stolen, rendered unavailable, or otherwise used or processed without authorization, which could subject us to liability and cause us financial harm. Any actual or perceived breach of security in our systems or networks, or any other actual or perceived data security incident we or our third-party service providers suffer, could result in significant damage to our reputation, negative publicity, loss of channel partners, end-customers and sales, loss of competitive advantages over our competitors, increased costs to remedy any problems and otherwise respond to any incident, regulatory investigations and enforcement actions, demands, costly litigation, and other liability. In addition, we may incur significant costs and operational consequences of investigating, remediating, eliminating and putting in place additional tools, devices, and other measures designed to prevent actual or perceived security breaches and other security incidents, as well as the costs to comply with any notification obligations resulting from any security incidents. While we maintain cybersecurity insurance, our insurance may be insufficient to cover all liabilities incurred by these incidents, and any incidents may result in loss of, or increased costs of, our cybersecurity insurance. Any of these negative outcomes could adversely impact the market perception of our products and subscriptions and end-customer and investor confidence in our company and could seriously harm our business or operating results.

Reliance on shipments at the end of the quarter could cause our revenue for the applicable period to fall below expected levels.

As a result of end-customer buying patterns and the efforts of our sales force and channel partners to meet or exceed their sales objectives, we have historically received a substantial portion of sales orders and generated a substantial portion of revenue during the last few weeks of each fiscal quarter. If expected revenue at the end of any fiscal quarter is delayed for any reason, including the failure of anticipated purchase orders to materialize (particularly for large enterprise end-customers with lengthy sales cycles), our logistics partners' inability to ship products prior to fiscal quarter-end to fulfill purchase orders received near the end of a fiscal quarter (including due to the effects of COVID-19), our failure to manage inventory to meet demand, any failure of our systems related to order review and processing, or any delays in shipments based on trade compliance requirements (including new compliance requirements imposed by new or renegotiated trade agreements), revenue could fall below our expectations and the estimates of analysts for that quarter, which could adversely impact our business and operating results and cause a decline in the market price of our common stock.

Seasonality may cause fluctuations in our revenue.

We believe there are significant seasonal factors that may cause our second and fourth fiscal quarters to record greater revenue sequentially than our first and third fiscal quarters. We believe that this seasonality results from a number of factors, including:

- end-customers with a December 31 fiscal year-end choosing to spend remaining unused portions of their discretionary budgets before their fiscal year-end, which potentially results in a positive impact on our revenue in our second fiscal quarter;
- our sales compensation plans, which are typically structured around annual quotas and commission rate accelerators, which potentially results in a positive impact on our revenue in our fourth fiscal quarter;
- seasonal reductions in business activity during August in the United States, Europe and certain other regions, which potentially results in a negative impact on our first fiscal quarter revenue; and
- the timing of end-customer budget planning at the beginning of the calendar year, which can result in a delay in spending at the beginning of the calendar year potentially resulting in a negative impact on our revenue in our third fiscal quarter.

As we continue to grow, seasonal or cyclical variations in our operations may become more pronounced, and our business, operating results and financial position may be adversely affected.

If we are unable to hire, integrate, train, retain, and motivate qualified personnel and senior management, our business could suffer.

Our future success depends, in part, on our ability to continue to hire, integrate, train, and retain qualified and highly skilled personnel. We are substantially dependent on the continued service of our existing engineering personnel because of the complexity of our offerings. Additionally, any failure to hire, integrate, train, and adequately incentivize our sales personnel or the inability of our recently hired sales personnel to effectively ramp to target productivity levels could negatively impact our growth and operating margins. Competition for highly skilled personnel, particularly in engineering, is often intense, especially in the San Francisco Bay Area, where we have a substantial presence and need for such personnel. Additionally, potential changes in U.S. immigration and work authorization laws and regulations, including in reaction to COVID-19, may make it difficult to renew or obtain visas for any highly skilled personnel that we have hired or are actively recruiting.

In addition, the industry in which we operate generally experiences high employee attrition. Although we have entered into employment offer letters with our key personnel, these agreements have no specific duration and constitute at-will employment. We do not maintain key person life insurance policies on any of our employees. The loss of one or more of our key employees, and any failure to have in place and execute an effective succession plan for key executives, could seriously harm our business. If we are unable to hire, integrate, train, or retain the qualified and highly skilled personnel required to fulfill our current or future needs, our business, financial condition, and operating results could be harmed.

Our future performance also depends on the continued services and continuing contributions of our senior management to execute on our business plan and to identify and pursue new opportunities and product innovations. The loss of services of senior management, the decrease in the effectiveness of such services due to working remotely from home, or the ineffective management of any leadership transitions, especially within our sales organization, could significantly delay or prevent the achievement of our development and strategic objectives, which could adversely affect our business, financial condition, and operating results.

Further, we believe that a critical contributor to our success and our ability to retain highly skilled personnel has been our corporate culture, which we believe fosters innovation, inclusion, teamwork, passion for end-customers, focus on execution, and the facilitation of critical knowledge transfer and knowledge sharing. As we grow and change, we may find it difficult to maintain these important aspects of our corporate culture. While we are taking steps to develop a more inclusive and diverse workforce, there is no guarantee that we will be able to do so. Any failure to preserve our culture as we grow could limit our ability to innovate and could negatively affect our ability to retain and recruit personnel, continue to perform at current levels or execute on our business strategy.

If we are not successful in executing our strategy to increase sales of our products, subscriptions and support offerings to new and existing enterprise end-customers, our operating results may suffer.

Our growth strategy is dependent, in part, upon increasing sales of our products, services, subscriptions and offerings to new and existing medium and large enterprise end-customers. Sales to these end-customers involve risks that may not be present, or that are present to a lesser extent, with sales to smaller entities. These risks include:

- competition from competitors, such as Cisco and Check Point, that traditionally target larger enterprises, service providers, and government entities and that may have pre-existing relationships or purchase commitments from those end-customers;
- increased purchasing power and leverage held by large end-customers in negotiating contractual arrangements with us;
- more stringent requirements in our worldwide support contracts, including stricter support response times and penalties for any failure to meet support requirements; and
- longer sales cycles, particularly during the current economic slowdown and in some cases over 12 months, and the associated risk that substantial time and resources may be spent on a potential end-customer that elects not to purchase our products and subscriptions.

In addition, product purchases by large enterprises are frequently subject to budget constraints, multiple approvals, and unplanned administrative, processing, and other delays. Finally, large enterprises typically have longer implementation cycles, require greater product functionality and scalability and a broader range of services, demand that vendors take on a larger share of risks, sometimes require acceptance provisions that can lead to a delay in revenue recognition, and expect greater payment flexibility from vendors. All of these factors can add further risk to business conducted with these end-customers. If we fail to realize an expected sale from a large end-customer in a particular quarter or at all, our business, operating results, and financial condition could be materially and adversely affected.

We rely on revenue from subscription and support offerings, and because we recognize revenue from subscription and support over the term of the relevant service period, downturns or upturns in sales of these subscription and support offerings are not immediately reflected in full in our operating results.

Subscription and support revenue accounts for a significant portion of our revenue, comprising 75.2% of total revenue in fiscal 2022, 73.7% of total revenue in fiscal 2021, and 68.8% of total revenue in fiscal 2020. Sales of new or renewal subscription and support contracts may decline and fluctuate as a result of a number of factors, including end-customers' level of satisfaction with our products and subscriptions (including newly integrated products and services), the prices of our products and subscriptions, the prices of products and services offered by our competitors, and reductions in our end-customers' spending levels. If our sales of new or renewal subscription and support contracts decline, our total revenue and revenue growth rate may decline, and our business will suffer. In addition, we recognize subscription and support revenue over the term of the relevant service period, which is typically one to five years. As a result, much of the subscription and support revenue we report each fiscal quarter is the recognition of deferred revenue from subscription and support contracts entered into during previous fiscal quarters. Consequently, a decline in new or renewed subscription or support contracts in any one fiscal quarter will not be fully or immediately reflected in revenue in that fiscal quarter but will negatively affect our revenue in future fiscal quarters. Also, it is difficult for us to rapidly increase our subscription and support revenue through additional subscription and support sales in any period, as revenue from new and renewal subscription and support contracts must be recognized over the applicable service period.

Defects, errors, or vulnerabilities in our products, subscriptions, or support offerings, the failure of our products or subscriptions to block a virus or prevent a security breach or incident, misuse of our products, or risks of product liability claims could harm our reputation and adversely impact our operating results.

Because our products and subscriptions are complex, they have contained and may contain design or manufacturing defects or errors that are not detected until after their commercial release and deployment by our end-customers. For example, from time to time, certain of our end-customers have reported defects in our products related to performance, scalability, and compatibility. Additionally, defects may cause our products or subscriptions to be vulnerable to security attacks, cause them to fail to help secure networks, or temporarily interrupt end-customers' networking traffic. Because the techniques used by computer hackers to access or sabotage networks change frequently and generally are not recognized until launched against a target, we may be unable to anticipate these techniques and provide a solution in time to protect our end-customers' networks. In addition, due to the Russian invasion of Ukraine there could be a significant increase in Russian cyberattacks against our customers, resulting in an increased risk of a security breach of our end-customers' systems. Furthermore, as a well-known provider of security solutions, our networks, products, including cloud-based technology, and subscriptions could be targeted by attacks specifically designed to disrupt our business and harm our reputation. In addition, defects or errors in our subscription updates or our products could result in a failure of our subscriptions to effectively update end-customers' hardware and cloud-based products. Our data centers and networks may experience technical failures and downtime, may fail to distribute appropriate updates, or may fail to meet the increased requirements of a growing installed end-customer base, any of which could temporarily or permanently expose our end-customers' networks, leaving their networks unprotected against the latest security threats. Moreover, our products must interoperate with our end-customers' existing infrastructure, which often have different specifications, utilize multiple protocol standards, deploy products from multiple vendors, and contain multiple generations of products that have been added over time. As a result, when problems occur in a network, it may be difficult to identify the sources of these problems.

The occurrence of any such problem in our products and subscriptions, whether real or perceived, could result in:

- expenditure of significant financial and product development resources in efforts to analyze, correct, eliminate, or work-around errors or defects or to address and eliminate vulnerabilities;
- loss of existing or potential end-customers or channel partners;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- an increase in warranty claims compared with our historical experience, or an increased cost of servicing warranty claims, either of which would adversely affect our gross margins; and
- litigation, regulatory inquiries, investigations, or other proceedings, each of which may be costly and harm our reputation.

Further, our products and subscriptions may be misused by end-customers or third parties that obtain access to our products and subscriptions. For example, our products and subscriptions could be used to censor private access to certain information on the Internet. Such use of our products and subscriptions for censorship could result in negative press coverage and negatively affect our reputation.

The limitation of liability provisions in our standard terms and conditions of sale may not fully or effectively protect us from claims as a result of federal, state, or local laws or ordinances, or unfavorable judicial decisions in the United States or other countries. The sale and support of our products and subscriptions also entails the risk of product liability claims. Although we may be indemnified by our third-party manufacturers for product liability claims arising out of manufacturing defects, because we control the design of our products and subscriptions, we may not be indemnified for product liability claims arising out of design defects. We maintain insurance to protect against certain claims associated with the use of our products and subscriptions, but our insurance coverage may not adequately cover any claim asserted against us. In addition, even claims that ultimately are unsuccessful could result in our expenditure of funds in litigation, divert management's time and other resources, and harm our reputation.

False detection of applications, viruses, spyware, vulnerability exploits, data patterns, or URL categories could adversely affect our business.

Our classifications of application type, virus, spyware, vulnerability exploits, data, or URL categories may falsely detect, report and act on applications, content, or threats that do not actually exist. This risk is heightened by the inclusion of a "heuristics" feature in our products and subscriptions, which attempts to identify applications and other threats not based on any known signatures but based on characteristics or anomalies which indicate that a particular item may be a threat. These false positives may impair the perceived reliability of our products and subscriptions and may therefore adversely impact market acceptance of our products and subscriptions. If our products and subscriptions restrict important files or applications based on falsely identifying them as malware or some other item that should be restricted, this could adversely affect end-customers' systems and cause material system failures. Any such false identification of important files or applications could result in damage to our reputation, negative publicity, loss of channel partners, end-customers and sales, increased costs to remedy any problem, and costly litigation.

We rely on our channel partners to sell substantially all of our products, including subscriptions and support, and if these channel partners fail to perform, our ability to sell and distribute our products and subscriptions will be limited, and our operating results will be harmed.

Substantially all of our revenue is generated by sales through our channel partners, including distributors and resellers. We provide our channel partners with specific training and programs to assist them in selling our products, including subscriptions and support offerings, but there can be no assurance that these steps will be utilized or effective. In addition, our channel partners may be unsuccessful in marketing, selling, and supporting our products and subscriptions. We may not be able to incentivize these channel partners to sell our products and subscriptions to end-customers and, in particular, to large enterprises. These channel partners may also have incentives to promote our competitors' products and may devote more resources to the marketing, sales, and support of competitive products. Our channel partners' operations may also be negatively impacted by other effects COVID-19 is having on the global economy, such as increased credit risk of end-customers and the uncertain credit markets. Our agreements with our channel partners may generally be terminated for any reason by either party with advance notice prior to each annual renewal date. We cannot be certain that we will retain these channel partners or that we will be able to secure additional or replacement channel partners. In addition, any new channel partner requires extensive training and may take several months or more to achieve productivity. Our channel partner sales structure could subject us to lawsuits, potential liability, and reputational harm if, for example, any of our channel partners misrepresent the functionality of our products or subscriptions to end-customers or violate laws or our corporate policies. If we fail to effectively manage our sales channels or channel partners, our ability to sell our products and subscriptions and operating results will be harmed.

If we do not accurately predict, prepare for, and respond promptly to rapidly evolving technological and market developments and successfully manage product and subscription introductions and transitions to meet changing end-customer needs in the enterprise security industry, our competitive position and prospects will be harmed.

The enterprise security industry has grown quickly and is expected to continue to evolve rapidly. Moreover, many of our end-customers operate in markets characterized by rapidly changing technologies and business plans, which require them to add numerous network access points and adapt increasingly complex enterprise networks, incorporating a variety of hardware, software applications, operating systems, and networking protocols. We must continually change our products and expand our business strategy in response to changes in network infrastructure requirements, including the expanding use of cloud computing. For example, organizations are moving portions of their data to be managed by third parties, primarily infrastructure, platform and application service providers, and may rely on such providers' internal security measures. While we have historically been successful in developing, acquiring, and marketing new products and product enhancements that respond to technological change and evolving industry standards, we may not be able to continue to do so, and there can be no assurance that our new or future offerings will be successful or will achieve widespread market acceptance. If we fail to accurately predict end-customers' changing needs and emerging technological trends in the enterprise security industry, including in the areas of mobility, virtualization, cloud computing, and software defined networks ("SDN"), our business could be harmed. In addition, COVID-19 and the resulting increase in customer demand for work-from-home technologies and other technologies have caused us to reprioritize our engineering and R&D efforts and there can be no assurance that any product enhancements or new features will be successful or address our end-customer needs.

The technology in our portfolio is especially complex because it needs to effectively identify and respond to new and increasingly sophisticated methods of attack, while minimizing the impact on network performance. Additionally, some of our new features and related enhancements may require us to develop new hardware architectures that involve complex, expensive, and time-consuming research and development processes. The development of our portfolio is difficult and the timetable for commercial release and availability is uncertain as there can be long time periods between releases and availability of new features. If we experience unanticipated delays in the availability of new products, features and subscriptions, and fail to meet customer expectations for such availability, our competitive position and business prospects will be harmed.

Additionally, we must commit significant resources to developing new features and new cloud security, AI/analytics and other offerings before knowing whether our investments will result in products, subscriptions, and features the market will accept. The success of new features depends on several factors, including appropriate new product definition, differentiation of new products, subscriptions, and features from those of our competitors, and market acceptance of these products, services and features. Moreover, successful new product introduction and transition depends on a number of factors, including our ability to manage the risks associated with new product production ramp-up issues, the availability of application software for new products, the effective management of purchase commitments and inventory, the availability of products in appropriate quantities and costs to meet anticipated demand, and the risk that new products may have quality or other defects or deficiencies, especially in the early stages of introduction. There can be no assurance that we will successfully identify opportunities for new products and subscriptions, develop and bring new products and subscriptions to market in a timely manner, or achieve market acceptance of our products and subscriptions, including our product enhancement efforts in connection with COVID-19, or that products, subscriptions, and technologies developed by others will not render our products, subscriptions, or technologies obsolete or noncompetitive.

Our current research and development efforts may not produce successful products, subscriptions, or features that result in significant revenue, cost savings or other benefits in the near future, if at all.

Developing our products, subscriptions, features, and related enhancements is expensive. Our investments in research and development may not result in significant design improvements, marketable products, subscriptions, or features, or may result in products, subscriptions, or features that are more expensive than anticipated. Additionally, we may not achieve the cost savings or the anticipated performance improvements we expect, and we may take longer to generate revenue, or generate less revenue, than we anticipate. Our future plans include significant investments in research and development and related product and subscription opportunities. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position. However, we may not receive significant revenue from these investments in the near future, if at all, or these investments may not yield the expected benefits, either of which could adversely affect our business and operating results.

We may acquire other businesses, which could subject us to adverse claims or liabilities, require significant management attention, disrupt our business, adversely affect our operating results, may not result in the expected benefits of such acquisitions and may dilute stockholder value.

As part of our business strategy, we acquire and make investments in complementary companies, products, or technologies. The identification of suitable acquisition candidates is difficult, and we may not be able to complete such acquisitions on favorable terms, if at all. In addition, we may be subject to claims or liabilities assumed from an acquired company, product, or technology; acquisitions we complete could be viewed negatively by our end-customers, investors, and securities analysts; and we may incur costs and expenses necessary to address an acquired company's failure to comply with laws and governmental rules and regulations. Additionally, we may be subject to litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders, or other third parties, which may differ from or be more significant than the risks our business faces.

If we are unsuccessful at integrating past or future acquisitions in a timely manner, or the technologies and operations associated with such acquisitions, into our company, our revenue and operating results could be adversely affected. Any integration process may require significant time and resources, which may disrupt our ongoing business and divert management's attention, and we may not be able to manage the integration process successfully or in a timely manner. We may not successfully evaluate or utilize the acquired technology or personnel, realize anticipated synergies from the acquisition, or accurately forecast the financial impact of an acquisition transaction and integration of such acquisition, including accounting charges and any potential impairment of goodwill and intangible assets recognized in connection with such acquisitions.

Our completed or future acquisitions may not ultimately strengthen our competitive position or achieve our goals and business strategy. We may find that the acquired businesses, products, or technologies do not further our business strategy as we expected. Our acquisitions may be viewed negatively by our customers, financial markets, or investors. We may experience difficulty integrating the operations and personnel of the acquired business, and we may have difficulty retaining the key personnel of the acquired business. We may have difficulty integrating the acquired technologies or products with our existing product lines and we may have difficulty maintaining uniform standards, controls, procedures, and policies across diverse or expanding geographic locations.

We may have to pay cash, incur debt, or issue equity or equity-linked securities to pay for any future acquisitions, each of which could adversely affect our financial condition or the market price of our common stock. Furthermore, the sale of equity or issuance of equity-linked debt to finance any future acquisitions could result in dilution to our stockholders. See the risk factors entitled "*Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products and subscriptions could reduce our ability to compete and could harm our business.*" and "*The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans, the conversion of our Notes or exercise of the related Warrants, or otherwise will dilute all other stockholders.*" The occurrence of any of these risks could harm our business, operating results, and financial condition.

Risks Related to our Supply Chain

Because we depend on manufacturing partners to build and ship our products, we are susceptible to manufacturing and logistics delays and pricing fluctuations that could prevent us from shipping customer orders on time, if at all, or on a cost-effective basis, which may result in the loss of sales and end-customers.

We depend on manufacturing partners, primarily our electronics manufacturing service provider (“EMS provider”) Flex, to manufacture our hardware product lines. Our reliance on these manufacturing partners reduces our control over the manufacturing process and exposes us to risks, including reduced control over quality assurance, product costs, product supply, timing and transportation risk. Our products are manufactured by our manufacturing partners at facilities located primarily in the United States. Some of the components in our products are sourced either through Flex or directly by us from component suppliers outside the United States. The portion of our products that are sourced outside the United States may subject us to additional logistical risks (which may increase due to the global impact of COVID-19) or risks associated with complying with local rules and regulations in foreign countries. Significant changes to existing international trade agreements could lead to sourcing or logistics disruption resulting from import delays or the imposition of increased tariffs on our sourcing partners. For example, the United States and Chinese governments have each enacted, and discussed additional, import tariffs. These tariffs, depending on their ultimate scope and how they are implemented, could negatively impact our business by increasing our costs. For example, some components that we import for final manufacturing in the United States have been impacted by these recent tariffs. As a result, our costs have increased and we have raised, and may be required to further raise, prices on our hardware products. Each of these factors could severely impair our ability to fulfill orders.

In addition, we are subject to requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the “Dodd-Frank Act”) to conduct due diligence, disclose, and report whether or not our products contain minerals originating from the Democratic Republic of the Congo and adjoining countries, or conflict minerals. Although the SEC has provided guidance with respect to a portion of the conflict minerals filing requirements that may somewhat reduce our reporting practices, we have incurred and expect to incur additional costs to comply with these disclosure requirements, including costs related to determining the source of any of the relevant minerals and metals used in our products. These requirements could adversely affect the sourcing, availability, and pricing of minerals used in the manufacture of semiconductor devices or other components used in our products. We may also encounter end-customers who require that all of the components of our products be certified as conflict free. If we are not able to meet this requirement, such end-customers may choose not to purchase our products.

Our manufacturing partners typically fulfill our supply requirements on the basis of individual purchase orders. We do not have long-term contracts with these manufacturers that guarantee capacity, the continuation of particular pricing terms, or the extension of credit limits. Accordingly, they are not obligated to continue to fulfill our supply requirements and the prices we pay for manufacturing services could be increased on short notice. Our contract with Flex permits them to terminate the agreement for their convenience, subject to prior notice requirements. If we are required to change manufacturing partners, our ability to meet our scheduled product deliveries to our end-customers could be adversely affected, which could cause the loss of sales to existing or potential end-customers, delayed revenue or an increase in our costs which could adversely affect our gross margins. COVID-19 and the global semiconductor shortage have in certain cases caused delays and challenges in obtaining components and inventory, as well as increases to freight and shipping costs, and may result in a material adverse effect on our results of operations. Any production interruptions for any reason, such as a natural disaster, epidemic or pandemic such as COVID-19, capacity shortages, or quality problems at one of our manufacturing partners would negatively affect sales of our product lines manufactured by that manufacturing partner and adversely affect our business and operating results.

Managing the supply of our products and product components is complex. Insufficient supply and inventory would result in lost sales opportunities or delayed revenue, while excess inventory would harm our gross margins.

Our manufacturing partners procure components and build our products based on our forecasts, and we generally do not hold inventory for a prolonged period of time. These forecasts are based on estimates of future demand for our products, which are in turn based on historical trends and analyses from our sales and product management organizations, adjusted for overall market conditions. COVID-19 has made forecasting more difficult and we may experience increased challenges to our supply chain due to the unpredictability of the impacts of COVID-19. In order to reduce manufacturing lead times and plan for adequate component supply, from time to time we may issue forecasts for components and products that are non-cancelable and non-returnable.

Our inventory management systems and related supply chain visibility tools may be inadequate to enable us to forecast accurately and effectively manage supply of our products and product components. If we ultimately determine that we have excess supply, we may have to reduce our prices and write-down inventory, which in turn could result in lower gross margins. If our actual component usage and product demand are lower than the forecast we provide to our manufacturing partners, we accrue for losses on manufacturing commitments in excess of forecasted demand. Alternatively, insufficient supply levels, including due to the recent global shortage of semiconductors, may lead to shortages that result in delayed product revenue or loss of sales opportunities altogether as potential end-customers turn to competitors’ products that are readily available. If we are unable to effectively manage our supply and inventory, our operating results could be adversely affected.

Because some of the key components in our products come from limited sources of supply, we are susceptible to supply shortages or supply changes, which has disrupted or delayed our scheduled product deliveries to our end-customers, increase our costs and may result in the loss of sales and end-customers.

Our products rely on key components, including integrated circuit components, which our manufacturing partners purchase on our behalf from a limited number of component suppliers, including sole source providers. The manufacturing operations of some of our component suppliers are geographically concentrated in Asia and elsewhere, which makes our supply chain vulnerable to regional disruptions, such as natural disasters, fire, political instability, civil unrest, a power outage, or health risks, such as epidemics and pandemics like COVID-19, and as a result have impaired, and could impair in the future, the volume of components that we are able to obtain. Lead times for components have also been adversely impacted by factors outside of our control, including COVID-19 and the recent global shortage of semiconductors. For example, we have experienced, and could continue to experience, increased difficulties in obtaining a sufficient amount of materials in the semiconductor market, which could reduce our flexibility to react to product mix changes and unforecasted orders. In addition, we have experienced increased costs because of these shortages.

Further, we do not have volume purchase contracts with any of our component suppliers, and they could cease selling to us at any time. If we are unable to obtain a sufficient quantity of these components in a timely manner for any reason, sales of our products could be delayed or halted, or we could be forced to expedite shipment of such components or our products at dramatically increased costs. Our component suppliers also change their selling prices frequently in response to market trends, including industry-wide increases in demand. Because we do not have, for the most part, volume purchase contracts with our component suppliers, we are susceptible to price fluctuations related to raw materials and components and may not be able to adjust our prices accordingly. Additionally, poor quality in any of the sole-sourced components in our products could result in lost sales or sales opportunities.

If we are unable to obtain a sufficient volume of the necessary components for our products on commercially reasonable terms or the quality of the components do not meet our requirements, we could also be forced to redesign our products and qualify new components from alternate component suppliers. The resulting stoppage or delay in selling our products and the expense of redesigning our products would result in lost sales opportunities and damage to customer relationships, which would adversely affect our business and operating results.

Risks Related to Sales of our Products, Subscriptions and Support Offerings

The sales prices of our products, subscriptions and support offerings may decrease, which may reduce our gross profits and adversely impact our financial results.

The sales prices for our products, subscriptions and support offerings may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of products, subscriptions and support offerings, anticipation of the introduction of new products, subscriptions or support offerings, or promotional programs or pricing pressures as a result of the economic downturn resulting from COVID-19. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions. Additionally, although we price our products, subscriptions and support offerings worldwide in U.S. dollars, currency fluctuations in certain countries and regions may negatively impact actual prices that channel partners and end-customers are willing to pay in those countries and regions. Furthermore, we anticipate that the sales prices and gross profits for our products could decrease over product life cycles. We cannot guarantee that we will be successful in developing and introducing new offerings with enhanced functionality on a timely basis, or that our products, subscriptions and support offerings, if introduced, will enable us to maintain our prices and gross profits at levels that will allow us to achieve and maintain profitability.

We generate a significant amount of revenue from sales to distributors, resellers, and end-customers outside of the United States, and we are therefore subject to a number of risks associated with international sales and operations.

We have a limited history of marketing, selling, and supporting our products, subscriptions and support offerings internationally. We may experience difficulties in recruiting, training, managing, and retaining an international staff, and specifically staff related to sales management and sales personnel. We also may not be able to maintain successful strategic distributor relationships internationally or recruit additional companies to enter into strategic distributor relationships. Business practices in the international markets that we serve may differ from those in the United States and may require us in the future to include terms other than our standard terms related to payment, warranties, or performance obligations in end-customer contracts.

Additionally, our international sales and operations are subject to a number of risks, including the following:

- political, economic and social uncertainty around the world, health risks such as epidemics and pandemics like COVID-19, macroeconomic challenges in Europe, terrorist activities, Russia's invasion of Ukraine, and continued hostilities in the Middle East;
- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- the uncertainty of protection for intellectual property rights in some countries;

- greater risk of unexpected changes in foreign and domestic regulatory practices, tariffs, and tax laws and treaties, including regulatory and trade policy changes adopted by the current administration, such as the recently imposed Sanctions on Russia, or foreign countries in response to regulatory changes adopted by the current administration;
- risks associated with trade restrictions and foreign legal requirements, including the importation, certification, and localization of our products required in foreign countries;
- greater risk of a failure of foreign employees, channel partners, distributors, and resellers to comply with both U.S. and foreign laws, including antitrust regulations, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, U.S. or foreign sanctions regimes and export or import control laws, and any trade regulations ensuring fair trade practices, which non-compliance could include increased costs;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- management communication and integration problems resulting from cultural and geographic dispersion; and
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business and related impact on sales cycles.

These and other factors could harm our future international revenues and, consequently, materially impact our business, operating results, and financial condition. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources. Our failure to successfully manage our international operations and the associated risks effectively could limit the future growth of our business.

Further, we are subject to risks associated with changes in economic and political conditions in countries in which we operate or sell our products and subscriptions. For instance, Brexit creates an uncertain political and economic environment in the United Kingdom (“U.K.”) and across European Union (“E.U.”) member states for the foreseeable future. On January 31, 2020 the U.K. left the E.U. and the EU/UK Trade and Cooperation Agreement came into force on January 1, 2021. Our financial condition and operating results may be impacted by such uncertainty with potential disruptions to our relationships with existing and future customers, suppliers and employees all possibly having a material adverse impact on our business, prospects, financial condition and/or operating results.

We are exposed to fluctuations in foreign currency exchange rates, which could negatively affect our financial condition and operating results.

Our sales contracts are primarily denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, there has been, and may continue to be, significant volatility in global stock markets and foreign currency exchange rates that result in the strengthening of the U.S. dollar against foreign currencies in which we conduct business. The strengthening of the U.S. dollar increases the real cost of our products to our end-customers outside of the United States and may lead to delays in the purchase of our products, subscriptions, and support, and the lengthening of our sales cycle. If the U.S. dollar continues to strengthen, this could adversely affect our financial condition and operating results. In addition, increased international sales in the future, including through our channel partners and other partnerships, may result in greater foreign currency denominated sales, increasing our foreign currency risk.

Our operating expenses incurred outside the United States and denominated in foreign currencies are increasing and are subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with foreign currency fluctuations, our financial condition and operating results could be adversely affected. We have entered into forward contracts in an effort to reduce our foreign currency exchange exposure related to our foreign currency denominated expenditures. As of July 31, 2022, the total notional amount of our outstanding foreign currency forward contracts was \$856.9 million. For more information on our hedging transactions, refer to Note 6. Derivative Instruments in Part II, Item 8 of this Annual Report on Form 10-K. The effectiveness of our existing hedging transactions and the availability and effectiveness of any hedging transactions we may decide to enter into in the future may be limited and we may not be able to successfully hedge our exposure, which could adversely affect our financial condition and operating results.

We are exposed to the credit and liquidity risk of some of our channel partners and end-customers, and to credit exposure in weakened markets, which could result in material losses.

Most of our sales are made on an open credit basis. Beyond our open credit arrangements, we have also experienced demands for customer financing due to COVID-19 and our competitors' offerings. The majority of these demands are currently facilitated by leasing and other financing arrangements provided by our distributors and resellers. To respond to this demand, our customer financing activities may increase in the future. We also provide financings to certain end-customers. We monitor customer payment capability in granting such financing arrangements, seek to limit such open credit to amounts we believe the end-customers can pay and maintain reserves we believe are adequate to cover exposure for doubtful accounts to mitigate credit risks of these end-customers. However, there can be no assurance that these programs will be effective in reducing our credit risks.

We believe customer financing is a competitive factor in obtaining business. The loan financing arrangements provided by our distributors and resellers may include not only financing the acquisition of our products and services but also providing additional funds for other costs associated with network installation and integration of our products and services.

Our exposure to the credit risks relating to the financing activities described above may increase if our customers are adversely affected by a global economic downturn or periods of economic uncertainty. Although we have programs in place with our distributors and resellers that are designed to monitor and mitigate these risks, we cannot guarantee these programs will be effective in reducing the credit risks, especially as we expand our business internationally. If we are unable to adequately control these risks, our business, operating results, and financial condition could be harmed.

In the past, we have experienced non-material losses due to bankruptcies among customers. If these losses increase due to COVID-19 or global economic conditions, they could harm our business and financial condition. A material portion of our sales is derived through our distributors.

For fiscal 2022, three distributors individually represented 10% or more of our total revenue, and in the aggregate represented 53.6% of our total revenue. As of July 31, 2022, three distributors individually represented 10% or more of our gross accounts receivable, and in the aggregate represented 47.7% of our gross accounts receivable.

Additionally, to the degree that turmoil in the credit markets makes it more difficult for some customers to obtain financing, those customers' ability to pay could be adversely impacted, which in turn could have a material adverse impact on our business, operating results, and financial condition.

A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.

Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive, and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. The substantial majority of our sales to date to government entities have been made indirectly through our channel partners. Government certification requirements for products and subscriptions like ours may change, thereby restricting our ability to sell into the federal government sector until we have attained the revised certification. If our products and subscriptions are late in achieving or fail to achieve compliance with these certifications and standards, or our competitors achieve compliance with these certifications and standards, we may be disqualified from selling our products, subscriptions and support offerings to such governmental entity, or be at a competitive disadvantage, which would harm our business, operating results, and financial condition. Government demand and payment for our products, subscriptions and support offerings may be impacted by government shutdowns, public sector budgetary cycles, contracting requirements, and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our products, subscriptions and support offerings. Government entities may have statutory, contractual, or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely impact our future operating results. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our products, subscriptions and support offerings, a reduction of revenue, or fines or civil or criminal liability if the audit uncovers improper or illegal activities, which could adversely impact our operating results in a material way. Additionally, the U.S. government may require certain of the products that it purchases to be manufactured in the United States and other relatively high cost manufacturing locations, and we may not manufacture all products in locations that meet such requirements, affecting our ability to sell these products, subscriptions and support offerings to the U.S. government.

Our ability to sell our products and subscriptions is dependent on the quality of our technical support services and those of our channel partners, and the failure to offer high-quality technical support services could have a material adverse effect on our end-customers' satisfaction with our products and subscriptions, our sales, and our operating results.

After our products and subscriptions are deployed within our end-customers' networks, our end-customers depend on our technical support services, as well as the support of our channel partners, to resolve any issues relating to our products. Our channel partners often provide similar technical support for third parties' products and may therefore have fewer resources to dedicate to the support of our products and subscriptions. If we or our channel partners do not effectively assist our end-customers in deploying our products and subscriptions, succeed in helping our end-customers quickly resolve post-deployment issues, or provide effective ongoing support, our ability to sell additional products and subscriptions to existing end-customers would be adversely affected and our reputation with potential end-customers could be damaged. While we have been able to meet increased demand for support services in fiscal 2022, failure to do so in the future could have a material adverse effect on our business.

Many larger enterprise, service provider, and government entity end-customers have more complex networks and require higher levels of support than smaller end-customers. If we or our channel partners fail to meet the requirements of these larger end-customers, it may be more difficult to execute on our strategy to increase our coverage with larger end-customers. Additionally, if our channel partners do not effectively provide support to the satisfaction of our end-customers, we may be required to provide direct support to such end-customers, which would require us to hire additional personnel and to invest in additional resources. It can take several months to recruit, hire, and train qualified technical support employees. We may not be able to hire such resources fast enough to keep up with unexpected demand, particularly if the sales of our products exceed our internal forecasts. As a result, our ability, and the ability of our channel partners to provide adequate and timely support to our end-customers will be negatively impacted, and our end-customers' satisfaction with our products and subscriptions will be adversely affected. Additionally, to the extent that we may need to rely on our sales engineers to provide post-sales support while we are ramping our support resources, our sales productivity will be negatively impacted, which would harm our revenues. Our failure or our channel partners' failure to provide and maintain high-quality support services could have a material adverse effect on our business, financial condition, and operating results.

Risks Related to Intellectual Property and Technology Licensing

Claims by others that we infringe their intellectual property rights could harm our business.

Companies in the enterprise security industry own large numbers of patents, copyrights, trademarks, domain names, and trade secrets and frequently enter into litigation based on allegations of infringement, misappropriation, or other violations of intellectual property rights. In addition, non-practicing entities also frequently bring claims of infringement of intellectual property rights. Third parties are asserting, have asserted and may in the future assert claims of infringement of intellectual property rights against us.

Third parties may also assert such claims against our end-customers or channel partners, whom our standard license and other agreements obligate us to indemnify against claims that our products and subscriptions infringe the intellectual property rights of third parties. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited, that they have divulged proprietary or other confidential information, or that their former employers own their inventions or other work product. Furthermore, we may be unaware of the intellectual property rights of others that may cover some or all of our technology, products, subscriptions and services. As we expand our footprint, both in our platforms, products, subscriptions and services and geographically, more overlaps occur and we may face more infringement claims both in the United States and abroad.

While we have been increasing the size of our patent portfolio, our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we have. In addition, litigation has involved and will likely continue to involve patent holding companies or other adverse patent owners who have no relevant product revenue and against whom our own patents may therefore provide little or no deterrence or protection. In addition, we have not registered our trademarks in all of our geographic markets and failure to secure those registrations could adversely affect our ability to enforce and defend our trademark rights. Any claim of infringement by a third party, even those without merit, could cause us to incur substantial costs defending against the claim, could distract our management from our business, and could require us to cease use of such intellectual property. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. A successful claimant could secure a judgment, or we may agree to a settlement that prevents us from distributing certain products or performing certain services or that requires us to pay substantial damages, royalties, or other fees. Any of these events could seriously harm our business, financial condition, and operating results.

Our proprietary rights may be difficult to enforce or protect, which could enable others to copy or use aspects of our products or subscriptions without compensating us.

We rely and expect to continue to rely on a combination of confidentiality and license agreements with our employees, consultants, and third parties with whom we have relationships, as well as trademark, copyright, patent, and trade secret protection laws, to protect our proprietary rights. We have filed various applications for certain aspects of our intellectual property. Valid patents may not issue from our pending applications, and the claims eventually allowed on any patents may not be sufficiently broad to protect our technology or products and subscriptions. We cannot be certain that we were the first to make the inventions claimed in our pending patent applications or that we were the first to file for patent protection, which could prevent our patent applications from issuing as patents or invalidate our patents following issuance. Additionally, the process of obtaining patent protection is expensive and time-consuming, and we may not be able to prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Any issued patents may be challenged, invalidated or circumvented, and any rights granted under these patents may not actually provide adequate defensive protection or competitive advantages to us. Additional uncertainty may result from changes to patent-related laws and court rulings in the United States and other jurisdictions. As a result, we may not be able to obtain adequate patent protection or effectively enforce any issued patents.

Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or subscriptions or obtain and use information that we regard as proprietary. We generally enter into confidentiality or license agreements with our employees, consultants, vendors, and end-customers, and generally limit access to and distribution of our proprietary information. However, we cannot be certain that we have entered into such agreements with all parties who may have or have had access to our confidential information or that the agreements we have entered into will not be breached. We cannot guarantee that any of the measures we have taken will prevent misappropriation of our technology. Because we may be an attractive target for computer hackers, we may have a greater risk of unauthorized access to, and misappropriation of, our proprietary information. In addition, the laws of some foreign countries do not protect our proprietary rights to as great an extent as the laws of the United States, and many foreign countries do not enforce these laws as diligently as government agencies and private parties in the United States. From time to time, we may need to take legal action to enforce our patents and other intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others or to defend against claims of infringement or invalidity. Such litigation could result in substantial costs and diversion of resources and could negatively affect our business, operating results, and financial condition. Attempts to enforce our rights against third parties could also provoke these third parties to assert their own intellectual property or other rights against us or result in a holding that invalidates or narrows the scope of our rights, in whole or in part. If we are unable to protect our proprietary rights (including aspects of our software and products protected other than by patent rights), we may find ourselves at a competitive disadvantage to others who need not incur the additional expense, time, and effort required to create the innovative products that have enabled us to be successful to date. Any of these events would have a material adverse effect on our business, financial condition, and operating results.

Our use of open source software in our products and subscriptions could negatively affect our ability to sell our products and subscriptions and subject us to possible litigation.

Our products and subscriptions contain software modules licensed to us by third-party authors under “open source” licenses. Some open source licenses contain requirements that we make available applicable source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public. This would allow our competitors to create similar products or subscriptions with lower development effort and time and ultimately could result in a loss of product sales for us.

Although we monitor our use of open source software to avoid subjecting our products and subscriptions to conditions we do not intend, the terms of many open source licenses have not been interpreted by United States courts, and there is a risk that these licenses could be construed in a way that could impose unanticipated conditions or restrictions on our ability to commercialize our products and subscriptions. From time to time, there have been claims against companies that distribute or use open source software in their products and subscriptions, asserting that open source software infringes the claimants’ intellectual property rights. We could be subject to suits by parties claiming infringement of intellectual property rights in what we believe to be licensed open source software. If we are held to have breached the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our products and subscriptions on terms that are not economically feasible, to reengineer our products and subscriptions, to discontinue the sale of our products and subscriptions if reengineering could not be accomplished on a timely basis, or to make generally available, in source code form, our proprietary code, any of which could adversely affect our business, operating results, and financial condition.

In addition to risks related to license requirements, usage of open source software can lead to greater risks than use of third-party commercial software, as open source licensors generally do not provide warranties or assurance of title or controls on origin of the software. In addition, many of the risks associated with usage of open source software, such as the lack of warranties or assurances of title, cannot be eliminated, and could, if not properly addressed, negatively affect our business. We have established processes to help alleviate these risks, including a review process for screening requests from our development organizations for the use of open source software, but we cannot be sure that our processes for controlling our use of open source software in our products and subscriptions will be effective.

We license technology from third parties, and our inability to maintain those licenses could harm our business.

We incorporate technology that we license from third parties, including software, into our products and subscriptions. We cannot be certain that our licensors are not infringing the intellectual property rights of third parties or that our licensors have sufficient rights to the licensed intellectual property in all jurisdictions in which we may sell our products and subscriptions. In addition, some licenses may be non-exclusive, and therefore our competitors may have access to the same technology licensed to us. Some of our agreements with our licensors may be terminated for convenience by them. We may also be subject to additional fees or be required to obtain new licenses if any of our licensors allege that we have not properly paid for such licenses or that we have improperly used the technologies under such licenses, and such licenses may not be available on terms acceptable to us or at all. If we are unable to continue to license any of this technology because of intellectual property infringement claims brought by third parties against our licensors or against us, or claims against us by our licensors, or if we are unable to continue our license agreements or enter into new licenses on commercially reasonable terms, our ability to develop and sell products and subscriptions containing such technology would be severely limited, and our business could be harmed. Additionally, if we are unable to license necessary technology from third parties, we may be forced to acquire or develop alternative technology, which we may be unable to do in a commercially feasible manner or at all, and we may be required to use alternative technology of lower quality or performance standards. This would limit and delay our ability to offer new or competitive products and subscriptions and increase our costs of production. As a result, our margins, market share, and operating results could be significantly harmed.

Risks Related to Privacy and Data Protection

Our failure to adequately protect personal information could have a material adverse effect on our business.

A wide variety of provincial, state, national, and international laws and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data. These laws and regulations relating to privacy, data protection and security are evolving and being tested in courts and may result in ever-increasing regulatory and public scrutiny, as well as escalating levels of enforcement and sanctions. Further, the interpretation and application of foreign laws and regulations in many cases is uncertain, and our legal and regulatory obligations in foreign jurisdictions are subject to frequent and unexpected changes, including the potential for various regulatory or other governmental bodies to enact new or additional laws or regulations, to issue rulings that invalidate prior laws or regulations, or to increase penalties significantly.

For example, the E.U. General Data Protection Regulation (“E.U. GDPR”), which became effective in May 2018, imposes more stringent data protection requirements, provides for greater penalties for noncompliance than E.U. laws that previously applied (up to the greater of €20 million or 4% of the total worldwide annual turnover), and confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the E.U. GDPR. The E.U. GDPR requires, among other things, that personal data only be transferred outside of the E.U. to the United States and other jurisdictions that the European Commission has not yet recognized as having “adequate” data protection laws (a “third country”), where a data transfer mechanism under the E.U. GDPR has been put in place. Historically, we have relied on the E.U.-U.S. and Swiss-U.S. Privacy Shield programs, and the use of model contractual clauses approved by the E.U. Commission, to legitimize these transfers (also referred to as standard contractual clauses or SCCs). In July 2020, the Court of Justice of the European Union in its “Schrems II” decision invalidated the E.U.-U.S. Privacy Shield for purposes of transfers to the U.S. and imposed a requirement for companies to carry out an assessment of the laws and practices governing access to personal data in the third country to ensure an essentially equivalent level of data protection to that afforded in the E.U. Though we no longer rely on the Privacy Shield programs and instead employ model contractual clauses for personal data transfers, the Schrems II decision raises questions as to implications under European and UK law and adequate data protection in the United States. Among other effects, we may experience additional costs associated with increased compliance burdens, putting in place any additional data transfer mechanisms and new contract negotiations with third parties that aid in processing data on our behalf. We may experience reluctance or refusal by current or prospective customers in the European Economic Area (“EEA”), Switzerland, and the U.K. (collectively, “Europe”) to use our products, and we may find it necessary or desirable to make further changes to our handling of personal data of residents of Europe. The regulatory environment applicable to the handling of European residents’ personal data, and our actions taken in response, may cause us to assume additional liabilities or incur additional costs and could result in our business, operating results and financial condition being harmed. Additionally, we and our customers may face risk of enforcement actions by data protection authorities in Europe relating to personal data transfers to us and by us from Europe. Any such enforcement actions could result in substantial costs and diversion of resources, distract management and technical personnel and negatively affect our business, operating results, and financial condition.

Following the withdrawal of the U.K. from the E.U. (i.e., Brexit), and the expiry of the Brexit transition period, which ended on December 31, 2020, the E.U. GDPR has been implemented in the U.K. (as the “U.K. GDPR”). The U.K. GDPR sits alongside the U.K. Data Protection Act 2018, which implements certain derogations in the E.U. GDPR into English law. The requirements of the U.K. GDPR, which are (at this time) largely aligned with those under the E.U. GDPR, may lead to similar compliance and operational costs with potential fines of up to £17.5 million or 4% of total worldwide annual turnover.

In the United States, companies that do business in California are subject to the California Consumer Privacy Act (“CCPA”), which requires, among other things, covered companies to provide new disclosures to California consumers, afford such consumers certain rights regarding their personal information, and also affords a private right of action to individuals affected by a data breach, if the breach was caused by a lack of reasonable security. The enforcement of the CCPA by the California Attorney General commenced on July 1, 2020. The CCPA has been amended on multiple occasions and the California Attorney General has issued initial and revised regulations that also govern the CCPA. It remains unclear how this legislation will be interpreted and enforced. The effects of the CCPA potentially are significant, however, and may require us to modify our data processing practices and policies and to incur substantial costs and expenses for compliance. Moreover, additional state privacy laws have been passed and will require potentially substantial efforts to obtain compliance. This includes the California Privacy Rights Act (“CPRA”) which was approved by California voters, and significantly modifies the CCPA. The U.S. federal government also is contemplating privacy legislation.

We may also from time to time be subject to, or face assertions that we are subject to, additional obligations relating to personal data by contract or due to assertions that self-regulatory obligations or industry standards apply to our practices. Additionally, the Federal Trade Commission and many state attorneys general are interpreting federal and state consumer protection laws to impose standards for the online collection, use, dissemination, and security of data. Further, we may be or become subject to data localization laws mandating that data collected in a foreign country be processed and stored within that country. Each of these privacy, security, and data protection laws and regulations, and any other such changes or new laws or regulations, could impose significant limitations, or require changes to our business model or practices or growth strategy, which may increase our compliance expenses and make our business more costly or less efficient to conduct.

Our actual or perceived failure to comply with applicable laws and regulations or other obligations to which we are now or which we may be subject relating to personal data, or to protect personal data from unauthorized acquisition, use or other processing, could result in consequences such as enforcement actions and regulatory investigations against us, fines, public censure, claims for damages by end-customers and other affected individuals, damage to our reputation and loss of goodwill (both in relation to existing end-customers and prospective end-customers), any of which could have a material adverse effect on our operations, financial performance, and business. Evolving and changing definitions of personal data and personal information, within the E.U., the United States, and elsewhere, especially relating to classification of Internet Protocol (“IP”) addresses, machine identification, location data, and other information, may limit or inhibit our ability to operate or expand our business, including limiting strategic partnerships that may involve the sharing or uses of data, and may require significant expenditures and efforts in order to comply. Even the perception of privacy, data protection or information security concerns, whether or not valid, may harm our reputation and inhibit adoption of our products and subscriptions by current and future end-customers.

Risks Related to Operations Outside the United States

We face risks associated with having operations and employees located in Israel.

As a result of various of our acquisitions, including Cyber Secdo Ltd. (“Secdo”), PureSec Ltd. (“PureSec”) and Twistlock Ltd. (“Twistlock”), we have offices and employees located in Israel. Accordingly, political, economic, and military conditions in Israel directly affect our operations. The future of peace efforts between Israel and its Arab neighbors remains uncertain. The effects of hostilities and violence on the Israeli economy and our operations in Israel are unclear, and we cannot predict the effect on us of further increases in these hostilities or future armed conflict, political instability or violence in the region. Current or future tensions and conflicts in the Middle East could adversely affect our business, operating results, financial condition and cash flows.

In addition, many of our employees in Israel are obligated to perform annual reserve duty in the Israeli military and are subject to being called for active duty under emergency circumstances. We cannot predict the full impact of these conditions on us in the future, particularly if emergency circumstances or an escalation in the political situation occurs. If many of our employees in Israel are called for active duty for a significant period of time, our operations and our business could be disrupted and may not be able to function at full capacity. Any disruption in our operations in Israel could adversely affect our business.

We are subject to governmental export and import controls that could subject us to liability or impair our ability to compete in international markets.

Because we incorporate encryption technology into our products, certain of our products are subject to U.S. export controls and may be exported outside the United States only with the required export license or through an export license exception. If we were to fail to comply with U.S. export licensing requirements, U.S. customs regulations, U.S. economic sanctions, or other laws, we could be subject to substantial civil and criminal penalties, including fines, incarceration for responsible employees and managers, and the possible loss of export or import privileges. Obtaining the necessary export license for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products to U.S. embargoed or sanctioned countries, governments, and persons. Even though we take precautions to ensure that our channel partners comply with all relevant regulations, any failure by our channel partners to comply with such regulations could have negative consequences for us, including reputational harm, government investigations, and penalties.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our end-customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products into international markets, prevent our end-customers with international operations from deploying our products globally or, in some cases, prevent or delay the export or import of our products to certain countries, governments, or persons altogether. Any change in export or import regulations, economic sanctions, such as the Sanctions on Russia, or related legislation, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential end-customers with international operations. Any decreased use of our products or limitation on our ability to export to or sell our products in international markets would likely adversely affect our business, financial condition, and operating results.

Tax, Accounting, Compliance and Regulatory Risks

We have a corporate structure aligned with the international nature of our business activities, and if we do not achieve increased tax benefits as a result of our corporate structure, our financial condition and operating results could be adversely affected.

We have reorganized our corporate structure and intercompany relationships to more closely align with the international nature of our business activities. This corporate structure may allow us to reduce our overall effective tax rate through changes in how we use our intellectual property, international procurement, and sales operations. This corporate structure may also allow us to obtain financial and operational efficiencies. These efforts require us to incur expenses in the near term for which we may not realize related benefits. If the structure is not accepted by the applicable tax authorities, if there are any changes in, or interpretations of, domestic and international tax laws that negatively impact the structure, or if we do not operate our business consistent with the structure and applicable tax provisions, we may fail to achieve the reduction in our overall effective tax rate and the other financial and operational efficiencies that we anticipate as a result of the structure and our future financial condition and operating results may be negatively impacted. In addition, we continue to evaluate our corporate structure in light of current and pending tax legislation, and any changes to our corporate structure may require us to incur additional expenses and may impact our overall effective tax rate.

We may have exposure to greater than anticipated tax liabilities.

Our income tax obligations are based in part on our corporate structure and intercompany arrangements, including the manner in which we develop, value, and use our intellectual property and the valuations of our intercompany transactions. The tax laws applicable to our business, including the laws of the United States and other jurisdictions, are subject to interpretation and certain jurisdictions may aggressively interpret their laws in an effort to raise additional tax revenue. The tax authorities of the jurisdictions in which we operate may challenge our methodologies for valuing developed technology or intercompany arrangements, which could increase our worldwide effective tax rate and harm our financial position and operating results. It is possible that tax authorities may disagree with certain positions we have taken, and any adverse outcome of such a review or audit could have a negative effect on our financial position and operating results. Further, the determination of our worldwide provision for or benefit from income taxes and other tax liabilities requires significant judgment by management, and there are transactions where the ultimate tax determination is uncertain. Although we believe that our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded on our consolidated financial statements and may materially affect our financial results in the period or periods for which such determination is made.

In addition, our future income tax obligations could be adversely affected by changes in, or interpretations of, tax laws in the United States or in other jurisdictions in which we operate.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our operating results could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported on our consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue, and expenses that are not readily apparent from other sources. For more information, refer to the section entitled “Critical Accounting Estimates” in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” in Part II, Item 7 of this Annual Report on Form 10-K. In general, if our estimates, judgments or assumptions relating to our critical accounting policies change or if actual circumstances differ from our estimates, judgments or assumptions, including uncertainty in the current economic environment due to COVID-19, our operating results may be adversely affected and could fall below our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our common stock.

Our reputation and/or business could be negatively impacted by ESG matters and/or our reporting of such matters.

There is an increasing focus from regulators, certain investors, and other stakeholders concerning environmental, social, and governance (“ESG”) matters, both in the United States and internationally. We communicate certain ESG-related initiatives, goals, and/or commitments regarding environmental matters, diversity, responsible sourcing and social investments, and other matters in our annual ESG Report, on our website, in our filings with the SEC, and elsewhere. These initiatives, goals, or commitments could be difficult to achieve and costly to implement. We could fail to achieve, or be perceived to fail to achieve, our ESG-related initiatives, goals, or commitments. In addition, we could be criticized for the timing, scope or nature of these initiatives, goals, or commitments, or for any revisions to them. To the extent that our required and voluntary disclosures about ESG matters increase, we could be criticized for the accuracy, adequacy, or completeness of such disclosures. Our actual or perceived failure to achieve our ESG-related initiatives, goals, or commitments could negatively impact our reputation, result in ESG-focused investors not purchasing and holding our stock, or otherwise materially harm our business.

Failure to comply with governmental laws and regulations could harm our business.

Our business is subject to regulation by various federal, state, local, and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, privacy, data security, and data-protection laws, anti-bribery laws (including the U.S. Foreign Corrupt Practices Act and the U.K. Anti-Bribery Act), import/export controls, federal securities laws, and tax laws and regulations. In certain jurisdictions, these regulatory requirements may be more stringent than those in the United States. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages, civil and criminal penalties, or injunctions. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation resulting from any alleged noncompliance, our business, operating results, and financial condition could be materially adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in professional fees. Enforcement actions, litigation, and sanctions could harm our business, operating results, and financial condition.

If we fail to comply with environmental requirements, our business, financial condition, operating results, and reputation could be adversely affected.

We are subject to various environmental laws and regulations including laws governing the hazardous material content of our products and laws relating to the collection of and recycling of electrical and electronic equipment. Examples of these laws and regulations include the E.U. Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Directive (“RoHS”) and the E.U. Waste Electrical and Electronic Equipment Directive (“WEEE Directive”), as well as the implementing legislation of the E.U. member states. Similar laws and regulations have been passed or are pending in China, South Korea, Norway, and Japan and may be enacted in other regions, including in the United States, and we are, or may in the future be, subject to these laws and regulations.

The E.U. RoHS and the similar laws of other jurisdictions limit the content of certain hazardous materials such as lead, mercury, and cadmium in the manufacture of electrical equipment, including our products. Our current products comply with the E.U. RoHS requirements. However, if there are changes to this or other laws (or their interpretation) or if new similar laws are passed in other jurisdictions, we may be required to reengineer our products to use components compatible with these regulations. This reengineering and component substitution could result in additional costs to us or disrupt our operations or logistics.

The WEEE Directive requires electronic goods producers to be responsible for the collection, recycling, and treatment of such products. Changes in interpretation of the directive may cause us to incur costs or have additional regulatory requirements to meet in the future in order to comply with this directive, or with any similar laws adopted in other jurisdictions.

We are also subject to environmental laws and regulations governing the management of hazardous materials, which we use in small quantities in our engineering labs. Our failure to comply with past, present, and future similar laws could result in reduced sales of our products, substantial product inventory write-offs, reputational damage, penalties, and other sanctions, any of which could harm our business and financial condition. We also expect that our products will be affected by new environmental laws and regulations on an ongoing basis. To date, our expenditures for environmental compliance have not had a material impact on our operating results or cash flows, and although we cannot predict the future impact of such laws or regulations, they will likely result in additional costs and may increase penalties associated with violations or require us to change the content of our products or how they are manufactured, which could have a material adverse effect on our business, operating results, and financial condition.

Risks Related to Our Notes

We may not have the ability to raise the funds necessary to settle conversions of our Notes, repurchase our Notes upon a fundamental change, or repay our Notes in cash at their maturity, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of our Notes.

In July 2018 we issued our 2023 Notes (the “2023 Notes”) and in June 2020 we issued our 2025 Notes (the “2025 Notes,” together with the “2023 Notes,” the “Notes”). We will need to make cash payments (1) if holders of our Notes require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change (e.g., a change of control of Palo Alto Networks, Inc.) before the maturity date, (2) upon conversion of our Notes, or (3) to repay our Notes in cash at their maturity, unless earlier converted or repurchased. Effective August 1, 2022 through October 31, 2022, all of the 2023 Notes and 2025 Notes are convertible. If all of the Noteholders decided to convert their Notes, we would be obligated to pay the \$3.7 billion principal amount of the Notes in cash. Under the terms of the Notes, we also have the option to settle the amount of our conversion obligation in excess of the aggregate principal amount of the Notes in cash or shares of our common stock. If our cash provided by operating activities, together with our existing cash, cash equivalents and investments, and existing sources of financing, are inadequate to satisfy these obligations, we will need to obtain third-party financing, which may not be available to us on commercially reasonable terms or at all, to meet these payment obligations.

In addition, our ability to repurchase or to pay cash upon conversion of our Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase our Notes at a time when the repurchase is required by the applicable indenture governing such Notes or to pay cash upon conversion of such Notes as required by the applicable indenture would constitute a default under the indenture. A default under the applicable indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the payment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase our Notes or to pay cash upon conversion of our Notes.

We may still incur substantially more debt or take other actions that would diminish our ability to make payments on our Notes when due.

We and our subsidiaries may be able to incur substantial additional debt in the future, subject to the restrictions contained in our debt instruments, some of which may be secured debt. We are not restricted under the terms of the indenture governing our Notes from incurring additional debt, securing existing or future debt, recapitalizing our debt or taking a number of other actions that are not limited by the terms of such indenture governing our Notes that could have the effect of diminishing our ability to make payments on our Notes when due. While the terms of any future indebtedness we may incur could restrict our ability to incur additional indebtedness, any such restrictions will indirectly benefit holders of our Notes only to the extent any such indebtedness or credit facility is not repaid or does not mature while our Notes are outstanding.

Risks Related to Our Common Stock

Our actual operating results may differ significantly from our guidance.

From time to time, we have released, and may continue to release, guidance in our quarterly earnings releases, quarterly earnings conference calls, or otherwise, regarding our future performance that represents our management’s estimates as of the date of release. This guidance, which includes forward-looking statements, has been and will be based on projections prepared by our management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified Public Accountants, and neither our registered public accountants nor any other independent expert or outside party compiles or examines the projections. Accordingly, no such person expresses any opinion or any other form of assurance with respect to the projections.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic, and competitive uncertainties and contingencies, many of which are beyond our control, such as COVID-19, and are based upon specific assumptions with respect to future business decisions, some of which will change. The rapidly evolving market in which we operate may make it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We intend to state possible outcomes as high and low ranges which are intended to provide a sensitivity analysis as variables are changed. However, actual results will vary from our guidance and the variations may be material. The principal reason that we release guidance is to provide a basis for our management to discuss our business outlook as of the date of release with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons. Investors are urged not to rely upon our guidance in making an investment decision regarding our common stock.

Any failure to successfully implement our operating strategy or the occurrence of any of the events or circumstances set forth in this “Risk Factors” section in this Annual Report on Form 10-K could result in our actual operating results being different from our guidance, and the differences may be adverse and material.

The market price of our common stock historically has been volatile and the value of your investment could decline.

The market price of our common stock has been volatile since our initial public offering (“IPO”) in July 2012. The reported high and low sales prices of our common stock during the last 12 months have ranged from \$367.21 to \$640.90 per share, as measured through August 22, 2022. The market price of our common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include:

- announcements of new products, subscriptions or technologies, commercial relationships, strategic partnerships, acquisitions, or other events by us or our competitors;
- price and volume fluctuations in the overall stock market from time to time;
- news announcements that affect investor perception of our industry, including reports related to the discovery of significant cyberattacks;
- significant volatility in the market price and trading volume of technology companies in general and of companies in our industry;
- fluctuations in the trading volume of our shares or the size of our public float;
- actual or anticipated changes in our operating results or fluctuations in our operating results;
- whether our operating results meet the expectations of securities analysts or investors;
- actual or anticipated changes in the expectations of securities analysts or investors, whether as a result of our forward-looking statements, our failure to meet such expectations or otherwise;
- inaccurate or unfavorable research reports about our business and industry published by securities analysts or reduced coverage of our company by securities analysts;
- litigation involving us, our industry, or both;
- actions instituted by activist shareholders or others;
- regulatory developments in the United States, foreign countries or both;
- major catastrophic events, such as COVID-19;
- sales or repurchases of large blocks of our common stock or substantial future sales by our directors, executive officers, employees and significant stockholders;
- sales of our common stock by investors who view our Notes as a more attractive means of equity participation in us;
- hedging or arbitrage trading activity involving our common stock as a result of the existence of our Notes;
- departures of key personnel; or
- economic uncertainty around the world.

The market price of our common stock could decline for reasons unrelated to our business, operating results, or financial condition and as a result of events that do not directly affect us. In the past, following periods of volatility in the market price of a company’s securities, securities class action litigation has often been brought against that company. Securities litigation could result in substantial costs and divert our management’s attention and resources from our business. This could have a material adverse effect on our business, operating results, and financial condition.

The convertible note hedge and warrant transactions may affect the value of our common stock.

In connection with the sale of our 2023 Notes and 2025 Notes, we entered into convertible note hedge transactions (the “Note Hedges”) with certain counterparties. In connection with each such sale of the Notes, we also entered into warrant transactions with the counterparties pursuant to which we sold warrants (the “Warrants”) for the purchase of our common stock. The Note Hedges for our 2023 Notes and 2025 Notes are expected generally to reduce the potential dilution to our common stock upon any conversion of our Notes and/or offset any cash payments we are required to make in excess of the principal amount of any such converted Notes. The Warrants could separately have a dilutive effect to the extent that the market price per share of our common stock exceeds the applicable strike price of the Warrants unless, subject to certain conditions, we elect to cash settle such Warrants.

The applicable counterparties or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our common stock and/or purchasing or selling our common stock or other securities of ours in secondary market transactions prior to the maturity of the outstanding Notes (and are likely to do so during any applicable observation period related to a conversion of our Notes). This activity could also cause or avoid an increase or a decrease in the market price of our common stock or our Notes, which could affect a note holder’s ability to convert its Notes and, to the extent the activity occurs during any observation period related to a conversion of our Notes, it could affect the amount and value of the consideration that the note holder will receive upon conversion of our Notes.

We do not make any representation or prediction as to the direction or magnitude of any potential effect that the transactions described above may have on the price of our Notes or our common stock. In addition, we do not make any representation that the counterparties or their respective affiliates will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans, the conversion of our Notes or exercise of the related Warrants, or otherwise will dilute all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to 1.0 billion shares of common stock and up to 100.0 million shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue shares of common stock or securities convertible into shares of our common stock from time to time in connection with a financing, acquisition, investment, our stock incentive plans, the conversion of our Notes, the settlement of our Warrants related to each such series of the Notes, or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and cause the market price of our common stock to decline.

We cannot guarantee that our share repurchase program will be fully consummated, or that it will enhance shareholder value, and share repurchases could affect the price of our common stock.

As of July 31, 2022, we had \$85.0 million available under our share repurchase program which will expire on December 31, 2022. Such share repurchase program may be suspended or discontinued by the Company at any time without prior notice. Although our board of directors has authorized a share repurchase program, we are not obligated to repurchase any specific dollar amount or to acquire any specific number of shares under the program. The share repurchase program could affect the price of our common stock, increase volatility and diminish our cash reserves. In addition, the program may be suspended or terminated at any time, which may result in a decrease in the price of our common stock.

We do not intend to pay dividends for the foreseeable future.

We have never declared or paid any dividends on our common stock. We intend to retain any earnings to finance the operation and expansion of our business, and we do not anticipate paying any cash dividends in the future. As a result, you may only receive a return on your investment in our common stock if the market price of our common stock increases.

Our charter documents and Delaware law, as well as certain provisions contained in the indentures governing our Notes, could discourage takeover attempts and lead to management entrenchment, which could also reduce the market price of our common stock.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may have the effect of delaying or preventing a change in control of our company or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws include provisions that:

- establish that our board of directors is divided into three classes, Class I, Class II and Class III, with three-year staggered terms;
- authorize our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval;
- provide our board of directors with the exclusive right to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director;
- prohibit our stockholders from taking action by written consent;

- specify that special meetings of our stockholders may be called only by the chairman of our board of directors, our president, our secretary, or a majority vote of our board of directors;
- require the affirmative vote of holders of at least 66 2/3% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the issuance of preferred stock and management of our business or our amended and restated bylaws;
- authorize our board of directors to amend our bylaws by majority vote; and
- establish advance notice procedures with which our stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting.

These provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for our stockholders to replace members of our board of directors, which is responsible for appointing the members of management. In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. Additionally, certain provisions contained in the indenture governing our Notes could make it more difficult or more expensive for a third party to acquire us. The application of Section 203 or certain provisions contained in the indenture governing our Notes also could have the effect of delaying or preventing a change in control of us. Any of these provisions could, under certain circumstances, depress the market price of our common stock.

General Risk Factors

Our business is subject to the risks of earthquakes, fire, power outages, floods, health risks and other catastrophic events, and to interruption by man-made problems such as terrorism.

Both our corporate headquarters and the location where our products are manufactured are located in the San Francisco Bay Area, a region known for seismic activity. In addition, other natural disasters, such as fire or floods, a significant power outage, telecommunications failure, terrorism, an armed conflict, cyberattacks, epidemics and pandemics such as COVID-19, or other geo-political unrest could affect our supply chain, manufacturers, logistics providers, channel partners, or end-customers or the economy as a whole and such disruption could impact our shipments and sales. These risks may be further increased if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, the loss of customers, or the delay in the manufacture, deployment, or shipment of our products, our business, financial condition, and operating results would be adversely affected.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products and subscriptions could reduce our ability to compete and could harm our business.

We intend to continue to make investments to support our business growth and may require additional funds to respond to business challenges, including the need to develop new features to enhance our portfolio, improve our operating infrastructure, or acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. If we raise additional equity or equity-linked financing, our stockholders may experience significant dilution of their ownership interests and the market price of our common stock could decline. Any conversion of the outstanding Notes into common stock will dilute the ownership interests of existing stockholders to the extent we deliver shares upon conversion of such Notes. See the risk factor entitled "*The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans, the conversion of our Notes or exercise of the related Warrants, or otherwise will dilute all other stockholders.*" The holders of our Notes have priority over holders of our common stock, and if we engage in future debt financings, the holders of such additional debt would also have priority over the holders of our common stock. Current and future indebtedness may also contain terms that, among other things, restrict our ability to incur additional indebtedness. We may also be required to take other actions that would otherwise be in the interests of the debt holders and would require us to maintain specified liquidity or other ratios, any of which could harm our business, operating results, and financial condition. We may not be able to obtain additional financing on terms favorable to us, if at all. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to support our business growth and to respond to business challenges could be significantly impaired, and our business may be adversely affected.

We are obligated to maintain proper and effective internal control over financial reporting. We may not complete our analysis of our internal control over financial reporting in a timely manner, or this internal control may not be determined to be effective, which may adversely affect investor confidence in our company and, as a result, the value of our common stock.

While we were able to determine in our management’s report for fiscal 2022 that our internal control over financial reporting is effective, as well as provide an unqualified attestation report from our independent registered public accounting firm to that effect, we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion, may be unable to assert that our internal controls are effective, or our independent registered public accounting firm may not be able to formally attest to the effectiveness of our internal control over financial reporting in the future. In the event that our chief executive officer, chief financial officer, or independent registered public accounting firm determines in the future that our internal control over financial reporting is not effective as defined under Section 404, we could be subject to one or more investigations or enforcement actions by state or federal regulatory agencies, stockholder lawsuits or other adverse actions requiring us to incur defense costs, pay fines, settlements or judgments and causing investor perceptions to be adversely affected and potentially resulting in a decline in the market price of our stock.

ITEM 1B. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2. PROPERTIES

Our corporate headquarters is located in Santa Clara, California, where we lease approximately 941,000 square feet of space under three lease agreements that expire in July 2028, with options to extend the lease terms through July 2046. We also lease space for personnel in Israel. In addition, we provide our cloud-based subscription offerings through data centers operated under co-location arrangements in the United States, Europe, and Asia. Refer to Note 11. Leases in Part II, Item 8 of this Annual Report on Form 10-K for more information on our operating leases. Additionally, we own 10.4 acres of land adjacent to our headquarters in Santa Clara, California, which we intend to develop to accommodate future expansion, the speed of which development has been slowed due to the current environment.

We believe that our current facilities are adequate to meet our current needs. We intend to expand our facilities or add new facilities as we add employees and enter new geographic markets, and we believe that suitable additional or alternative space will be available as needed to accommodate ongoing operations and any such growth. However, we expect to incur additional expenses in connection with such new or expanded facilities.

ITEM 3. LEGAL PROCEEDINGS

The information set forth under the “Litigation” subheading in Note 12. Commitments and Contingencies in Part II, Item 8 of this Annual Report on Form 10-K is incorporated herein by reference.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

Our common stock, \$0.0001 par value per share, is traded on the Nasdaq Global Select Market under the symbol "PANW." Prior to October 22, 2021, our common stock traded on the New York Stock Exchange ("NYSE") under the symbol "PANW."

Holders of Record

As of August 22, 2022, there were 355 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid, and do not anticipate declaring or paying in the foreseeable future, any cash dividends on our capital stock. Any future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors, subject to applicable laws and will depend on then existing conditions, including our financial condition, operating results, contractual restrictions, capital requirements, business prospects, and other factors our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

See Part III, Item 12 "Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters" of this Annual Report on Form 10-K for more information regarding securities authorized for issuance.

Recent Sales of Unregistered Equity Securities

During the three months ended July 31, 2022, we issued a total of 35,004 shares of our unregistered common stock pursuant to post-closing obligations in connection with our previous acquisitions of The Crypsis Group, Gamma Networks, Inc., and Sinefa Group, Inc. (the "Transactions").

The Transactions did not involve any underwriters, any underwriting discounts or commissions, or any public offering. The issuances of the securities pursuant to the Transactions were exempt from registration under the Securities Act of 1933, as amended (the "Act") by virtue of Section 4(a)(2) of the Act and Rule 506 of Regulation D promulgated thereunder.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table summarizes stock repurchases during the three months ended July 31, 2022 (in millions, except per share amounts):

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽¹⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ⁽¹⁾
May 1, 2022 to May 31, 2022 ⁽¹⁾⁽²⁾	0.0	\$ 436.37	—	\$ 450.0
June 1, 2022 to June 30, 2022 ⁽¹⁾⁽²⁾	0.5	\$ 482.86	0.5	\$ 196.3
July 1, 2022 to July 31, 2022 ⁽¹⁾⁽²⁾	0.3	\$ 486.05	0.3	\$ 85.0
Total	0.8	\$ 483.50	0.8	

⁽¹⁾ On February 26, 2019, we announced that our board of directors authorized a \$1.0 billion share repurchase program, which is funded from available working capital. In December 2020 and August 2021, we announced additional \$700.0 million and \$676.1 million increases to this share repurchase program, respectively, bringing the total authorization to \$2.4 billion, with \$85.0 million remaining as of July 31, 2022. The expiration date of this repurchase authorization was extended to December 31, 2022, and our repurchase program may be suspended or discontinued at any time. Repurchases under our program are to be made at management's discretion on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing.

⁽²⁾ Includes shares of restricted common stock delivered by certain employees upon vesting of equity awards to satisfy tax withholding requirements. The number of shares delivered by these employees to satisfy tax withholding requirements during the period was not significant.

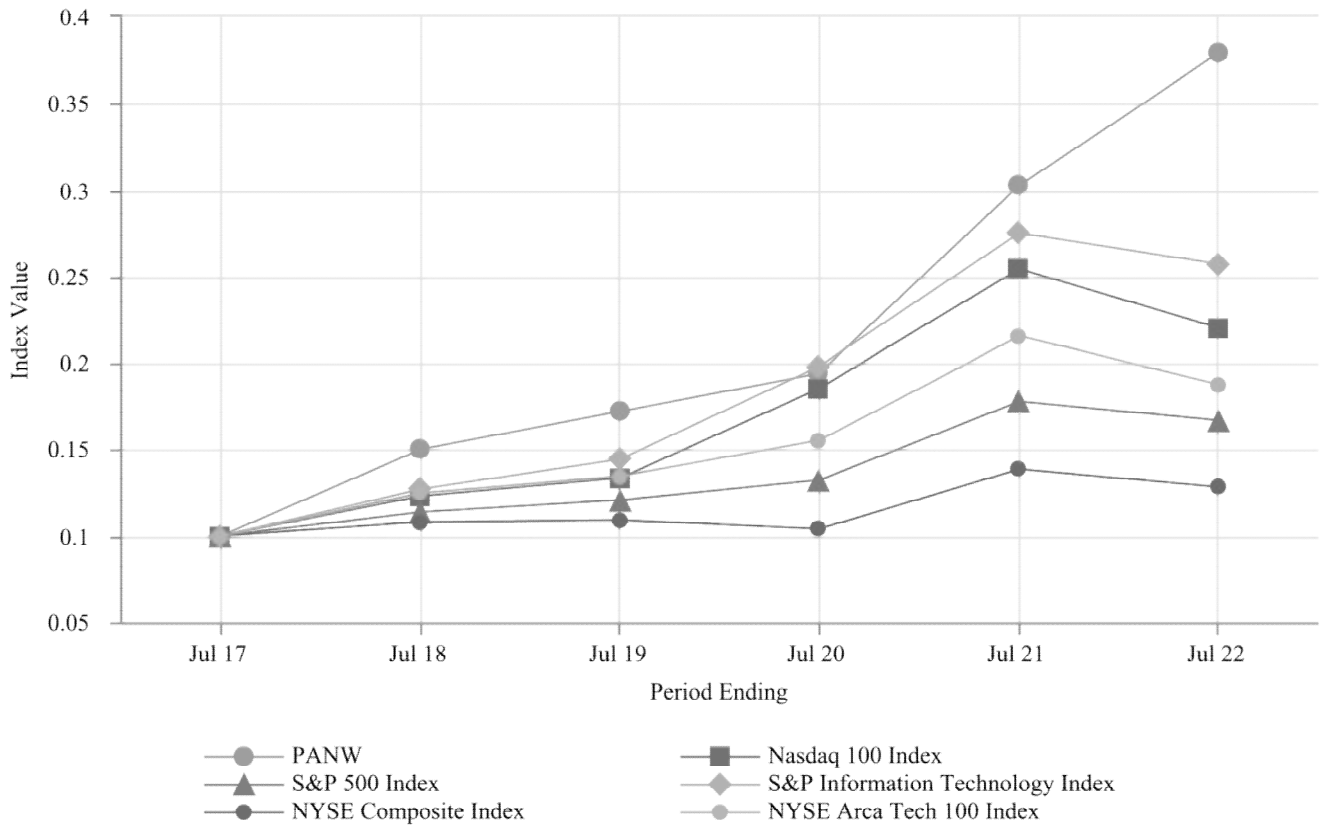
Stock Price Performance Graph

This performance graph shall not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), or incorporated by reference into any filing of Palo Alto Networks, Inc. under the Securities Act of 1933, as amended, or the Exchange Act, except as shall be expressly set forth by specific reference in such filing.

Historically, we have compared the cumulative total return on our common stock with that of the NYSE Composite Index and the NYSE Arca Tech 100 Index. As a result of the change in our listing from the NYSE to Nasdaq in October 2021, we have added the Nasdaq 100 Index, the Standard & Poor’s 500 Index and the Standard & Poor’s Information Technology Index to the indexes that we have historically used.

This performance graph compares the cumulative total return on our common stock with that of the Nasdaq 100 Index, the Standard & Poor’s 500 Index, the Standard & Poor Information Technology Index, the NYSE Composite Index and the NYSE Arca Tech 100 Index for the five years ended July 31, 2022. This performance graph assumes \$100 was invested on July 31, 2017, in each of the common stock of Palo Alto Networks, Inc., the Nasdaq 100 Index, the Standard & Poor’s 500 Index, the Standard & Poor’s Information Technology Index, the NYSE Composite Index, and the NYSE Arca Tech 100 Index, and assumes the reinvestment of any dividends. The stock price performance on this performance graph is not necessarily indicative of future stock price performance.

Palo Alto Networks, Inc. Comparison of Total Return Performance



Company/Index	7/31/2017	7/31/2018	7/31/2019	7/31/2020	7/31/2021	7/31/2022
Palo Alto Networks, Inc.	\$ 100.00	\$ 150.45	\$ 171.91	\$ 194.20	\$ 302.82	\$ 378.74
Nasdaq 100 Index	\$ 100.00	\$ 122.99	\$ 133.48	\$ 185.46	\$ 254.41	\$ 220.19
S&P 500 Index	\$ 100.00	\$ 114.01	\$ 120.65	\$ 132.42	\$ 177.92	\$ 167.20
S&P Information Technology Index	\$ 100.00	\$ 126.83	\$ 144.57	\$ 198.12	\$ 274.74	\$ 257.30
NYSE Composite Index	\$ 100.00	\$ 108.32	\$ 109.18	\$ 104.16	\$ 138.73	\$ 128.08
NYSE Arca Tech 100 Index	\$ 100.00	\$ 124.87	\$ 134.35	\$ 155.18	\$ 215.23	\$ 187.52

ITEM 6. [RESERVED]

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes appearing elsewhere in this Annual Report on Form 10-K. The following discussion and analysis contains forward-looking statements based on current expectations and assumptions that are subject to risks and uncertainties, which could cause our actual results to differ materially from those anticipated or implied by any forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in this Annual Report on Form 10-K, and in particular, the risks discussed under the caption "Risk Factors" in Part I, Item 1A of this report.

Our Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is organized as follows:

- **Overview.** A discussion of our business and overall analysis of financial and other highlights in order to provide context for the remainder of MD&A.
- **Key Financial Metrics.** A summary of our GAAP and non-GAAP key financial metrics, which management monitors to evaluate our performance.
- **Results of Operations.** A discussion of the nature and trends in our financial results and an analysis of our financial results comparing fiscal 2022 to fiscal 2021. For discussion and analysis related to our financial results comparing fiscal 2021 to 2020, refer to Part II, Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations in our Annual Report on Form 10-K for fiscal 2021, which was filed with the Securities and Exchange Commission on September 3, 2021.
- **Liquidity and Capital Resources.** An analysis of changes on our balance sheets and cash flows, and a discussion of our financial condition and our ability to meet cash needs.
- **Contractual Obligations and Commitments.** An overview of our contractual obligations, contingent liabilities, commitments, and off-balance sheet arrangements outstanding as of July 31, 2022, including expected payment schedules.
- **Critical Accounting Estimates.** A discussion of our accounting policies that require critical estimates, assumptions, and judgments.
- **Recent Accounting Pronouncements.** A discussion of expected impacts of impending accounting changes on financial information to be reported in the future.

Overview

We empower enterprises, organizations, service providers, and government entities to protect themselves against today's most sophisticated cyber threats. Our cybersecurity platforms and services help secure enterprise users, networks, clouds, and endpoints by delivering comprehensive cybersecurity backed by industry leading artificial intelligence and automation. We are a leading provider of zero trust solutions that start with the next-generation of zero trust network access to secure remote workforces and extend into securing all users, applications and infrastructure with zero trust principles. Our security solutions are designed to reduce customers' total cost of ownership by improving operational efficiency and eliminating the need for siloed point products. Our company focuses on delivering value in five fundamental areas:

Network Security:

- Our network security platform, which includes our ML-Powered Next-Generation Firewalls, available in a number of form factors, including physical, virtual, and containerized appliances, as well as a cloud-delivered service, has been a leader in the industry for ten consecutive years. Our network security platform also includes our Cloud-Delivered Security Services, such as Threat Prevention, Advanced Threat Prevention, WildFire[®], Advanced URL Filtering, DNS Security, IoT Security, GlobalProtect[™], SD-WAN, Enterprise Data Loss Prevention ("Enterprise DLP"), SaaS Security API and SaaS Security Inline. Through these add-on security services, our customers are able to secure their content, applications, users, and devices across our network security platform as well as the Prisma[®] and Cortex[®] product lines. Panorama[™], our network security management solution, available as hardware or virtual machine, can centrally manage our network security platform irrespective of form factor, location, or scale.

Secure Access Service Edge:

- Prisma Access is our next-generation Zero Trust Network Access (“ZTNA”) platform that provides secure network access for all employees with unified policy management and continuous threat inspection. We have recently introduced ZTNA 2.0, which addresses major shortcomings in the first-generation ZTNA products in the industry (which we refer to as ZTNA 1.0). Prisma Access delivers granular least-privileged access along with continuous trust verification and security inspection and protects security for all applications and data across the enterprise infrastructure. Prisma Access, when combined with Prisma SD-WAN, provides a comprehensive single-vendor Secure Access Service Edge (“SASE”) offering that is used to secure remote workforces and enable the cloud-delivered branch.

Cloud Security:

- We enable cloud native security through our Prisma Cloud platform. As a comprehensive Cloud Native Application Protection Platform (“CNAPP”), Prisma Cloud secures hybrid and multi-cloud environments for applications, data, and the entire cloud native technology stack across the full development lifecycle; from code to runtime. For inline network security on multi and hybrid-cloud environments, we also offer our VM-Series and CN-Series Firewall offerings.

Security Operations:

- We deliver the next generation of endpoint security, security analytics and security automation solutions through our Cortex portfolio. These include our industry-leading extended detection and response platform Cortex XDR® to prevent, detect, and respond to complex cybersecurity attacks, Cortex XSOAR® for security orchestration, automation, and response (“SOAR”), Cortex Xpanse® for attack surface management (“ASM”) and Cortex Data Lake allowing our customers to collect and analyze large amounts of context-rich data across endpoints, networks, and clouds. These products are delivered as software or SaaS subscriptions.

Threat Intelligence and Security Consulting (Unit 42):

- We enable security teams with up-to-date threat intelligence and deep cybersecurity expertise before, during and after attacks through our Unit 42 threat research and security consulting team. Unit 42 offers incident response, risk management, board advisory and proactive cybersecurity assessment services.

For fiscal 2022 and 2021, total revenue was \$5.5 billion and \$4.3 billion, respectively, representing year-over-year growth of 29.3%. Our growth reflects the increased adoption of our portfolio, which consists of product, subscriptions, and support. We believe our portfolio will enable us to benefit from recurring revenues and new revenues as we continue to grow our end-customer base. As of July 31, 2022, we had end-customers in over 180 countries. Our end-customers represent a broad range of industries, including education, energy, financial services, government entities, healthcare, Internet and media, manufacturing, public sector, and telecommunications, and include almost all of the Fortune 100 companies and a majority of the Global 2000 companies in the world. We maintain a field sales force that works closely with our channel partners in developing sales opportunities. We primarily use a two-tiered, indirect fulfillment model whereby we sell our products, subscriptions, and support to our distributors, which, in turn, sell to our resellers, which then sell to our end-customers.

Our product revenue grew to \$1.4 billion or 24.8% of total revenue for fiscal 2022, representing year-over-year growth of 21.7%. Product revenue is primarily generated from sales of our appliances, primarily our ML-Powered Next-Generation Firewall, which is available in a number of form factors, including as physical, virtual, and containerized appliances. Our ML-Powered Next-Generation Firewall incorporates our PAN-OS operating system, which provides a consistent set of capabilities across our entire network security product line. Our products are designed for different performance requirements throughout an organization, ranging from our PA-410, which is designed for small organizations and remote or branch offices, to our top-of-the-line PA-7080, which is designed for large-scale data centers and service provider use. The same firewall functionality that is delivered in our physical appliances is also available in our VM-Series virtual firewalls, which secure virtualized and cloud-based computing environments, and in our CN-Series container firewalls, which secure container environments and traffic.

Our subscription and support revenue grew to \$4.1 billion or 75.2% of total revenue for fiscal 2022, representing year-over-year growth of 32.0%. Our subscriptions provide our end-customers with near real-time access to the latest antivirus, intrusion prevention, web filtering, modern malware prevention, data loss prevention, and cloud access security broker capabilities across the network, endpoints, and the cloud. When end-customers purchase our physical, virtual, or container firewall appliances, or certain cloud offerings, they typically purchase support in order to receive ongoing security updates, upgrades, bug fixes, and repairs. In addition to the subscriptions purchased with these appliances, end-customers may also purchase other subscriptions on a per-user, per-endpoint, or capacity-based basis. We also offer professional services, including incident response, risk management, and digital forensic services.

We continue to invest in innovation as we evolve and further extend the capabilities of our portfolio, as we believe that innovation and timely development of new features and products are essential to meeting the needs of our end-customers and improving our competitive position. During fiscal 2022, we introduced several new offerings, including: Prisma Cloud 3.0, Prisma Access 3.0, AIOps for NGFW, PAN-OS 10.2, and Cloud NGFW for AWS.

We believe that the growth of our business and our short-term and long-term success are dependent upon many factors, including our ability to extend our technology leadership, grow our base of end-customers, expand deployment of our portfolio and support offerings within existing end-customers, and focus on end-customer satisfaction. To manage any future growth effectively, we must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems and controls, and our ability to manage headcount, capital, and processes in an efficient manner. While these areas present significant opportunities for us, they also pose challenges and risks that we must successfully address in order to sustain the growth of our business and improve our operating results. For additional information regarding the challenges and risks we face, see the “Risk Factors” section in Part I, Item 1A of this Annual Report on Form 10-K.

Impact of COVID-19 and Other Macroeconomic Factors on Our Business

We are actively monitoring, evaluating, and responding to developments relating to COVID-19, which has resulted in and is expected to continue to result in significant global, social, and business disruption. While we instituted a global work-from-home policy beginning in March 2020, which has been modified to provide employees with the choice to work in our offices for a set number of days per week or completely remotely, we did not experience significant disruption in our work operations during fiscal 2022. We will continue to actively monitor the situation, including progress made through vaccinations, and we will make further changes to our business operations as may be required by federal, state, or local authorities or that we determine are in the best interests of our employees, end-customers, partners, suppliers, and stockholders. Our focus remains on the safety of our employees, and we strive to protect the health and well-being of the communities in which we operate, in part, by providing technology to our employees, end-customers, and partners to help them do their best work while working remotely.

COVID-19 has affected our end-customers’ spending and could lead them to delay or defer purchasing decisions, and lengthen sales cycles and payment terms, which could materially adversely impact our business, results of operations, and overall financial performance. The extent of the impact of COVID-19 on our operational and financial performance will depend on developments, including the duration and spread of the virus and its variants, impact on our end-customers’ spending, volume of sales and length of our sales cycles, impact on our partners, suppliers, and employees, actions that may be taken by governmental authorities, and other factors identified in Part I, Item 1A “Risk Factors” in this Form 10-K. The global supply chain and the semiconductor industry are experiencing significant challenges. We have seen supply chain challenges increase, including chip and component shortages, which have, in certain cases, caused delays for us in acquiring chips, components and inventory and have resulted in increased costs as compared to historic levels. While we incurred increased costs and experienced increased lead time for certain product deliveries to our end-customers, we continue to work to minimize the effects from supply chain challenges.

In addition, our overall performance depends in part on worldwide economic and geopolitical conditions. Worsening economic conditions, including inflation, higher interest rates, fluctuations in foreign exchange rates and other changes in economic conditions, may adversely affect our financial performance.

Key Financial Metrics

We monitor the key financial metrics set forth in the tables below to help us evaluate growth trends, establish budgets, measure the effectiveness of our sales and marketing efforts, and assess operational efficiencies. We discuss revenue, gross margin, and the components of operating loss and margin below under “Results of Operations.”

	July 31,		
	2022	2021	
	(in millions)		
Total deferred revenue	\$ 6,994.0	\$	5,024.0
Cash, cash equivalents, and investments.....	\$ 4,686.4	\$	3,789.4

	Year Ended July 31,		
	2022	2021	2020
	(dollars in millions)		
Total revenue.....	\$ 5,501.5	\$ 4,256.1	\$ 3,408.4
Total revenue year-over-year percentage increase	29.3 %	24.9 %	17.5 %
Gross margin.....	68.8 %	70.0 %	70.7 %
Operating loss	\$ (188.8)	\$ (304.1)	\$ (179.0)
Operating margin	(3.4)%	(7.1)%	(5.3)%
Billings.....	\$ 7,471.5	\$ 5,452.2	\$ 4,301.7
Billings year-over-year percentage increase	37.0 %	26.7 %	23.3 %
Cash flow provided by operating activities.....	\$ 1,984.7	\$ 1,503.0	\$ 1,035.7
Free cash flow (non-GAAP)	\$ 1,791.9	\$ 1,387.0	\$ 821.3

- **Deferred Revenue.** Our deferred revenue primarily consists of amounts that have been invoiced but have not been recognized as revenue as of the period end. The majority of our deferred revenue balance consists of subscription and support revenue that is recognized ratably over the contractual service period. We monitor our deferred revenue balance because it represents a significant portion of revenue to be recognized in future periods.
- **Billings.** We define billings as total revenue plus the change in total deferred revenue, net of acquired deferred revenue, during the period. We consider billings to be a key metric used by management to manage our business. We believe billings provides investors with an important indicator of the health and visibility of our business because it includes subscription and support revenue, which is recognized ratably over the contractual service period, and product revenue, which is recognized at the time of shipment, provided that all other conditions for revenue recognition have been met. We consider billings to be a useful metric for management and investors, particularly if we continue to experience increased sales of subscriptions and strong renewal rates for subscription and support offerings, and as we monitor our near-term cash flows. While we believe that billings provides useful information to investors and others in understanding and evaluating our operating results in the same manner as our management, it is important to note that other companies, including companies in our industry, may not use billings, may calculate billings differently, may have different billing frequencies, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of billings as a comparative measure. We calculate billings in the following manner:

	Year Ended July 31,		
	2022	2021	2020
	(in millions)		
Billings:			
Total revenue	\$ 5,501.5	\$ 4,256.1	\$ 3,408.4
Add: change in total deferred revenue, net of acquired deferred revenue.....	1,970.0	1,196.1	893.3
Billings.....	\$ 7,471.5	\$ 5,452.2	\$ 4,301.7

- **Cash Flow Provided by Operating Activities.** We monitor cash flow provided by operating activities as a measure of our overall business performance. Our cash flow provided by operating activities is driven in large part by sales of our products and from up-front payments for subscription and support offerings. Monitoring cash flow provided by operating activities enables us to analyze our financial performance without the non-cash effects of certain items such as depreciation, amortization, and share-based compensation costs, thereby allowing us to better understand and manage the cash needs of our business.
- **Free Cash Flow (non-GAAP).** We define free cash flow, a non-GAAP financial measure, as cash provided by operating activities less purchases of property, equipment, and other assets. We consider free cash flow to be a profitability and liquidity measure that provides useful information to management and investors about the amount of cash generated by the business after necessary capital expenditures. A limitation of the utility of free cash flow as a measure of our financial performance and liquidity is that it does not represent the total increase or decrease in our cash balance for the period. In addition, it is important to note that other companies, including companies in our industry, may not use free cash flow, may calculate free cash flow in a different manner than we do, or may use other financial measures to evaluate their performance, all of which could reduce the usefulness of free cash flow as a comparative measure. A reconciliation of free cash flow to cash flow provided by operating activities, the most directly comparable financial measure calculated and presented in accordance with GAAP, is provided below:

	Year Ended July 31,		
	2022	2021	2020
	(in millions)		
Free cash flow (non-GAAP):			
Net cash provided by operating activities	\$ 1,984.7	\$ 1,503.0	\$ 1,035.7
Less: purchases of property, equipment, and other assets	192.8	116.0	214.4
Free cash flow (non-GAAP)	<u>\$ 1,791.9</u>	<u>\$ 1,387.0</u>	<u>\$ 821.3</u>
Net cash provided by (used in) investing activities	<u>\$ (933.4)</u>	<u>\$ (1,480.6)</u>	<u>\$ 288.0</u>
Net cash provided by (used in) financing activities	<u>\$ (806.6)</u>	<u>\$ (1,104.0)</u>	<u>\$ 673.0</u>

Results of Operations

The following table summarizes our results of operations for the periods presented and as a percentage of our total revenue for those periods based on our consolidated statements of operations data. The period to period comparison of results is not necessarily indicative of results for future periods.

	Year Ended July 31,					
	2022		2021		2020	
	Amount	% of Revenue	Amount	% of Revenue	Amount	% of Revenue
(dollars in millions)						
Revenue:						
Product.....	\$ 1,363.1	24.8 %	\$ 1,120.3	26.3 %	\$ 1,064.2	31.2 %
Subscription and support	4,138.4	75.2 %	3,135.8	73.7 %	2,344.2	68.8 %
Total revenue	5,501.5	100.0 %	4,256.1	100.0 %	3,408.4	100.0 %
Cost of revenue:						
Product.....	455.5	8.3 %	308.5	7.2 %	294.4	8.6 %
Subscription and support	1,263.2	22.9 %	966.4	22.8 %	705.1	20.7 %
Total cost of revenue ⁽¹⁾	1,718.7	31.2 %	1,274.9	30.0 %	999.5	29.3 %
Total gross profit.....	3,782.8	68.8 %	2,981.2	70.0 %	2,408.9	70.7 %
Operating expenses:						
Research and development	1,417.7	25.8 %	1,140.4	26.8 %	768.1	22.5 %
Sales and marketing	2,148.9	39.0 %	1,753.8	41.1 %	1,520.2	44.7 %
General and administrative	405.0	7.4 %	391.1	9.2 %	299.6	8.8 %
Total operating expenses ⁽¹⁾	3,971.6	72.2 %	3,285.3	77.1 %	2,587.9	76.0 %
Operating loss	(188.8)	(3.4)%	(304.1)	(7.1)%	(179.0)	(5.3)%
Interest expense.....	(27.4)	(0.5)%	(163.3)	(3.8)%	(88.7)	(2.6)%
Other income, net.....	9.0	0.1 %	2.4	0.0 %	35.9	1.1 %
Loss before income taxes.....	(207.2)	(3.8)%	(465.0)	(10.9)%	(231.8)	(6.8)%
Provision for income taxes.....	59.8	1.1 %	33.9	0.8 %	35.2	1.0 %
Net loss	\$ (267.0)	(4.9)%	\$ (498.9)	(11.7)%	\$ (267.0)	(7.8)%

⁽¹⁾ Includes share-based compensation as follows:

	Year Ended July 31,		
	2022	2021	2020
	(in millions)		
Cost of product revenue	\$ 9.3	\$ 6.2	\$ 5.7
Cost of subscription and support revenue	110.2	93.0	77.7
Research and development.....	471.1	428.9	274.6
Sales and marketing	304.7	269.9	214.5
General and administrative	118.1	128.9	92.0
Total share-based compensation	\$ 1,013.4	\$ 926.9	\$ 664.5

Revenue

Our revenue consists of product revenue and subscription and support revenue. Revenue is recognized upon transfer of control of the corresponding promised products and subscriptions and support to our customers in an amount that reflects the consideration we expect to be entitled to in exchange for those products and subscriptions and support. We expect our revenue to vary from quarter to quarter based on seasonal and cyclical factors.

Product Revenue

Product revenue is derived from sales of our appliances, primarily our ML-Powered Next-Generation Firewall, which is available in a number of form factors, including as physical, virtual, and containerized appliances. Product revenue also includes revenue derived from software licenses of Panorama. Our appliances and software licenses include a broad set of built-in networking and security features and functionalities. We recognize product revenue at the time of hardware shipment or delivery of software license.

	Year Ended July 31,				Year Ended July 31,			
	2022		2021		2021		2020	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%
(dollars in millions)								
Product.....	\$ 1,363.1	\$ 1,120.3	\$ 242.8	21.7 %	\$ 1,120.3	\$ 1,064.2	\$ 56.1	5.3 %

Product revenue increased for fiscal 2022 compared to fiscal 2021 primarily due to increased demand for our new generation of products, which includes customer transition from our legacy products.

Subscription and Support Revenue

Subscription and support revenue is derived primarily from sales of our subscription and support offerings. Our contractual subscription and support contracts are typically one to five years. We recognize revenue from subscriptions and support over time as the services are performed. As a percentage of total revenue, we expect our subscription and support revenue to vary from quarter to quarter and increase over the long term as we introduce new subscriptions, renew existing subscription and support contracts, and expand our installed end-customer base.

	Year Ended July 31,				Year Ended July 31,			
	2022		2021		2021		2020	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%
(dollars in millions)								
Subscription	\$ 2,539.0	\$ 1,898.8	\$ 640.2	33.7 %	\$ 1,898.8	\$ 1,405.3	\$ 493.5	35.1 %
Support.....	1,599.4	1,237.0	362.4	29.3 %	1,237.0	938.9	298.1	31.7 %
Total subscription and support.....	<u>\$ 4,138.4</u>	<u>\$ 3,135.8</u>	<u>\$ 1,002.6</u>	<u>32.0 %</u>	<u>\$ 3,135.8</u>	<u>\$ 2,344.2</u>	<u>\$ 791.6</u>	<u>33.8 %</u>

Subscription and support revenue increased for fiscal 2022 compared to fiscal 2021 due to increased demand for our subscription and support offerings from our end-customers. The mix between subscription revenue and support revenue will fluctuate over time, depending on the introduction of new subscription offerings, renewals of support services, and our ability to increase sales to new and existing end-customers.

Revenue by Geographic Theater

	Year Ended July 31,				Year Ended July 31,			
	2022		2021		2021		2020	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%
(dollars in millions)								
Americas	\$ 3,802.6	\$ 2,937.5	\$ 865.1	29.5 %	\$ 2,937.5	\$ 2,318.0	\$ 619.5	26.7 %
EMEA	1,055.8	817.3	238.5	29.2 %	817.3	671.9	145.4	21.6 %
APAC	643.1	501.3	141.8	28.3 %	501.3	418.5	82.8	19.8 %
Total revenue	<u>\$ 5,501.5</u>	<u>\$ 4,256.1</u>	<u>\$ 1,245.4</u>	<u>29.3 %</u>	<u>\$ 4,256.1</u>	<u>\$ 3,408.4</u>	<u>\$ 847.7</u>	<u>24.9 %</u>

With respect to geographic theaters, the Americas contributed the largest portion of the year-over-year increases in revenue for fiscal 2022 due to its larger and more established sales force compared to our other theaters. Revenue from Europe, the Middle East, and Africa (“EMEA”) and Asia Pacific and Japan (“APAC”) increased year-over-year for fiscal 2022 due to increasing investment in global sales force in order to support our growth and innovation.

Cost of Revenue

Our cost of revenue consists of cost of product revenue and cost of subscription and support revenue.

Cost of Product Revenue

Cost of product revenue primarily includes costs paid to our manufacturing partners for procuring components and manufacturing our products. Our cost of product revenue also includes personnel costs, which consist of salaries, benefits, bonuses, share-based compensation and travel and entertainment associated with our operations organization, amortization of intellectual property licenses, product testing costs, shipping and tariff costs, and shared costs. Shared costs consist of certain facilities, depreciation, benefits, recruiting, and information technology costs that we allocate based on headcount. We expect our cost of product revenue to fluctuate with our product revenue.

	Year Ended July 31,				Year Ended July 31,			
	2022		2021		2021		2020	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%
(dollars in millions)								
Cost of product revenue	\$ 455.5	\$ 308.5	\$ 147.0	47.6 %	\$ 308.5	\$ 294.4	\$ 14.1	4.8 %
Number of employees at period end	149	127	22	17.3 %	127	117	10	8.5 %

Cost of product revenue increased for fiscal 2022 compared to fiscal 2021 primarily due to an increase in the volume of product sold. The remaining increase in costs was primarily driven by supply chain challenges.

Cost of Subscription and Support Revenue

Cost of subscription and support revenue includes personnel costs for our global customer support and technical operations organizations, customer support and repair costs, third-party professional services costs, data center and cloud hosting service costs, amortization of acquired intangible assets and capitalized software development costs, and shared costs. We expect our cost of subscription and support revenue to increase as our installed end-customer base grows and adoption of our cloud-based subscription offerings increases.

	Year Ended July 31,				Year Ended July 31,			
	2022		2021		2021		2020	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%
(dollars in millions)								
Cost of subscription and support revenue	\$ 1,263.2	\$ 966.4	\$ 296.8	30.7 %	\$ 966.4	\$ 705.1	\$ 261.3	37.1 %
Number of employees at period end	2,515	2,108	407	19.3 %	2,108	1,402	706	50.4 %

Cost of subscription and support revenue increased for fiscal 2022 compared to fiscal 2021 primarily due to increased costs to support the growth of our subscription and support offerings. Personnel costs grew \$135.4 million to \$547.8 million for fiscal 2022 compared to fiscal 2021 primarily due to headcount growth. The remaining increase was primarily due to increased cloud hosting service costs to support our cloud-based subscription offerings, outside service costs for global customer support resulting from the expansions of our customer base and product portfolio, and shared costs.

Gross Margin

Gross margin has been and will continue to be affected by a variety of factors, including the introduction of new products, manufacturing costs, the average sales price of our products, cloud hosting service costs, personnel costs, the mix of products sold, and the mix of revenue between product and subscription and support offerings. Our virtual and higher-end firewall products generally have higher gross margins than our lower-end firewall products within each product series. We expect our gross margins to vary over time depending on the factors described above.

	Year Ended July 31,					
	2022		2021		2020	
	Amount	Gross Margin	Amount	Gross Margin	Amount	Gross Margin
(dollars in millions)						
Product	\$ 907.6	66.6 %	\$ 811.8	72.5 %	\$ 769.8	72.3 %
Subscription and support	2,875.2	69.5 %	2,169.4	69.2 %	1,639.1	69.9 %
Total gross profit	\$ 3,782.8	68.8 %	\$ 2,981.2	70.0 %	\$ 2,408.9	70.7 %

Product gross margin decreased for fiscal 2022 compared to fiscal 2021 primarily due to higher costs related to our product offerings driven by supply chain challenges.

Subscription and support gross margin was relatively flat for fiscal 2022 compared to fiscal 2021.

Operating Expenses

Our operating expenses consist of research and development, sales and marketing, and general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, share-based compensation, travel and entertainment, and with regard to sales and marketing expense, sales commissions. Our operating expenses also include shared costs, which consist of certain facilities, depreciation, benefits, recruiting, and information technology costs that we allocate based on headcount to each department. We expect operating expenses generally to increase in absolute dollars and decrease over the long term as a percentage of revenue as we continue to scale our business. As of July 31, 2022, we expect to recognize approximately \$1.8 billion of share-based compensation expense over a weighted-average period of approximately 2.6 years, excluding additional share-based compensation expense related to any future grants of share-based awards. Share-based compensation expense is generally recognized on a straight-line basis over the requisite service periods of the awards.

Research and Development

Research and development expense consists primarily of personnel costs. Research and development expense also includes prototype related expenses and shared costs. We expect research and development expense to increase in absolute dollars as we continue to invest in our future products and services, although our research and development expense may fluctuate as a percentage of total revenue.

	<u>Year Ended July 31,</u>		<u>Change</u>		<u>Year Ended July 31,</u>		<u>Change</u>	
	<u>2022</u>	<u>2021</u>			<u>2021</u>	<u>2020</u>		
	<u>Amount</u>	<u>Amount</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>Amount</u>	<u>Amount</u>	<u>%</u>
(dollars in millions)								
Research and development	\$1,417.7	\$1,140.4	\$ 277.3	24.3 %	\$1,140.4	\$ 768.1	\$ 372.3	48.5 %
Number of employees at period end	3,268	2,595	673	25.9 %	2,595	1,821	774	42.5 %

Research and development expense increased for fiscal 2022 compared to fiscal 2021 primarily due to an increase in personnel costs, which grew \$193.5 million to \$1.1 billion, primarily due to headcount growth. The increase in research and development expense was further driven by increased shared costs and third-party product development costs.

Sales and Marketing

Sales and marketing expense consists primarily of personnel costs, including commission expense. Sales and marketing expense also includes costs for market development programs, promotional and other marketing costs, professional services, and shared costs. We continue to strategically invest in headcount and have grown our sales presence. We expect sales and marketing expense to continue to increase in absolute dollars as we increase the size of our sales and marketing organizations to grow our customer base, increase touch points with end-customers, and expand our global presence, although our sales and marketing expense may fluctuate as a percentage of total revenue.

	<u>Year Ended July 31,</u>		<u>Change</u>		<u>Year Ended July 31,</u>		<u>Change</u>	
	<u>2022</u>	<u>2021</u>			<u>2021</u>	<u>2020</u>		
	<u>Amount</u>	<u>Amount</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>Amount</u>	<u>Amount</u>	<u>%</u>
(dollars in millions)								
Sales and marketing	\$2,148.9	\$1,753.8	\$ 395.1	22.5 %	\$1,753.8	\$1,520.2	\$ 233.6	15.4 %
Number of employees at period end	5,167	4,493	674	15.0 %	4,493	3,800	693	18.2 %

Sales and marketing expense increased for fiscal 2022 compared to fiscal 2021 primarily due to an increase in personnel costs, which grew \$291.8 million to \$1.6 billion, primarily due to headcount growth and increased travel and entertainment expenses. The increase in sales and marketing expense was further driven by an increase in costs associated with marketing activities.

General and Administrative

General and administrative expense consists primarily of personnel costs and shared costs for our executive, finance, human resources, information technology, and legal organizations, and professional services costs, which consist primarily of legal, auditing, accounting, and other consulting costs. We expect general and administrative expense to increase in absolute dollars as we increase the size of our general and administrative organizations and incur additional costs to support our business growth, although our general and administrative expense may fluctuate as a percentage of total revenue.

	Year Ended July 31,				Year Ended July 31,			
	2022	2021	Change		2021	2020	Change	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%

(dollars in millions)

General and administrative	\$ 405.0	\$ 391.1	\$ 13.9	3.6 %	\$ 391.1	\$ 299.6	\$ 91.5	30.5 %
Number of employees at period end	1,462	1,150	312	27.1 %	1,150	874	276	31.6 %

General and administrative expenses increased for fiscal 2022 compared to fiscal 2021 primarily due to personnel costs, which grew \$24.6 million to \$268.6 million, partially offset by a decrease in acquisition-related costs. The increase in personnel costs was primarily due to headcount growth, partially offset by lower share-based compensation related to accelerated vesting of equity awards in connection with acquisitions.

Interest Expense

Interest expense primarily consists of interest expense related to our 0.75% Convertible Senior Notes due 2023 (the “2023 Notes”) and the 0.375% Convertible Senior Notes due 2025 (the “2025 Notes,” and together with “2023 Notes,” the “Notes”).

	Year Ended July 31,				Year Ended July 31,			
	2022	2021	Change		2021	2020	Change	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%

(dollars in millions)

Interest expense	\$ 27.4	\$ 163.3	\$ (135.9)	(83.2)%	\$ 163.3	\$ 88.7	\$ 74.6	84.1 %
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Interest expense decreased for fiscal 2022 compared to fiscal 2021 primarily because we no longer recognize interest expense for amortization of the debt discount as a result of the adoption of new debt guidance. Refer to Note 1. Description of Business and Summary of Significant Accounting Policies and Note 10. Debt in Part II, Item 8 of this Annual Report on Form 10-K for more information.

Other Income, Net

Other income, net includes interest income earned on our cash, cash equivalents, and investments, and gains and losses from foreign currency remeasurement and foreign currency transactions.

	Year Ended July 31,				Year Ended July 31,			
	2022	2021	Change		2021	2020	Change	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%

(dollars in millions)

Other income, net	\$ 9.0	\$ 2.4	\$ 6.6	275.0 %	\$ 2.4	\$ 35.9	\$ (33.5)	(93.3)%
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Other income, net increased for fiscal 2022 compared to fiscal 2021 primarily due to increased foreign currency exchange gains and higher interest income earned on our cash, cash equivalent, and investment balances as a result of higher interest rates for fiscal 2022 compared to fiscal 2021, partially offset by increased losses related to non-designated derivative instruments.

Provision for Income Taxes

Provision for income taxes consists primarily of income taxes in foreign jurisdictions in which we conduct business and withholding taxes. We maintain a full valuation allowance for domestic and certain foreign deferred tax assets, including net operating loss carryforwards and certain domestic tax credits. Our valuation allowance has caused, and may continue to cause, disproportionate relationships between our overall effective tax rate and other jurisdictional measures.

	Year Ended July 31,				Year Ended July 31,			
	2022	2021	Change		2021	2020	Change	
	Amount	Amount	Amount	%	Amount	Amount	Amount	%

(dollars in millions)

Provision for income taxes.....	\$ 59.8	\$ 33.9	\$ 25.9	76.4 %	\$ 33.9	\$ 35.2	\$ (1.3)	(3.7)%
Effective tax rate.....	(28.9)%	(7.3)%			(7.3)%	(15.2)%		

We recorded an income tax provision for fiscal 2022. The provision for income taxes for fiscal 2022 was primarily due to income taxes in profitable foreign jurisdictions and withholding taxes. Our provision for income taxes increased for fiscal 2022 compared to fiscal 2021, primarily due to foreign income and withholding taxes. Refer to Note 15. Income Taxes in Part II, Item 8 of this Annual Report on Form 10-K for more information.

Liquidity and Capital Resources

	July 31,	
	2022	2021
	(in millions)	
Working capital ⁽¹⁾	\$ (1,891.4)	\$ (469.4)
Cash, cash equivalents, and investments:		
Cash and cash equivalents	\$ 2,118.5	\$ 1,874.2
Investments	2,567.9	1,915.2
Total cash, cash equivalents, and investments.....	<u>\$ 4,686.4</u>	<u>\$ 3,789.4</u>

(1) Current liabilities included net carrying amounts of convertible senior notes of \$3.7 billion and \$1.6 billion as of July 31, 2022 and 2021, respectively. Refer to Note 10. Debt in Part II, Item 8 of this Annual Report on Form 10-K for information on the Notes.

As of July 31, 2022, our total cash, cash equivalents, and investments of \$4.7 billion were held for general corporate purposes. As of July 31, 2022, we had no unremitted earnings when evaluating our outside basis difference relating to our U.S. investment in foreign subsidiaries. However, there could be local withholding taxes payable due to various foreign countries if certain lower tier earnings are distributed. Withholding taxes that would be payable upon remittance of these lower tier earnings are not expected to be material.

Debt

In July 2018, we issued the 2023 Notes with an aggregate principal amount of \$1.7 billion. In June 2020, we issued the 2025 Notes with an aggregate principal amount of \$2.0 billion. The 2023 Notes mature on July 1, 2023 and the 2025 Notes mature on June 1, 2025; however, under certain circumstances, holders may surrender their Notes of a series for conversion prior to the applicable maturity date. Upon conversion of the Notes of a series, we will pay cash equal to the aggregate principal amount of the Notes of such series to be converted, and, at our election, will pay or deliver cash and/or shares of our common stock for the amount of our conversion obligation in excess of the aggregate principal amount of the Notes of such series being converted. The sale price condition for the Notes was met during the fiscal quarter ended July 31, 2022, and as a result, holders may convert their Notes at any time during the fiscal quarter ending October 31, 2022. If all of the holders of the Notes converted their Notes during this period, we would be obligated to settle the \$3.7 billion principal amount of the Notes in cash. We believe that our cash provided by operating activities, our existing cash, cash equivalents and investments, and existing sources of and access to financing will be sufficient to meet our anticipated cash needs should the holders choose to convert their Notes during the fiscal quarter ending October 31, 2022 or hold the 2023 Notes until maturity on July 1, 2023. As of July 31, 2022, substantially all of our Notes remained outstanding. Refer to Note 10. Debt in Part II, Item 8 of this Annual Report on Form 10-K for more information on the Notes.

In September 2018, we entered into a credit agreement (the “Credit Agreement”) that provides for a \$400.0 million unsecured revolving credit facility (the “Credit Facility”), with an option to increase the amount of the Credit Facility by up to an additional \$350.0 million, subject to certain conditions. As of July 31, 2022, there were no amounts outstanding, and we were in compliance with all covenants under the Credit Agreement. Refer to Note 10. Debt in Part II, Item 8 of this Annual Report on Form 10-K for more information on the Credit Agreement.

Capital Return

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program. In December 2020 and August 2021, our board of directors authorized additional \$700.0 million and \$676.1 million increases, respectively, bringing the total authorization under this share repurchase program to \$2.4 billion. Repurchases will be funded from available working capital and may be made at management’s discretion from time to time. The expiration date of this repurchase authorization was extended to December 31, 2022, and our repurchase program may be suspended or discontinued at any time. As of July 31, 2022, 85.0 million remained available for future share repurchases under this repurchase program. In February 2020, our board of directors approved the repurchase of \$1.0 billion of our common stock through an accelerated share repurchase (“ASR”) transaction, which was in addition to our current authorization. During fiscal 2020, we completed the ASR transaction with an aggregate of 5.2 million shares of our common stock repurchased and retired. Refer to Note 13. Stockholders’ Equity in Part II, Item 8 of this Annual Report on Form 10-K for information on these repurchase programs.

Leases and Other Material Cash Requirements

We have entered into various non-cancelable operating leases primarily for our facilities with original lease periods expiring through the year ending July 31, 2032, with the most significant leases relating to our corporate headquarters in Santa Clara, California. As of July 31, 2022, we have total operating lease obligations of \$338.4 million recorded on our consolidated balance sheet.

As of July 31, 2022, our commitments to purchase products, components, cloud and other services totaled \$2.4 billion. Refer to Note 12. Commitments and Contingencies in Part II, Item 8 of this Annual Report on Form 10-K for more information on these commitments.

Cash Flows

The following table summarizes our cash flows for the years ended July 31, 2022, 2021, and 2020:

	Year Ended July 31,		
	2022	2021	2020
	(in millions)		
Net cash provided by operating activities	\$ 1,984.7	\$ 1,503.0	\$ 1,035.7
Net cash provided by (used in) investing activities	(933.4)	(1,480.6)	288.0
Net cash provided by (used in) financing activities	(806.6)	(1,104.0)	673.0
Net increase (decrease) in cash, cash equivalents, and restricted cash	<u>\$ 244.7</u>	<u>\$ (1,081.6)</u>	<u>\$ 1,996.7</u>

Cash from operations could be affected by various risks and uncertainties, including, but not limited to, the effects of COVID-19 and other risks detailed in Part I, Item 1A “Risk Factors” in this Form 10-K. We believe that our cash flow from operations with existing cash and cash equivalents will be sufficient to meet our anticipated cash needs for at least the next 12 months and thereafter for the foreseeable future. Our future capital requirements will depend on many factors including our growth rate, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced products and subscription and support offerings, the costs to acquire or invest in complementary businesses and technologies, the costs to ensure access to adequate manufacturing capacity, the investments in our infrastructure to support the adoption of our cloud-based subscription offerings, the repayment obligations associated with our Notes, the continuing market acceptance of our products and subscription and support offerings and macroeconomic events such as COVID-19. In addition, from time to time, we may incur additional tax liability in connection with certain corporate structuring decisions.

We may also choose to seek additional equity or debt financing. In the event that additional financing is required from outside sources, we may not be able to raise it on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results, and financial condition may be adversely affected.

Operating Activities

Our operating activities have consisted of net losses adjusted for certain non-cash items and changes in assets and liabilities. Our largest source of cash provided by our operations is receipts from our product revenue and subscription and support revenue.

Cash provided by operating activities during fiscal 2022 was \$2.0 billion, an increase of \$481.7 million compared to fiscal 2021. The increase was primarily due to growth of our business as reflected by increases in billings and collections during fiscal 2022, partially offset by higher cash expenditure to support our business growth.

Investing Activities

Our investing activities have consisted of capital expenditures, net investment purchases, sales, and maturities, and business acquisitions. We expect to continue such activities as our business grows.

Cash used in investing activities during fiscal 2022 was \$933.4 million, a decrease of \$547.2 million compared to fiscal 2021. The decrease was primarily due to a decrease in net cash payments for business acquisitions, partially offset by an increase in net investment purchases, sales and maturities during fiscal 2022.

Financing Activities

Our financing activities have consisted of cash used to repurchase shares of our common stock, proceeds from sales of shares through employee equity incentive plans, and payments for tax withholding obligations of certain employees related to the net share settlement of equity awards.

Cash used in financing activities during fiscal 2022 was \$806.6 million, a decrease of \$297.4 million compared to fiscal 2021. The decrease was primarily due to a decrease in repurchases of our common stock during fiscal 2022.

Critical Accounting Estimates

Our consolidated financial statements have been prepared in accordance with GAAP. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, expenses, and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe are reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Actual results could differ materially from those estimates due to risks and uncertainties, including uncertainty in the current economic environment. To the extent that there are material differences between these estimates and our actual results, our future consolidated financial statements will be affected.

We believe that of our significant accounting policies described in Note 1. Description of Business and Summary of Significant Accounting Policies in Part II, Item 8 of this Annual Report on Form 10-K, the critical accounting estimates, assumptions, and judgments that have the most significant impact on our consolidated financial statements are described below.

Revenue Recognition

The majority of our contracts with our customers include various combinations of our products and subscriptions and support. Our appliances and software licenses have significant standalone functionalities and capabilities and, accordingly, are distinct from our subscriptions and support services, as the customer can benefit from the product without these services and such services are separately identifiable within the contract. We account for multiple agreements with a single customer as a single contract if the contractual terms and/or substance of those agreements indicate that they may be so closely related that they are, in effect, parts of a single contract. The amount we are due in exchange for delivering on the contract is allocated to each performance obligation based on its relative standalone selling price.

We establish standalone selling price using the prices charged for a deliverable when sold separately. If not observable through past transactions, we estimate the standalone selling price based on our pricing model and our go-to-market strategy, which include factors such as type of sales channel (channel partner or end-customer), the geographies in which our offerings were sold (domestic or international) and offering type (products, subscriptions, or support). As our business offerings evolve over time, we may be required to modify our estimated standalone selling prices, and as a result the timing and classification of our revenue could be affected.

Deferred Contract Costs

We defer contract costs that are recoverable and incremental to obtaining customer sales contracts. Contract costs, which primarily consist of sales commissions, are amortized on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. Sales commissions for initial contracts that are not commensurate with renewal commissions are amortized over a benefit period of five years, consistent with the revenue recognition pattern of the performance obligations in the related contracts including expected renewals. The benefit period is determined by taking into consideration contract length, technology life, and other quantitative and qualitative factors. The expected renewals are estimated based on historical renewal trends. Sales commissions for initial contracts that are commensurate and sales commissions for renewal contracts are amortized over the related contractual period in proportion to the revenue recognized.

Income Taxes

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carryforwards. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

Significant judgment is required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires us to estimate and measure the tax benefit as the largest amount that is more likely than not to be realized upon ultimate settlement.

Significant judgment is required in evaluating our uncertain tax positions and determining our provision for income taxes. Although we believe our reserves are reasonable, no assurance can be given that the final tax outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. We adjust these reserves in light of changing facts and circumstances, such as the closing of a tax audit or the refinement of an estimate. To the extent that the final tax outcome of these matters is different than the amounts recorded, such differences may impact the provision for income taxes in the period in which such determination is made.

Manufacturing Partner and Supplier Liabilities

We outsource most of our manufacturing, repair, and supply chain management operations to our EMS provider, which procures components and assembles our products based on our demand forecasts. These forecasts of future demand are based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions. We accrue costs for manufacturing purchase commitments in excess of our forecasted demand, including costs for excess components or for carrying costs incurred by our manufacturing partners and component suppliers. Actual component usage and product demand may be materially different from our forecast and could be caused by factors outside of our control, which could have an adverse impact on our results of operations. To date, we have not accrued significant costs associated with this exposure.

Loss Contingencies

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. We accrue for loss contingencies when it is probable that an asset has been impaired or a liability has been incurred and the amount of loss can be reasonably estimated. If we determine that a loss is possible and the range of the loss can be reasonably determined, then we disclose the range of the possible loss. We regularly evaluate current information available to us to determine whether an accrual is required, an accrual should be adjusted, or a range of possible loss should be disclosed.

From time to time, we are involved in disputes, litigation, and other legal actions. However, there are many uncertainties associated with any litigation, and these actions or other third-party claims against us may cause us to incur substantial settlement charges, which are inherently difficult to estimate and could adversely affect our results of operations. The actual liability in any such matters may be materially different from our estimates, which could result in the need to adjust our liability and record additional expenses.

Goodwill, Intangibles, and Other Long-Lived Assets

We make significant estimates, assumptions, and judgments when valuing goodwill and other purchased intangible assets in connection with the initial purchase price allocation of an acquired entity, as well as when evaluating impairment of goodwill and other purchased intangible assets on an ongoing basis. These estimates are based upon a number of factors, including historical experience, market conditions, and information obtained from the management of the acquired company. Critical estimates in valuing certain intangible assets include, but are not limited to, cash flows that an asset is expected to generate in the future, discount rates, the time and expense that would be necessary to recreate the assets, and the profit margin a market participant would receive. The amounts and useful lives assigned to identified intangible assets impact the amount and timing of future amortization expense.

We evaluate goodwill for impairment on an annual basis in our fourth fiscal quarter or more frequently if we believe impairment indicators exist. We have elected to first assess qualitative factors to determine whether it is more likely than not that the fair value of our reporting unit is less than its carrying amount, including goodwill. The qualitative assessment includes our evaluation of relevant events and circumstances affecting our single reporting unit, including macroeconomic, industry, and market conditions, our overall financial performance, and trends in the market price of our common stock. If qualitative factors indicate that it is more likely than not that our reporting unit's fair value is less than its carrying amount, then we will perform the quantitative impairment test by comparing our reporting unit's carrying amount, including goodwill, to its fair value. If the carrying amount of our reporting unit exceeds its fair value, an impairment loss will be recognized in an amount equal to that excess but limited to the total amount of goodwill. To date, the results of our qualitative assessment have indicated that the quantitative goodwill impairment test is not necessary.

We evaluate purchased intangible assets and other long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. Such events or changes in circumstances include, but are not limited to, a significant decrease in the fair value of the underlying asset or asset group, a significant decrease in the benefits realized from the acquired assets, difficulty and delays in integrating the business, or a significant change in the operations of the acquired assets or use of an asset or asset group. A long-lived asset is considered impaired if its carrying amount exceeds the estimated future undiscounted cash flows the asset or asset group is expected to generate. Critical estimates in determining whether a long-lived asset is considered impaired include the amount and timing of future cash flows that the asset or asset group is expected to generate. If a long-lived asset is considered to be impaired, the impairment to be recognized is the amount by which the carrying amount of the asset exceeds the fair value of the asset or asset group, which is estimated using a present value technique. Critical estimates in determining the fair value of an asset or asset group and the amount of impairment to recognize include, but are not limited to, the amount and timing of future cash flows that the asset or asset group is expected to generate and the discount rate. Determining the fair value of an asset or asset group is highly judgmental in nature and involves the use of significant estimates and assumptions for market participants. We base our fair value estimates on assumptions we believe to be reasonable but that are unpredictable and inherently uncertain. Actual future results may differ from those estimates.

Recent Accounting Pronouncements

Refer to “Recently Issued Accounting Pronouncements” in Note 1. Description of Business and Summary of Significant Accounting Policies in Part II, Item 8 of this Annual Report on Form 10-K for a description of recent accounting pronouncements and our expectation of their impact, if any, on our results of operations and financial condition.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Foreign Currency Exchange Risk

Our sales contracts are primarily denominated in U.S. dollars. A portion of our operating expenses are incurred outside of the United States and are denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates. Additionally, fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our statement of operations. The effect of an immediate 10% adverse change in foreign exchange rates on monetary assets and liabilities at July 31, 2022 would not be material to our financial condition or results of operations. As of July 31, 2022, foreign currency transaction gains and losses and exchange rate fluctuations have not been material to our consolidated financial statements. We enter into foreign currency derivative contracts with maturities of 16 months or less which we designate as cash flow hedges to manage the foreign currency exchange risk associated with our foreign currency denominated operating expenditures. The effectiveness of our existing hedging transactions and the availability and effectiveness of any hedging transactions we may decide to enter into in the future may be limited, and we may not be able to successfully hedge our exposure, which could adversely affect our financial condition and operating results. Refer to Note 6. Derivative Instruments in Part II, Item 8 of this Annual Report on Form 10-K for more information.

As our international operations grow, our risks associated with fluctuations in foreign currency exchange rates will become greater, and we will continue to reassess our approach to managing this risk. In addition, a weakening U.S. dollar can increase the costs of our international expansion and a strengthening U.S. dollar can increase the real cost of our products to our end-customers outside of the United States, leading to delays in the purchase of our products and services. For additional information, see the risk factor entitled “*We are exposed to fluctuations in foreign currency exchange rates, which could negatively affect our financial condition and operating results.*” in Part 1, Item 1A of this Annual Report on Form 10-K.

Interest Rate Risk

The primary objectives of our investment activities are to preserve principal, provide liquidity, and maximize income without significantly increasing risk. Most of the securities we invest in are subject to interest rate risk. To minimize this risk, we maintain our portfolio of cash, cash equivalents, and short-term investments in a variety of securities, including commercial paper, money market funds, U.S. government and agency securities, corporate debt securities, and asset-backed securities. To assess the interest rate risk, we performed a sensitivity analysis to determine the impact a change in interest rates would have on the value of the investment portfolio. Based on investment positions as of July 31, 2022, a hypothetical 100 basis point increase in interest rates across all maturities would result in a \$20.6 million decline in the fair market value of the portfolio. Such losses would only be realized if we sold the investments prior to maturity. Conversely, a hypothetical 100 basis point decrease in interest rates would lead to a \$20.6 million increase in the fair market value of the portfolio.

In July 2018, we issued \$1.7 billion aggregate principal amount of 0.75% Convertible Senior Notes due 2023 (the “2023 Notes”) and in June 2020, we issued \$2.0 billion aggregate principal amount of 0.375% Convertible Senior Notes due 2025 (the “2025 Notes”). We carry these instruments at face value less unamortized discount and unamortized issuance costs on our consolidated balance sheets. As these instruments have a fixed annual interest rate, we have no financial and economic exposure associated with changes in interest rates. However, the fair value of fixed rate instruments fluctuates when interest rates change, and additionally, in the case of either series of Notes, when the market price of our common stock fluctuates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Palo Alto Networks, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Palo Alto Networks, Inc. (the Company) as of July 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended July 31, 2022, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at July 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2022, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of July 31, 2022, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated September 6, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition

Description of the Matter

As described in Note 1 to the consolidated financial statements, the Company's contracts with customers sometimes contain multiple performance obligations, which are accounted for separately if they are distinct. In such cases, the transaction price is then allocated to the distinct performance obligations on a relative standalone selling price basis, and revenue is recognized when control of the distinct performance obligation is transferred. For example, product revenue is recognized at the time of hardware shipment or delivery of software license, and subscription and support revenue is recognized over time as the services are performed.

Auditing the Company's revenue recognition was complex, including the identification and determination of distinct performance obligations and the timing of revenue recognition. For example, there were nonstandard terms and conditions that required judgment to determine the distinct performance obligations and the impact on the timing of revenue recognition.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the Company's process and controls to identify and determine the distinct performance obligations and the timing of revenue recognition.

To test the identification and determination of the distinct performance obligations and the timing of revenue recognition, our audit procedures included, among others, reading the executed contract and purchase order to understand the contract, identifying the performance obligation(s), determining the distinct performance obligations, and evaluating the timing of revenue recognition for a sample of individual sales transactions. We evaluated the accuracy of the Company's contract summary documentation, specifically related to the identification and determination of distinct performance obligations and the timing of revenue recognition.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2009.

San Jose, California
September 6, 2022

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Palo Alto Networks, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Palo Alto Networks, Inc.'s internal control over financial reporting as of July 31, 2022, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Palo Alto Networks, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of July 31, 2022, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of July 31, 2022 and 2021, the related consolidated statements of operations, comprehensive loss, stockholders' equity and cash flows for each of the three years in the period ended July 31, 2022, and the related notes and our report dated September 6, 2022 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

San Jose, California
September 6, 2022

PALO ALTO NETWORKS, INC.
CONSOLIDATED BALANCE SHEETS
(In millions, except per share data)

	July 31,	
	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 2,118.5	\$ 1,874.2
Short-term investments	1,516.0	1,026.9
Accounts receivable, net of allowance for credit losses of \$8.9 and \$11.2 at July 31, 2022 and July 31, 2021, respectively	2,142.5	1,240.4
Short-term deferred contract costs	317.7	276.5
Prepaid expenses and other current assets	320.2	229.3
Total current assets	6,414.9	4,647.3
Property and equipment, net	357.8	318.4
Operating lease right-of-use assets	242.0	262.9
Long-term investments	1,051.9	888.3
Long-term deferred contract costs	550.1	494.6
Goodwill	2,747.7	2,710.1
Intangible assets, net	384.5	498.6
Other assets	504.7	421.4
Total assets	\$ 12,253.6	\$ 10,241.6
Liabilities, temporary equity and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 128.0	\$ 56.9
Accrued compensation	461.1	430.6
Accrued and other liabilities	399.2	329.4
Deferred revenue	3,641.2	2,741.9
Convertible senior notes, net	3,676.8	1,557.9
Total current liabilities	8,306.3	5,116.7
Convertible senior notes, net	—	1,668.1
Long-term deferred revenue	3,352.8	2,282.1
Long-term operating lease liabilities	276.1	313.4
Other long-term liabilities	108.4	97.7
Total liabilities	12,043.6	9,478.0
Commitments and contingencies (Note 12)		
Temporary equity	—	129.1
Stockholders' equity:		
Preferred stock; \$0.0001 par value; 100.0 shares authorized; none issued and outstanding at July 31, 2022 and July 31, 2021	—	—
Common stock and additional paid-in capital; \$0.0001 par value; 1,000.0 shares authorized; 99.6 and 97.3 shares issued and outstanding at July 31, 2022 and July 31, 2021, respectively	1,932.7	2,311.2
Accumulated other comprehensive loss	(55.6)	(9.9)
Accumulated deficit	(1,667.1)	(1,666.8)
Total stockholders' equity	210.0	634.5
Total liabilities, temporary equity and stockholders' equity	\$ 12,253.6	\$ 10,241.6

See notes to consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except per share data)

	Year Ended July 31,		
	2022	2021	2020
Revenue:			
Product.....	\$ 1,363.1	\$ 1,120.3	\$ 1,064.2
Subscription and support	4,138.4	3,135.8	2,344.2
Total revenue.....	5,501.5	4,256.1	3,408.4
Cost of revenue:			
Product.....	455.5	308.5	294.4
Subscription and support	1,263.2	966.4	705.1
Total cost of revenue.....	1,718.7	1,274.9	999.5
Total gross profit.....	3,782.8	2,981.2	2,408.9
Operating expenses:			
Research and development	1,417.7	1,140.4	768.1
Sales and marketing	2,148.9	1,753.8	1,520.2
General and administrative	405.0	391.1	299.6
Total operating expenses.....	3,971.6	3,285.3	2,587.9
Operating loss	(188.8)	(304.1)	(179.0)
Interest expense.....	(27.4)	(163.3)	(88.7)
Other income, net.....	9.0	2.4	35.9
Loss before income taxes	(207.2)	(465.0)	(231.8)
Provision for income taxes.....	59.8	33.9	35.2
Net loss	\$ (267.0)	\$ (498.9)	\$ (267.0)
Net loss per share, basic and diluted	\$ (2.71)	\$ (5.18)	\$ (2.76)
Weighted-average shares used to compute net loss per share, basic and diluted	98.5	96.4	96.9

See notes to consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In millions)

	Year Ended July 31,		
	2022	2021	2020
Net loss	\$ (267.0)	\$ (498.9)	\$ (267.0)
Other comprehensive income (loss), net of tax:			
Change in unrealized gains (losses) on investments	(25.0)	(3.0)	1.0
Cash flow hedges:			
Change in unrealized gains (losses)	(54.0)	1.1	8.3
Net realized (gains) losses reclassified into earnings	33.3	(18.5)	4.9
Net change on cash flow hedges	(20.7)	(17.4)	13.2
Other comprehensive income (loss).....	(45.7)	(20.4)	14.2
Comprehensive loss	\$ (312.7)	\$ (519.3)	\$ (252.8)

See notes to consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

(In millions)

	Common Stock and Additional Paid-In Capital		Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount			
	Balance as of July 31, 2019	96.8			
Net loss	—	—	—	(267.0)	(267.0)
Other comprehensive income	—	—	14.2	—	14.2
Issuance of common stock in connection with employee equity incentive plans	3.6	84.0	—	—	84.0
Taxes paid related to net share settlement of equity awards	—	(22.7)	—	—	(22.7)
Share-based compensation for equity-based awards	—	674.4	—	—	674.4
Repurchase and retirement of common stock	(6.1)	(1,198.1)	—	—	(1,198.1)
Settlement of warrants	2.0	—	—	—	—
Equity component of convertible senior notes, net	—	398.7	—	—	398.7
Issuance of warrants	—	202.8	—	—	202.8
Purchase of note hedges	—	(370.8)	—	—	(370.8)
Balance as of July 31, 2020	96.3	2,259.2	10.5	(1,167.9)	1,101.8
Net loss	—	—	—	(498.9)	(498.9)
Other comprehensive loss	—	—	(20.4)	—	(20.4)
Issuance of common stock in connection with employee equity incentive plans	3.7	104.0	—	—	104.0
Taxes paid related to net share settlement of equity awards	—	(28.9)	—	—	(28.9)
Share-based compensation for equity-based awards	—	943.4	—	—	943.4
Repurchase and retirement of common stock	(4.0)	(1,178.1)	—	—	(1,178.1)
Issuance of common and restricted common stock in connection with acquisitions	1.3	340.7	—	—	340.7
Temporary equity reclassification	—	(129.1)	—	—	(129.1)
Balance as of July 31, 2021	97.3	2,311.2	(9.9)	(1,666.8)	634.5
Cumulative-effect adjustment from adoption of new accounting pronouncement	—	(581.9)	—	266.7	(315.2)
Net loss	—	—	—	(267.0)	(267.0)
Other comprehensive loss	—	—	(45.7)	—	(45.7)
Issuance of common stock in connection with employee equity incentive plans	4.1	137.3	—	—	137.3
Taxes paid related to net share settlement of equity awards	—	(50.3)	—	—	(50.3)
Share-based compensation for equity-based awards	—	1,031.4	—	—	1,031.4
Repurchase and retirement of common stock	(1.8)	(915.0)	—	—	(915.0)
Balance as of July 31, 2022	99.6	\$ 1,932.7	\$ (55.6)	\$ (1,667.1)	\$ 210.0

See notes to consolidated financial statements.

PALO ALTO NETWORKS, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Year Ended July 31,		
	2022	2021	2020
Cash flows from operating activities			
Net loss	\$ (267.0)	\$ (498.9)	\$ (267.0)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Share-based compensation for equity-based awards	1,011.1	894.5	658.4
Depreciation and amortization.....	282.6	260.4	206.1
Gain related to facility exit	—	—	(3.1)
Amortization of deferred contract costs.....	362.1	298.0	254.4
Amortization of debt discount and debt issuance costs	7.2	142.9	73.9
Reduction of operating lease right-of-use assets	54.4	44.5	47.4
Amortization of investment premiums, net of accretion of purchase	13.5	13.1	(6.2)
Repayments of convertible senior notes attributable to debt discount.....	—	(0.1)	—
Changes in operating assets and liabilities, net of effects of acquisitions:			
Accounts receivable, net.....	(902.0)	(172.4)	(435.6)
Deferred contract costs	(458.8)	(440.8)	(407.4)
Prepaid expenses and other assets	(141.0)	(299.1)	(1.6)
Accounts payable	69.3	(11.8)	(12.8)
Accrued compensation	30.4	105.1	75.7
Accrued and other liabilities.....	(47.1)	(28.5)	(39.8)
Deferred revenue	1,970.0	1,196.1	893.3
Net cash provided by operating activities	1,984.7	1,503.0	1,035.7
Cash flows from investing activities			
Purchases of investments	(2,271.7)	(1,958.9)	(1,180.8)
Proceeds from sales of investments	449.2	131.1	314.0
Proceeds from maturities of investments	1,118.9	1,240.5	1,952.7
Business acquisitions, net of cash acquired	(37.0)	(777.3)	(583.5)
Purchases of property, equipment, and other assets.....	(192.8)	(116.0)	(214.4)
Net cash provided by (used in) investing activities	(933.4)	(1,480.6)	288.0
Cash flows from financing activities			
Repayments of convertible senior notes	(0.6)	(0.9)	—
Payments for debt issuance costs.....	—	(0.2)	—
Proceeds from borrowings on convertible senior notes, net	—	—	1,979.1
Proceeds from issuance of warrants.....	—	—	202.8
Purchase of note hedges.....	—	—	(370.8)
Repurchases of common stock	(892.3)	(1,178.1)	(1,198.1)
Proceeds from sales of shares through employee equity incentive plans.....	136.6	104.0	84.0
Payments for taxes related to net share settlement of equity awards	(50.3)	(28.8)	(22.7)
Payment of deferred consideration related to prior year business acquisition	—	—	(1.3)
Net cash provided by (used in) financing activities	(806.6)	(1,104.0)	673.0
Net increase (decrease) in cash, cash equivalents, and restricted cash	244.7	(1,081.6)	1,996.7
Cash, cash equivalents, and restricted cash—beginning of period	1,880.1	2,961.7	965.0
Cash, cash equivalents, and restricted cash—end of period.....	\$ 2,124.8	\$ 1,880.1	\$ 2,961.7
Reconciliation of cash, cash equivalents, and restricted cash to the consolidated balance sheets			

	Year Ended July 31,		
	2022	2021	2020
Cash and cash equivalents	\$ 2,118.5	\$ 1,874.2	\$ 2,958.0
Restricted cash included in prepaid expenses and other current assets	6.3	5.4	2.8
Restricted cash included in other assets	—	0.5	0.9
Total cash, cash equivalents, and restricted cash	<u>\$ 2,124.8</u>	<u>\$ 1,880.1</u>	<u>\$ 2,961.7</u>
Non-cash investing and financing activities			
Equity consideration for business acquisitions	\$ (2.5)	\$ (365.4)	\$ (11.0)
Supplemental disclosures of cash flow information			
Cash paid for income taxes	\$ 34.6	\$ 24.9	\$ 17.2
Cash paid for contractual interest	\$ 20.2	\$ 20.0	\$ 13.5

See notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Description of Business and Summary of Significant Accounting Policies

Description of Business

Palo Alto Networks, Inc. (the “Company,” “we,” “us,” or “our”), headquartered in Santa Clara, California, was incorporated in March 2005 under the laws of the State of Delaware and commenced operations in April 2005. We empower enterprises, organizations, service providers, and government entities to secure their users, networks, clouds and endpoints by delivering comprehensive cybersecurity backed by artificial intelligence and automation.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (“GAAP”). The consolidated financial statements include all adjustments necessary for a fair presentation of our annual results. All adjustments are of a normal recurring nature.

Principles of Consolidation

The consolidated financial statements include our accounts and our wholly owned subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported and disclosed in the consolidated financial statements and the accompanying notes. We evaluate our estimates on an ongoing basis. Management estimates include, but are not limited to, the standalone selling price for our products and services, share-based compensation, fair value of assets acquired and liabilities assumed in business combinations, the assessment of recoverability of our intangibles and goodwill, valuation allowance against deferred tax assets, manufacturing partner and supplier liabilities, deferred contract cost benefit period, and loss contingencies. We base our estimates on assumptions, both historical and forward looking, that we believe are reasonable. Actual results could differ materially from those estimates due to risks and uncertainties, including uncertainty in the current economic environment.

Concentrations

Financial instruments that subject us to concentrations of credit risk consist primarily of cash and cash equivalents, investments, derivative contracts, accounts receivable and financing receivables.

We invest only in high-quality credit instruments and our cash and cash equivalents and available-for-sale investments consist primarily of fixed income securities. Management believes that the financial institutions that hold our investments are financially sound and, accordingly, are subject to minimal credit risk. Deposits held with banks may exceed the amount of insurance provided on such deposits.

Our derivative contracts expose us to credit risk to the extent that the counterparties may be unable to meet the terms of the arrangement. We mitigate this credit risk by transacting with major financial institutions with high credit ratings and also enter into master netting arrangements, which permit net settlement of transactions with the same counterparty. We are not required to pledge, and are not entitled to receive, cash collateral related to these derivative instruments. We do not enter into derivative contracts for trading or speculative purposes.

Our accounts receivable are primarily derived from our distributors in various geographical locations. Our financing receivables are with qualified end-customers. We perform ongoing credit evaluations and generally do not require collateral on accounts receivable or financing receivables.

As of July 31, 2022, three distributors individually represented 10% or more of our gross accounts receivable, and in the aggregate represented 47.7% of our gross accounts receivable. As of July 31, 2022, two end-customers represented 10% or more of our gross financing receivables, and in aggregate represented 33.7% of our gross financing receivables.

For fiscal 2022, three distributors represented 10% or more of our total revenue, representing 29.7%, 12.4%, and 11.5%, respectively. No single end-customer accounted for more than 10% of our total revenue in fiscal 2022, 2021, or 2020.

We rely on an electronics manufacturing services provider (“EMS provider”) to assemble most of our products and sole source component suppliers for a certain number of our components.

Comprehensive Loss

Comprehensive loss is comprised of net loss and other comprehensive income (loss). Our other comprehensive income (loss) includes unrealized gains and losses on available-for-sale investments and unrealized gains and losses on cash flow hedges.

Foreign Currency Transactions

The functional currency of our foreign subsidiaries is the U.S. dollar. Monetary assets and liabilities denominated in foreign currencies have been remeasured into U.S. dollars using the exchange rates in effect at the balance sheet dates. Foreign currency remeasurement gains and losses and foreign currency transaction gains and losses are not significant to the consolidated financial statements.

Fair Value

We define fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities which are required to be recorded at fair value, we consider the principal or most advantageous market in which to transact and the market-based risk.

We categorize assets and liabilities recorded or disclosed at fair value on our consolidated balance sheets based upon the level of judgment associated with inputs used to measure their fair value. The categories are as follows:

- Level 1—Inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2—Inputs are quoted prices for similar assets and liabilities in active markets or inputs that are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments.
- Level 3—Inputs are unobservable inputs based on our own assumptions used to measure assets and liabilities at fair value. The inputs require significant management judgment or estimation.

Our financial assets and liabilities that are measured at fair value on a recurring basis include marketable securities and derivative financial instruments. Goodwill, intangible assets, and other long-lived assets are measured at fair value on a nonrecurring basis, only if impairment is indicated. The carrying amounts reported in the consolidated financial statements approximate the fair value for cash and cash equivalents, accounts receivable, accounts payable, and accrued liabilities, due to their short-term nature.

Cash, Cash Equivalents, and Investments

We consider all highly liquid investments with original maturities of three months or less at the date of purchase to be cash equivalents. Investments not considered cash equivalents, and with maturities of one year or less from the consolidated balance sheet date, are classified as short-term investments. Investments with maturities greater than one year from the consolidated balance sheet date are classified as long-term investments.

We determine the classification of our investments in marketable debt securities at the time of purchase and reevaluate such determination at each balance sheet date. Our marketable debt securities are classified as available-for-sale. Debt securities in an unrealized loss position are written down to its fair value with the corresponding charge recorded in other income, net in our consolidated statements of operations, if it is more likely than not that we will be required to sell the impaired security before recovery of its amortized cost basis, or we have the intention to sell the security. If neither of these conditions are met, we determine whether a credit loss exists by comparing the present value of the expected cash flows of the security with its amortized cost basis. An allowance for credit losses is recorded in other income, net in our consolidated statements of operations for an amount not to exceed the unrealized loss. Unrealized losses that are not credit-related are included in accumulated other comprehensive income (loss) (“AOCI”) in stockholders’ equity.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount, net of allowances for credit losses. The allowance for credit losses is based on our assessment of collectability. Management regularly reviews the adequacy of the allowance for credit losses on a collective basis by considering the age of each outstanding invoice, each customer’s expected ability to pay and collection history, current market conditions, and reasonable and supportable forecasts of future economic conditions. Accounts receivable deemed uncollectible are charged against the allowance for credit losses. For the years ended July 31, 2022 and 2021, the allowance for credit losses activity was not significant.

Financing Receivables

We provide financing arrangements for certain qualified end-user customers to purchase our products and services. Payment terms on these financing arrangements are up to five years. Financing receivables are recorded at amortized cost, which approximates fair value. We may sell, in certain instances, these financing arrangements on a non-recourse basis to third party financial institutions. The financing receivables are derecognized upon transfer as these sales qualify as true sales.

We evaluate the allowance for credit losses by assessing the risks and losses inherent in our financing receivables on either an individual or a collective basis. Our assessment considers various factors, including lifetime expected losses determined using customer risk profile, current economic conditions that may affect a customer's ability to pay, and forward-looking economic considerations. Financing receivables deemed uncollectible are charged against the allowance for credit losses. Short-term financing receivables are included in prepaid expenses and other current assets, and long-term financing receivables are included in other assets on our consolidated balance sheets.

Derivatives

We are exposed to foreign currency exchange risk. Substantially all of our revenue is transacted in U.S. dollars, however, a portion of our operating expenditures are incurred outside of the United States and are denominated in foreign currencies, making them subject to fluctuations in foreign currency exchange rates. We enter into foreign currency derivative contracts with maturities of 16 months or less, which we designate as cash flow hedges, to manage the foreign currency exchange risk associated with our operating expenditures.

Our derivative financial instruments are recorded at fair value, on a gross basis, as either assets or liabilities on our consolidated balance sheets. Gains or losses related to our cash flow hedges are recorded as a component of AOCI on our consolidated balance sheets and are reclassified into the financial statement line item associated with the underlying hedged transaction in our consolidated statements of operations when the underlying hedged transaction is recognized in earnings. Gains or losses related to non-designated derivative instruments are recognized in other income, net in our consolidated statements of operations for each period until the instrument matures, is terminated, is re-designated as a qualified cash flow hedge, or is sold. Derivatives designated as cash flow hedges are classified in our consolidated statements of cash flows in the same manner as the underlying hedged transaction, primarily within cash flows from operating activities.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, generally three to ten years. Leasehold improvements are depreciated over the shorter of the estimated useful lives of the improvements or the remaining lease term. Land is not depreciated.

Business Combinations

We include the results of operations of the businesses that we acquire as of the respective dates of acquisition. We allocate the fair value of the purchase price of our acquisitions to the assets acquired and liabilities assumed, generally based on their estimated fair values. The excess of the purchase price over the fair values of these identifiable assets and liabilities is recorded as goodwill. Additional information existing as of the acquisition date but unknown to us may become known during the remainder of the measurement period, not to exceed 12 months from the acquisition date, which may result in changes to the amounts and allocations recorded.

Intangible Assets

Purchased intangible assets with finite lives are carried at cost, less accumulated amortization. Amortization is computed over the estimated useful lives of the respective assets. Acquisition-related in-process research and development represents the fair value of incomplete research and development projects that have not reached technological feasibility as of the date of acquisition. Initially, these assets are not subject to amortization. Assets related to projects that have been completed are transferred to developed technology, which are subject to amortization.

Impairment of Goodwill, Intangible Assets, and Other Long-Lived Assets

Goodwill is evaluated for impairment on an annual basis in the fourth quarter of our fiscal year, and whenever events or changes in circumstances indicate the carrying amount of goodwill may not be recoverable. We have elected to first assess qualitative factors to determine whether it is more likely than not that the fair value of our single reporting unit is less than its carrying amount, including goodwill. If we determine that it is more likely than not that the fair value is less than its carrying amount, then the quantitative impairment test will be performed. Under the quantitative impairment test, if the carrying amount exceeds its fair value, we will recognize an impairment loss in an amount equal to that excess but limited to the total amount of goodwill.

We evaluate events and changes in circumstances that could indicate carrying amounts of purchased intangible assets and other long-lived assets may not be recoverable. When such events or changes in circumstances occur, we assess the recoverability of these assets or asset groups by determining whether or not the carrying amount will be recovered through undiscounted expected future cash flows. If the total of the future undiscounted cash flows is less than the carrying amount of an asset or asset group, we record an impairment loss for the amount by which the carrying amount exceeds the fair value of the asset or asset group.

We did not recognize any impairment losses on our goodwill, intangible assets, or other long-lived assets during the years ended July 31, 2022, 2021, and 2020.

Manufacturing Partner and Supplier Liabilities

We outsource most of our manufacturing, repair, and supply chain management operations to our EMS provider and payments to it are a significant portion of our cost of product revenue. Although we are contractually obligated to purchase manufactured products and components, we generally do not own the components and manufactured products. Product title transfers from our EMS provider to us and immediately to our customers upon shipment. Our EMS provider assembles our products using design specifications, quality assurance programs, and standards that we establish, and it procures components and assembles products based on our demand forecasts. These forecasts represent our estimates of future demand for our products based upon historical trends and analysis from our sales and product management functions as adjusted for overall market conditions. If the actual component usage and product demand are significantly lower than forecast, we record a liability for manufacturing purchase commitments in excess of our forecasted demand including costs for excess components or for carrying costs incurred by our manufacturing partners and component suppliers. Through July 31, 2022, we have not accrued any significant costs associated with this exposure.

Convertible Senior Notes

Prior to August 1, 2021, our convertible senior notes were separated into a liability and an equity component. The carrying amount of the liability component was calculated by measuring the fair value of a similar liability that did not have an associated convertible feature, using a discounted cash flow model with a risk-adjusted yield. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the par value of the notes as a whole. This difference represented a debt discount that was amortized to interest expense using the effective interest method over the term of the notes. The equity component was not remeasured as it continued to meet the conditions for equity classification. Transaction costs related to the issuance of the notes were allocated to the liability and equity components using the same proportions as the proceeds from the notes. Transaction costs attributable to the liability component were netted with the liability component and amortized to interest expense using the effective interest method over the term of the notes. Transaction costs attributable to the equity component were netted with the equity component of the notes in additional paid-in capital. Upon the notes becoming convertible, the net carrying amount of the liability component was classified as a current liability and a portion of the equity component representing the conversion option was reclassified to temporary equity. The portion of the equity component classified as temporary equity was measured as the difference between the principal and net carrying amount of the notes, excluding debt issuance costs.

Upon adoption of the new debt guidance on August 1, 2021, our convertible senior notes are accounted for entirely as a liability and measured at their amortized cost. Transaction costs related to the issuance of the notes are netted with the liability and are amortized on a straight-line basis, which approximates the effective interest rate method, to interest expense over the term of the notes.

Revenue Recognition

Our revenue consists of product revenue and subscription and support revenue. Revenue is recognized when control of promised products, subscriptions and support services are transferred to customers, in an amount that reflects the expected consideration in exchange for those products and services.

We determine revenue recognition through the following steps:

- Identification of the contract, or contracts, with a customer.
- Identification of the performance obligations in the contract.
- Determination of the transaction price.
- Allocation of the transaction price to the performance obligations in the contract.
- Recognition of revenue when, or as, we satisfy a performance obligation.

Revenues are reported net of sales taxes. Shipping charges billed to our customers are included in revenues and related costs are included in cost of revenue.

Product Revenue

Product revenue is derived primarily from sales of our appliances. Product revenue also includes revenue derived from software licenses of Panorama and the VM-Series. Our appliances and software licenses include a broad set of built-in networking and security features and functionalities. We recognize product revenue at the time of hardware shipment or delivery of software license.

Subscription and Support Revenue

Subscription and support revenue is derived primarily from sales of our subscription and support offerings. We recognize subscription and support revenue over time as the services are performed. Our contractual subscription and support contracts are typically one to five years.

Contracts with Multiple Performance Obligations

The majority of our contracts with our customers include various combinations of our products and subscriptions and support. Our appliances and software licenses have significant standalone functionalities and capabilities. Accordingly, these appliances and software licenses are distinct from our subscriptions and support services as the customer can benefit from the product without these services and such services are separately identifiable within the contract. We account for multiple agreements with a single customer as a single contract if the contractual terms and/or substance of those agreements indicate that they may be so closely related that they are, in effect, parts of a single contract. The amount of consideration we expect to receive in exchange for delivering on the contract is allocated to each performance obligation based on its relative standalone selling price. If a contract contains a single performance obligation, no allocation is required.

We establish standalone selling price using the prices charged for a deliverable when sold separately. If the standalone selling price is not observable through past transactions, we estimate the standalone selling price based on our pricing model and our go-to-market strategy, which include factors such as type of sales channel (reseller, distributor, or end-customer), the geographies in which our offerings were sold (domestic or international), and offering type (products, subscriptions, or support).

Deferred Revenue

We record deferred revenue when cash payments are received or due in advance of our performance. Our payment terms typically require payment within 30 to 45 days of the date we issue an invoice. The current portion of deferred revenue represents the amounts that are expected to be recognized as revenue within one year of the consolidated balance sheet date.

Deferred Contract Costs

We defer contract costs that are recoverable and incremental to obtaining customer sales contracts. Contract costs, which primarily consist of sales commissions, are amortized on a systematic basis that is consistent with the transfer to the customer of the goods or services to which the asset relates. Sales commissions paid for initial contracts are generally not commensurate with the commissions paid for renewal contracts, given the substantive difference in commission rates in proportion to their respective contract values. Sales commissions for initial contracts that are not commensurate are amortized over a benefit period of five years, consistent with the revenue recognition pattern of the performance obligations in the related contracts including expected renewals. The benefit period is determined by taking into consideration contract length, technology life, and other quantitative and qualitative factors. The expected renewals are estimated based on historical renewal trends. Sales commissions for initial contracts that are commensurate and sales commissions for renewal contracts are amortized over the related contractual period in proportion to the revenue recognized.

We classify deferred contract costs as short-term or long-term based on when we expect to recognize the expense. The amortization of deferred contract costs is included in sales and marketing expense in our consolidated statements of operations. Deferred contract costs are periodically reviewed for impairment. We did not recognize any impairment losses on our deferred contract costs during the years ended July 31, 2022, 2021, or 2020.

Software Development Costs

Internally developed software includes security software developed to meet our internal needs to provide cloud-based subscription offerings to our end-customers and business software that we customize to meet our specific operational needs. These capitalized costs consist of internal compensation related costs and external direct costs incurred during the application development stage and will be amortized over a useful life of three to five years. As of July 31, 2022 and 2021, we capitalized as other assets on our consolidated balance sheets \$130.9 million and \$114.8 million in costs, respectively, net of accumulated amortization, for security software developed to meet our internal needs to provide our cloud-based subscription offerings. We recognized amortization expense of \$62.4 million, \$47.8 million, and \$31.3 million related to these capitalized costs as cost of subscription and support revenue in our consolidated statements of operations during the years ended July 31, 2022, 2021, and 2020, respectively.

The costs to develop software that is marketed externally have not been capitalized as we believe our current software development process is essentially completed concurrent with the establishment of technological feasibility. As such, all related software development costs are expensed as incurred and included in research and development expense in our consolidated statements of operations.

Share-Based Compensation

Compensation expense related to share-based transactions is measured and recognized in the consolidated financial statements based on fair value on the grant date. We recognize share-based compensation expense for awards with only service conditions on a straight-line basis over the requisite service period of the related award. We recognize share-based compensation expense for awards with market conditions and awards with performance conditions on a straight-line basis over the requisite service period for each separately vesting portion of the award and, for awards with performance conditions, when it is probable that the performance condition will be achieved. We account for forfeitures of all share-based payment awards when they occur.

Leases

We determine if an arrangement is a lease at inception. We evaluate the classification of leases at commencement and, as necessary, at modification. Operating leases related balances are included in operating lease right-of-use assets, accrued and other liabilities, and long-term operating lease liabilities on our consolidated balance sheets. We did not have any material finance leases in any of the periods presented.

Operating lease right-of-use assets represent our right to use an underlying asset for the lease term. Operating lease liabilities represent our obligation to make payments arising from the lease. Operating lease right-of-use assets and liabilities are recognized at the present value of the future lease payments at the lease commencement date. The interest rate used to determine the present value of the future lease payments is our incremental borrowing rate, because the interest rates implicit in most of our leases are not readily determinable. Our incremental borrowing rate is estimated to approximate the interest rate on a collateralized basis with similar terms and payments, and in economic environments where the leased asset is located. Operating lease right-of-use assets also include adjustments related to lease incentives, prepaid or accrued rent and initial direct lease costs. Operating lease right-of-use assets are subject to evaluation for impairment or disposal on a basis consistent with other long-lived assets.

Our lease terms may include periods under options to extend or terminate the lease when it is reasonably certain that we will exercise that option. We generally use the base, non-cancelable lease term when determining the lease assets and liabilities. Operating lease cost is recognized on a straight-line basis over the lease term.

We account for lease and non-lease components as a single lease component and do not recognize right-of-use assets and lease liabilities for leases with a term of 12 months or less. Payments under our lease arrangements are primarily fixed, however, certain lease agreements contain variable payments, which are expensed as incurred and not included in the operating lease right-of-use assets and liabilities. Variable lease payments are primarily comprised of real estate taxes, common area maintenance charges, and insurance costs.

Income Taxes

We account for income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. In addition, deferred tax assets are recorded for the future benefit of utilizing net operating losses and research and development credit carryforwards. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized.

Significant judgment is required in determining any valuation allowance recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence, including past operating results, estimates of future taxable income, and the feasibility of tax planning strategies. In the event that we change our determination as to the amount of deferred tax assets that can be realized, we will adjust our valuation allowance with a corresponding impact to the provision for income taxes in the period in which such determination is made.

We recognize liabilities for uncertain tax positions based on a two-step process. The first step is to evaluate the tax position for recognition by determining if the weight of available evidence indicates that it is more likely than not that the position will be sustained on audit, including resolution of related appeals or litigation processes, if any. The second step requires us to estimate and measure the tax benefit as the largest amount that is more likely than not to be realized upon ultimate settlement.

Loss Contingencies

We are subject to the possibility of various loss contingencies arising in the ordinary course of business. In determining loss contingencies, we consider the likelihood of loss or impairment of an asset, or the incurrence of a liability, as well as our ability to reasonably estimate the amount of loss. An estimated loss contingency is accrued when it is probable that an asset has been impaired, or a liability has been incurred and the amount of loss can be reasonably estimated. If we determine that a loss is possible and the range of the loss can be reasonably determined, then we disclose the range of the possible loss. We regularly evaluate current information available to us to determine whether an accrual is required, an accrual should be adjusted, or a range of possible loss should be disclosed.

Recently Adopted Accounting Pronouncements

Acquired Contract Assets and Contract Liabilities

In October 2021, the Financial Accounting Standards Board (“FASB”) issued authoritative guidance that requires companies to apply revenue guidance to recognize and measure contract assets and contract liabilities from contracts with customers acquired in a business combination on the acquisition date, instead of measuring them at fair value. We early adopted this guidance in our first quarter of fiscal 2022 on a prospective basis. The adoption of this standard did not have a material impact on our consolidated financial statements.

Debt with Conversion Options

In August 2020, the FASB issued authoritative guidance that simplifies the accounting for certain financial instruments with characteristics of liabilities and equity, including convertible instruments. The standard reduces the number of models used to account for convertible instruments and simplifies the classification of debt on the balance sheet.

We adopted this standard in our first quarter of fiscal 2022 using the modified-retrospective approach, under which financial results reported in periods prior to fiscal 2022 were not adjusted. The adoption of this standard resulted in an increase to convertible senior notes, net of \$444.3 million, a decrease to accumulated deficit of \$266.7 million, and a decrease to additional paid-in capital and temporary equity of \$711.0 million upon adoption.

2. Revenue

Disaggregation of Revenue

The following table presents revenue by geographic theater (in millions):

	Year Ended July 31,		
	2022	2021	2020
Revenue:			
Americas			
United States	\$ 3,560.3	\$ 2,747.8	\$ 2,157.6
Other Americas	242.3	189.7	160.4
Total Americas	3,802.6	2,937.5	2,318.0
Europe, the Middle East, and Africa (“EMEA”)	1,055.8	817.3	671.9
Asia Pacific and Japan (“APAC”)	643.1	501.3	418.5
Total revenue	<u>\$ 5,501.5</u>	<u>\$ 4,256.1</u>	<u>\$ 3,408.4</u>

The following table presents revenue for groups of similar products and services (in millions):

	Year Ended July 31,		
	2022	2021	2020
Revenue:			
Product	\$ 1,363.1	\$ 1,120.3	\$ 1,064.2
Subscription and support			
Subscription	2,539.0	1,898.8	1,405.3
Support	1,599.4	1,237.0	938.9
Total subscription and support	4,138.4	3,135.8	2,344.2
Total revenue	<u>\$ 5,501.5</u>	<u>\$ 4,256.1</u>	<u>\$ 3,408.4</u>

Deferred Revenue

During the years ended July 31, 2022 and 2021, we recognized approximately \$2.7 billion and \$2.0 billion of revenue pertaining to amounts that were deferred as of July 31, 2021 and 2020, respectively.

Remaining Performance Obligations

Revenue expected to be recognized from remaining performance obligations was \$8.2 billion as of July 31, 2022, of which we expect to recognize approximately \$4.1 billion over the next 12 months and the remainder thereafter.

3. Fair Value Measurements

The following table presents our financial assets and liabilities measured at fair value on a recurring basis as of July 31, 2022 and 2021 (in millions):

	July 31, 2022				July 31, 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Cash equivalents:								
Money market funds	\$ 1,205.2	\$ —	\$ —	\$ 1,205.2	\$ 124.2	\$ —	\$ —	\$ 124.2
Certificates of deposit	—	155.3	—	155.3	—	150.4	—	150.4
Commercial paper	—	69.1	—	69.1	—	—	—	—
Corporate debt securities	—	19.5	—	19.5	—	1.0	—	1.0
U.S. government and agency securities	—	10.0	—	10.0	—	116.3	—	116.3
Non-U.S. government and agency securities	—	5.1	—	5.1	—	—	—	—
Total cash equivalents	1,205.2	259.0	—	1,464.2	124.2	267.7	—	391.9
Short-term investments:								
Certificates of deposit	—	116.4	—	116.4	—	12.4	—	12.4
Commercial paper	—	79.0	—	79.0	—	—	—	—
Corporate debt securities	—	505.0	—	505.0	—	208.9	—	208.9
U.S. government and agency securities	—	798.2	—	798.2	—	762.1	—	762.1
Non-U.S. government and agency securities	—	17.4	—	17.4	—	43.5	—	43.5
Total short-term investments	—	1,516.0	—	1,516.0	—	1,026.9	—	1,026.9
Long-term investments:								
Certificates of deposit	—	—	—	—	—	5.0	—	5.0
Corporate debt securities	—	761.2	—	761.2	—	180.7	—	180.7
U.S. government and agency securities	—	118.2	—	118.2	—	674.1	—	674.1
Non-U.S. government and agency securities	—	—	—	—	—	28.5	—	28.5
Asset-backed securities	—	172.5	—	172.5	—	—	—	—
Total long-term investments	—	1,051.9	—	1,051.9	—	888.3	—	888.3
Prepaid expenses and other current assets:								
Foreign currency forward contracts	—	2.4	—	2.4	—	4.1	—	4.1
Total prepaid expenses and other current assets	—	2.4	—	2.4	—	4.1	—	4.1
Other assets:								
Foreign currency forward contracts	—	0.7	—	0.7	—	0.1	—	0.1
Total other assets	—	0.7	—	0.7	—	0.1	—	0.1
Total assets measured at fair value	\$ 1,205.2	\$ 2,830.0	\$ —	\$ 4,035.2	\$ 124.2	\$ 2,187.1	\$ —	\$ 2,311.3
Accrued and other liabilities:								
Foreign currency forward contracts	\$ —	\$ 32.4	\$ —	\$ 32.4	\$ —	\$ 6.4	\$ —	\$ 6.4
Total accrued and other liabilities	—	32.4	—	32.4	—	6.4	—	6.4
Other long-term liabilities:								
Foreign currency forward contracts	—	0.8	—	0.8	—	0.5	—	0.5

	July 31, 2022				July 31, 2021			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Total other long-term liabilities	—	0.8	—	0.8	—	0.5	—	0.5
Total liabilities measured at fair value	\$ —	\$ 33.2	\$ —	\$ 33.2	\$ —	\$ 6.9	\$ —	\$ 6.9

Refer to Note 10. Debt, for the carrying amount and estimated fair value of our convertible senior notes as of July 31, 2022 and 2021.

4. Cash Equivalents and Investments

Available-for-sale Debt Securities

The following tables summarize the amortized cost, unrealized gains and losses, and fair value of our available-for-sale debt securities (in millions):

	July 31, 2022			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Certificates of deposit	\$ 155.3	\$ —	\$ —	\$ 155.3
Commercial paper	69.1	—	—	69.1
Corporate debt securities	19.5	—	—	19.5
U.S. government and agency securities	10.0	—	—	10.0
Non-U.S. government and agency securities	5.0	0.1	—	5.1
Total available-for-sale cash equivalents	\$ 258.9	\$ 0.1	\$ —	\$ 259.0

	July 31, 2022			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Investments:				
Certificates of deposit	\$ 116.5	\$ —	\$ (0.1)	\$ 116.4
Commercial paper	79.1	—	(0.1)	79.0
Corporate debt securities	1,276.8	1.3	(11.9)	1,266.2
U.S. government and agency securities	928.1	0.1	(11.8)	916.4
Non-U.S. government and agency securities	17.6	—	(0.2)	17.4
Asset-backed securities	173.4	0.2	(1.1)	172.5
Total available-for-sale investments	\$ 2,591.5	\$ 1.6	\$ (25.2)	\$ 2,567.9

	July 31, 2021			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Cash equivalents:				
Certificates of deposit	\$ 150.4	\$ —	\$ —	\$ 150.4
Corporate debt securities	1.0	—	—	1.0
U.S. government and agency securities	116.3	—	—	116.3
Total available-for-sale cash equivalents	\$ 267.7	\$ —	\$ —	\$ 267.7

	July 31, 2021			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Investments:				
Certificates of deposit	\$ 17.4	\$ —	\$ —	\$ 17.4
Corporate debt securities	389.2	0.5	(0.1)	389.6
U.S. government and agency securities	1,435.1	1.1	—	1,436.2
Non-U.S. government and agency securities	72.0	—	—	72.0
Total available-for-sale investments	\$ 1,913.7	\$ 1.6	\$ (0.1)	\$ 1,915.2

As of July 31, 2022, the gross unrealized losses that have been in a continuous unrealized loss position for less than 12 months were \$24.8 million, which were related to \$2.0 billion of available-for-sale debt securities, and the gross unrealized losses that have been in a continuous unrealized loss position for more than 12 months were not material. The gross unrealized losses on our available-for-sale debt securities as of July 31, 2021 were not material.

Unrealized losses related to our available-for-sale debt securities are due to interest rate fluctuations as opposed to credit quality. We do not intend to sell any of the securities in an unrealized loss position and it is not likely that we would be required to sell these securities before recovery of their amortized cost basis, which may be at maturity. We did not recognize any credit losses related to our available-for-sale debt securities during the years ended July 31, 2022 and 2021.

The following table summarizes the amortized cost and fair value of our available-for-sale debt securities as of July 31, 2022, by contractual years-to-maturity (in millions):

	Amortized Cost	Fair Value
Due within one year.....	\$ 1,789.4	\$ 1,775.0
Due between one and three years.....	965.2	956.4
Due between three to five years.....	91.5	91.2
Due between five to ten years.....	4.3	4.3
Total.....	<u>\$ 2,850.4</u>	<u>\$ 2,826.9</u>

Marketable Equity Securities

Marketable equity securities consist of money market funds and are included in cash and cash equivalents on our consolidated balance sheets. As of July 31, 2022 and 2021, the carrying value of our marketable equity securities were \$1.2 billion and \$124.2 million, respectively. There were no unrealized gains or losses recognized for these securities during the years ended July 31, 2022, 2021, and 2020.

5. Financing Receivables

The following table summarizes our short-term and long-term financing receivables (in millions):

	July 31,	
	2022	2021
Short-term financing receivables, gross.....	\$ 112.6	\$ 80.0
Allowance for credit losses.....	(1.3)	(1.0)
Short-term financing receivables, net.....	<u>\$ 111.3</u>	<u>\$ 79.0</u>
Long-term financing receivables, gross.....	\$ 194.6	\$ 198.6
Allowance for credit losses.....	(2.5)	(4.3)
Long-term financing receivables, net.....	<u>\$ 192.1</u>	<u>\$ 194.3</u>

There was no significant activity in allowance for credit losses during the years ended July 31, 2022 and 2021. Past due amounts on financing receivables were not material as of July 31, 2022 and 2021.

6. Derivative Instruments

As of July 31, 2022 and 2021, the total notional amount of our outstanding foreign currency forward contracts was \$856.9 million and \$531.9 million, respectively. Refer to Note 3. Fair Value Measurements for the fair value of our derivative instruments as reported on our consolidated balance sheets as of July 31, 2022.

As of July 31, 2022, unrealized losses in AOCI related to our cash flow hedges were \$24.8 million, of which \$22.0 million of losses are expected to be recognized into earnings within the next 12 months. As of July 31, 2021, unrealized gains and losses in AOCI related to our cash flow hedges were not material.

7. Acquisitions

Fiscal 2022

During the year ended July 31, 2022, we completed acquisitions for a combined total purchase consideration of \$40.1 million, which was primarily cash. We have accounted for these transactions as business combinations, and recorded goodwill of \$37.6 million. The goodwill is not deductible for income tax purposes.

Fiscal 2021*Bridgecrew Inc.*

On March 2, 2021, we completed our acquisition of Bridgecrew Inc. (“Bridgecrew”), a privately-held cloud security company. We expect the acquisition will expand our Prisma Cloud offering to deliver security across the full application lifecycle. The total purchase consideration for the acquisition of Bridgecrew was \$156.9 million, which consisted of the following (in millions):

	Amount
Cash	\$ 155.9
Fair value of replacement awards	1.0
Total	\$ 156.9

As part of the acquisition, we issued \$42.5 million of replacement awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 129.6
Identified intangible assets.....	21.6
Cash	9.0
Net liabilities assumed.....	(3.3)
Total	\$ 156.9

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Bridgecrew technology into our platforms. The goodwill is not deductible for income tax purposes.

The following table presents details of the identified intangible asset acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 21.6	6 years

Expansive Inc.

On December 15, 2020, we completed our acquisition of Expansive Inc. (“Expansive”), a privately-held company specializing in attack surface management. We expect the acquisition will enrich our Cortex offerings and provide organizations an integrated view of the enterprise to combine external, internal, and threat data. The total purchase consideration for the acquisition of Expansive was \$797.2 million, which consisted of the following (in millions):

	Amount
Cash	\$ 434.9
Common stock (1.1 million shares)	340.7
Fair value of replacement awards	21.6
Total	\$ 797.2

As part of the acquisition, we issued replacement equity awards, which included 0.2 million shares of our restricted common stock. The total fair value of the replacement equity awards was \$160.0 million, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 598.2
Identified intangible assets.....	160.3
Cash	51.1
Net liabilities assumed.....	(12.4)
Total.....	<u>\$ 797.2</u>

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Expanse technology into our platforms. The goodwill is not deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 123.4	6 years
Customer relationships.....	36.9	10 years
Total.....	<u>\$ 160.3</u>	

Sinefa Group, Inc.

On November 24, 2020, we completed our acquisition of Sinefa Group, Inc. and its wholly owned subsidiaries (“Sinefa”), a privately-held digital experience monitoring company. We expect the acquisition will extend our Prisma Access offering. The total purchase consideration for the acquisition of Sinefa was \$27.0 million, which consisted of the following (in millions):

	Amount
Cash	\$ 26.9
Fair value of replacement awards	0.1
Total.....	<u>\$ 27.0</u>

As part of the acquisition, we issued \$11.5 million of replacement equity awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 13.7
Identified intangible assets.....	20.4
Net liabilities assumed.....	(7.1)
Total.....	<u>\$ 27.0</u>

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Sinefa technology into our platforms. The goodwill is deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 18.6	6 years
Customer relationships	1.8	8 years
Total.....	<u>\$ 20.4</u>	

The Crypsis Group

On September 17, 2020, we completed our acquisition of The Crypsis Group (“Crypsis”), an incident response, risk management, and digital forensics consulting firm. We expect the acquisition will expand our capabilities and strengthen our Cortex strategy. The total purchase consideration for the acquisition of Crypsis was \$227.7 million, which consisted of the following (in millions):

	Amount
Cash	\$ 225.7

Fair value of replacement awards	2.0
Total	\$ 227.7

As part of the acquisition, we issued \$27.1 million of replacement awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 157.6
Identified intangible assets.....	54.4
Net assets acquired.....	15.7
Total	\$ 227.7

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Crypsis technology into our platforms. The goodwill is deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 6.9	3 years
Customer relationships	47.5	7 years
Total	\$ 54.4	

Fiscal 2020

CloudGenix Inc.

On April 21, 2020, we completed our acquisition of CloudGenix, Inc. (“CloudGenix”), a privately-held company. We believe the acquisition will strengthen our secure access service edge (“SASE”) offering. The total purchase consideration for the acquisition of CloudGenix was \$402.7 million, which consisted of the following (in millions):

	Amount
Cash	\$ 396.1
Fair value of replacement awards	6.6
Total	\$ 402.7

As part of the acquisition, we issued \$30.3 million of replacement awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 301.2
Identified intangible assets.....	109.9
Cash	8.3
Net liabilities assumed	(16.7)
Total	\$ 402.7

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating CloudGenix technology into our portfolio. The goodwill is not deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 67.2	5 years
Customer relationships.....	42.7	10 years
Total.....	<u>\$ 109.9</u>	

Aporeto, Inc.

On December 23, 2019, we completed our acquisition of Aporeto, Inc. (“Aporeto”), a privately-held machine identity-based microsegmentation company. We believe the acquisition will strengthen our cloud-native security platform capabilities delivered by Prisma Cloud. The total purchase consideration for the acquisition of Aporeto was \$144.1 million, which consisted of the following (in millions):

	Amount
Cash	\$ 139.8
Fair value of replacement awards	4.3
Total.....	<u>\$ 144.1</u>

As part of the acquisition, we issued \$16.4 million of replacement awards, of which the portion attributable to services performed prior to the acquisition date was allocated to purchase consideration. The remaining fair value was allocated to future services and will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 111.3
Identified intangible assets.....	23.8
Cash	10.5
Net liabilities assumed.....	(1.5)
Total.....	<u>\$ 144.1</u>

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Aporeto’s technology into our platform. The goodwill is not deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 20.5	7 years
Customer relationships	3.3	4 years
Total.....	<u>\$ 23.8</u>	

Zingbox, Inc.

On September 20, 2019, we completed our acquisition of Zingbox, Inc. (“Zingbox”), a privately-held Internet of Things (“IoT”) security company. We believe the acquisition will accelerate our delivery of IoT security through our ML-Powered Next-Generation Firewall and Cortex offerings. The total purchase consideration for the acquisition of Zingbox was \$66.4 million in cash.

As part of the acquisition, we issued replacement equity awards with a total fair value of \$5.7 million, which will be expensed over the remaining service periods as share-based compensation.

We have accounted for this transaction as a business combination and allocated the purchase consideration to assets acquired and liabilities assumed based on estimated fair values, as presented in the following table (in millions):

	Amount
Goodwill	\$ 48.1
Identified intangible assets.....	20.4
Net liabilities assumed.....	(2.1)
Total.....	<u>\$ 66.4</u>

Goodwill generated from this business combination is primarily attributable to the assembled workforce and expected post-acquisition synergies from integrating Zingbox's technology into our portfolio. The goodwill is not deductible for income tax purposes.

The following table presents details of the identified intangible assets acquired (in millions, except years):

	Fair Value	Estimated Useful Life
Developed technology	\$ 18.6	5 years
Customer relationships	1.8	8 years
Total.....	<u>\$ 20.4</u>	

Additional Acquisition-Related Information

Pro forma results of operations have not been presented because the effects of the acquisitions were not material to our consolidated statements of operations.

Additional information related to our acquisitions completed in fiscal 2022, such as that related to income tax and other contingencies, existing as of the acquisition date but unknown to us may become known during the remainder of the measurement period, not to exceed 12 months from the respective acquisition date, which may result in changes to the amounts and allocations recorded.

8. Goodwill and Intangible Assets

Goodwill

The following table presents details of our goodwill during the year ended July 31, 2022 (in millions):

	Amount
Balance as of July 31, 2021	\$ 2,710.1
Goodwill acquired.....	37.6
Balance as of July 31, 2022	<u>\$ 2,747.7</u>

Purchased Intangible Assets

The following table presents details of our purchased intangible assets (in millions):

	July 31,					
	2022			2021		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Intangible assets subject to amortization:						
Developed technology	\$ 600.7	\$ (347.9)	\$ 252.8	\$ 596.2	\$ (243.8)	\$ 352.4
Customer relationships	172.7	(52.2)	120.5	172.7	(30.6)	142.1
Acquired intellectual property	11.3	(4.8)	6.5	7.9	(3.8)	4.1
Trade name and trademarks	9.4	(9.4)	—	9.4	(9.4)	—
Other	0.9	(0.1)	0.8	1.8	(1.8)	—
Total intangible assets subject to amortization.....	795.0	(414.4)	380.6	788.0	(289.4)	498.6
Intangible assets not subject to amortization:						
In-process research and development.....	3.9	—	3.9	—	—	—
Total purchased intangible assets.....	<u>\$ 798.9</u>	<u>\$ (414.4)</u>	<u>\$ 384.5</u>	<u>\$ 788.0</u>	<u>\$ (289.4)</u>	<u>\$ 498.6</u>

We recognized amortization expense of \$126.9 million, \$117.8 million, and \$77.3 million for the years ended July 31, 2022, 2021, and 2020, respectively.

The following table summarizes estimated future amortization expense of our intangible assets subject to amortization as of July 31, 2022 (in millions):

	Fiscal years ending July 31,						
	Total	2023	2024	2025	2026	2027	2028 and Thereafter
Future amortization expense ... \$	380.6	\$ 101.1	\$ 91.1	\$ 77.4	\$ 55.6	\$ 28.5	\$ 26.9

9. Property and Equipment

The following table presents details of our property and equipment, net (in millions):

	July 31,	
	2022	2021
Computers, equipment, and software.....	\$ 404.3	\$ 352.1
Leasehold improvements	249.3	231.6
Land	87.2	49.6
Demonstration units	41.6	43.8
Furniture and fixtures.....	45.1	40.3
Total property and equipment, gross.....	827.5	717.4
Less: accumulated depreciation	(469.7)	(399.0)
Total property and equipment, net	\$ 357.8	\$ 318.4

During the year ended July 31, 2022, we purchased 4.6 acres of land adjacent to our headquarters in Santa Clara, California, along with the associated buildings, for \$39.5 million to accommodate future expansion of our headquarters. This amount was recorded in property and equipment, net on our consolidated balance sheet as of July 31, 2022.

We recognized depreciation expense of \$92.8 million, \$94.2 million, and \$96.0 million related to property and equipment during the years ended July 31, 2022, 2021, and 2020, respectively.

10. Debt

Convertible Senior Notes

In July 2018, we issued \$1.7 billion aggregate principal amount of 0.75% Convertible Senior Notes due 2023 (the “2023 Notes”) and, in June 2020, we issued \$2.0 billion aggregate principal amount of 0.375% Convertible Senior Notes due 2025 (the “2025 Notes,” and together with the 2023 Notes, the “Notes”). The 2023 Notes bear interest at a fixed rate of 0.75% per year, payable semi-annually in arrears on January 1 and July 1 of each year, beginning on January 1, 2019. The 2025 Notes bear interest at a fixed rate of 0.375% per year, payable semi-annually in arrears on June 1 and December 1 of each year, beginning on December 1, 2020. Each series of the convertible notes is governed by an indenture between us, as the issuer, and U.S. Bank National Association, as Trustee (individually, each an “Indenture,” and together, the “Indentures”). The Notes of each series are unsecured, unsubordinated obligations and the applicable Indenture governing each series of Notes does not contain any financial covenants or restrictions on the payments of dividends, the incurrence of indebtedness, or the issuance or repurchase of securities by us or any of our subsidiaries. The 2023 Notes and the 2025 Notes mature on July 1, 2023 and June 1, 2025, respectively. We cannot redeem the 2023 Notes prior to maturity. We may redeem for cash all or any portion of the 2025 Notes, at our option, on or after June 5, 2023, and prior to the 31st scheduled trading day immediately preceding the maturity date if the last reported sale price of our common stock has been at least 130% of the conversion price then in effect for at least 20 trading days during any 30 consecutive trading day period ending on and including the trading day preceding the date on which we provide notice of redemption. The redemption will be at a price equal to 100% of the principal amount of the 2025 Notes and adjusted for interest. If we call any or all of the 2025 Notes for redemption, holders may convert such 2025 Notes called for redemption at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date.

The following table presents details of our Notes (number of shares in millions):

	Conversion Rate per \$1,000 Principal	Initial Conversion Price	Convertible Date	Initial Number of Shares
2023 Notes	3.7545	\$ 266.35	April 1, 2023	6.4
2025 Notes	3.3602	\$ 297.60	March 1, 2025	6.7

Holders of the Notes may surrender their Notes for conversion at their option at any time prior to the close of business on the business day immediately preceding their respective convertible dates only under the following circumstances:

- during any fiscal quarter commencing after the fiscal quarters ending on October 31, 2018 and October 31, 2020 for the 2023 Notes and the 2025 Notes, respectively (and only during such fiscal quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding fiscal quarter is greater than or equal to 130% of the applicable conversion price for the respective Notes on each applicable trading day (the “sale price condition”);
- during the five business day period after any five consecutive trading day period (the “measurement period”) in which the trading price per \$1,000 principal amount of the applicable series of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the applicable conversion rate for the respective Notes on each such trading day; or

- upon the occurrence of specified corporate events.

On or after the respective convertible date, holders may surrender all or any portion of their Notes for conversion at any time prior to the close of business on the second scheduled trading day immediately preceding the applicable maturity date regardless of the foregoing conditions, and such conversions will be settled upon the applicable maturity date. Upon conversion, holders of the Notes of a series will receive cash equal to the aggregate principal amount of the Notes of such series to be converted, and, at our election, cash and/or shares of our common stock for any amounts in excess of the aggregate principal amount of the Notes of such series being converted.

The conversion price will be subject to adjustment in some events. Holders of the Notes of a series who convert their Notes of such series in connection with certain corporate events that constitute a “make-whole fundamental change” under the applicable Indenture are, under certain circumstances, entitled to an increase in the conversion rate for such series of Notes. Additionally, upon the occurrence of a corporate event that constitutes a “fundamental change” under the applicable Indenture, holders of the Notes of such series may require us to repurchase for cash all or a portion of the Notes of such series at a repurchase price equal to 100% of the principal amount of the Notes of such series plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The sale price condition for the Notes was met during the fiscal quarter ended July 31, 2022, and as a result, holders may convert their Notes at any time during the fiscal quarter ending October 31, 2022. The net carrying amount of the Notes was classified as a current liability on our consolidated balance sheet as of July 31, 2022.

The sale price condition for the 2023 Notes was met during the fiscal quarter ended July 31, 2021, and as a result, holders may convert their 2023 Notes at any time during the fiscal quarter ended October 31, 2021. Accordingly, the net carrying amount of the 2023 Notes was classified as a current liability and the portion of the equity component representing the conversion option was classified as temporary equity on our consolidated balance sheet as of July 31, 2021. The sale price condition for the 2025 Notes was not met during the fiscal quarter ended July 31, 2021. Since the 2025 Notes were not convertible during the fiscal quarter ended October 31, 2021, the associated net carrying amount was classified as a long-term liability and the equity component was included in additional paid-in capital on our consolidated balance sheet as of July 31, 2021.

The following table sets forth the components of the Notes (in millions):

	July 31, 2022 ⁽¹⁾			July 31, 2021		
	2023 Notes	2025 Notes	Total	2023 Notes	2025 Notes	Total
Liability component:						
Principal	\$ 1,691.9	\$ 1,999.4	\$ 3,691.3	\$ 1,692.0	\$ 2,000.0	\$ 3,692.0
Less: debt discount and debt issuance costs, net of amortization	(2.6)	(11.9)	(14.5)	(134.1)	(331.9)	(466.0)
Net carrying amount	<u>\$ 1,689.3</u>	<u>\$ 1,987.5</u>	<u>\$ 3,676.8</u>	<u>\$ 1,557.9</u>	<u>\$ 1,668.1</u>	<u>\$ 3,226.0</u>
Equity component (including amounts classified as temporary equity)	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 315.0</u>	<u>\$ 403.0</u>	<u>\$ 718.0</u>

⁽¹⁾ As described in Note 1. Description of Business and Summary of Significant Accounting Policies, we adopted new debt guidance effective August 1, 2021, using a modified retrospective method, under which financial results reported in prior periods were not adjusted. Upon adoption, our convertible senior notes are accounted for entirely as a liability and measured at their amortized cost. Transaction costs related to the issuance of the notes are netted with the liability and are amortized on a straight-line basis, which approximates the effective interest rate method, to interest expense over the term of the notes.

The total estimated fair value of the 2023 Notes and 2025 Notes were \$3.2 billion and \$3.5 billion at July 31, 2022, respectively and \$2.6 billion and \$2.9 billion at July 31, 2021, respectively. The fair value was determined based on the closing trading price per \$100 of the applicable series of the Notes as of the last day of trading for the period. We consider the fair value of the Notes at July 31, 2022 and 2021 to be a Level 2 measurement. The fair value of the Notes is primarily affected by the trading price of our common stock and market interest rates.

The following table sets forth interest expense recognized related to the Notes (dollars in millions):

	Year Ended July 31, 2022			Year Ended July 31, 2021			Year Ended July 31, 2020		
	2023 Notes	2025 Notes	Total	2023 Notes	2025 Notes	Total	2023 Notes	2025 Notes	Total
Contractual interest expense	\$ 12.7	\$ 7.5	\$ 20.2	\$ 12.7	\$ 7.5	\$ 20.2	\$ 12.7	\$ 1.1	\$ 13.8
Amortization of debt discount ⁽¹⁾	—	—	—	63.5	74.3	137.8	60.9	10.5	71.4
Amortization of debt issuance costs	2.8	4.4	7.2	2.3	2.8	5.1	2.1	0.4	2.5
Total interest expense recognized	\$ 15.5	\$ 11.9	\$ 27.4	\$ 78.5	\$ 84.6	\$ 163.1	\$ 75.7	\$ 12.0	\$ 87.7
Effective interest rate of the liability component	0.9 %	0.6 %		5.2 %	5.4 %		5.2 %	5.4 %	

⁽¹⁾ Upon adoption of the new debt guidance on August 1, 2021, the conversion option is no longer separately accounted for as debt discount. Our convertible senior notes are accounted for entirely as a liability.

Note Hedges

To minimize the impact of potential economic dilution upon conversion of our convertible senior notes, we entered into separate convertible note hedge transactions (the “2023 Note Hedges,” with respect to the 2023 Notes, the “2025 Note Hedges,” with respect to the 2025 Notes, and the 2023 Notes Hedges together with 2025 Note Hedges, the “Note Hedges”) with respect to our common stock concurrent with the issuance of each series of the Notes.

The following table presents details of our Note Hedges (in millions):

	Initial Number of Shares	Aggregate Purchase
2023 Note Hedges	6.4	\$ 332.0
2025 Note Hedges	6.7	\$ 370.8

The Note Hedges cover shares of our common stock at a strike price per share that corresponds to the initial applicable conversion price of the applicable series of the Notes, which are also subject to adjustment, and are exercisable upon conversion of the applicable series of the Notes. The Note Hedges will expire upon maturity of the applicable series of the Notes. The Note Hedges are separate transactions and are not part of the terms of the applicable series of the Notes. Holders of the Notes of either series will not have any rights with respect to the Note Hedges. Any shares of our common stock receivable by us under the Note Hedges are excluded from the calculation of diluted earnings per share as they are antidilutive. The aggregate amounts paid for the Note Hedges are included in additional paid-in capital on our consolidated balance sheets.

Warrants

Separately, but concurrently with the issuance of each series of our convertible senior notes, we entered into transactions whereby we sold warrants (the “2023 Warrants,” with respect to the 2023 Notes, the “2025 Warrants,” with respect to the 2025 Notes, and the 2023 Warrants together with the 2025 Warrants, the “Warrants”) to acquire shares of our common stock, subject to anti-dilution adjustments. The 2023 Warrants and 2025 Warrants are exercisable beginning October 2023 and September 2025, respectively.

The following table presents details of our Warrants (in millions, except per share data):

	Initial Number of Shares	Strike Price per Share	Aggregate Proceeds
2023 Warrants	6.4	\$ 417.80	\$ 145.4
2025 Warrants	6.7	\$ 408.47	\$ 202.8

The shares issuable under the Warrants will be included in the calculation of diluted earnings per share when the average market value per share of our common stock for the reporting period exceeds the applicable strike price for such series of Warrants. The Warrants are separate transactions and are not part of either series of Notes or Note Hedges and are not remeasured through earnings each reporting period. Holders of the Notes of either series will not have any rights with respect to the Warrants. The aggregate proceeds received from the sale of the Warrants are included in additional paid-in capital on our consolidated balance sheets.

Revolving Credit Facility

On September 4, 2018, we entered into a credit agreement (the “Credit Agreement”) with certain institutional lenders that provides for a \$400.0 million unsecured revolving credit facility (the “Credit Facility”), with an option to increase the amount of the Credit Facility by up to an additional \$350.0 million, subject to certain conditions. The Credit Facility matures on the earlier of (i) September 4, 2023 and (ii) the date that is 91 days prior to the stated maturity of our 2023 Notes if (a) any of the 2023 Notes are still outstanding and (b) our unrestricted cash and cash equivalents are less than the then outstanding principal amount of our 2023 Notes plus \$400.0 million.

The borrowings under the Credit Facility currently bear interest, at our option, at a base rate plus a spread of 0.00% to 0.75%, or an adjusted LIBO Rate plus a spread of 1.00% to 1.75%, in each case with such spread being determined based on our leverage ratio. We are obligated to pay an ongoing commitment fee on undrawn amounts at a rate of 0.125% to 0.250%, depending on our leverage ratio. In March 2021, the ICE Benchmark Administration, the administrator of LIBO Rate, announced that it will cease publication of LIBO Rate by June 2023. Under the terms of our Credit Facility, in the event of the discontinuance of the LIBO Rate, a mutually agreed-upon alternative benchmark rate will be established to replace the LIBO Rate, which may include the Secured Overnight Financing Rate (“SOFR”). We do not anticipate that the discontinuance of the LIBO Rate will materially impact our liquidity or financial position.

As of July 31, 2022, there were no amounts outstanding and we were in compliance with all covenants under the Credit Agreement.

12. Commitments and Contingencies

Purchase Commitments

Manufacturing Purchase Commitments

In order to reduce manufacturing lead times and plan for adequate supply, we enter into agreements with manufacturing partners and component suppliers to procure inventory based on our demand forecasts. The following table presents details of the aggregate future minimum or fixed purchase commitments under these arrangements excluding obligations under contracts that we can cancel without a significant penalty as of July 31, 2022 (in millions):

	Fiscal years ending July 31,						2028 and Thereafter
	Total	2023	2024	2025	2026	2027	
Manufacturing purchase commitments	\$ 331.7	\$ 226.7	\$ 30.0	\$ 35.0	\$ 40.0	\$ —	\$ —

Other Purchase Commitments

We have entered into various non-cancelable agreements with certain service providers, under which we are committed to minimum or fixed purchases. The following table presents details of the aggregate future non-cancelable purchase commitments under these agreements as of July 31, 2022 (in millions):

	Fiscal years ending July 31,						2028 and Thereafter
	Total	2023	2024	2025	2026	2027	
Other purchase	\$ 1,881.4	\$ 82.7	\$ 368.5	\$ 413.9	\$ 531.6	\$ 483.9	\$ 0.8

Additionally, we have a \$162.2 million minimum purchase commitment with a service provider through September 2027 with no specified annual commitments.

Mutual Covenant Not to Sue and Release Agreement

In January 2020, we executed a Mutual Covenant Not to Sue and Release Agreement for \$50.0 million to extend an existing covenant not to sue for seven years. As the primary benefit of the arrangement was attributable to future use, the amount was recorded in other assets on our consolidated balance sheets and is amortized to cost of product revenue in our consolidated statements of operations over the estimated period of benefit of seven years.

Litigation

We are subject to legal proceedings, claims, and litigation arising in the ordinary course of business, including intellectual property litigation. Such matters are subject to many uncertainties and outcomes are not predictable with assurance. We accrue for contingencies when we believe that a loss is probable and that we can reasonably estimate the amount of any such loss.

To the extent there is a reasonable possibility that a loss exceeding amounts already recognized may be incurred and the amount of such additional loss would be material, we will either disclose the estimated additional loss or state that such an estimate cannot be made. As of July 31, 2022, we have not recorded any significant accruals for loss contingencies associated with such legal proceedings, determined that an unfavorable outcome is probable or reasonably possible, or determined that the amount or range of any possible loss is reasonably estimable.

Indemnification

Under the indemnification provisions of our standard sales related contracts, we agree to defend our end-customers against third-party claims asserting infringement of certain intellectual property rights, which may include patents, copyrights, trademarks, or trade secrets, and to pay judgments entered on such claims. Our exposure under these indemnification provisions is generally limited to payments made to us for the alleged infringing products over the preceding twelve months under the agreement. However, certain agreements include indemnification provisions that could potentially expose us to losses in excess of these payments. In addition, we indemnify our officers, directors, and certain key employees while they are serving in good faith in their company capacities. To date, we have not recorded any accruals for loss contingencies associated with indemnification claims or determined that an unfavorable outcome is probable or reasonably possible.

13. Stockholders' Equity

Share Repurchase Program

In February 2019, our board of directors authorized a \$1.0 billion share repurchase program, which is funded from available working capital. In December 2020 and August 2021, our board of directors authorized additional \$700.0 million and \$676.1 million increases to this share repurchase program, respectively, bringing the total authorization under this share repurchase program to \$2.4 billion (our “current authorization”). The expiration date of our current authorization was extended to December 31, 2022, and our repurchase program may be suspended or discontinued at any time. Repurchases may be made at management’s discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing.

The following table summarizes the share repurchase activity under our share repurchase program (in millions, except per share amounts):

	Year Ended July 31,		
	2022	2021	2020
Number of shares repurchased	1.8	4.0	0.9
Weighted average price per share ⁽¹⁾	\$ 512.49	\$ 294.87	\$ 209.12
Aggregate purchase price ⁽¹⁾	\$ 915.0	\$ 1,178.1	\$ 198.1

⁽¹⁾ Includes transaction costs

As of July 31, 2022, \$85.0 million remained available for future share repurchases under our current repurchase authorization. The total price of the shares repurchased and related transaction costs are reflected as a reduction to common stock and additional paid-in capital on our consolidated balance sheets.

Accelerated Stock Repurchase

In February 2020, our board of directors approved the repurchase of \$1.0 billion of our common stock through an accelerated share repurchase (“ASR”) transaction with a financial institution. This ASR transaction was in addition to our share repurchase program.

During the fiscal year ended July 31, 2020, we completed the ASR transaction with an aggregate of 5.2 million shares of our common stock repurchased and retired. The total price of the ASR transaction is reflected as a reduction to common stock and additional paid-in capital on our consolidated balance sheet.

14. Equity Award Plans

Share-Based Compensation Plans

Equity Incentive Plans

Our 2021 Equity Incentive Plan (our “2021 Plan”) became effective in December 2021 and replaced our 2012 Equity Incentive Plan (our “2012 Plan”). Our 2021 Plan provides for the granting of stock options, stock appreciation rights, restricted stock awards (“RSAs”), restricted stock units (“RSUs”), performance shares (“PSAs”), performance-based stock units (“PSUs”) and performance stock options (“PSOs”) to our employees, directors, and consultants. Upon effectiveness of the 2021 Plan, the 2012 Plan was terminated and no further awards will be granted under the 2012 Plan. Awards that were outstanding upon such termination remained outstanding pursuant to their original terms, and any subsequent expiration, cancellation or forfeiture of awards under our 2012 Plan are returned to our 2021 Plan.

The majority of our equity awards are RSUs, which generally vest over a period of three to four years from the date of grant. Until vested, RSUs do not have the voting and dividend participation rights of common stock and the shares underlying the awards are not considered issued and outstanding. Our options expire no more than ten years after the date of grant.

We grant PSUs to certain employees, which vest over a period of one to four years from the date of grant. The actual number of PSUs earned and eligible to vest is determined based on the level of achievement against revenue growth, pre-established billings and operating margin goals, or pre-defined individual performance targets for the fiscal year, and market conditions, if applicable. During the year ended July 31, 2022, we granted 0.1 million shares of PSUs, which contain service, performance and market conditions. The performance condition is based on revenue growth, whereas the market condition measures our total shareholder return (“TSR”) relative to the TSR of the companies listed in the Standard & Poor’s 500 index. In addition to this grant, we have also approved the future grant of 0.1 million shares of PSUs with similar terms, which will be considered granted at the time their related vesting conditions are established in the next two years.

We have also granted PSOs with both a market condition and a service condition to certain executives. The market condition for PSOs granted in the fiscal years 2018 and 2019 requires the price of our common stock to equal or exceed \$297.75, \$397.00, \$496.25, and \$595.50 based on the average closing price for 30 consecutive trading days during the four-, five-, six-, and seven-and-a-half-year periods following the date of grant in fiscal year 2018 and 2019, respectively. The market condition for PSOs granted in the fiscal year 2021 requires the price of our common stock to equal or exceed \$397.00, \$496.25, \$595.50 and \$700.00 based on the average closing price for 30 consecutive trading days during the three-, four-, five-, and six-and-a-half-year periods following the date of grant. All of the PSOs granted in the fiscal year 2021 were forfeited in the same fiscal year and are no longer outstanding. To the extent that the market condition has been met, one-fourth of the PSOs will vest on each anniversary date of the grant date for such PSOs, subject to continued service. All outstanding PSOs may be exercised prior to vesting (“early exercise”). Shares of common stock issued upon early exercise of the PSOs will be restricted and, at our option, subject to repurchase if the option holder ceases to be a service provider. The maximum contractual term of our outstanding PSOs is seven and a half years from the date of grant, depending on vesting period. As of July 31, 2022, all stock price targets for our outstanding PSOs have been satisfied.

We net-share settle equity awards held by certain employees by withholding shares upon vesting to satisfy tax withholding obligations. The shares withheld to satisfy employee tax withholding obligations are returned to our 2021 Plan and will be available for future issuance. Payments for employees’ tax obligations to the tax authorities are recognized as a reduction to additional paid-in capital and reflected as financing activities in our consolidated statements of cash flows.

A total of 13.1 million shares of our common stock are reserved for issuance pursuant to our equity incentive plans as of July 31, 2022.

2012 Employee Stock Purchase Plan

Our 2012 Employee Stock Purchase Plan was adopted by our board of directors and approved by the stockholders on June 5, 2012, and was effective upon completion of our initial public offering (“IPO”). On August 29, 2017, we amended and restated our 2012 Employee Stock Purchase Plan (our “2012 ESPP”) to extend the length of our offering periods from 6 to 24 months.

Our 2012 ESPP permits eligible employees to acquire shares of our common stock at 85% of the lower of the fair market value of our common stock on the first trading day of each offering period or on the purchase date. If the fair market value of our common stock on the purchase date is lower than the first trading day of the offering period, the current offering period will be cancelled after purchase and a new 24-month offering period will begin. Under our 2012 ESPP, each 24-month offering period consists of four consecutive 6-month purchase periods, with purchase dates on the first trading day on or after February 28 and August 31 of each year. Participants may purchase shares of common stock through payroll deductions of up to 15% of their eligible compensation, subject to purchase limits of 625 shares per six-month purchase period and \$25,000 worth of stock for each calendar year. Shares purchased under our 2012 ESPP during the fiscal years ended July 31, 2022, 2021 and 2020 were 0.7 million, 0.6 million and 0.6 million, at an average exercise price of \$192.81 per share, \$161.07 per share and \$146.90 per share respectively.

A total of 4.9 million shares of our common stock are available for sale under our 2012 ESPP as of July 31, 2022. On the first day of each fiscal year, the number of shares in the reserve may be increased by the lesser of (i) 2,000,000 shares, (ii) 1% of the outstanding shares of our common stock on the first day of the fiscal year, or (iii) such other amount as determined by our board of directors.

Assumed Share-Based Compensation Plans

In connection with our acquisitions, we have assumed equity incentive plans of certain acquired companies (collectively “the Assumed Plans”). The equity awards assumed in connection with each acquisition were granted from their respective assumed plans. The assumed equity awards will be settled in shares of our common stock and will retain the terms and conditions under which they were originally granted. No additional equity awards will be granted under and forfeited awards will not be returned to the Assumed Plans. Refer to Note 7. Acquisitions for more information on our acquisitions and the related equity awards assumed.

Stock Option Activities

The following table summarizes the stock option and PSO activity under our stock plans during the years ended July 31, 2022, 2021, and 2020 (in millions, except per share amounts):

	Stock Options Outstanding				PSOs Outstanding			
	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value	Number of Shares	Weighted-Average Exercise Price Per Share	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance—July 31, 2019	0.3	\$ 14.53	2.2	\$ 81.4	3.7	\$ 193.99	6.2	\$ 120.1
Exercised	(0.2)	\$ 11.46			—	\$ —		
Forfeited.....	—	\$ —			(0.9)	\$ 193.51		
Balance—July 31, 2020	0.1	\$ 19.59	1.5	\$ 34.2	2.8	\$ 194.14	5.2	\$ 170.9
Granted	—	\$ —			0.2	\$ 304.29		
Exercised	0.0	\$ 12.82			—	\$ —		
Forfeited.....	—	\$ 7.84			(0.2)	\$ 304.29		
Balance—July 31, 2021	0.1	\$ 26.20	0.8	\$ 27.4	2.8	\$ 194.14	4.2	\$ 566.8
Exercised	(0.1)	\$ 18.72			—	\$ —		
Forfeited.....	—	\$ —			(0.1)	\$ 184.24		
Balance—July 31, 2022	0.0	\$ 55.36	0.5	\$ 6.7	2.7	\$ 194.55	3.2	\$ 809.3
Exercisable—July 31, 2022....	0.0	\$ 55.36	0.5	\$ 6.7	2.7	\$ 194.55	3.2	\$ 809.3

The weighted-average grant-date fair value of PSOs granted during the year ended July 31, 2021 was \$82.12 per share. The intrinsic value of options exercised during the years ended July 31, 2022, 2021, and 2020 was \$29.2 million, \$22.2 million and \$50.2 million, respectively.

RSU and PSU Activities

The following table summarizes the RSU and PSU activity under our stock plans during the years ended July 31, 2022, 2021, and 2020 (in millions, except per share amounts):

	RSUs Outstanding			PSUs Outstanding		
	Number of Shares	Weighted-Average Grant-Date Fair Value Per Share	Aggregate Intrinsic Value	Number of Shares	Weighted-Average Grant-Date Fair Value Per Share	Aggregate Intrinsic Value
Balance—July 31, 2019	6.9	\$ 188.16	\$ 1,554.0	0.3	\$ 197.86	\$ 67.0
Granted ⁽¹⁾⁽²⁾	3.5	\$ 211.38		0.4	\$ 248.55	
Vested ⁽³⁾	(2.8)	\$ 181.19		(0.1)	\$ 166.90	
Forfeited	(1.0)	\$ 188.18		0.0	\$ 175.88	
Balance—July 31, 2020	6.6	\$ 203.30	\$ 1,688.1	0.6	\$ 231.42	\$ 147.2
Granted ⁽¹⁾⁽²⁾	4.1	\$ 297.89		0.8	\$ 321.45	
Vested ⁽³⁾	(2.9)	\$ 200.91		(0.1)	\$ 195.60	
Forfeited	(0.9)	\$ 226.79		0.0	\$ 235.98	
Balance—July 31, 2021	6.9	\$ 257.56	\$ 2,760.2	1.3	\$ 292.93	\$ 498.4
Granted ⁽¹⁾	1.9	\$ 494.54		0.3	\$ 351.14	
Vested ⁽³⁾	(3.0)	\$ 257.07		(0.4)	\$ 250.42	
Forfeited	(0.9)	\$ 286.49		(0.2)	\$ 321.92	
Balance—July 31, 2022	4.9	\$ 346.54	\$ 2,456.9	1.0	\$ 319.15	\$ 513.7

- (1) For PSUs, shares granted represent the aggregate maximum number of shares that may be earned and issued with respect to these awards over their full terms.
- (2) Includes 0.4 million RSUs assumed in connection with the acquisitions of Crypsis, Sinefa, Expanse and Bridgecrew, with weighted-average grant-date fair value of \$241.43, \$297.17, \$317.45 and \$354.66, respectively, for the year ended July 31, 2021, and 0.1 million RSUs assumed in connection with the acquisitions of Zingbox, Aporeto and CloudGenix, with weighted-average grant-date fair value of \$208.25, \$231.30 and \$181.48, respectively, for the year ended July 31, 2020.
- (3) Includes time-based vesting for PSUs.

The aggregate fair value, as of the respective vesting dates, of RSUs vested during the years ended July 31, 2022, 2021, and 2020 was \$1.6 billion, \$986.4 million, and \$615.7 million, respectively. The aggregate fair value, as of the respective vesting dates, of PSUs vested during the year ended July 31, 2022, 2021, and 2020 was \$184.0 million, \$20.8 million and \$11.9 million, respectively.

Shares Available for Grant

The following table presents the stock activity and the total number of shares available for grant under our equity incentive plans as of July 31, 2022 (in millions):

	Number of shares
Balance—July 31, 2021	11.3
Authorized	8.8
Cancelled upon effectiveness of the 2021 Plan	(14.6)
RSUs and PSUs granted	(2.2)
PSOs, RSUs, and PSUs forfeited.....	1.2
Shares withheld for taxes.....	0.1
Balance—July 31, 2022	<u>4.6</u>

Share-Based Compensation

We record share-based compensation awards based on estimated fair value as of the grant date. The fair value of RSUs and PSUs not subject to market conditions is based on the closing market price of our common stock on the date of grant.

The fair value of the PSUs subject to the market condition is estimated on the grant date using a Monte Carlo simulation model. No such PSUs were granted during the years ended July 31, 2021 or 2020. The following table summarizes the assumptions used and the resulting grant-date fair value of our PSUs subject to the market condition granted during the year ended July 31, 2022:

	Year Ended July 31, 2022
Volatility	36.0% - 41.1%
Expected term (in years)	1.4 - 3.0
Dividend yield	— %
Risk-free interest rate	0.2% - 2.0%
Grant-date fair value per share	\$411.49 - \$782.13

The expected volatility is based on the historical volatility of our common stock. The expected term is based on the length of each tranche's performance period from the grant date. The dividend yield assumption is based on our current expectations about our anticipated dividend policy. The risk-free interest rate is based on the implied yield available on U.S. Treasury zero-coupon issues with maturities that approximate the expected term.

The fair value of PSOs is estimated on the grant date using a Monte Carlo simulation model, which predicts settlement of the options midway between the vesting term and the contractual term. No PSOs were granted during the years ended July 31, 2022 or 2020. The following table summarizes the assumptions used and the resulting grant-date fair values of our PSOs granted during the year ended July 31, 2021:

	Year Ended July 31, 2021
Volatility	35.9 %
Dividend yield	— %
Risk-free interest rate	0.6 %
Weighted-average grant-date fair value per share	\$ 82.12

The expected volatility is based on a combination of implied volatility from traded options on our common stock and the historical volatility of our common stock. The dividend yield assumption is based on our current expectations about our anticipated dividend policy. The risk-free interest rate is based on the implied yield available on U.S. Treasury zero-coupon issues with terms equal to the contractual terms of each tranche.

The fair value of shares issued under our 2012 ESPP are estimated on the grant date using the Black-Scholes option pricing model. The following table summarizes the assumptions used and the resulting grant-date fair values of our ESPP:

	Year Ended July 31,		
	2022	2021	2020
Volatility.....	33.6% - 39.4%	34.9% - 42.6%	31.0% - 35.7%
Expected term (in years)	0.5 - 2.0	0.5 - 2.0	0.5 - 2.0
Dividend yield.....	— %	— %	— %
Risk-free interest rate.....	0.1% - 1.4%	0.1%	0.9% - 1.9%
Grant-date fair value per share.....	\$112.76 - \$222.30	\$69.48 - \$129.05	\$46.75 - \$66.47

The expected volatility is based on a combination of implied volatility from traded options on our common stock and the historical volatility of our common stock. The expected term represents the term from the first day of the offering period to the purchase dates within each offering period. The dividend yield assumption is based on our current expectations about our anticipated dividend policy. The risk-free interest rate is based on the implied yield available on U.S. Treasury zero-coupon issues with maturities that approximate the expected term.

The following table summarizes share-based compensation included in costs and expenses (in millions):

	Year Ended July 31,		
	2022	2021	2020
Cost of product revenue	\$ 9.3	\$ 6.2	\$ 5.7
Cost of subscription and support revenue	110.2	93.0	77.7
Research and development.....	471.1	428.9	274.6
Sales and marketing	304.7	269.9	214.5
General and administrative	118.1	128.9	92.0
Total share-based compensation	\$ 1,013.4	\$ 926.9	\$ 664.5

As of July 31, 2022, total compensation cost related to unvested share-based awards not yet recognized was \$1.8 billion. This cost is expected to be amortized over a weighted-average period of approximately 2.6 years. Future grants will increase the amount of compensation expense to be recorded in these periods.

15. Income Taxes

The following table presents the components of income (loss) before income taxes (in millions):

	Year Ended July 31,		
	2022	2021	2020
United States	\$ (152.3)	\$ (482.2)	\$ (56.1)
Foreign	(54.9)	17.2	(175.7)
Total	\$ (207.2)	\$ (465.0)	\$ (231.8)

The following table summarizes our provision for income taxes (in millions):

	Year Ended July 31,		
	2022	2021	2020
Federal:			
Current	\$ 2.6	\$ 3.3	\$ 3.8
Deferred	(0.3)	(5.9)	(1.3)
State:			
Current	1.5	1.7	1.3
Deferred	0.1	0.1	0.1
Foreign:			
Current	58.8	41.3	39.2
Deferred	(2.9)	(6.6)	(7.9)
Total	<u>\$ 59.8</u>	<u>\$ 33.9</u>	<u>\$ 35.2</u>

For the year ended July 31, 2022, our provision for income taxes increased compared to the year ended July 31, 2021, primarily due to foreign income and withholding taxes.

For the year ended July 31, 2021, our provision for income taxes decreased slightly compared to the year ended July 31, 2020, primarily due to tax benefits from changes in our valuation allowances.

The following table presents the items accounting for the difference between income taxes computed at the federal statutory income tax rate and our provision for income taxes:

	Year Ended July 31,		
	2022	2021	2020
Federal statutory rate	21.0 %	21.0 %	21.0 %
Effect of:			
State taxes, net of federal tax benefit	2.7	1.3	3.0
Effects of non-U.S. operations	(16.5)	(3.1)	667.5
Change in valuation allowance	(158.7)	(40.7)	(714.1)
Share-based compensation	83.6	5.0	(5.1)
Tax credits	41.5	9.9	17.9
Non-deductible expenses	(2.5)	(1.3)	(3.9)
Other, net	—	0.6	(1.5)
Total	<u>(28.9)%</u>	<u>(7.3)%</u>	<u>(15.2)%</u>

In fiscal 2020, we transferred certain intellectual property rights to a wholly owned United Kingdom subsidiary, primarily to align our legal structure to our evolving operations. The tax benefit from an increase in the tax basis of intellectual property rights resulted in an increase in effects of non-U.S. operations and was fully offset by a full valuation.

The following table presents the components of our deferred tax assets and liabilities as of July 31, 2022 and 2021 (in millions):

	July 31,	
	2022	2021
Deferred tax assets:		
Accruals and reserves	\$ 227.1	\$ 125.0
Deferred revenue	475.5	364.9
Net operating loss carryforwards	759.1	556.7
Tax credits	317.4	230.8
Share-based compensation	59.2	53.9
Fixed assets and intangible assets	1,742.6	1,789.6
Interest carryforward	55.8	19.2
Gross deferred tax assets	3,636.7	3,140.1
Valuation allowance	(3,414.1)	(2,933.3)
Total deferred tax assets	222.6	206.8
Deferred tax liabilities:		
Deferred contract costs	(183.6)	(165.4)
Other deferred tax liabilities	(27.8)	(32.3)
Total deferred tax liabilities	(211.4)	(197.7)
Net deferred tax assets	\$ 11.2	\$ 9.1

A valuation allowance is provided when it is more likely than not that the deferred tax asset will not be realized. Realization of deferred tax assets is dependent upon future taxable income, if any, the amount and timing of which are uncertain. At such time, if it is determined that it is more likely than not that the deferred tax assets are realizable, the valuation allowance will be adjusted. As of July 31, 2022, we have provided a valuation allowance for our federal, state, United Kingdom and certain other foreign deferred tax assets that we believe will, more likely than not, be unrealizable. The net valuation allowance increased by \$0.5 billion from the year ended July 31, 2021 to the year ended July 31, 2022, primarily due to an increase in our NOL carryforwards and deferred revenue as a result of current year operations.

As of July 31, 2022, we had federal, state, and foreign NOL carryforwards of approximately \$2.0 billion, \$1.0 billion, and \$1.8 billion, respectively, as reported on our tax returns, available to reduce future taxable income, if any. If not utilized, our federal and state NOL carryforwards will expire in various amounts at various dates beginning in the years ending July 31, 2033 and July 31, 2023, respectively. Our foreign NOL will carry forward indefinitely.

As of July 31, 2022, we had federal and state research and development tax credit carryforwards of approximately \$243.8 million and \$197.4 million, respectively, as reported on our tax returns. If not utilized, the federal credit carryforwards will expire in various amounts at various dates beginning in the year ending July 31, 2026. The state credit will carry forward indefinitely.

As of July 31, 2022, we had foreign tax credit carryforwards of \$3.5 million as reported on our tax returns. If not utilized, the foreign tax credit carryforwards will expire in various amounts at various dates beginning in the year ending July 31, 2023.

Utilization of the NOL carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of NOLs and credits before utilization.

As of July 31, 2022, we had \$414.0 million of unrecognized tax benefits, \$76.1 million of which would affect income tax expense if recognized, after consideration of our valuation allowance in the United States and other assets. As of July 31, 2021, we had \$372.9 million of unrecognized tax benefits, \$68.7 million of which would affect income tax expense if recognized, after consideration of our valuation allowance in the United States and other assets. We do not expect the amount of unrecognized tax benefits as of July 31, 2022 to materially change over the next 12 months.

We file federal, state, and foreign income tax returns in jurisdictions with varying statutes of limitations. Generally, all years remain subject to adjustment due to our NOL and credit carryforwards. We currently have ongoing tax audits in various jurisdictions and at various times. The primary focus of these audits is, generally, profit allocation. The ultimate amount and timing of any future settlements cannot be predicted with reasonable certainty.

We recognize both interest and penalties associated with uncertain tax positions as a component of income tax expense. During the years ended July 31, 2022, 2021, and 2020, we recognized income tax expense related to interest and penalties of \$5.2 million, \$3.5 million, and \$1.6 million, respectively. We had accrued interest and penalties on our consolidated balance sheets related to unrecognized tax benefits of \$20.9 million and \$15.7 million as of July 31, 2022 and 2021, respectively.

The following table presents a reconciliation of the beginning and ending amount of our gross unrecognized tax benefits (in millions):

	Year Ended July 31,		
	2022	2021	2020
Unrecognized tax benefits at the beginning of the period	\$ 372.9	\$ 326.4	\$ 314.5
Additions for tax positions taken in prior years	3.5	26.5	3.2
Reductions for tax positions taken in prior years	(7.4)	(2.5)	(1.6)
Additions for tax positions taken in the current year	45.0	22.5	10.3
Unrecognized tax benefits at the end of the period	<u>\$ 414.0</u>	<u>\$ 372.9</u>	<u>\$ 326.4</u>

During the year ended July 31, 2022 and 2021, our additions for tax positions taken in the given year were primarily attributable to uncertain tax positions related to tax credits.

During the year ended July 31, 2020, our additions for tax positions taken in the given year were primarily attributable to intercompany transactions.

As of July 31, 2022, we had no unremitted earnings when evaluating our outside basis difference relating to our U.S. investment in foreign subsidiaries. However, there could be local withholding taxes payable due to various foreign countries if certain lower tier earnings are distributed. Withholding taxes that would be payable upon remittance of these lower tier earnings are not material.

16. Net Loss Per Share

Basic net loss per share is computed by dividing net loss by basic weighted-average shares outstanding during the period. Diluted net loss per share is computed by dividing net loss by diluted weighted-average shares outstanding, including potentially dilutive securities.

The following table presents the computation of basic and diluted net loss per share of common stock (in millions, except per share data):

	Year Ended July 31,		
	2022	2021	2020
Net loss	\$ (267.0)	\$ (498.9)	\$ (267.0)
Weighted-average shares used to compute net loss per share, basic and diluted	98.5	96.4	96.9
Net loss per share, basic and diluted	<u>\$ (2.71)</u>	<u>\$ (5.18)</u>	<u>\$ (2.76)</u>

The following securities were excluded from the computation of diluted net loss per share of common stock for the periods presented as their effect would have been antidilutive (in millions):

	Year Ended July 31,		
	2022	2021	2020
Convertible senior notes	13.1	13.1	13.1
Warrants related to the issuance of convertible senior notes	13.1	13.1	13.1
RSUs and PSUs	5.9	8.2	7.2
Options to purchase common stock, including PSOs	2.7	2.9	2.9
RSAs and PSAs	0.1	0.3	0.1
ESPP shares	0.2	0.3	0.3
Total	<u>35.1</u>	<u>37.9</u>	<u>36.7</u>

17. Other Income, Net

The following table sets forth the components of other income, net (in millions):

	Year Ended July 31,		
	2022	2021	2020
Interest income	\$ 15.6	\$ 8.5	\$ 41.4
Foreign currency exchange gains (losses), net	1.8	(5.4)	(6.7)
Other	(8.4)	(0.7)	1.2
Total other income, net	<u>\$ 9.0</u>	<u>\$ 2.4</u>	<u>\$ 35.9</u>

18. Segment Information

We conduct business globally and sales are primarily managed on a geographic theater basis. Our chief operating decision maker reviews financial information presented on a consolidated basis accompanied by information about revenue by geographic region for purposes of allocating resources and evaluating financial performance. We have one business activity and there are no segment managers who are held accountable for operations, operating results, and plans for levels, components, or types of products or services below the consolidated unit level. Accordingly, we are considered to be in a single reportable segment and operating unit structure.

The following table presents our long-lived assets, which consist of property and equipment, net and operating lease right-of-use assets, by geographic region (in millions):

	Year Ended July 31,	
	2022	2021
Long-lived assets:		
United States	\$ 446.1	\$ 461.1
Israel	55.4	61.9
Other countries	98.3	58.3
Total long-lived assets	<u>\$ 599.8</u>	<u>\$ 581.3</u>

Refer to Note 2. Revenue for revenue by geographic theater and revenue for groups of similar products and services for the years ended July 31, 2022, 2021, and 2020.

19. Subsequent Events

Share Repurchase

On August 19, 2022, our board of directors authorized a \$915.0 million increase to our share repurchase program under the current authorization, bringing the total remaining authorization for future share repurchases to \$1.0 billion. Repurchases may be made at management's discretion from time to time on the open market, through privately negotiated transactions, transactions structured through investment banking institutions, block purchase techniques, 10b5-1 trading plans, or a combination of the foregoing. The repurchase authorization will expire on December 31, 2023, and may be suspended or discontinued at any time without prior notice.

Stock Split Effected in the Form of a Stock Dividend ("Stock Split")

On August 22, 2022, we announced that our board of directors had approved a three-for-one stock split of our outstanding shares of common stock to be effected in the form of a stock dividend. Each stockholder of record at the close of business on September 6, 2022 (the "record date"), will receive, after the close of business on September 13, 2022, two additional shares for every share held on the record date, and trading will begin on a split-adjusted basis on September 14, 2022.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

Not applicable.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, evaluated the effectiveness of our disclosure controls and procedures pursuant to Rule 13a-15 under the Securities Exchange Act of 1934, as amended (the “Exchange Act”). In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. In addition, the design of disclosure controls and procedures must reflect the fact that there are resource constraints and that management is required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs.

Based on our evaluation, our chief executive officer and chief financial officer concluded that, as of July 31, 2022, our disclosure controls and procedures are designed at a reasonable assurance level and are effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission (“SEC”) rules and forms, and that such information is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate, to allow timely decisions regarding required disclosure.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) under the Exchange Act. Our management assessed the effectiveness of our internal control over financial reporting as of July 31, 2022, based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in Internal Control - Integrated Framework (2013 framework). Based on that assessment, management concluded that, as of July 31, 2022, our internal control over financial reporting was effective.

The effectiveness of our internal control over financial reporting as of July 31, 2022 has been audited by Ernst & Young LLP, the independent registered public accounting firm that audits our consolidated financial statements, as stated in their report which is included in Part II, Item 8 of this Annual Report on Form 10-K.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the quarter ended July 31, 2022 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

Not applicable.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this item will be contained in our definitive proxy statement to be filed with the SEC in connection with our 2022 annual meeting of stockholders (the “Proxy Statement”), which is expected to be filed not later than 120 days after the end of our fiscal year ended July 31, 2022, and is incorporated in this report by reference.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item will be set forth in the Proxy Statement and is incorporated herein by reference.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

Documents filed as part of this Annual Report on Form 10-K are as follows:

1. Consolidated Financial Statements

Our Consolidated Financial Statements are listed in the “Index to Consolidated Financial Statements” under Part II, Item 8 of this Annual Report on Form 10-K.

2. Financial Statement Schedules

Financial statement schedules have been omitted because they are not required, not applicable, not present in amounts sufficient to require submission of the schedule, or the required information is shown in the Consolidated Financial Statements or the notes thereto.

3. Exhibits

The following documents are incorporated by reference or are filed with this Annual Report on Form 10-K, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1	Restated Certificate of Incorporation of the Registrant.	10-K	001-35594	3.1	October 4, 2012
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-35594	3.1	May 23, 2022
3.3	Certificate of Change of Location of Registered Agent and/or Registered Office.	8-K	001-35594	3.1	August 30, 2016
4.1	Indenture between the Registrant and U.S. Bank National Association, dated as of July 12, 2018.	8-K	001-35594	4.1	July 13, 2018
4.2	Indenture between the Registrant and U.S. Bank National Association, dated as of June 8, 2020.	8-K	001-35594	4.1	June 8, 2020
4.3	Form of Global 0.75% Convertible Senior Note due 2023 (included in Exhibit 4.1).	8-K	001-35594	4.2	July 13, 2018
4.4	Form of Global 0.375% Convertible Senior Note due 2023 (included in Exhibit 4.1).	8-K	001-35594	4.2	June 8, 2020
4.5	Description of Registrant’s Securities.				
10.1*	Form of Indemnification Agreement between the Registrant and its directors and officers.	S-1/A	333-180620	10.1	July 9, 2012
10.2*	2012 Equity Incentive Plan and related form	10-Q	001-35594	10.2	November 26, 2019
10.3*	Form of 2012 Equity Incentive Plan Performance-Based Restricted Stock Unit Award Agreement	10-Q	001-35594	10.4	November 19, 2021
10.4*	2021 Equity Incentive Plan	S-8	333-261697	99.1	December 16, 2021
10.5*	Form of 2021 Equity Incentive Plan Global Stock Option Award Agreement	S-8	333-261697	99.2	December 16, 2021
10.6*	Form of 2021 Equity Incentive Plan Global Restricted Stock Unit Award Agreement	S-8	333-261697	99.3	December 16, 2021
10.7*	2012 Employee Stock Purchase Plan, as amended and restated, and related form agreements.				
10.8*	RedLock Inc. 2015 Stock Plan, as amended, and related form agreements under RedLock Inc. 2015 Stock Plan, as amended.	S-8	333-227901	99.1	October 19, 2018
10.9*	Demisto, Inc. 2015 Stock Option Plan, as amended.	S-8	333-230663	99.1	April 1, 2019

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.10*	Twistlock Ltd. Amended and Restated 2015 Share Option Plan.	S-8	333-232672	99.1	July 16, 2019
10.11*	Zingbox, Inc. Stock Incentive Plan, as amended and restated.	S-8	333-234059	99.1	October 2, 2019
10.12*	Aporeto, Inc. Amended and Restated 2015 Stock Option and Grant Plan.	S-8	333-235854	99.1	January 8, 2020
10.13*	CloudGenix Inc. 2013 Equity Incentive Plan.	S-8	333-238014	99.1	May 5, 2020
10.14*	Crypsis Group Holdings, LLC 2017 Equity Incentive Plan.	S-8	333-249387	99.1	October 8, 2020
10.15*	Sinefa Group, Inc. 2020 Stock Plan.	S-8	333-251423	99.1	December 17, 2020
10.16*	Expanse Holding Company, Inc. Amended and Restated 2012 Stock Incentive Plan.	S-8	333-251425	99.1	December 17, 2020
10.17*	Gamma Networks, Inc. 2018 Stock Option and Grant Plan	S-8	333-259327	99.1	September 3, 2021
10.18*	Bridgecrew, Inc. 2019 Stock Incentive Plan.	S-8	333-254042	99.1	March 9, 2021
10.19*	Employee Incentive Compensation Plan, as amended and restated.	10-Q	001-35594	10.2	November 25, 2014
10.20*	Clawback Policy, adopted as of August 29, 2017.	10-Q	001-35594	10.3	November 21, 2017
10.21*	Amended and Restated Outside Director Compensation Policy (last amended February 16, 2022)	10-Q	001-35594	10.4	February 23, 2022
10.22*	Continued Service Policy	10-Q	001-35594	10.3	May 20, 2022
10.23*	Palo Alto Networks, Inc. Deferred Compensation Plan effective June 1, 2022				
10.24*	New Offer Letter between the Registrant and Mark D. McLaughlin, dated May 31, 2018.	8-K	001-35594	10.1	June 4, 2018
10.25*	Employment Agreement between Palo Alto Networks (Israel Analytics) Ltd. and Nir Zuk, dated August 18, 2020.	10-Q	001-35594	10.1	November 19, 2020
10.26*	Offer Letter between the Registrant and Nikesh Arora, dated May 30, 2018.	8-K	001-35594	10.1	June 4, 2018
10.27*	Offer Letter between the Registrant and Josh Paul, dated August 5, 2021.	8-K	001-35594	10.1	September 8, 2021
10.28*	Confirmatory Employment Letter with Updated Change in Control Protection between the Registrant and Lee Klarich, dated December 19, 2011.	10-Q	001-35594	10.4	November 30, 2018
10.29*	Addendum to Employment Offer Letter by and between the Registrant and Dipak Golechha, dated March 17, 2021.	8-K	001-35594	10.1	March 19, 2021
10.30*	Addendum to Employment Offer Letter by and between the Registrant and Dipak Golechha, dated February 18, 2022.	10-Q	001-35594	10.1	May 20, 2022
10.31*	Employment Offer Letter by and between the Registrant and William “BJ” Jenkins, dated July 27, 2021.	8-K	001-35594	10.1	August 12, 2021
10.32*	Addendum to Employment Offer Letter between the Registrant and William “BJ” Jenkins dated February 18, 2022.	10-Q	001-35594	10.2	May 20, 2022
10.33*	Offer Letter between the Registrant and Amit K. Singh, dated October 11, 2018.	8-K	001-35594	10.1	October 15, 2018

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.34*	Addendum to Employment Offer Letter by and between the Registrant and Amit Singh, dated October 19, 2021.	10-Q	001-35594	10.2	November 19, 2021
10.35*	Second Addendum to Employment Offer Letter by and between the Registrant and Amit Singh, dated January 28, 2022.	10-Q	001-35594	10.5	February 23, 2022
10.36*	Form of Offer Letter between the Registrant and its directors.	10-K	001-35594	10.27	September 3, 2021
10.37**	Amended and Restated Flextronics Manufacturing Services Agreement, by and between the Registrant and Flextronics Telecom Systems Ltd., dated April 1, 2019.	10-Q	001-35594	10.1	May 30, 2019
10.38	Vendor Information Security Terms between the Registrant and Flextronics Telecom Systems Ltd. dated July 23, 2021	10-K	001-35594	10.29	September 3, 2021
10.39	Settlement, Release and Cross-License Agreement, dated May 27, 2014, by and between the Registrant and Juniper Networks, Inc.	8-K	001-35594	10.1	May 28, 2014
10.40	Purchase Agreement, dated July 10, 2018, by and among the Registrant and Citigroup Global Markets Inc. and Wells Fargo Securities, LLC, as representatives of the several Initial Purchasers named therein.	8-K	001-35594	10.1	July 13, 2018
10.41	Form of Convertible Note Hedge Confirmation.	8-K	001-35594	10.2	July 13, 2018
10.42	Form of Warrant Confirmation.	8-K	001-35594	10.3	July 13, 2018
10.43	Purchase Agreement, dated June 3, 2020, by and among the Registrant and Morgan Stanley & Co. LLC and Citigroup Global Markets Inc., as representatives of the several Initial Purchasers named therein.	8-K	001-35594	10.1	June 8, 2020
10.44	Form of Convertible Note Hedge Confirmation.	8-K	001-35594	10.2	June 8, 2020
10.45	Form of Warrant Confirmation.	8-K	001-35594	10.3	June 8, 2020
10.46	Lease between the Registrant and Santa Clara Campus Property Owner I LLC, dated May 28, 2015.	10-K	001-35594	10.29	September 17, 2015
10.47	Lease between the Registrant and Santa Clara Campus Property Owner I LLC, dated May 28, 2015.	10-K	001-35594	10.30	September 17, 2015
10.48	Lease between the Registrant and Santa Clara Campus Property Owner I LLC, dated May 28, 2015.	10-K	001-35594	10.31	September 17, 2015
10.49	Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated October 7, 2015.	8-K/A	001-35594	10.1	October 19, 2015
10.50	Amendment No. 1 to Lease by and between the Registrant and Santa Clara Phase I Property LLC, dated November 9, 2015.	10-Q	001-35594	10.2	November 24, 2015
10.51	Amendment No. 1 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated November 9, 2015.	10-Q	001-35594	10.3	November 24, 2015
10.52	Amendment No. 1 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated September 16, 2016.	10-Q	001-35594	10.1	November 22, 2016
10.53	Amendment No. 1 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated September 16, 2016.	10-Q	001-35594	10.2	November 22, 2016

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.54	Amendment No. 2 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated September 16, 2016.	10-Q	001-35594	10.3	November 22, 2016
10.55	Amendment No. 2 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated November 16, 2016.	10-Q	001-35594	10.1	March 1, 2017
10.56	Amendment No. 2 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated November 16, 2016.	10-Q	001-35594	10.2	March 1, 2017
10.57	Amendment No. 3 to Lease by and between the Registrant and Santa Clara Campus Property Owner I LLC, dated November 16, 2016.	10-Q	001-35594	10.3	March 1, 2017
10.58	Amendment No. 3 to Lease by and between the Registrant and Santa Clara EFH LLC, dated June 22, 2017.	10-K	001-35594	10.40	September 7, 2017
10.59	Amendment No. 3 to Lease by and between the Registrant and Santa Clara G LLC, dated June 22, 2017.	10-K	001-35594	10.41	September 7, 2017
10.60	Amendment No. 4 to Lease by and between the Registrant and Santa Clara EFH LLC, dated June 22, 2017.	10-K	001-35594	10.42	September 7, 2017
10.61	Amendment No. 4 to Lease by and between the Registrant and Santa Clara Phase III EFH LLC, dated September 29, 2017.	10-Q	001-35594	10.5	November 21, 2017
10.62	Amendment No. 4 to Lease by and between the Registrant and Santa Clara Phase III G LLC, dated September 29, 2017.	10-Q	001-35594	10.6	November 21, 2017
10.63	Amendment No. 5 to Lease by and between the Registrant and Santa Clara Phase III EFH LLC, dated September 29, 2017.	10-Q	001-35594	10.7	November 21, 2017
10.64	Credit Agreement, dated as of September 4, 2018, by and among the Registrant, the lenders from time to time party thereto and Citibank, N.A., as administrative	8-K	001-35594	10.1	September 6, 2018
21.1	List of subsidiaries of the Registrant.				
23.1	Consent of Independent Registered Public Accounting Firm.				
24.1	Power of Attorney (contained in the signature page to this Annual Report on Form 10-K).				
31.1	Certification of the Chief Executive Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.				
31.2	Certification of the Chief Financial Officer pursuant to Section 302(a) of the Sarbanes-Oxley Act of 2002.				
32.1†	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2†	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS	XBRL Instance Document.				
101.SCH	XBRL Taxonomy Schema Linkbase Document.				
101.CAL	XBRL Taxonomy Calculation Linkbase Document.				

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
101.DEF	XBRL Taxonomy Definition Linkbase Document.				
101.LAB	XBRL Taxonomy Labels Linkbase Document.				
101.PRE	XBRL Taxonomy Presentation Linkbase Document.				
104	Cover Page Interactive Data File (formatted as inline XBRL and contained in Exhibit 101)				

* Indicates a management contract or compensatory plan or arrangement.

** Certain portions of this exhibit have been omitted as the Registrant has determined (i) the omitted information is not material and (ii) the omitted information would likely cause harm to the Registrant if publicly disclosed.

† The certifications attached as Exhibit 32.1 and Exhibit 32.2 that accompany this Annual Report on Form 10-K, are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Annual Report on Form 10-K, irrespective of any general incorporation language contained in such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on September 6, 2022.

PALO ALTO NETWORKS, INC.

By: /s/ NIKESH ARORA

Nikesh Arora

Chairman and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Nikesh Arora, Dipak Golechha, and Josh Paul, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their, his or her substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

Signature	Title	Date
<u>/s/ NIKESH ARORA</u> Nikesh Arora	Chairman, Chief Executive Officer and Director (Principal Executive Officer)	September 6, 2022
<u>/s/ DIPAK GOLECHHA</u> Dipak Golechha	Chief Financial Officer (Duly Authorized Officer and Principal Financial Officer)	September 6, 2022
<u>/s/ JOSH PAUL</u> Josh Paul	Chief Accounting Officer (Duly Authorized Officer and Principal Accounting Officer)	September 6, 2022
<u>/s/ MARK D. MCLAUGHLIN</u> Mark D. McLaughlin	Vice Chairman and Director	September 6, 2022
<u>/s/ NIR ZUK</u> Nir Zuk	Chief Technology Officer and Director	September 6, 2022
<u>/s/ APARNA BAWA</u> Aparna Bawa	Director	September 6, 2022
<u>/s/ ASHEEM CHANDNA</u> Asheem Chandna	Director	September 6, 2022
<u>/s/ JOHN M. DONOVAN</u> John M. Donovan	Director	September 6, 2022
<u>/s/ CARL ESCHENBACH</u> Carl Eschenbach	Director	September 6, 2022
<u>/s/ DR. HELENE D. GAYLE</u> Dr. Helene D. Gayle	Director	September 6, 2022
<u>/s/ JAMES J. GOETZ</u> James J. Goetz	Director	September 6, 2022
<u>/s/ RT HON SIR JOHN KEY</u> Rt Hon Sir John Key	Director	September 6, 2022
<u>/s/ MARY PAT MCCARTHY</u> Mary Pat McCarthy	Director	September 6, 2022
<u>/s/ LORRAINE TWOHILL</u> Lorraine Twohill	Director	September 6, 2022

BOARD OF DIRECTORS

Nikesh Arora

Chief Executive Officer and
Chair of the Board of Directors

Mark D. McLaughlin

Vice Chair of the Board of Directors

Nir Zuk

Chief Technology Officer and Director

Aparna Bawa

Chief Operating Officer and Interim Chief Legal Officer,
Zoom Video Communications, Inc.

Asheem Chandna

Partner, Greylock Partners

John M. Donovan

Former Chief Executive Officer—AT&T Communications

Carl Eschenbach

General Partner, Sequoia Capital Operations, LLC

Dr. Helene D. Gayle

President, Spelman College

James J. Goetz

Managing Member, Sequoia Capital

Rt Hon Sir John Key

Former Prime Minister of New Zealand

Mary Pat McCarthy

Former Vice Chair, KPMG LLP

Lorraine Twohill

Chief Marketing Officer, Google

CORPORATE EXECUTIVES

Nikesh Arora

Chief Executive Officer and
Chair of the Board of Directors

Dipak Golechha

Chief Financial Officer

BJ Jenkins

President

Lee Klarich

Chief Product Officer

Nir Zuk

Chief Technology Officer and Director

CORPORATE HEADQUARTERS

Palo Alto Networks, Inc.
3000 Tannery Way
Santa Clara, California 95054

T: (408) 753-4000

F: (408) 753-4001

www.paloaltonetworks.com

VIRTUAL ANNUAL MEETING OF STOCKHOLDERS

Tuesday, December 13, 2022 at 12:15 p.m. PST
www.virtualshareholdermeeting.com/PANW2022

REGISTRAR AND TRANSFER AGENT

For questions regarding your account, changes of
address or the consolidation of accounts, please
contact the Company's transfer agent:

Computershare Trust Company, N.A.

P.O. Box 43006
Providence RI 02940-3006

T: (877) 373-6374

Foreign Stockholders: (781) 575-2879

www.computershare.com/investor

LEGAL COUNSEL

Wilson Sonsini Goodrich & Rosati
Professional Corporation

Palo Alto, California

INDEPENDENT AUDITORS

Ernst & Young LLP

San Jose, California

INVESTOR RELATIONS

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