Zscaler, Inc.

Fiscal Year 2019 Annual Report

ZSCALER, INC.

Dear Stockholder:

I am pleased to invite you to attend the 2019 Annual Meeting of Stockholders (the "Annual Meeting") of Zscaler, Inc. ("Zscaler" or the "Company"), to be held on Friday, January 10, 2020 at 2:00 p.m. Pacific Time. The Annual Meeting will be conducted virtually via live webcast. You will be able to vote and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/ZS2019 (please have your notice or proxy card in hand when you visit the website).

The attached Notice of Annual Meeting of Stockholders and Proxy Statement contain details of the business to be conducted at the Annual Meeting.

Whether or not you attend the virtual Annual Meeting, it is important that your shares be represented and voted at the meeting. Therefore, I urge you to promptly vote and submit your proxy via the Internet, by phone or by mail.

On behalf of the Board of Directors, I would like to express our appreciation for your support of and interest in Zscaler.

Sincerely,

Jay Chaudhry
President, Chief Executive Officer and
Chairman of the Board

ZSCALER, INC.
110 Rose Orchard Way
San Jose, California 95134
NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

Time and Date	January 10, 2020 at 2:00 p.m. Pacific Time
Place	The Annual Meeting will be a completely virtual meeting of stockholders, to be conducted via live audio webcast. You will be able to attend the virtual Annual Meeting and submit your questions during the meeting by visiting www.virtualshareholdermeeting.com/ZS2019.
Items of Business	• To elect three Class II directors from the nominees described in this Proxy Statement to hold office until the 2022 annual meeting of stockholders or until their successors are elected and qualified, subject to their earlier death, resignation or removal. • To ratify the selection of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020. • To approve, on a non-binding advisory basis, the frequency of future stockholder advisory votes on the compensation of our named executive officers.
Record Date	November 15, 2019 (the "Record Date"). Only stockholders of record at the close of business on the Record Date are entitled to receive notice of, and to vote at, the Annual Meeting.

YOUR VOTE IS IMPORTANT. Whether or not you plan to attend the virtual Annual Meeting, we urge you to submit your vote via the Internet, telephone or mail as soon as possible to ensure your shares are represented. For additional instructions for each of these voting options, please refer to the proxy card. Returning the proxy does not deprive you of your right to attend the virtual Annual Meeting and to vote your shares at the virtual Annual Meeting. The Proxy Statement explains proxy voting and the matters to be voted on in more detail.

Important Notice Regarding the Availability of Proxy Materials for the Virtual Annual Meeting to be Held on January 10, 2020. Our proxy materials, including the Proxy Statement and Annual Report to Stockholders, are being made available on or about November 27, 2019 at the following website: http://www.proxyvote.com, as well as on our website at http://ir.zscaler.com in the SEC Filings section of our Investors webpage. We are providing access to our proxy materials over the Internet under the rules adopted by the U.S. Securities and Exchange Commission.

By Order of the Board of Directors,

Robert Schlossman
Chief Legal Officer and Secretary
San Jose, CA
November 27, 2019

Your vote is important. To vote your shares, please follow the instructions in the Notice of Internet Availability of Proxy Materials, which is being mailed to you on or about November 27, 2019.

TABLE OF CONTENTS

	Page
QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING	2
BOARD OF DIRECTORS AND CORPORATE GOVERNANCE	10
Nominees for Director	11
Continuing Directors	11
Director Independence	13
Board Leadership Structure	14
Executive Sessions of Non-Employee Directors	14
Board Meetings and Committees	14
Audit Committee	15
Compensation Committee	15
Nominating and Corporate Governance Committee	16
Compensation Committee Interlocks and Insider Participation	16
Considerations in Evaluating Director Nominees	17
Stockholder Recommendations for Nominations to the Board of Directors	18
Communications with the Board of Directors	18
Corporate Governance Guidelines and Code of Conduct	19
Role of the Board in Risk Oversight	19
Director Compensation	20
PROPOSAL NO. 1 ELECTION OF DIRECTORS	22
Nominees	22
Vote Required	22
PROPOSAL NO. 2 RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM	23
Fees Paid to the Independent Registered Public Accounting Firm	23
Auditor Independence	24
Audit Committee Policy on Pre-Approval of Audit and Permissible Non-Audit Services of Independent Registered Public Accounting Firm	24
Vote Required	24
AUDIT COMMITTEE REPORT	25
PROPOSAL NO. 3 ADVISORY VOTE ON THE FREQUENCY OF FUTURE STOCKHOLDER ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS	27
EXECUTIVE OFFICERS	28
EXECUTIVE COMPENSATION	28
Compensation Discussion and Analysis	30
Equity Compensation Plan Information	58
COMPENSATION COMMITTEE REPORT	59
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	60
RELATED PERSON TRANSACTIONS	63
OTHER MATTERS	65

Section 16(a) Beneficial Ownership Reporting Compliance	65
Fiscal Year 2019 Annual Report and SEC Filings	65
Company Website	65
PROPOSALS OF STOCKHOLDERS FOR FISCAL 2020 ANNUAL MEETING	66

ZSCALER, INC.

PROXY STATEMENT
FOR 2019 ANNUAL MEETING OF STOCKHOLDERS
To Be Held at 2:00 p.m. Pacific Time on January 10, 2020

This proxy statement and form of proxy are furnished in connection with the solicitation of proxies by our board of directors for use at our 2019 Annual Meeting of Stockholders (the “Annual Meeting”), and any postponements, adjournments or continuations thereof. The Annual Meeting will be held on January 10, 2020 at 2:00 p.m. Pacific Time, via live audio webcast at www.virtualshareholdermeeting.com/ZS2019. The Notice of Internet Availability of Proxy Materials (the “Notice”) containing instructions on how to access this proxy statement and our annual report is first being mailed on or about November 27, 2019 to all stockholders entitled to vote at the Annual Meeting. If you receive a Notice by mail, you will not receive a printed copy of the proxy materials in the mail unless you specifically request these materials.

QUESTIONS AND ANSWERS ABOUT THE ANNUAL MEETING

The information provided in the "question and answer" format below addresses certain frequently asked questions but is not intended to be a summary of all matters contained in this proxy statement. Please read the entire proxy statement carefully before voting your shares.

Why am I receiving these materials?

Our board of directors is providing these proxy materials to you in connection with our board of directors' solicitation of proxies for use at Zscaler's virtual Annual Meeting, which will take place on January 10, 2020. Stockholders are invited to attend the virtual Annual Meeting and are requested to vote on the proposals described in this Proxy Statement.

All stockholders will have the ability to access the proxy materials via the Internet, including this Proxy Statement and our Annual Report on Form 10-K for the fiscal year ended July 31, 2019 (the "Annual Report"), as filed with the U.S. Securities and Exchange Commission (the "SEC") on September 18, 2019. The Notice includes information on how to access the proxy materials, how to submit your vote over the Internet, by phone or how to request a paper copy of the proxy materials. This Proxy Statement and the Annual Report are available at http://www.proxyvote.com.

What proposals will be voted on at the Annual Meeting?

There are three proposals scheduled to be voted on at the Annual Meeting:

- the election of three Class II directors to hold office until the 2022 annual meeting of stockholders or until their successors are elected and qualified;
- the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020;
- a proposal to approve, on a non-binding advisory basis, the frequency of future stockholder advisory votes on the compensation of our named executive officers.

At the time this Proxy Statement was mailed, our management and board of directors were not aware of any other matters to be presented at the Annual Meeting other than those set forth in this Proxy Statement and in the notice accompanying this Proxy Statement.

How does our board of directors recommend that I vote?

Our board of directors recommends that you vote:

- FOR the election of each of the three director nominees nominated by our board of directors and named in this proxy statement as Class II directors to serve for a three-year term;
- FOR the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020; and
- "ONE YEAR" as the preferred frequency for future advisory non-binding votes to approve the compensation of our named executive officers.

Who is entitled to vote at the Annual Meeting?

Holders of our common stock at the close of business on November 15, 2019, the record date for the Annual Meeting (the "Record Date"), are entitled to notice of and to vote at the Annual Meeting. Each stockholder is entitled to one vote for each share of our common stock held as of the Record Date. As of the Record Date, there were 127,939,822 shares of common stock outstanding and entitled to vote. Stockholders are not permitted to cumulate votes with respect to the election of directors. The shares you are entitled to vote include shares that are (1) held of record directly in your name and (2) held for you as the beneficial owner through a stockbroker, bank or other nominee.

What is the difference between holding shares as a stockholder of record and as a beneficial owner?

Stockholder of Record: Shares Registered in Your Name. If, at the close of business on the Record Date, your shares were registered directly in your name with American Stock Transfer & Trust Company, LLC, our transfer agent, then you are considered the stockholder of record with respect to those shares. As the stockholder of record, you have the right to grant your voting proxy directly to the individuals listed on the proxy card or to vote on your own behalf at the Annual Meeting.

Beneficial Owners: Shares Registered in the Name of a Broker, Bank or Other Nominee. If, at the close of business on the Record Date, your shares were held, not in your name, but rather in a stock brokerage account or by a bank or other nominee on your behalf, then you are considered the beneficial owner of shares held in "street name." As the beneficial owner, you have the right to direct your broker, bank or other nominee how to vote your shares by following the voting instructions your broker, bank or other nominee provides. If you do not provide your broker, bank or other nominee with instructions on how to vote your shares, your broker, bank or other nominee may, in its discretion, vote your shares with respect to routine matters but may not vote your shares with respect to any non-routine matters. For additional information, see "*What if I do not specify how my shares are to be voted?*" below.

Do I have to do anything in advance if I plan to attend the Annual Meeting?

The Annual Meeting will be a completely virtual audio meeting of stockholders, which will be conducted via live audio webcast. You are entitled to participate in the annual meeting only if you were a holder of our common stock as of the close of business on November 15, 2019 or if you hold a valid proxy for the Annual Meeting.

You will be able to attend the virtual Annual Meeting and submit your questions during the Annual Meeting by visiting www.virtualshareholdermeeting.com/ZS2019. You also will be able to vote your shares electronically at the Annual Meeting.

To participate in the virtual Annual Meeting, you will need the control number included on your Notice or proxy card. The live audio webcast will begin promptly at 2:00 p.m. Pacific Time. We encourage you to access the meeting prior to the start time. Online check-in will begin at 1:45 p.m. Pacific Time, and you should allow ample time for the check-in procedures.

How can I get help if I have trouble checking in or listening to the meeting online?

If you encounter any difficulties accessing the virtual meeting during the check-in or meeting time, please call the technical support number that will be posted on the Virtual Shareholder Meeting log-in page.

How do I vote and what are the voting deadlines?

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record, you can vote in one of the following ways:

- **You may vote via the Internet**. To vote via the Internet, go to http://www.proxyvote.com to complete an electronic proxy card. You will be asked to provide the control number from the proxy card you receive. Your vote must be received by 11:59 p.m. Eastern Time on January 9, 2020 to be counted. If you vote via the Internet, you do not need to return a proxy card by mail.

- **You may vote by telephone**. To vote by telephone, dial toll-free 1-800-690-6903 in the United States and Canada or 1-800-454-8683 from countries outside the United States and Canada and follow the recorded instructions. You will be asked to provide the control number from the proxy card. Your vote must be received by 11:59 p.m. Eastern Time on January 9, 2020 to be counted. If you vote by telephone, you do not need to return a proxy card by mail.

- **You may vote by mail**. To vote by mail using the proxy card (if you requested paper copies of the proxy materials to be mailed to you), you need to complete, date and sign the proxy card and return it promptly by mail in the envelope to be provided so that it is received no later than January 9, 2020. The persons named in the proxy card will vote the shares you own in accordance with your instructions on the proxy card you mail. If you return the proxy card, but do not give any instructions on a particular matter to be voted on at the Annual Meeting, the persons named in the proxy card will vote the shares you own in accordance with the recommendations of our board of directors.

- **You may vote at the Annual Meeting**. To vote at the meeting, following the instructions at www.virtualshareholdermeeting.com/ZS2019 (have your Notice or proxy card in hand when you visit the website).

Beneficial Owners: Shares Registered in the Name of a Broker, Bank or Other Nominee. If you are the beneficial owner of shares held of record by a broker, bank or other nominee, 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 instruct your broker, bank or other nominee how to vote your shares. The availability of Internet and telephone voting options will depend on the voting process of your broker, bank or other nominee.

Can I change my vote or revoke my proxy?

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record, you may revoke your proxy or change your proxy instructions at any time before your proxy is voted at the Annual Meeting by:

- entering a new vote by Internet or telephone;

- signing and returning a new proxy card with a later date;

- delivering a written revocation to our Secretary at Zscaler, Inc., 110 Rose Orchard Way, San Jose, California 95134, by 11:59 p.m. Eastern Time on January 9, 2020; or

- following the instructions at www.virtualshareholdermeeting.com/ZS2019.

Beneficial Owners: Shares Registered in the Name of a Broker, Bank or Other Nominee. If you are the beneficial owner of your shares, you must contact the broker, bank or other nominee holding your shares and follow their instructions to change your vote or revoke your proxy.

What is the effect of giving a proxy?

Proxies are solicited by and on behalf of our board of directors. The persons named in the proxy have been designated as proxy holders by our board of directors. When a proxy is properly dated, executed and returned, the shares represented by the proxy will be voted at the Annual Meeting in accordance with the instructions of the stockholder. If no specific instructions are given; however, the shares will be voted in accordance with the recommendations of our board of directors. 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 your shares. If the Annual Meeting is postponed or adjourned, the proxy holders can vote your shares on the new meeting date, unless you have properly revoked your proxy, as described above.

What if I do not specify how my shares are to be voted?

Stockholder of Record: Shares Registered in Your Name. If you are a stockholder of record and you submit a proxy but you do not provide voting instructions, your shares will be voted:

- FOR the election of each of the three directors nominated by our board of directors and named in this proxy statement as Class II directors to serve for a three-year term (Proposal No. 1);
- FOR the ratification of the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020 (Proposal No. 2);
- FOR "ONE YEAR" as the preferred frequency for future advisory non-binding votes to approve the compensation of our named executive officers (Proposal No. 3); and
- in the discretion of the named proxy holders regarding any other matters properly presented for a vote at the Annual Meeting.

Beneficial Owners: Shares Registered in the Name of a Broker, Bank or Other Nominee. If you are a beneficial owner and you do not provide your broker, bank or other nominee that holds your shares with voting instructions, then your broker, bank or other nominee will determine if it has discretion to vote on each matter. Brokers do not have discretion to vote on non-routine matters. In the absence of timely directions, your broker will have discretion to vote your shares on our sole "routine" matter: the proposal to ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020. For additional information regarding broker non-votes, see "*What are the effects of abstentions and broker non-votes?*" below.

What are the effects of abstentions and broker non-votes?

An abstention represents a stockholder's affirmative choice to decline to vote on a proposal. If a stockholder indicates on its proxy card that it wishes to abstain from voting its shares, or if a broker, bank or other nominee holding its customers' shares of record causes abstentions to be recorded for shares, these shares will be considered present and entitled to vote at the Annual Meeting. As a result, abstentions will be counted for purposes of determining the presence or absence of a quorum and will also count as votes against a proposal in cases where approval of the proposal requires the affirmative vote of a majority of the shares present and

entitled to vote at the Annual Meeting (*e.g.*, Proposal No. 2). Abstentions will have no impact on the outcome of Proposals No. 1 and No. 3 as long as a quorum exists.

A broker non-vote occurs when a broker, bank or other nominee holding shares for a beneficial owner does not vote on a particular proposal because the broker, bank or other nominee does not have discretionary voting power with respect to such proposal and has not received voting instructions from the beneficial owner of the shares. Broker non-votes will be counted for purposes of calculating whether a quorum is present at the Annual Meeting but will not be counted for purposes of determining the number of votes cast. Therefore, a broker non-vote will make a quorum more readily attainable but will not otherwise affect the outcome of the vote on any proposal.

What is a quorum?

A quorum is the minimum number of shares required to be present at the Annual Meeting for the meeting to be properly held under our bylaws and Delaware law. The presence (including by proxy) of a majority of all issued and outstanding shares of our common stock entitled to vote at the Annual Meeting will constitute a quorum at the Annual Meeting. As noted above, as of the Record Date, there were a total of 127,939,822 shares of common stock outstanding, which means that 63,969,912 shares of common stock must be represented at the Annual Meeting to have a quorum. If there is no quorum, a majority of the shares present at the Annual Meeting may adjourn the meeting to a later date.

How many votes are needed for approval of each proposal?

- Proposal No. 1: The election of Class II directors requires a plurality vote of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon to be approved. Plurality means that the three nominees who receive the most FOR votes will be elected. You may (i) vote FOR all nominees, (ii) WITHHOLD your vote as to all nominees, or (iii) vote FOR all nominees except for those specific nominees from whom you WITHHOLD your vote. Any shares not voted FOR a particular nominee (whether as a result of voting withheld or a broker non-vote) will not be counted in such nominee's favor and will have no effect on the outcome of the election. A vote withheld with respect to the election of any or all nominees will be counted for purposes of determining whether there is a quorum, but, with respect to any specific nominee, will not be considered to have been voted for such nominee and will have no effect on the outcome.

- Proposal No. 2: The ratification of the appointment of PricewaterhouseCoopers LLP requires an affirmative vote of a majority of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon to be approved. You may vote FOR, AGAINST or ABSTAIN. If you ABSTAIN from voting on Proposal No. 2, the abstention will have the same effect as a vote AGAINST the proposal.

- Proposal No. 3: The approval, on an advisory basis, of the frequency of future stockholder advisory votes on the compensation of our named executive officers. The frequency receiving the highest number of votes from holders of shares present in person or by proxy at the Annual Meeting and entitled to vote thereon will be considered the frequency preferred by the stockholders. You may vote for the frequency of future advisory votes on executive compensation to be "ONE YEAR," "TWO YEARS," or "THREE YEARS," or you may "ABSTAIN" with respect to this proposal. Abstentions and broker non-votes will have no effect on the outcome. Because this proposal is an advisory vote, the result will not be binding on our board of directors or our company. However, our board of directors values stockholders' opinions, and our board of directors and our compensation

committee will consider the outcome of the vote when determining how often we should submit to stockholders an advisory vote to approve the compensation of our named executive officers.

How are proxies solicited for the Annual Meeting and who is paying for such solicitation?

Our board of directors is soliciting proxies for use at the Annual Meeting by means of the proxy materials. We will bear the entire cost of proxy solicitation, including the preparation, assembly, printing, mailing and distribution of the proxy materials. Copies of solicitation materials will also be made available upon request to brokers, banks and other nominees to forward to the beneficial owners of the shares held of record by such brokers, banks or other nominees. The original solicitation of proxies may be supplemented by solicitation by telephone, electronic communication, or other means by our directors, officers, employees or agents. No additional compensation will be paid to these individuals for any such services, although we may reimburse such individuals for their reasonable out-of-pocket expenses in connection with such solicitation. We do not plan to retain a proxy solicitor to assist in the solicitation of proxies.

If you choose to access the proxy materials and/or vote over the Internet, you are responsible for Internet access charges you may incur. If you choose to vote by telephone, you are responsible for telephone charges you may incur.

What does it mean if I received more than one Notice?

If you receive more than one Notice, your shares may be registered in more than one name or in different accounts. Please follow the voting instructions on each Notice to ensure that all of your shares are voted.

Is my vote confidential?

Proxy instructions, ballots and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within Zscaler or to third parties, except as necessary to meet applicable legal requirements, to allow for the tabulation of votes and certification of the vote, or to facilitate a successful proxy solicitation.

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 an SEC-approved procedure called "householding." Under this procedure, we will deliver only one copy of our Notice of Internet Availability of Proxy Materials (and for those stockholders that received a paper copy of proxy materials in the mail, one copy of our annual report to stockholders and this proxy statement) to multiple stockholders who share the same address (if they appear to be members of the same family), unless we have received contrary instructions from an affected stockholder. Stockholders who participate in householding will continue to receive separate proxy cards if they received a paper copy of proxy materials in the mail. This procedure reduces our printing and mailing costs. Upon written or oral request, we will promptly deliver a separate copy of the proxy materials and annual report to any stockholder at a shared address to which we delivered a single copy of any of these documents.

To receive a separate copy, or, if you are receiving multiple copies, to request that we only send a single copy of next year's proxy materials and annual report, you may contact us as follows:

Zscaler, Inc.
Attention: Secretary
110 Rose Orchard Way
San Jose, California 95134
(408) 533-0288

Stockholders who hold shares in street name may contact their brokerage firm, bank, broker-dealer or other nominee to request information about householding.

How can I find out the results of the voting at the Annual Meeting?

Preliminary voting results will be announced at the Annual Meeting. In addition, final voting results will be published in a current report on Form 8-K that we expect to file within four business days after the Annual Meeting. If final voting results are not available to us at that time, we intend to file a Form 8-K to publish preliminary results and, within four business days after the final results are known to us, file an amendment to the Form 8-K to publish the final results.

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 by submitting their proposals in writing to our Secretary in a timely manner. For a stockholder proposal to be considered for inclusion in our proxy statement for our fiscal 2020 annual meeting of stockholders, our Secretary must receive the written proposal at our principal executive offices not later than July 30, 2020. In addition, stockholder proposals must comply with the requirements of Rule 14a-8 under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Stockholder proposals should be addressed to:

Zscaler, Inc.
Attention: Secretary
110 Rose Orchard Way
San Jose, California 95134
(408) 533-0288

Our 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. Our 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 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 Secretary, which notice must contain the information specified in our bylaws. To be timely for our fiscal 2020 annual meeting of stockholders, our Secretary must receive the written notice at our principal executive offices:

- not earlier than September 13, 2020; and

- not later than October 13, 2020.

In the event that we hold our fiscal 2020 annual meeting of stockholders more than 30 days before or more than 60 days after the first anniversary of the date 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 the fiscal 2020 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.

Nomination of Director Candidates

You may propose director candidates for consideration by our nominating and corporate governance 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 Secretary at the address set forth above. For additional information regarding stockholder recommendations for director candidates, see "Board of Directors and Corporate Governance—Stockholder Recommendations for Nominations to the Board of Directors."

In addition, our 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 bylaws. In addition, the stockholder must give timely notice to our Secretary in accordance with our bylaws, which, in general, require that the notice be received by our Secretary within the time period described above under "Stockholder Proposals" for stockholder proposals that are not intended to be included in a proxy statement.

Availability of Bylaws

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

BOARD OF DIRECTORS AND CORPORATE GOVERNANCE

Our business affairs are managed under the direction of our board of directors, which is currently comprised of seven members. Five of our seven directors are independent within the meaning of the independent director requirements of the Nasdaq Stock Market LLC ("Nasdaq"). Our board of directors is divided into three classes with staggered three-year terms. 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.

Upon the recommendation of our nominating and corporate governance committee, we are nominating Andrew Brown, Scott Darling and David Schneider as Class II directors at the Annual Meeting. If elected, Messrs. Brown, Darling and Schneider will each hold office for a three-year term until the 2022 annual meeting of stockholders or until their successors are elected and qualified. Nehal Raj, who is currently serving as one of our Class II directors, is not a nominee for election at the Annual Meeting, and his term as a director will end at the Annual Meeting. We thank Mr. Raj for his many years of service to the Company and our board of directors.

The following table sets forth the names, ages as of October 31, 2019 and certain other information for each of the directors with terms expiring at the Annual Meeting (who are also nominees for election as a director at the Annual Meeting), for the director nominee and for each of the continuing and non-continuing directors:

Name	Class	Age	Position	Director Since	Current Term Expires	Expiration of Term For Which Nominated
Director Nominees						
Andrew Brown (1)(2)	II	56	Director	2015	2019	2022
Scott Darling (3)	II	63	Director	2016	2019	2022
David Schneider	II	51	Director	—	—	2022
Continuing Directors						
Jay Chaudhry	III	61	President, Chief Executive Officer and Chairman of the Board	2007	2020	—
Amit Sinha, Ph.D.	III	43	President of Research and Development, Operations and Customer Service, Chief Technology Officer and Director	2017	2020	—
Karen Blasing (1)(2)	I	63	Director	2017	2021	—
Charles Giancarlo (2)(3)	I	61	Director	2016	2021	—
Non-Continuing Director						
Nehal Raj (1)(3)	II	41	Director	2015	2019	—

(1) Member of our audit committee
(2) Member of our compensation committee
(3) Member of our nominating and corporate governance committee

Nominees for Director

Andrew Brown has served as a member of our board of directors since October 2015. Mr. Brown has served as chief executive officer of Sand Hill East LLC, a strategic management, investment and marketing services firm, since February 2014. Since 2006, he has also been the chief executive officer and co-owner of Biz Tectonics LLC, a privately held consulting company. From September 2010 to October 2013, Mr. Brown served as group chief technology officer of UBS Securities LLC, an investment bank. From 2008 to 2010, he served as head of strategy, architecture and optimization at Bank of America Merrill Lynch, the corporate and investment banking division of Bank of America. From 2006 to 2008, Mr. Brown served as chief technology officer of infrastructure at Credit Suisse Securities (USA) LLC, an investment bank. He currently sits on the board of directors of Guidewire Software, Inc., a provider of software products for property and casualty insurers, where he serves as a member of the compensation committee, and Pure Storage, Inc., or Pure Storage, an enterprise level data storage company. Mr. Brown holds a B.S. (Honors) in chemical physics from University College London. We believe Mr. Brown is qualified to serve as a member of our board of directors based on his extensive experience as chief technology officer of multiple Fortune 500 companies, as well as his service on the board of directors of other publicly held companies.

Scott Darling has served as a member of our board of directors since November 2016. Mr. Darling has served as president of Dell Technologies Capital, the corporate development and venture capital arm of Dell Technologies Inc., since September 2016. Prior to joining Dell Technologies upon its acquisition of EMC Corp., Mr. Darling was president of EMC Corporate Development and Ventures from March 2012 to September 2016, and in such role he was responsible for EMC's business development and venture capital investment activity. Prior to joining EMC, Mr. Darling was a general partner at Frazier Technology Ventures II, L.P., which he joined in 2007, and was vice president and managing director at Intel Capital Corp., the venture capital arm of Intel Corporation, from 2000 to 2007. Mr. Darling previously served on the board of directors of DocuSign Inc., a provider of electronic signature technology and digital transaction management services. Mr. Darling holds a B.A. in economics from the University of California at Santa Cruz and an M.B.A. from the Stanford University Graduate School of Business. We believe Mr. Darling is qualified to serve as a member of our board of directors based on his experience as a director of and as an investor in multiple technology companies.

David Schneider has served as president, global customer operations of ServiceNow, Inc., a cloud computing company, since January 2019. He previously served as ServiceNow's chief revenue officer from June 2014 to January 2019 and as senior vice president of worldwide sales and services from June 2011 to May 2014. From July 2009 to March 2011, Mr. Schneider served as senior vice president of worldwide sales of the backup recovery systems division of EMC Corporation, a computer storage company acquired by Dell Technologies Inc. From January 2004 to July 2009, Mr. Schneider held senior positions at Data Domain, Inc., a data archiving and deduplication company acquired by EMC, most recently as Senior Vice President of Worldwide Sales. Mr. Schneider holds a B.A. in political science from the University of California, Irvine. Mr. Schneider was selected to serve on our board of directors because of his knowledge and experience in operations and management at various technology companies.

Continuing Directors

Jagtar S. (Jay) Chaudhry is our co-founder and has served as our president, chief executive officer and as chairman of our board of directors since September 2007. Mr. Chaudhry holds an M.B.A. and an M.S. in electrical engineering and industrial engineering from the University of Cincinnati and a B. Tech in electronics engineering from the Indian Institute of Technology (Banaras Hindu University) Varanasi. We believe Mr. Chaudhry is qualified to serve as a member of our board of directors because he is a security

industry pioneer and an accomplished entrepreneur, having founded and built several companies, and based on the perspective, operational insight and expertise he has accumulated as our co-founder and our chief executive officer.

Amit Sinha, Ph.D. has served as president of research and development, operations and customer service since July 2019, as our chief technology officer since December 2010 and as a member of our board of directors since May 2017. He previously served as our executive vice president of engineering and cloud operations from October 2013 to July 2019. Dr. Sinha holds a Ph.D. and an M.S. in electrical engineering and computer science from the Massachusetts Institute of Technology, and a B. Tech in electrical engineering from the Indian Institute of Technology, Delhi. We believe Dr. Sinha is qualified to serve as a member of our board of directors because he has more than 15 years of experience as an architect and technical manager in the networking and security industries and because of the operational insight and expertise he has accumulated as our chief technology officer.

Karen Blasing has served as a member of our board of directors since January 2017. Ms. Blasing served as the chief financial officer of Guidewire Software, Inc. from 2009 to March 2015. Prior to 2009, Ms. Blasing served as the chief financial officer for Force10 Networks, Inc. and as the senior vice president of finance for salesforce.com, and she also served as chief financial officer for Nuance Communications, Inc. and Counterpane Internet Security, Inc. and held senior finance roles for Informix Corporation (now IBM Informix) and Oracle Corporation. She currently serves as a director of Autodesk, Inc., a multinational software corporation, where she serves as a member of the audit committee, and previously served as a director of Ellie Mae, Inc. Ms. Blasing holds a B.A. in economics and business administration from the University of Montana and an M.B.A. from the University of Washington. We believe Ms. Blasing is qualified to serve as a member of our board of directors based on her extensive financial leadership and management experience at numerous SaaS and enterprise software companies.

Charles Giancarlo has served as a member of our board of directors since November 2016. Mr. Giancarlo has served as chief executive officer of Pure Storage since August 2017. From January 2008 until October 2015, Mr. Giancarlo was a managing director and then strategic advisor of Silver Lake Partners, a private investment firm that focuses on technology, technology-enabled and related growth industries. From May 1993 to December 2007, Mr. Giancarlo served in numerous senior executive roles at Cisco Systems, Inc., a provider of communications and networking products and services, ultimately as the executive vice president and chief development officer from May 2004 to December 2007. Mr. Giancarlo currently serves on the boards of directors of Arista Networks, Inc., a manufacturer of networking products, where he serves as a member of the compensation committee and the nominating and corporate governance committee, and Pure Storage. He previously served on the boards of directors of Accenture plc, Avaya, Inc., Imperva, Inc., ServiceNow, Inc., Netflix, Inc. and Tintri, Inc. Mr. Giancarlo holds a B.S. in electrical engineering from Brown University, an M.S. in electrical engineering from the University of California, Berkeley and an M.B.A. from Harvard Business School. We believe Mr. Giancarlo is qualified to serve as a member of our board of directors based on his extensive business expertise, including his prior executive level leadership, and his experience on the boards of publicly traded technology companies.

Non-Continuing Director

Nehal Raj has served as a member of our board of directors since July 2015. Mr. Raj is a Partner at TPG, a private investment firm based in San Francisco, where he leads investments in the technology sector for both TPG Capital and TPG Growth. Prior to joining TPG in 2006, he was an associate at Francisco Partners. Mr. Raj is currently a director of several private companies. He previously served as a director of Domo, Inc. and IMS Holdings, Inc. Mr. Raj holds a B.A. in economics and an M.S. in industrial engineering

from Stanford University, where he was Phi Beta Kappa, and an M.B.A. from Harvard Business School, where he was a Baker Scholar. We believe Mr. Raj is qualified to serve as a member of our board of directors based on his experience as a director of technology companies and his background in the private equity industry, including his experience with investments in network technology, infrastructure SaaS and cyber-security companies.

Director Independence

Our common stock is listed on the Nasdaq Global Select Market. Under the rules of Nasdaq, independent directors must comprise a majority of a listed company's board of directors within a specified period after the completion of our initial public offering. In addition, the rules of Nasdaq require that, subject to specified exceptions, each member of a listed company's audit, compensation and nominating and governance committees be independent. Audit committee members and compensation committee members must also satisfy the independence criteria set forth in Rule 10A-3 and Rule 10C-1, respectively, under the Exchange Act. Under the rules of Nasdaq, a director will only qualify as an "independent director" if, in the opinion of that company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

To be considered independent for purposes of Rule 10A-3 and under the rules of Nasdaq, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of our audit committee, our 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.

To be considered independent for purposes of Rule 10C-1 and under the rules of Nasdaq, the board of directors must affirmatively determine that the member of the compensation committee is independent, including a consideration of all factors specifically relevant to determining whether the director has a relationship to the company which 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: (i) the source of compensation of such director, including any consulting, advisory or other compensatory fee paid by the company to such director; and (ii) whether such director is affiliated with the company, a subsidiary of the company or an affiliate of a subsidiary of the company.

Our board of directors has undertaken a review of its composition, the composition of its committees and the independence of our directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from and provided by each director or director nominee concerning his background, employment and affiliations, including family relationships, our board of directors has determined that none of (i) Ms. Blasing and Messrs. Brown, Darling, Giancarlo and Raj, representing five of our seven directors, and Mr. Schneider, the director nominee, has a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director, and (ii) that each of these directors or director nominee is "independent" as that term is defined under the rules of Nasdaq. Mr. Chaudhry and Dr. Sinha are not independent under Nasdaq's independence standards. Our board of directors also determined that Ms. Blasing (chair) and Messrs. Brown and Raj, who comprise our audit committee, and Messrs. Brown (chair) and Giancarlo and Ms. Blasing, who comprise our compensation committee, satisfy the independence standards for committee members established by applicable SEC rules and the listing standards of Nasdaq.

In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with the Company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital 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 our directors or executive officers.

Board Leadership Structure

Mr. Chaudhry currently serves as both chairman of our board of directors and our chief executive officer. Our board of directors believes that the current board leadership structure, coupled with a strong emphasis on board independence, provides effective independent oversight of management while allowing the board and management to benefit from Mr. Chaudhry’s leadership, Company-specific experience and years of experience as an executive in the network security industry. Serving on our board of directors and as chief executive officer since our founding in 2007, Mr. Chaudhry is best positioned to identify strategic priorities, lead critical discussion and execute our strategy and business plans. Mr. Chaudhry possesses detailed in-depth knowledge of the issues, opportunities and challenges facing us. Independent directors and management sometimes have different perspectives and roles in strategy development. The board of directors believes that Mr. Chaudhry’s combined role enables strong leadership, creates clear accountability and enhances our ability to communicate our message and strategy clearly and consistently to stockholders.

Executive Sessions of Non-Employee Directors

In order to encourage and enhance communication among non-employee directors, and as required under the applicable rules of Nasdaq, our corporate governance guidelines provide that the non-employee directors of our board of directors will meet in executive sessions without management directors or Company management present on a periodic basis, but no less than twice a year.

Board Meetings and Committees

During the fiscal year ended July 31, 2019, our board of directors held five meetings (including regularly scheduled and special meetings), and each director attended at least 75% of the aggregate of (i) the total number of meetings of our board of directors held during the period for which he or she served as a director and (ii) the total number of meetings held by all committees of our board of directors on which he or she served during the periods that he or she served.

Although we do not have a formal policy regarding attendance by members of our board of directors at annual meetings of stockholders, we encourage, but do not require, our directors to attend.

We have established an audit committee, a compensation committee and a nominating and corporate governance committee. We believe that the composition of these committees meet the criteria for independence under, and the functioning of these committees comply with the requirements of, the Sarbanes-Oxley Act of 2002, the rules of the Nasdaq Global Select Market, and SEC rules and regulations. We intend to continue to comply with the requirements of the Nasdaq Global Select Market with respect to committee composition of independent directors. Each committee has the composition and responsibilities described below.

Audit Committee

The members of our audit committee are Ms. Blasing and Messrs. Brown and Raj, each of whom is a non-employee member of our board of directors. Immediately following the Annual Meeting, Mr. Darling will become a member of the audit committee replacing Mr. Raj. Ms. Blasing serves as the chair of our audit committee. All current members of our audit committee and Mr. Darling meet the requirements for independence and financial literacy of audit committee members under current Nasdaq listing standards and SEC rules and regulations. Our audit committee chairperson, Ms. Blasing, is our audit committee financial expert, as that term is defined under the SEC rules implementing Section 407 of the Sarbanes-Oxley Act of 2002, and possesses financial sophistication, as defined under Nasdaq listing standards. The responsibilities of our audit committee include, among other things:

- selecting and hiring our registered public accounting firm;
- evaluating the performance and independence of our registered public accounting firm;
- approving the audit and pre-approving any non-audit services to be performed by our registered public accounting firm;
- reviewing our financial statements and related disclosures and reviewing our critical accounting policies and practices;
- 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 reports;
- reviewing and approving in advance any proposed related-person transactions; and
- preparing the audit committee report that the SEC will require in our annual proxy statement.

Our audit committee operates under a written charter that satisfies the applicable rules and regulations of the SEC and the listing requirements of Nasdaq. A copy of the charter of our audit committee is available on our website at http://ir.zscaler.com in the Governance section of our Investors webpage. During the fiscal year ended July 31, 2019, our audit committee held four meetings.

Compensation Committee

Our compensation committee is comprised of Ms. Blasing and Messrs. Brown and Giancarlo, each of whom is a non-employee member of our board of directors. Mr. Brown is the chairman of our compensation committee. Our board of directors has determined that each member of our compensation committee meets the requirements for independence under the rules of Nasdaq and the SEC and is a “non-employee director” within the meaning of Rule 16b-3 under the Exchange Act. The compensation committee is responsible for, among other things:

- reviewing and approving our chief executive officer's and other executive officers' annual base salaries, incentive compensation plans, including the specific goals and amounts, equity compensation, employment agreements, severance arrangements and change in control agreements and any other benefits, compensation or arrangements;

- administering our equity compensation plans;

- overseeing our overall compensation philosophy, compensation plans and benefits programs; and

- preparing the compensation committee report that the SEC will require in our annual proxy statement.

Our compensation committee operates under a written charter that satisfies the listing standards of Nasdaq. A copy of the charter of our compensation committee is available on our website at http://ir.zscaler.com in the Governance section of our Investors webpage. During the fiscal year ended July 31, 2019, our compensation committee held five meetings.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee is comprised of Messrs. Darling, Giancarlo and Raj, each of whom is a non-employee member of our board of directors. Contingent on his election at the Annual Meeting, Mr. Schneider will become a member of the nominating and corporate governance committee replacing Mr. Raj. Mr. Giancarlo is the chairman of our nominating and corporate governance committee. Our board of directors has determined that all current members of our nominating and corporate committee and Mr. Schneider meet the requirements for independence under the rules of Nasdaq. The nominating and corporate governance committee is responsible for, among other things:

- evaluating and making recommendations regarding the composition, organization and governance of our board of directors and its committees;

- 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; and

- reviewing and approving conflicts of interest of our directors and corporate officers, other than related person transactions reviewed by the audit committee.

Our nominating and corporate governance committee operates under a written charter that satisfies the listing standards of Nasdaq. A copy of the charter of our nominating and corporate governance committee is available on our website at http://ir.zscaler.com in the Governance section of our Investors webpage. During the fiscal year ended July 31, 2019, our nominating and corporate governance committee held three meetings.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee is or has been an officer or employee of the Company. None of our executive officers currently serves, or in the past year has served, as a member of

the compensation committee or director (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of any entity that has one or more executive officers serving on our compensation committee or our board of directors.

Considerations in Evaluating Director Nominees

It is the policy of the nominating and corporate governance committee of our board of directors to consider recommendations for candidates to our board of directors from stockholders holding no less than one percent (1%) of the outstanding shares of the Company's common stock continuously for at least 12 months prior to the date of the submission of the recommendation or nomination.

The nominating and corporate governance committee will use the following procedures to identify and evaluate any individual recommended or offered for nomination to our board of directors:

- The nominating and corporate governance committee will consider candidates recommended by stockholders in the same manner as candidates recommended to the nominating and corporate governance committee from other sources.

- In its evaluation of director candidates, including the members of our board of directors eligible for re-election, the nominating and corporate governance committee will consider factors such as:

  - business expertise;

  - diversity, including differences in professional background, gender, race, ethnicity, education, skill, and other individual qualities and attributes that contribute to the total mix of viewpoints and experience represented on the board of directors;

  - past attendance at meetings, and participation in and contributions to the activities of our board of directors; and

  - other factors that the nominating and corporate governance committee deems appropriate.

- The nominating and corporate governance committee requires the following minimum qualifications to be satisfied by any nominee for a position on our board of directors:

  - the highest personal and professional ethics and integrity;

  - proven achievement and competence in the nominee's field and the ability to exercise sound business judgment;

  - skills that are complementary to those of the existing board of directors;

  - the ability to assist and support management and make significant contributions to the Company's success; and

  - an understanding of the fiduciary responsibilities that is required of a member of our board of directors and the commitment of time and energy necessary to diligently carry out those responsibilities.

If the nominating and corporate governance committee determines that an additional or replacement director is required, the nominating and corporate governance committee may take such measures that it considers appropriate in connection with its evaluation of a director candidate, including candidate interviews, inquiry of the person or persons making the recommendation or nomination, engagement of an outside search firm to gather additional information, or reliance on the knowledge of the members of the nominating and corporate governance committee, our board directors or management.

The nominating and corporate governance committee may propose to our board of directors a candidate recommended or offered for nomination by a stockholder as a nominee for election to our board of directors. In the future, the nominating and corporate governance committee may pay fees to third parties to assist in identifying or evaluating director candidates.

Stockholder Recommendations for Nominations to the Board of Directors

A stockholder that wants to recommend a candidate for election to our board of directors should direct the recommendation in writing by letter to the Company, attention of the Secretary, at Zscaler, Inc., 110 Rose Orchard Way, San Jose, California 95134. The recommendation must include the candidate's name, home and business contact information, detailed biographical data, relevant qualifications, a signed letter from the candidate confirming willingness to serve, information regarding any relationships between the candidate and the Company and evidence of the recommending stockholder's ownership of Company stock. Such recommendations must also include a statement from the recommending stockholder in support of the candidate, particularly within the context of the criteria for board membership, including issues of character, integrity, judgment, diversity of experience, independence, area of expertise, corporate experience, length of service, potential conflicts of interest, other commitments and the like and personal references.

A stockholder that instead desires to nominate a person directly for election to our board of directors at an annual meeting of the stockholders must meet the deadlines and other requirements set forth in Section 2.4 of the Company's bylaws and the rules and regulations of the Securities and Exchange Commission. Section 2.4 of the Company's bylaws requires that a stockholder who seeks to nominate a candidate for director must provide a written notice to the Secretary of the Company not later than the 45th day nor earlier than the 75th day before the one-year anniversary of the date on which the corporation first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting; *provided*, *however*, that in the event that no annual meeting was held in the previous year or if the date of the annual meeting is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the date of the previous year's annual meeting, then, for notice by the stockholder to be timely, it must be so received by the secretary not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of (i) the 90th day prior to such annual meeting, or (ii) the 10th day following the day on which Public Announcement (as defined below) of the date of such annual meeting is first made. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice. "Public Announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Exchange Act, or any successor thereto.

Communications with the Board of Directors

Our board of directors believes that management speaks for Zscaler, Inc. Individual board members may, from time to time, communicate with various constituencies that are involved with the Company, but

it is expected that board members would do this with knowledge of management and, in most instances, only at the request of management.

In cases where stockholders and other interested parties wish to communicate directly with our non-management directors, messages can be sent to our Secretary, at Zscaler, Inc., 110 Rose Orchard Way, San Jose, California 95134. Our Secretary monitors these communications and will provide a summary of all received messages to the board of directors at each regularly scheduled meeting of the board of directors. Our board of directors generally meets on a quarterly basis. Where the nature of a communication warrants, our Secretary may determine, in his or her judgment, to obtain the more immediate attention of the appropriate committee of the board or non-management director, of independent advisors or of Company management, as our Secretary considers appropriate.

Our Secretary may decide in the exercise of his or her judgment whether a response to any stockholder or interested party communication is necessary.

This procedure for stockholder and other interested party communications with the non-management directors is administered by the Company's nominating and corporate governance committee. This procedure does not apply to (a) communications to non-management directors from officers or directors of the Company who are stockholders, (b) stockholder proposals submitted pursuant to Rule 14a-8 under the Exchange Act or (c) communications to the audit committee pursuant to the Complaint Procedures for Accounting and Auditing Matters.

Corporate Governance Guidelines and Code of Conduct

Our board of directors 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 of directors has adopted a Code of Conduct that applies to all of our employees, officers and directors, including our chief executive officer, chief financial officer, and other executive and senior financial officers. The full text of our Corporate Governance Guidelines and our Code of Conduct is posted on our website at http://ir.zscaler.com in the Governance section of our Investors webpage. We intend to post any amendments to our Code of Conduct, and any waivers of our Code of Conduct for directors and executive officers, on the same website.

Role of the Board in Risk Oversight

One of the key functions of our board of directors is informed oversight of our risk management process which risks include, among others, strategic, financial, business and operational, cybersecurity, legal and regulatory compliance, and reputational risks. Our board of directors does not have a standing risk management committee, but rather administers this oversight function directly through the board of directors as a whole, as well as through its standing committees that address risks inherent in their respective areas of oversight. In particular, our board of directors is responsible for monitoring and assessing strategic risk exposure. Our audit committee is responsible for reviewing and discussing our major financial risk exposures and the steps our management has taken to monitor and control these exposures, including guidelines and policies with respect to risk assessment and risk management. In addition to oversight of the performance of our external audit function, our audit committee also monitors compliance with legal and regulatory requirements and reviews related party transactions. Our nominating and corporate governance committee monitors the effectiveness of our corporate governance guidelines. Our compensation committee assesses and monitors whether any of our compensation policies and programs has the potential to encourage excessive risk-taking.

Director Compensation

Each non-employee director is eligible to receive compensation for his or her service consisting of annual cash retainers and equity awards under our outside director compensation policy. Our outside director compensation policy was crafted in consultation with Compensia, Inc., an independent consultant engaged by our compensation committee. Compensia provided us with competitive data, analysis and recommendations regarding non-employee director compensation, which includes a mix of cash and equity-based compensation. After careful consideration of this information and the scope of the duties and responsibilities of our non-employee directors, our board of directors approved our outside director compensation policy. We believe this policy provides reasonable compensation to our non-employee directors that is commensurate with their contributions and appropriately aligned with our peers. We also reimburse our directors for expenses associated with attending meetings of our board of directors and board committees.

For fiscal 2019, non-employee directors were entitled to receive the following cash compensation for service in the following positions:

Position	Annual Retainer ($)
Board member	30,000
Audit committee chair	20,000
Audit committee member	8,000
Compensation committee chair	12,000
Compensation committee member	5,000
Nominating and Corporate Governance committee chair	7,500
Nominating and Corporate Governance committee member	4,000

In addition, non-employee directors were eligible to receive the following equity awards for board service:

(1) Initial RSU grant with a target value of $175,000 pro-rated from the date of appointment or election (automatically granted on the effective date of appointment or election). These RSUs vest in equal quarterly installments over the remainder of the year of appointment in advance of the next annual meeting of stockholders; and

(2) Annual RSU grant with target value of $175,000 (automatically granted at the annual meeting). These RSUs vest in four equal quarterly installments over a one-year period.

Effective with the Annual Meeting, the annual RSU grant target value will be increased to $200,000 and will vest in four equal quarterly installments over a one-year period. Also effective with the Annual Meeting, the initial RSU grant target value will be increased to two-and one-half times the value of the then effective annual RSU grant, pursuant to which one-third of the RSUs will vest on the one-year anniversary of the effective date of appointment and the remaining RSUs will vest in eight equal quarterly installments thereafter. Any director elected at the annual meeting for a given year will receive both the initial RSU grant and the annual RSU grant.

The number of RSUs for each of the initial and annual RSU grant will be determined by dividing the annual equity value by the average closing price of Zscaler common stock on the Nasdaq Global Select Market for the 30 trading days ending on the date that is five days prior to the grant date, rounded up to the nearest share.

All cash payments to non-employee directors who served in the relevant capacity at any point during the immediately preceding prior fiscal quarter will be paid quarterly in arrears on a prorated basis. A non-employee director who served in the relevant capacity during only a portion of the prior fiscal quarter will receive a pro-rated payment of the quarterly payment of the applicable cash retainer.

The following table sets forth information regarding compensation earned by or paid to our non-employee directors during the fiscal year ended July 31, 2019:

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)(1)	Total ($)
Lane Bess (2)	11,364	—	11,364
Karen Blasing	55,000	181,962	236,962
Andrew Brown	50,000	181,962	231,962
Scott Darling	34,000	181,962	215,962
Charles Giancarlo	42,500	181,962	224,462
Nehal Raj(3)	35,000	181,962	223,962

(1) Amounts represent the grant date fair market value of RSUs automatically granted to serving directors following our 2018 annual meeting of stockholders.

(2). Mr. Bess served as a member of our Board of Directors through December 18, 2018, the date of our 2018 annual meeting of stockholders.

(3) Mr. Raj elected to exercise his right to receive payments of director fees effective in October 2018 after previously electing to forego his right to receive fees for service as a director.

The following table lists all outstanding equity awards held by our non-employee directors as of July 31, 2019.

Name	Aggregate Number of Stock Awards Outstanding as of July 31, 2019 (#)	Aggregate Number of Stock Options Outstanding as of July 31, 2019 (#)
Karen Blasing	2,298	189,334
Andrew Brown	2,298	132,333
Scott Darling	2,298	—
Charles Giancarlo	2,298	—
Nehal Raj	2,298	—

For information about the compensation of directors who are also our employees, see “Executive Compensation.”

PROPOSAL NO. 1
ELECTION OF DIRECTORS

Our board of directors is currently composed of seven members. In accordance with our certificate of incorporation, our board of directors is divided into three classes with staggered three-year terms. One class is elected each year at the annual meeting of stockholders for a term of three years. At the Annual Meeting, three Class II 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 such director's 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 of directors may have the effect of delaying or preventing changes in control of the Company.

Nominees

Our board of directors has nominated Andrew Brown, Scott Darling and David Schneider for election as Class II directors at the Annual Meeting. If elected, each of Messrs. Brown, Darling and Schneider will serve as Class II directors until the 2022 annual meeting of stockholders or until their successors are elected and qualified, or their earlier death, resignation or removal. Messrs. Brown and Darling are currently directors of the Company. For information concerning the nominees, see "Board of Directors and Corporate Governance."

If you are a stockholder of record and you sign your proxy card or vote over the Internet or by telephone but do not give instructions with respect to the voting of directors, your shares will be voted FOR the election of Messrs. Brown, Darling and Schneider. We expect that Messrs. Brown, Darling and Schneider 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 of directors to fill such vacancy. If you are a beneficial owner of shares of our common stock and you do not give voting instructions to your broker, bank or other nominee, then your broker, bank or other nominee will leave your shares unvoted on this matter.

Vote Required

The election of Class II directors requires a plurality vote of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon to be approved. Accordingly, the three nominees receiving the highest number of "FOR" votes will be elected. Broker non-votes will have no effect on this proposal.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE ELECTION OF EACH OF THE THREE DIRECTORS NOMINATED BY OUR BOARD OF DIRECTORS AND NAMED IN THIS PROXY STATEMENT AS CLASS II DIRECTORS TO SERVE FOR A THREE-YEAR TERM.

PROPOSAL NO. 2
RATIFICATION OF APPOINTMENT OF
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Our audit committee has appointed PricewaterhouseCoopers LLP, as our independent registered public accounting firm to audit our consolidated financial statements for our fiscal year ending July 31, 2020. PricewaterhouseCoopers LLP has served as our independent registered public accounting firm since May 2015.

At the Annual Meeting, stockholders are being asked to ratify the appointment of PricewaterhouseCoopers LLP as our independent registered public accounting firm for our fiscal year ending July 31, 2020. Stockholder ratification of the appointment of PricewaterhouseCoopers LLP is not required by our bylaws or other applicable legal requirements. However, our board of directors is submitting the appointment of PricewaterhouseCoopers LLP to our stockholders for ratification as a matter of good corporate governance. In the event that this appointment is not ratified by the affirmative vote of a majority of the shares present in person or by proxy at the Annual Meeting and entitled to vote, such appointment will be reconsidered by our audit committee. Even if the appointment is ratified, our audit committee, in its sole discretion, may appoint another independent registered public accounting firm at any time during our fiscal year ending July 31, 2020 if our audit committee believes that such a change would be in the best interests of Zscaler and its stockholders. If the appointment is not ratified by our stockholders, the audit committee may reconsider whether it should appoint another independent registered public accounting firm. A representative of PricewaterhouseCoopers LLP is expected to be present at the Annual Meeting, will have an opportunity to make a statement if he or she wishes to do so, and is expected to be available to respond to appropriate questions from stockholders.

Fees Paid to the Independent Registered Public Accounting Firm

The following table presents fees for professional audit services and other services rendered to us by PricewaterhouseCoopers LLP for our fiscal years ended July 31, 2019 and 2018.

	2019	2018
Audit Fees (1)	$ 1,813,669	$ 2,374,091
Audit-Related Fees (2)	2,125	252,549
Tax Fees	—	—
All Other Fees (3)	2,700	4,500
	$ 1,818,494	$ 2,631,140

(1) Audit Fees consist of fees for professional services rendered in connection with the audit of our annual consolidated financial statements, the review of our quarterly condensed consolidated financial statements, statutory audit fees, and audit services that are normally provided by the independent registered public accounting firm in connection with regulatory filings. This category also includes fees for professional services provided in connection with our initial public offering, incurred during the fiscal year ended July 31, 2018, including comfort letters, consents and review of documents filed with the SEC.

(2) Audit-Related Fees consist primarily of fees for assurance and related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and not reported under “Audit Fees.” For our fiscal year ended July 31, 2018, this category includes accounting consultations and technical accounting guidance associated with the adoption of the new revenue accounting standard issued by the Financial Accounting Standards Board (“FASB”), Accounting Standards Updated (“ASU”) No. 2014-09, Revenue from Contracts with Customers (Topic 606).

(3) All Other Fees consist of aggregate fees billed for products and services provided by the independent registered public accounting firm other than those disclosed above. These services specifically relate to subscription fees paid for access to online accounting research software and regulatory applications.

Auditor Independence

In the fiscal year ended July 31, 2019, there were no other professional services provided by PricewaterhouseCoopers LLP that would have required our audit committee to consider their compatibility with maintaining the independence of PricewaterhouseCoopers LLP.

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

Our audit committee has established a policy governing our use of the services of our independent registered public accounting firm. Under the policy, our audit committee is required to pre-approve all audit and permissible non-audit services performed by our independent registered public accounting firm in order to ensure that the provision of such services does not impair such accounting firm's independence. All fees paid to PricewaterhouseCoopers LLP for our fiscal years ended July 31, 2019 and 2018 were pre-approved by our audit committee.

Vote Required

The ratification of the appointment of PricewaterhouseCoopers LLP requires the affirmative vote of a majority of the shares of our common stock present in person or by proxy at the Annual Meeting and entitled to vote thereon. Abstentions will have the effect of a vote AGAINST the proposal.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF PRICEWATERHOUSECOOPERS LLP AS OUR INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR OUR FISCAL YEAR ENDING JULY 31, 2020.

AUDIT COMMITTEE REPORT

The information contained in the following Audit Committee Report shall not be deemed to be soliciting material or to be filed with the Securities and Exchange Commission, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that Zscaler, Inc. (the "Company") specifically incorporates it by reference in such filing.

The audit committee serves as the representative of our board of directors with respect to its oversight of:

- our accounting and financial reporting processes and the audit of our financial statements;
- the integrity of our financial statements;
- our compliance with legal and regulatory requirements;
- inquiring about significant risks, reviewing our policies for risk assessment and risk management, and assessing the steps management has taken to control these risks; and
- the independent registered public accounting firm's appointment, qualifications and independence.

The audit committee also reviews the performance of our independent registered public accounting firm, PricewaterhouseCoopers LLP, in the annual audit of our financial statements and in assignments unrelated to the audit, and reviews the independent registered public accounting firm's fees.

The audit committee is currently composed of three non-employee directors. Immediately following the Annual Meeting, Mr. Darling will become a member of the audit committee replacing Mr. Raj. Our board of directors has determined that each current member of the audit committee and Mr. Darling is independent, and that Ms. Blasing qualifies as an "audit committee financial expert" under the SEC rules.

The audit committee provides our board of directors such information and materials as it may deem necessary to make our board of directors aware of financial matters requiring the attention of our board of directors. The audit committee reviews our financial disclosures and meets privately, outside the presence of our management, with our independent registered public accounting firm. In fulfilling its oversight responsibilities, the audit committee reviewed and discussed the audited financial statements in our fiscal year ended July 31, 2019 Annual Report with management, including a discussion of the quality and substance of the accounting principles, the reasonableness of significant judgments made in connection with the audited financial statements, and the clarity of disclosures in the financial statements. The audit committee reports on these meetings to our board of directors.

The audit committee reviewed and discussed the Company's audited consolidated financial statements with management and PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm. The audit committee has discussed with PricewaterhouseCoopers LLP the matters required to be discussed by Auditing Standard No. 1301, *Communications with Audit Committees*, issued by the Public Company Accounting Oversight Board ("PCAOB").

The audit committee received and reviewed the written disclosures and the letter from PricewaterhouseCoopers LLP required by the applicable requirements of the PCAOB regarding

PricewaterhouseCoopers LLP's communications with the audit committee concerning independence, and discussed with PricewaterhouseCoopers LLP its independence. In addition, the audit committee discussed with PricewaterhouseCoopers LLP its independence from management and the Company, including matters in the letter from PricewaterhouseCoopers LLP required by PCAOB Rule 3526, *Communication with Audit Committees Concerning Independence*, and considered the compatibility of non-audit services with PricewaterhouseCoopers LLP's independence.

Based on the review and discussions referred to above, the audit committee recommended to our board of directors that the Company's audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the fiscal year ended July 31, 2019 for filing with the Securities and Exchange Commission. The audit committee also has selected PricewaterhouseCoopers LLP as the independent registered public accounting firm for fiscal year 2020. Our board of directors recommends that stockholders ratify this selection at the Annual Meeting.

Respectfully submitted by the members of the audit committee of the board of directors:

Karen Blasing (Chair)
Andrew Brown
Nehal Raj

PROPOSAL NO. 3
ADVISORY VOTE ON THE FREQUENCY OF FUTURE STOCKHOLDER ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

The Dodd-Frank Act and Section 14A of the Exchange Act enable our stockholders to indicate their preference at least once every six years regarding how frequently we should solicit a non-binding advisory vote on the compensation of our named executive officers as disclosed in our proxy statement. Accordingly, we are asking our stockholders to indicate whether they would prefer an advisory vote every one year, two years or three years. Alternatively, stockholders may abstain from casting a vote.

After considering the benefits and consequences of each alternative, our board of directors recommends that the advisory vote on the compensation of our named executive officers be submitted to the stockholders every year. In formulating its recommendation, our board of directors considered that compensation decisions are made annually and that an annual advisory vote on the compensation of our named executive officers will allow stockholders to provide more frequent and direct input on our compensation philosophy, policies and practices. The first advisory vote on the compensation of our named executive officers will be submitted to the stockholders at the fiscal year 2020 annual meeting.

Vote Required

The alternative among one year, two years or three years that receives the highest number of votes cast at the Annual Meeting by stockholders entitled to vote thereon will be deemed to be the frequency preferred by our stockholders. Abstentions and broker non-votes will have no effect on this proposal.

While our board of directors believes that its recommendation is appropriate at this time, the stockholders are not voting to approve or disapprove that recommendation, but are instead asked to indicate their preference, on an advisory basis, as to whether non-binding future stockholder advisory votes on the compensation of our named executive officers should be held every year, two years or three years.

As an advisory vote, the result of this proposal is non-binding. Although the vote is non-binding, our board of directors and our compensation committee value the opinions of our stockholders in this matter and, to the extent there is any significant vote in favor of one time period over another, will consider the outcome of this vote when making future decisions regarding the frequency of holding future stockholder advisory votes on the compensation of our named executive officers.

THE BOARD OF DIRECTORS RECOMMENDS A VOTE TO HOLD FUTURE STOCKHOLDER ADVISORY VOTES ON THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS EVERY "ONE YEAR."

EXECUTIVE OFFICERS

The following table sets forth certain information about our executive officers and their respective ages as of October 31, 2019. Officers are elected by the board of directors to hold office until their successors are elected and qualified.

Name	Age	Position
Jay Chaudhry	61	President, Chief Executive Officer and Chairman of the Board
Remo Canessa	62	Chief Financial Officer
Amit Sinha, Ph.D.	43	President of Research and Development, Operations and Customer Service, Chief Technology Officer and Director
Dali Rajic	46	President Go-To-Market and Chief Revenue Officer
Manoj Apte, Ph.D.	46	Chief Strategy Officer
Robert Schlossman	51	Chief Legal Officer

For the biographies of Mr. Chaudhry and Dr. Sinha, see "*Board of Directors and Corporate Governance—Continuing Directors*."

Remo E. Canessa has served as our chief financial officer since February 2017. Prior to joining us, he served as chief financial officer of Illumio Inc., a private cybersecurity company, from July 2016 to February 2017. Prior to joining Illumio, from October 2004 to April 2016, Mr. Canessa served as chief financial officer and an advisor to Infoblox Inc., a network control, network automation and domain name system security company. Mr. Canessa is a certified public accountant (inactive), and he holds a B.A. in economics from the University of California, Berkeley and an M.B.A. from Santa Clara University. Mr. Canessa previously served on the board of directors of Aerohive Networks, Inc., a cloud-managed mobile networking platform provider, where he was chairman of the audit committee and a member of the compensation committee.

Dali Rajic has served as our president go-to-market and chief revenue officer since September 2019. Prior to joining us, he served as chief customer officer from February 2018 and as chief revenue officer from August 2016 to September 2019 at AppDynamics, Inc., an application performance management company and subsidiary of Cisco Systems, Inc. From April 2012 to August 2016, Mr. Rajic served in multiple sales executive roles at AppDynamics. From February 2009 to March 2012, he served in various sales executive roles at BMC Software, Inc., a computer software company. Mr. Rajic holds a B.S. in international marketing from California State Polytechnic University, Pomona and an M.B.A. from the Kellogg Graduate School of Management at Northwestern University.

Manoj Apte, Ph.D. has served as our senior vice president and as our chief strategy officer since September 2016. Prior to his appointment as our chief strategy officer, Dr. Apte served as our vice president of product management from September 2008. Dr. Apte holds a Ph.D. in computer science from Mississippi State University, an M.S. in computational engineering from Mississippi State University and a B. Tech in aerospace engineering from the Indian Institute of Technology, Bombay.

Robert Schlossman has served as our chief legal officer since February 2016. Prior to joining us, he served as the chief legal officer at Lucid Motors Inc., an electric car company, from May 2015 to January 2016. Prior to joining Lucid Motors, from March 2010 to August 2014, Mr. Schlossman served as the chief

legal and administrative officer at Aptina Inc., a provider of imaging solutions, which was acquired by ON Semiconductor Corporation. Mr. Schlossman holds a J.D. from the University of California, Berkeley School of Law, as well as an M.A. and B.A. in English from Stanford University.

EXECUTIVE COMPENSATION

Compensation Discussion and Analysis

Introduction

This Compensation Discussion and Analysis provides information regarding the fiscal 2019 compensation program for our principal executive officer, our principal financial officer, and our three other executive officers at fiscal year-end who were our most highly-compensated executive officers (our "named executive officers"). For fiscal 2019, our named executive officers were:

- Jay Chaudhry, our Chief Executive Officer, President and Chairman of the board of directors (our "CEO");
- Remo E. Canessa, our Chief Financial Officer;
- Amit Sinha, Ph.D., our President of Research &Development, Operations & Customer Service, Chief Technology Officer;
- Manoj Apte, Ph.D., our Chief Strategy Officer; and
- Robert Schlossman, our Chief Legal Officer and Secretary

This Compensation Discussion and Analysis describes the material elements of our executive compensation program during fiscal 2019. It also provides an overview of our executive compensation philosophy, including our principal compensation policies and practices. Finally, it analyzes how and why the compensation committee of our board of directors (the "compensation committee") arrived at the specific compensation decisions for our named executive officers in fiscal 2019 and discusses the key factors that the compensation committee considered in determining their compensation.

Executive Summary

Who We Are

Our mission is to provide fast, secure, and reliable access to information no matter where it lives. We were incorporated in 2007, during the early stages of cloud adoption and mobility, based on a vision that the internet would become the new corporate network as the cloud becomes the new data center. We predicted that with rapid cloud adoption and increasing workforce mobility, traditional perimeter security approaches would provide inadequate protection for users and data and an increasingly poor user experience. We pioneered a security cloud that represents a fundamental shift in the architectural design and approach to network security.

Enterprise applications are rapidly moving to the cloud to achieve greater IT agility, a faster pace of innovation and lower costs. Organizations are increasingly relying on Internet destinations for a range of business activities, adopting new external SaaS applications for critical business functions and moving their internally managed applications to the cloud. Enterprise users now expect to be able to seamlessly access applications and data, wherever they are hosted, from any device, anywhere in the world. We believe these

trends are indicative of the broader digital transformation agenda, as businesses increasingly succeed or fail based on their IT outcomes.

We believe that securing the on-premises corporate network to protect users and data is becoming increasingly irrelevant in a cloud and mobile-first world where organizations depend on the internet, a network they do not control and cannot secure, to access critical applications that power their businesses. We pioneered a new approach to security that connects the right user to the right application, regardless of network. Our cloud platform, which delivers security as a service, eliminates the need for traditional on-premises security appliances that are difficult to maintain and require compromises between security, cost and user experience. Our cloud platform incorporates the security functionality needed to enable users to safely utilize authorized applications and services based on an organization's policies. Our solution is a purpose-built, multi-tenant, distributed cloud security platform that secures access for users and devices to applications and services, regardless of location.

Fiscal 2019 Business Highlights

Fiscal 2019, our first year as a public company, was a strong year for us marked by significant achievements in revenue, billings growth and positive free cash flow. Fiscal 2019 highlights were as follows:

- Total revenue was $302.8 million, an increase of 59% year-over-year.
- Calculated billings were $390 million, an increase of 51% year-over-year. Calculated billings is a non-GAAP financial measure. The reconciliation of GAAP revenue and calculation billings is set forth on page 58 of our Annual Report on Form 10-K, as filed with the SEC on September 18, 2019.
- GAAP loss from operations was $35.3 million, or 12% of total revenue, compared to a GAAP loss of $34.6 million in fiscal 2018, or 18% of total revenue. Non-GAAP income from operations was $25.1 million, or 8% of total revenue, compared to Non-GAAP loss from operations of $15.4 million in fiscal 2018, or 8% of total revenue. The reconciliation of GAAP loss from operations and non-GAAP loss from operations is set forth on page 57 of our Annual Report on Form 10-K, as filed with the SEC on September 18, 2019.
- Cash provided by operations was $58.0 million, or 19% of revenue, compared to $17.3 million, or 9% of revenue, in fiscal 2018. Positive free cash flow was $29.3 million, or 10% of revenue, compared to $2.1 million, or 1% of revenue, in fiscal 2018. Free cash flow is a non-GAAP financial measure. The reconciliation of cash provided by operations and free cash flow is set forth on page 57 of our Annual Report on Form 10-K, as filed with the SEC on September 18, 2019.

Executive Compensation Highlights

During and for fiscal 2019, the compensation committee took the following key actions with respect to the compensation of our named executive officers:

- ***Base Salaries*** – The compensation committee maintained annual base salaries at their fiscal 2018 levels, including for our CEO, who has a salary of $23,660.
- ***Annual Cash Bonuses*** – While we had a strong year as described above, the targets set for our annual cash bonus plan required extraordinary or stretch level performance to achieve

payment (reflecting a pay-for-performance philosophy). Accordingly, no annual cash bonuses were paid to our Named Executive Officers, as our results under our Fiscal 2019 Employee Incentive Compensation Plan, or the Incentive Compensation Plan, did not meet the aggressive fiscal 2019 threshold performance levels that we had established for each six-month performance period under the Incentive Compensation Plan.

- ***Long-Term Incentive Compensation*** – The compensation committee determined that a substantial part of long-term incentive compensation should also reflect our pay-for-performance philosophy. As a result, the compensation committed granted long-term incentive compensation opportunities in the form of both time-based restricted stock unit ("RSU") awards and performance-based restricted stock unit ("PSU") awards, including a PSU award for our CEO with an aggregate grant date fair value of approximately $5.6 million. In addition to requiring continued service for vesting, our PSU awards provide that our named executive officers may earn shares of our common stock based on our achievement of pre-established target levels for one or more financial or operational performance measures established for a fiscal year. Despite our strong financial performance in fiscal 2019, we did not meet the aggressive threshold performance measures that were established for attainment of PSU Awards for 2019 and none of the shares of our common stock underlying PSU awards subject to the fiscal 2019 performance measures were earned.

Pay-for-Performance

We believe our executive compensation program is reasonable, competitive, and appropriately balances the goals of attracting, motivating, rewarding, and retaining our named executive officers with the goal of aligning their interests with those of our stockholders. To ensure this alignment and to motivate and reward individual initiative and effort, a substantial portion of our named executive officers' target annual compensation opportunity is both variable in nature and "at-risk."

We emphasize variable compensation that appropriately rewards our named executive officers through two separate compensation elements:

- First, we provide the opportunity to participate in our cash bonus plan which provides semi-annual cash payments if our named executive officers produce short-term financial, operational, and strategic results that meet or exceed the objectives set by our compensation committee.

- In addition, we grant RSU and PSU awards that will reward recipients over a multi-year period, with the PSUs only being earned for achieving performance objectives established by our compensation committee. The RSU and, if earned, PSU awards comprise a majority of our named executive officers' target total direct compensation opportunities, the future value of which depends significantly on the value of our common stock, thereby incentivizing them to build sustainable long-term value for the benefit of our stockholders.

These variable pay elements ensure that, each year, a substantial portion of our named executive officers' target total direct compensation is contingent (rather than fixed) in nature, with the amounts ultimately payable subject to variability above or below target levels commensurate with our actual performance. The performance goals we set for fiscal 2019 for both our annual cash bonus plan and our PSUs were very aggressive and did not result in payment in spite of our strong financial performance. As we mature as a public company, we intend that our executive compensation program will continue to evolve

to reflect our executive compensation philosophy and objective of rewarding strong performance with competitive and incentivizing compensation.

The pay mix for our CEO and our other named executive officers for fiscal 2019 reflected this "pay-for-performance" design:

Fiscal Year 2019 Pay Mix

CEO		All Other Named Executive Officers as a Group	
Cash	0.42%	Cash	5.49%
PSU	99.58%	PSU	31.50%
RSU	–	RSU	63.01%

We believe that this design provides balanced incentives for our named executive officers to drive financial and operational performance and long-term growth. To ensure that we remain faithful to our compensation philosophy, the compensation committee regularly evaluates the relationship between the reported values of the equity awards granted to our named executive officers, the amount of compensation realizable (and, ultimately, realized) from such awards in subsequent years.

Executive Compensation Policies and Practices

We endeavor to maintain sound governance standards consistent with our executive compensation policies and practices. The compensation committee evaluates our executive compensation program on a regular basis to ensure that it is consistent with our short-term and long-term goals given the dynamic nature of our business and the market in which we compete for executive talent. The following summarizes our executive compensation and related policies and practices:

What We Do

- ***Maintain an Independent Compensation Committee***. The compensation committee consists solely of independent directors who establish our compensation policies and practices.

- ***Retain an Independent Compensation Advisor***. The compensation committee has engaged its own compensation consultant to provide information, analysis, and other advice on executive compensation independent of management. This consultant performed no other consulting or other services for us in fiscal 2019.

- ***Annual Executive Compensation Review***. The compensation committee conducts an annual review and approval of our compensation strategy, including a review and determination of our compensation peer group used for comparative purposes and a review of our compensation-related risk profile to ensure that our compensation programs do not encourage excessive or inappropriate risk-taking and that the level of risk that they do encourage is not reasonably likely to have a material adverse effect on us.

- ***Compensation At-Risk***. Our executive compensation program is designed so that a significant portion of our named executive officers' compensation is "at risk" based on corporate performance, as well as equity-based, to align the interests of our named executive officers and stockholders.

- ***Use a Pay-for-Performance Philosophy***. The majority of our named executive officers' compensation is directly linked to corporate performance; we also structure their target total direct compensation opportunities with a significant long-term equity component, thereby making a substantial portion of each named executive officer's target total direct compensation dependent upon our stock price and/or total stockholder return.

- ***Nominal Base Salary and Zero Bonus Potential for our CEO***. Our CEO receives only a nominal base salary and is not eligible for a cash bonus.

- ***Succession Planning***. We review the risks associated with our key executive officer positions to ensure adequate succession plans are in place.

<u>What We Do Not Do</u>

- ***No Executive Retirement Plans***. We do not currently offer, nor do we have plans to offer, defined benefit pension plans or any non-qualified deferred compensation plans or arrangements to our named executive officers other than the plans and arrangements that are available to all employees. Our named executive officers are eligible to participate in our 401(k) retirement plan on the same basis as our other employees.

- ***Limited Perquisites.*** Perquisites or other personal benefits are not a material part of our compensation program for our named executive officers.

- ***No Excise Tax Payments on Future Post-Employment Compensation Arrangements***. We do not provide any excise tax reimbursement payments (including "gross-ups") on payments or benefits contingent upon a change in control of the Company.

- ***No Special Health or Welfare Benefits***. We do not provide our named executive officers with any health or welfare benefit programs, other than participation in our broad-based employee programs on the same basis as our other full-time, salaried employees.

- ***No Hedging or Pledging of our Equity Securities.*** We prohibit our employees, including our named executive officers and the members of our board of directors from hedging or pledging our equity securities.

Frequency of Future Stockholder Advisory Vote on Named Executive Officer Compensation

At the Annual Meeting of Stockholders to which this Proxy Statement relates, we will be conducting a non-binding advisory vote on the frequency of future non-binding advisory votes on the compensation of our named executive officers (commonly known as a "Say-When-on-Pay" vote). Our board of directors is recommending that we hold future non-binding advisory votes on the compensation of our named executive officers on an annual, rather than a biennial or triennial, basis. For additional information about the Say-When-on-Pay vote, see Proposal No. 3 above.

Executive Compensation Philosophy and Objectives

Our executive compensation program is guided by our overarching philosophy of paying for high and demonstrable performance. Consistent with this philosophy, we have designed our executive compensation program to achieve the following primary objectives:

- Provide market competitive compensation and benefit levels that will attract, retain, motivate, and reward a highly-talented team of executives within the context of responsible cost management;
- Establish a direct link between our financial and operational results and strategic objectives and the compensation of our executives;
- Align the interests and objectives of our executives with those of our stockholders by linking their long-term incentive compensation opportunities to stockholder value creation and their cash incentives to our annual performance; and
- Offer total compensation opportunities to our executives that, while competitive, are internally consistent and fair.

Generally, we structure the annual compensation of our named executive officers using three principal elements: base salary, annual cash bonus opportunities, and long-term equity incentive opportunities in the form of equity awards. The design of our executive compensation program is influenced by a variety of factors, with the primary goals being to align the interests of our named executive officers and stockholders and to link pay with performance.

We have not adopted policies or employed guidelines for allocating compensation between current and long-term compensation, between cash and non-cash compensation, or among different forms of non-cash compensation.

Compensation-Setting Process

Role of Compensation Committee

The compensation committee discharges the responsibilities of our board of directors relating to the compensation of our named executive officers and the non-employee members of our board of directors. The compensation committee has overall responsibility for overseeing our compensation and benefits policies generally, and overseeing and evaluating the compensation plans, policies and practices applicable to our CEO and other named executive officers.

In carrying out its responsibilities, the compensation committee evaluates our compensation policies and practices with a focus on the degree to which these policies and practices reflect our executive compensation philosophy, develops strategies and makes decisions that it believes further our philosophy or align with developments in best compensation practices, and reviews the performance of our named executive officers when making decisions with respect to their compensation.

The compensation committee's authority, duties, and responsibilities are further described in its charter, which is reviewed annually and revised and updated as warranted. The charter is available at http://ir.zscaler.com.

The compensation committee retains a compensation consultant (as described below) to provide support in its review and assessment of our executive compensation program.

Setting Target Total Direct Compensation

The compensation committee reviews the base salary levels, annual cash bonus opportunities, and long-term incentive compensation opportunities of our named executive officers and all related performance criteria at the beginning of each year, or more frequently as warranted. Adjustments are generally effective at the beginning of the fiscal year.

The compensation committee does not establish a specific target for formulating the target total direct compensation opportunities of our named executive officers. In making decisions about the compensation of our named executive officers, the members of the compensation committee rely primarily on their general experience and subjective considerations of various factors, including the following:

- our executive compensation program objectives;
- our performance against the financial, operational, and strategic objectives established by the compensation committee and our board of directors;
- each individual named executive officer's knowledge, skills, experience, qualifications, and tenure relative to other similarly-situated executives at the companies in our compensation peer group;
- the scope of each named executive officer's role and responsibilities compared to other similarly-situated executives at the companies in our compensation peer group;
- the prior performance of each individual named executive officer, based on a subjective assessment of his or her contributions to our overall performance, ability to lead his or her business unit or function, and work as part of a team, all of which reflect our core values;
- the potential of each individual named executive officer to contribute to our long-term financial, operational, and strategic objectives;
- our CEO's compensation relative to that of our named executive officers, and compensation parity among our named executive officers;
- our financial performance relative to our compensation and performance peers;
- the compensation practices of our compensation peer group and the positioning of each named executive officer's compensation in a ranking of peer company compensation levels based on an analysis of competitive market data; and
- the recommendations of our CEO with respect to the compensation of our named executive officers (except with respect to his own compensation).

These factors provide the framework for compensation decision-making and final decisions regarding the compensation opportunity for each named executive officer. No single factor is determinative in setting compensation levels, nor is the impact of any individual factor on the determination of pay levels quantifiable.

The compensation committee does not weight these factors in any predetermined manner, nor does it apply any formulas in developing its compensation recommendations. The members of the compensation

committee consider all of this information in light of their individual experience, knowledge of the Company, knowledge of the competitive market, knowledge of each named executive officer, and business judgment in making their decisions.

The compensation committee does not engage in formal benchmarking against other companies' compensation programs or practices to establish our compensation levels or make specific compensation decisions with respect to our named executive officers. Instead, in making its determinations, the compensation committee reviews information summarizing the compensation paid at a representative group of peer companies, to the extent that the executive positions at these companies are considered comparable to our positions and informative of the competitive environment and more broad-based compensation surveys to gain a general understanding of market compensation levels.

Role of Management

In discharging its responsibilities, the compensation committee works with members of our management, including our CEO. Our management assists the compensation committee by providing information on corporate and individual performance, market compensation data, and management's perspective on compensation matters. The compensation committee solicits and reviews our CEO's proposals with respect to program structures, as well as his recommendations for adjustments to annual cash compensation, long-term incentive compensation opportunities, and other compensation-related matters for our named executive officers (except with respect to his own compensation) based on his evaluation of their performance for the prior year.

At the beginning of each year, our CEO reviews the performance of our other named executive officers based on such individual's level of success in accomplishing the business objectives established for him or her for the prior year and his or her overall performance during that year and then shares these evaluations with, and makes recommendations to, the compensation committee for each element of compensation as described above.

The compensation committee reviews and discusses our CEO's proposals and recommendations with our CEO and considers them as one factor in determining and approving the compensation of our named executive officers, including our CEO. Our CEO also attends meetings of our board of directors and the compensation committee at which executive compensation matters are addressed, except with respect to discussions involving his own compensation.

Role of Compensation Consultant

The compensation committee engages an external compensation consultant to assist it by providing information, analysis, and other advice relating to our executive compensation program and the decisions resulting from its annual executive compensation review. The compensation consultant reports directly to the compensation committee and its chair and serves at the discretion of the compensation committee, which reviews the engagement annually.

In fiscal 2019, the compensation committee engaged Compensia, Inc. ("Compensia"), a national compensation consulting firm, to serve as its compensation consultant to advise on executive compensation matters, including competitive market pay practices for our named executive officers and with the data analysis and selection of the compensation peer group.

During fiscal 2019, Compensia attended the meetings of the compensation committee (both with and without management present) as requested and provided the following services:

- consultation with the compensation committee chair and other members between compensation committee meetings;
- review, research, and updating of our compensation peer group;
- an analysis of competitive market data based on the compensation peer group for our named executive officers' positions and an evaluation of how the compensation we pay our named executive officers compares both to our performance and to how the companies in our compensation peer group compensate their executives;
- review and analysis of the base salary levels, annual incentive bonus opportunities, and long-term incentive compensation opportunities of our named executive officers;
- review and analysis of the base salary levels, annual incentive bonus opportunities, and long-term incentive compensation opportunities for possible new hires;
- review and analysis of the compensation arrangements of the non-employee members of our board of directors against the companies in the compensation peer group;
- assessment of executive compensation trends within our industry, and updating on corporate governance and regulatory issues and developments; and
- support on other ad hoc matters throughout the year.

The terms of Compensia's engagement includes reporting directly to the compensation committee chair. Compensia also coordinated with our management for data collection and job matching for our executive officers. In fiscal 2019, Compensia did not provide any other services to us.

The compensation committee has evaluated its relationship with Compensia to ensure that it believes that such firm is independent from management. This review process included a review of the services that such compensation consultant provided, the quality of those services, and the fees associated with the services provided during fiscal 2019. Based on this review, as well as consideration of the factors affecting independence set forth in Exchange Act Rule 10C-1(b)(4), Rule 5605(d)(3)(D) of the NASDAQ Marketplace Rules, and such other factors as were deemed relevant under the circumstances, the compensation committee has determined that no conflict of interest was raised as a result of the work performed by Compensia and that Compensia is independent.

Competitive Positioning

For purposes of assessing our executive compensation against the competitive market, the compensation committee reviews and considers the compensation levels and practices of a select group of peer companies. This compensation peer group consists of technology companies that are similar to us in terms of revenue, market capitalization, and industry focus. The competitive data drawn from this compensation peer group is only one of several factors that the compensation committee considers, however, in making its decisions with respect to the compensation of our named executive officers.

The compensation peer group for fiscal 2019, which was first developed in fiscal 2017 in advance of our initial public offering with the assistance of Compensia, to analyze the compensation of our executive officers, including our named executive officers, was comprised of publicly-traded technology companies against which we compete for executive talent, as well as, in some instances, business opportunities. In

evaluating the companies comprising the compensation peer group, Compensia considered the following criteria:

- publicly-traded companies headquartered in the United States and traded on a major United States stock exchange;

- companies in the software and Internet services sectors, with a secondary focus on other technology companies;

- similar revenues – within a range of ~0.5x to ~2.0x our then-projected fiscal 2017 revenues of approximately $170 million (approximately $85 million to approximately $340 million); and

- similar market capitalization – within a range of ~0.5x to ~2.0x our then-projected market capitalization of approximately $2.5 billion (approximately $1.25 billion to approximately $5.0 billion).

This compensation peer group for fiscal 2019 consisted of the following companies:

Barracuda Networks	Ellie Mae	MuleSoft	Q2 Holdings
BlackLine	Gigamon	New Relic	Qualys
Box	HubSpot	Okta	Twilio
Callidus Software	Imperva	Paycom Software	Zendesk
Coupa Software	LogMeIn	Proofpoint	

The compensation committee used data drawn from the companies in our compensation peer group, as well as data from Compensia's proprietary database of public technology companies, to evaluate the competitive market when determining the total direct compensation packages for our named executive officers, including base salary, target cash incentive award opportunities, and long-term incentive compensation opportunities.

The compensation committee reviews our compensation peer group at least annually and makes adjustments to its composition if warranted, taking into account changes in both our business and the businesses of the companies in the peer group.

Compensation Elements

In fiscal 2019, the principal elements of our executive compensation program, and the purposes for each element, were as follows:

Element	Type of Element	Compensation Element	Objective
Base Salary	Fixed	Cash	Designed to attract and retain highly talented executives by providing fixed compensation amounts that are competitive in the market and reward performance
Annual Cash Bonuses	Variable	Cash	Designed to motivate our executives to achieve annual business objectives and provide financial incentives when we meet or exceed these annual objectives
Long Term Incentive Compensation	Variable	Equity awards in the form of PSU awards and RSU awards that may be settled for shares of our common stock	Designed to align the interests of our executives and our stockholders by motivating them to create sustainable long-term stockholder value

Base Salary

Base salary represents the fixed portion of the compensation of our named executive officers and is an important element of compensation intended to attract and retain highly-talented individuals. Generally, we use base salary to provide each named executive officer with a specified level of cash compensation during the year with the expectation that he or she will perform his or her responsibilities to the best of his or her ability and in our best interests.

Generally, we establish the initial base salaries of our named executive officers through arm's-length negotiation at the time we hire the individual, taking into account his or her position, qualifications, experience, prior salary level, and the base salaries of our other executive officers. Thereafter, the compensation committee reviews the base salaries of our named executive officers each year as part of its annual compensation review, with input from our CEO (except with respect to his own base salary) and makes adjustments as it determines to be reasonable and necessary to reflect the scope of a named executive officer's performance, individual contributions and responsibilities, position in the case of a promotion, and market conditions.

In October 2018, the compensation committee reviewed the base salaries of our named executive officers, taking into consideration a competitive market analysis and the recommendations of our CEO, as well as the other factors described in "Compensation-Setting Process – Setting Target Total Direct Compensation" above. Following this review, the compensation committee determined to maintain the base salary for each of our named executive officers at its fiscal 2018 level.

The base salaries of our named executive officers for fiscal 2019 were as follows:

Named Executive Officer	Fiscal 2018 Base Salary	Fiscal 2019 Base Salary	Percentage Adjustment
Mr. Chaudhry	$23,660	$23,660	0%
Mr. Canessa	$300,000	$300,000	0%
Dr. Sinha	$300,000	$300,000	0%
Dr. Apte	$275,000	$275,000	0%
Mr. Schlossman	$275,000	$275,000	0%

The base salaries paid to our named executive officers during fiscal 2019 are set forth in the *"Fiscal 2019 Summary Compensation Table"* below.

Annual Cash Bonuses

We use our Incentive Compensation Plan, an annual cash bonus plan, to motivate employees selected by the compensation committee, including our named executive officers, to achieve our annual business goals. Our Incentive Compensation Plan allows our compensation committee to provide cash incentive awards to employees selected by our compensation committee, including our named executive officers, based upon performance goals established by our compensation committee. Pursuant to the Incentive Compensation Plan, our compensation committee, in its sole discretion, establishes a target award for each participant and a bonus pool, with actual awards payable from such bonus pool, with respect to the applicable performance period. For fiscal 2019 the Incentive Compensation Plan included semi-annual performance periods with semi-annual award payouts after the end of the first six-month period and, then again, after the end of the fiscal year.

The compensation committee administered the Incentive Compensation Plan. As the administrator of the plan, the compensation committee may, in its sole discretion and at any time, increase, reduce, or eliminate a participant's actual award, and/or increase, reduce, or eliminate the amount allocated to the bonus pool for a particular performance period. The actual award may be below, at or above a participant's target annual cash bonus award, in the discretion of the administrator. Further, the administrator may determine the amount of any increase, reduction, or elimination on the basis of such factors as it deems relevant, and it is not required to establish any allocation or weighting with respect to the factors it considers.

Actual awards under the Fiscal 2019 Incentive Compensation Plan were to be paid in cash (or its equivalent) in a single lump sum only after they are earned, which requires continued employment through the date the actual award is paid. The compensation committee reserved the right to settle an actual award with a grant of an equity award under our then-current equity compensation plan, which equity award may have such terms and conditions, as the compensation committee determines. Payment of awards was to occur as soon as administratively practicable after they are earned, but no later than the dates set forth in the Fiscal 2019 Incentive Compensation Plan.

Our board of directors and the compensation committee have the authority to amend, alter, suspend, or terminate the plan, provided such action does not impair the existing rights of any participant with respect to any earned awards.

Fiscal 2019 Target Annual Cash Bonus Award Opportunities

For purposes of the Fiscal 2019 Incentive Compensation Plan, cash bonus awards were based upon fixed amounts as determined by the compensation committee. In October 2018, the compensation committee

reviewed the target annual cash bonus award opportunities of our named executive officers. Following this review and after taking into consideration the factors described in "Governance of Executive Compensation Program – Compensation-Setting Process" above, the compensation committee determined to maintain the target annual cash bonus award opportunities of our named executive officers for fiscal 2019 at their fiscal 2018 levels.

The target annual cash bonus award opportunities of our named executive officers for fiscal 2019 were as follows:

Named Executive Officer	Fiscal 2019 Target Annual Cash Bonus Award Opportunity
Mr. Chaudhry	$0
Mr. Canessa	$150,000
Dr. Sinha	$125,000
Dr. Apte	$100,000
Mr. Schlossman	$75,000

Potential annual cash bonus awards for our named executive officers under the Fiscal 2019 Incentive Compensation Plan could range from zero to 150% of their target annual cash bonus award opportunity.

Corporate Performance Objectives

Under the Fiscal 2019 Incentive Compensation Plan, the compensation committee determined the performance measures and related target levels for the fiscal 2019 awards.

In October 2018, the compensation committee selected net new annual contract value ("net new ACV") as the performance measure for the Fiscal 2019 Incentive Compensation Plan. For this purpose, "net new ACV" means generally the aggregate annual value of a new or upsell sales contract to an end user or partner for products and services sold by Zscaler that is billable at the time of booking, offset by any lost or reduced renewals.

The compensation committee selected net new ACV as the appropriate corporate performance measure for the Fiscal 2019 Incentive Compensation Plan because, in its view, this measure was a key indicator of our execution of our strategy. Net new ACV, while significant to our achievement of our growth and business strategy, is an internal metric that we do not disclose in our financial statements. For fiscal 2019, the target net new ACV, as set forth in our annual operating plan, for each half of the year was greater than the amount achieved in the comparable period for the prior fiscal year and represented a very aggressive growth target for fiscal 2019.

For purposes of the Fiscal 2019 Incentive Compensation Plan, our named executive officers were eligible to earn cash bonus awards to the extent that we achieved a minimum target net new ACV for each half of fiscal 2019 (that is, the periods from August 1, 2018 through January 31, 2019 and February 1, 2019 through July 31, 2019), subject to greater payouts for increased achievement above the target.

Annual Cash Bonus Payments

As previously described, our named executive officers were eligible for semi-annual cash bonus awards only to the extent, and in the amount, that we met or exceeded the applicable minimum threshold for net new ACV for each six-month performance period. Because we did not achieve our desired net new

ACV goals for either half of fiscal 2019, the compensation committee did not make any cash bonus awards to our named executive officers under the Fiscal 2019 Incentive Compensation Plan.

Long-Term Incentive Compensation

We view long-term incentive compensation in the form of equity awards as a critical element of our executive compensation program. We use equity awards to incentivize and reward our named executive officers for long-term corporate performance based on the value of our common stock and, thereby, to align the interests of our named executive officers with those of our stockholders. Typically, we have granted equity awards to our named executive officers as part of the compensation committee's annual review of our executive compensation program.

Currently, we use RSU awards and PSU awards to retain, motivate, and reward our named executive officers for long-term increases in the value of our common stock and, thereby, to align their interests with those of our stockholders. Our PSU awards provide that our named executive officers may earn shares of our common stock based on our achievement of pre-established target levels for one or more financial or operational performance measures as well as continued service. We also grant RSU awards with solely time-based vesting requirements to named executive officers other than our CEO. Because RSU awards have value to the recipient even in the absence of stock price appreciation, we are able to incentivize and retain our named executive officers using fewer shares of our common stock than would be necessary if we used stock options to provide equity to our executive officers. In addition, because the value of these RSU awards increases with any increase in the value of the underlying shares, RSU awards also provide incentives to our named executive officers that are aligned with the interests of our stockholders.

To date, the compensation committee has not applied a rigid formula in determining the size and form of the equity awards to be granted to our named executive officers as part of our annual focal review of equity awards. Instead, in making these decisions, the compensation committee has exercised its judgment as to the amount and form of the awards. The compensation committee considers the retention value of the equity compensation held by the named executive officer, the cash compensation received by the named executive officer, a competitive market analysis performed by its compensation consultant, the recommendations of our CEO (except with respect to himself), the amount of equity compensation held by the named executive officer (including the current economic value of his or her unvested equity and the ability of these unvested holdings to satisfy our retention objectives), and the other factors described in "Compensation-Setting Process – Setting Target Total Direct Compensation" above. Based upon these factors, the compensation committee has determined the size of each award at levels it considered appropriate to create a meaningful opportunity for reward predicated on the creation of long-term stockholder value.

Fiscal 2019 Equity Award Grants

In October 2018, the compensation committee granted long-term incentive compensation opportunities in the form of equity awards to our named executive officers in amounts that it considered to be consistent with our compensation philosophy and its desired market positioning and which also recognized the performance of each of our named executive officers, as follows:

- ***Mr. Chaudhry*** – Mr. Chaudhry was not granted as RSU award, but was granted four separate PSU awards, each covering 150,000 units which may be settled for shares of our common stock with individual annual performance periods to correspond to fiscal 2019 through fiscal 2022. Each such PSU award is subject to being earned and vesting annually for each fiscal year from fiscal 2019 through fiscal 2022 based on the achievement of one or more performance measures to be established at the beginning of each fiscal year by the

compensation committee. Following the completion of each performance year, the compensation committee certifies our achievement against the applicable performance measures, and 100% of the units earned by our CEO will vest on the first trading day on or after September 15th. If such certification is made after September 15, earned units will vest on the first trading day on or after December 15th. For the fiscal 2019 performance year, the total number of units that could be earned scaled from 0% to 150% of the target number of units, based on actual achievement of the fiscal 2019 performance measure. The performance measures and related target performance levels for the fiscal 2020 through fiscal 2022 performance years will be determined in the applicable performance year, with the measures and related target performance levels for fiscal 2020 performance being determined by the compensation committee in the first quarter of fiscal 2020. For each of these PSU awards, receipt of any shares of our common stock upon settlement of the awards is subject to Mr. Chaudhry continuing to be a service provider through any performance determination date or subsequent vesting date. Mr. Chaudhry currently intends to donate any shares of our common stock issued for earned PSU awards (or the proceeds from the sale thereof) to charity as part of his philanthropic commitments.

- ***Mr. Canessa*** – Mr. Canessa was granted a mix of RSU awards and PSU awards. Mr. Canessa was granted a RSU award covering 56,250 units subject to a delayed vesting schedule. The RSU award will vest over approximately six years in total, with 6.25% of the units subject to vesting on December 15, 2020 and 6.25% of the units vesting on the first trading day on or after each of March 15, June 15, September 15 and December 15 (each a "Quarterly Vesting Date") thereafter. Mr. Canessa was also granted two separate PSU awards consisting of 28,125 units each, with individual annual performance periods to correspond to fiscal 2019 and fiscal 2020. For the 2019 performance year, the total number of units that could be earned scaled from 0% to 150% of the target number of units, based on actual achievement of the 2019 performance measure. The performance measures and related target performance levels for the 2020 performance year were determined by the compensation committee in the first quarter of fiscal 2020. For each performance year, any earned units will vest on the same schedule as for his RSU award, with 6.25% of the earned units vesting on December 15, 2020 and 6.25% of the units vesting each Quarterly Vesting Date thereafter. For each of the RSU and PSU awards, receipt of any shares of common stock upon settlement of the awards is subject to Mr. Canessa continuing to be a service provider through any applicable vesting date.

- ***Dr. Sinha, Dr. Apte and Mr. Schlossman*** – Dr. Sinha, Dr. Apte and Mr. Schlossman were granted a mix of RSU and PSU awards. Dr. Sinha's RSU award consists of two separate RSU awards each covering 62,500 units with 62,500 units vesting in 16 equal quarterly installments beginning on December 15, 2019 and the remaining 62,500 units vesting in 16 equal quarterly installments beginning on December 15, 2020. Dr. Apte's RSU award consists of two separate RSU awards each covering 56,250 units with 56,250 units vesting in 16 equal quarterly installments beginning on December 15, 2019 and the remaining 56,250 units vesting in 16 equal quarterly installments beginning on December 15, 2020. Mr. Schlossman's RSU award consists of two separate RSU awards each covering 31,250 units with 31,250 units vesting in 16 equal quarterly installments beginning on December 15, 2019 and the remaining 31,250 units vesting in 16 equal quarterly installments beginning on December 15, 2020.

> The PSU awards of Dr. Sinha, Dr. Apte, and Mr. Schlossman each consist of two separate PSU awards of 62,500 units, 56,250 units, and 31,250 units, respectively, with individual annual performance periods to correspond to fiscal 2019 and fiscal 2020. For the 2019 performance year, the total number of units that could be earned scaled from 0% to 150% of the target number of units, based on actual achievement of the 2019 performance measure. The performance measures and related target performance levels for the 2020 performance year were determined by the compensation committee in the first quarter of fiscal 2020. For each performance year, any earned units will vest on the same schedule as for each named executive officer's RSU awards, with any earned units from the fiscal 2019 PSU award vesting in 16 equal quarterly installments beginning on December 15, 2019 and any earned units from the fiscal 2020 PSU award vesting in 16 equal quarterly installments beginning on December 15, 2020. For each of the RSU and PSU awards, receipt of any shares of common stock underlying the awards is subject to the applicable named executive officer continuing to be a service provider through any vesting date.

The number of shares subject to the PSU and RSU awards granted to our named executive officers (viewed in the aggregate by value) was determined by the compensation committee based on its consideration of the factors described above.

<u>Fiscal 2019 PSU Awards</u>

The PSU awards granted to our CEO and our other named executive officers for the fiscal 2019 performance year, or the Fiscal 2019 PSU Awards, were to be earned based on our level of attainment of the same full-year fiscal 2019 net new ACV target performance level as the compensation committee selected for the Fiscal 2019 Incentive Compensation Plan.

The compensation committee selected target net new ACV as the appropriate corporate performance measure for the Fiscal 2019 PSU Awards, in addition to the Fiscal 2019 Incentive Compensation Plan, because, in its view, this measure was a key indicator of our execution of our strategy. For fiscal 2019, the net new ACV target performance level for the Fiscal 2019 PSU Awards was greater than the amount achieved in the comparable period for the prior fiscal year and represented a very aggressive target for fiscal 2019.

Each unit earned pursuant to a Fiscal 2019 PSU Award was to be settled for one share of our common stock, which was then eligible for time-based vesting as described above. For purposes of the Fiscal 2019 PSU Awards, our named executive officers were eligible to earn the units underlying and subject to these awards to the extent that we achieved the pre-established performance threshold for net new ACV for fiscal 2019 as determined as of the end of the fiscal year, subject to earning a greater number of units for increased achievement above the target performance level.

<u>Results of Fiscal 2019 PSU Awards</u>

In September 2019, our net new ACV results for fiscal 2019 were presented to the compensation committee. After reviewing and analyzing these results, the compensation committee certified that, for the performance period ended July 31, 2019, our net new ACV results for the year did not meet the threshold performance level established for the Fiscal 2019 PSU Awards. Consequently, none of the shares of our common stock subject to the Fiscal 2019 PSU awards were earned by our named executive officers and the awards were forfeited.

The equity awards granted to our named executive officers in fiscal 2019 are set forth in the "*Fiscal 2019 Summary Compensation Table*" and the "*Fiscal 2019 Grants of Plan-Based Awards Table*" below.

Health and Welfare Benefits

Our named executive officers are eligible to receive the same employee benefits that are generally available to all employees, subject to the satisfaction of certain eligibility requirements. These benefits include medical, dental, and vision insurance, business travel insurance, an employee assistance program, health and dependent care flexible spending accounts, basic life insurance, accidental death and dismemberment insurance, short-term and long-term disability insurance and reimbursement for mobile phone coverage.

We maintain a tax-qualified retirement plan, or the 401(k) plan, that provides eligible employees, including our named executive officers, with an opportunity to save for retirement on a tax-advantaged basis. Eligible employees are able to participate in the 401(k) Plan as of the first day of the month following the date they meet the plan's eligibility requirements, and participants are able to defer up to 100% of their eligible compensation subject to applicable annual limits as set under the Internal Revenue Code. All participants' interests in their deferrals are 100% vested when contributed. Through the end of fiscal 2019, we have not made any matching contributions to the 401(k) plan to date.

The 401(k) Plan is intended to be qualified under Section 401(a) of the Internal Revenue Code with the plan's related trust intended to be tax-exempt under Section 501(a) of the Internal Revenue Code. As a tax-qualified retirement plan, contributions to our 401(k) Plan and earnings on those contributions are not taxable to our employees until distributed from the plan.

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.

Perquisites and Other Personal Benefits

Currently, we do not view perquisites or other personal benefits as a significant component of our executive compensation program. Accordingly, we do not provide significant perquisites or other personal benefits to our named executive officers, except as generally made available to our employees or in situations where we believe it is appropriate to assist an individual in the performance of his or her duties, to make him or her more efficient and effective, and for recruitment and retention purposes. During fiscal 2019, none of our named executive officers received perquisites or other personal benefits that were, in the aggregate, $10,000 or more for any individual.

We have in the past and may in the future, we may provide perquisites or other personal benefits in limited circumstances, such as those described in the preceding paragraph. All future practices with respect to perquisites or other personal benefits will be approved and subject to periodic review by the compensation committee.

Employment Arrangements

We entered into written employment agreement with our CEO and employment offer letters with our other named executive officers in connection with their employment with us. We believe that these arrangements were necessary to induce these individuals to forego other employment opportunities or leave their then-current employer for the uncertainty of a demanding position in a new and unfamiliar organization.

In filling each of our executive positions, our board of directors or the compensation committee, as applicable, recognized that it would need to develop competitive compensation packages to attract qualified candidates in a dynamic labor market. At the same time, our board of directors and the compensation

committee were sensitive to the need to integrate new executive officers into the executive compensation structure that we were seeking to develop, balancing both competitive and internal equity considerations.

Each of these arrangements provides for "at will" employment (meaning that either we or the executive officer may terminate the employment relationship at any time without cause) and sets forth the initial compensation arrangements for the executive officer, including their base salary, target annual cash bonus opportunity (expressed as fixed amount or as a percentage of his or her base salary), participation in our employee benefit programs, eligibility for future equity awards, and reimbursement for all reasonable and necessary business expenses.

In addition, in the case of our named executive officers, their employment offer letters and other agreements provide that the executive officer will be eligible to receive certain severance payments and benefits in connection with certain terminations of employment. These post-employment compensation arrangements are discussed in "*Post-Employment Compensation*" below.

For detailed descriptions of the employment arrangements with our named executive officers, see "*Potential Payments upon Termination or Change in Control*" below.

Post-Employment Compensation

The employment offer letters with certain of our named executive officers provide them with certain protection in the event of their termination of employment other than for "cause," death, or "disability" (as such terms are defined in the employment offer letters). In addition, our named executive officers, are participants in our Change of Control and Severance Policy, or the Severance Policy, which provides for certain protections in the event of a termination of employment in connection with a change in control of the Company. We believe that these protections were necessary to induce these individuals to leave their former employment for the uncertainty of a demanding position in a new and unfamiliar organization and help from a retention standpoint and to retain their services on an ongoing basis.

These arrangements provide reasonable compensation to a named executive officer if he or she leaves our employ under certain circumstances to facilitate his or her transition to new employment. Further, in some instances we seek to mitigate any potential employer liability and avoid future disputes or litigation by requiring a departing named executive officer to sign a separation and release agreement acceptable to us as a condition to receiving post-employment compensation payments or benefits. We also believe that these arrangements provided by the Severance Policy help maintain their continued focus and dedication to their assigned duties to maximize stockholder value if there is a potential transaction that could involve a change in control of the Company.

Under the Severance Policy, all payments and benefits in the event of a change in control of the Company are payable only if there is a subsequent loss of employment by a named executive officer (a so-called "double-trigger" arrangement). In the case of the acceleration of vesting of outstanding equity awards, we use this double-trigger arrangement to protect against the loss of retention value following a change in control of the Company and to avoid windfalls, both of which could occur if vesting of either equity or cash-based awards accelerated automatically as a result of the transaction.

In the event of a change in control of the Company, to the extent Section 280G or 4999 of the Internal Revenue Code is applicable to a named executive officer, such individual is entitled to receive either:

- payment of the full amounts specified in the policy to which he or she is entitled; or

- payment of such lesser amount that does not trigger the excise tax imposed by Section 4999, whichever results in him or her receiving a higher amount after taking into account all federal, state, and local income, excise and employment taxes.

We do not use excise tax payments (or “gross-ups”) relating to a change in control of the Company and have no such obligations in place with respect to any of our named executive officers.

We believe that having in place reasonable and competitive post-employment compensation arrangements, including in the event of a change in control of the Company, are essential to attracting and retaining highly-qualified executive officers. The compensation committee does not consider the specific amounts payable under the post-employment compensation arrangements when determining the annual compensation for our named executive officers. We do believe, however, that these arrangements are necessary to offer compensation packages that are competitive.

For detailed descriptions of the post-employment compensation arrangements with our named executive officers, as well as an estimate of the potential payments and benefits payable under these arrangements, see “*Potential Payments upon Termination or Change in Control*” below.

Other Compensation Policies

Hedging and Pledging Prohibitions

Under our Insider Trading Policy, our employees (including officers) and members of our board of directors are prohibited from making short-sales and engaging in transactions in publicly-traded options, such as puts and calls, and other derivative securities with respect to our securities. This latter prohibition extends to any hedging or similar transaction designed to decrease the risks associated with holding our securities. In addition, under our Insider Trading Policy, certain of our employees (including officers) and members of our board of directors are prohibited from using our securities as collateral for a loan or holding our securities in a margin account.

Tax and Accounting Considerations

The compensation committee takes the applicable tax and accounting requirements into consideration in designing and overseeing our executive compensation program.

Deductibility of Executive Compensation

Section 162(m) of the Internal Revenue Code generally places a $1 million limit on the amount of compensation a public company can deduct in any one year for certain executive officers. While our compensation committee considers tax deductibility as one factor in determining executive compensation, our compensation committee also looks at other factors in making its decisions, as noted above, and retains the flexibility to award compensation that it determines to be consistent with the goals of our executive compensation program even if the awards are not deductible by us for tax purposes.

Taxation of “Parachute” Payments

Sections 280G and 4999 of the Internal Revenue 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 of the company that exceeds certain prescribed limits, and that the company (or a successor) may forfeit a deduction on the

amounts subject to this additional tax. We have not agreed to provide any executive officer, including any named executive officer, with a "gross-up" or other reimbursement payment for any tax liability that the executive officer might owe as a result of the application of Sections 280G or 4999 of the Internal Revenue Code.

Section 409A of the Internal Revenue Code

Section 409A of the Internal Revenue Code imposes additional significant taxes in the event that an executive officer, director or service provider receives "deferred compensation" that does not satisfy the requirements of Section 409A of the Internal Revenue Code. Although we do not maintain a traditional nonqualified deferred compensation plan for our executive officers, Section 409A of the Internal Revenue Code does apply to certain severance arrangements, bonus arrangements and equity awards, and we have structured all such arrangements and awards in a manner to either avoid or comply with the applicable requirements of Section 409A of the Internal Revenue Code.

Accounting for Stock-Based Compensation

The compensation committee takes accounting considerations into account in designing compensation plans and arrangements for our executive officers and other employees. Chief among these is Financial Accounting Standards Board Accounting Standards Codification Topic 718 ("ASC Topic 718"), the standard which governs the accounting treatment of certain stock-based compensation. Among other things, ASC Topic 718 requires us to record a compensation expense in our income statement for all equity awards granted to our executive officers and other employees. This compensation expense is based on the grant date "fair value" of the equity award and, in most cases, will be recognized ratably over the award's requisite service period (which, generally, will correspond to the award's vesting schedule). This compensation expense is also reported in the compensation tables below, even though recipients may never realize any value from their equity awards.

Employment Offer Letter with Remo Canessa

Under Mr. Canessa's employment offer letter, if we terminate Mr. Canessa's employment with us other than for "cause," death or "disability" outside of the period beginning on a "change of control" (as such terms are defined in the Severance Policy) and ending 12 months following the change of control, he will be entitled to receive:

- accelerated vesting as to the number of unvested shares subject to equity awards that otherwise would have vested during the 6 months following the date his employment with us terminates had he remained employed with us through such time;
- extension of the period of time in which he has to exercise his vested options until the date that is 12 months following his termination date, subject to earlier termination on a change in control (or similar transaction) pursuant to the terms of the equity plan under which the options are granted; and
- severance pay at a rate equal to 100% of his base salary, as then in effect, for a period of 6 months following the date of such termination, payable in accordance with our normal payroll practices.

To receive the severance benefits upon a qualifying termination, Mr. Canessa must sign and not revoke a release of claims within the time specified in his employment offer letter.

Employment Offer Letter with Robert Schlossman

Under Mr. Schlossman's employment offer letter, if we terminate Mr. Schlossman's employment with us other than for "cause" or he resigns for "good reason", without a "change of control" (as such terms are defined in the employment offer letter), he will be entitled to receive continuing severance pay at a rate equal to 100% of his base salary, as then in effect, for a period of 3 months from the date of such termination, to be paid periodically in accordance with the Company's normal payroll practices.

To receive the severance benefits upon a qualifying termination, Mr. Schlossman must sign and not revoke a release of claims within the time specified in his employment offer letter.

Change of Control and Severance Policy

Our board of directors adopted a Change of Control and Severance Policy, or the Severance Policy. Each of our current executive officers is a participant in the Severance Policy. Under the Severance Policy, if we terminate a participant other than for "cause," death or "disability" or the named executive officer resigns for "good reason" during the period beginning on a "change of control" (as such terms are defined in the Severance Policy) and ending 12 months following the change of control (which we refer to as the change of control period), such named executive officer will be eligible to receive the following severance benefits:

- 100% of the then-unvested shares subject to his then-outstanding equity awards will become vested and exercisable, and in the case of equity awards with performance-based vesting, all performance goals and other vesting criteria will be deemed achieved at the specified percentage of target levels;

- a lump-sum payment equal to 100% of the greatest of (i) a participant's annual base salary as in effect immediately prior to his termination, (ii) if the termination is a resignation for good reason based on a material reduction in base salary, a participant's annual base salary as in effect immediately prior to such reduction, or (iii) a participant's annual base salary as in effect immediately prior to the change of control;

- a lump-sum payment equal to (i) 100% of a participant's target annual bonus for the fiscal year in which the termination occurs plus (ii) a pro-rated portion of such target annual bonus reduced by any bonus payments made during such fiscal year; and

- a lump-sum health benefit severance payment of $36,000.

To receive the severance benefits upon a qualifying termination, a named executive officer must sign and not revoke a release of claims within the time specified in the Severance Policy. If we discover after a named executive officer receives severance benefits that grounds for terminating him for cause existed, such named executive officer will not receive any further severance benefits under the Severance Policy, and to the extent permitted by law, the named executive officer will be required to repay to us any severance payments and benefits (or gain derived from such payments and benefits) he received under the Severance Policy.

If any of the payments or benefits provided for under the Severance Policy or otherwise payable to a named executive officer would constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code and would be subject to the related excise tax under Section 4999 of the Internal Revenue Code, then the named executive officer will be entitled to receive either full payment of such

payments and benefits or such lesser amount which would result in no portion of the benefits being subject to the excise tax, whichever results in the greater amount of after-tax benefits to him.

In addition to the benefits described above, Mr. Canessa's 12-month extended post-termination exercise period continues to apply for a qualified termination during the change of control period.

Fiscal Year 2018 Equity Incentive Plan and 2007 Stock Plan

Our Fiscal Year 2018 Equity Incentive Plan (the "2018 Plan") provides that in the event of a merger or change in control, as defined under our 2018 Plan, each outstanding award will be treated as the administrator determines, without a participant's consent. The administrator is not required to treat all awards or participants similarly.

In the event that a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and all other terms and conditions met and such award will become fully exercisable, if applicable. If an option or stock appreciation right is not assumed or substituted, the administrator will notify the participant in writing or electronically that such 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 will terminate upon the expiration of such period.

In the event of a change in control, with respect to awards granted to an outside director, his or her options and stock appreciation rights, if any, will vest fully and become immediately exercisable, all restrictions on his or her restricted stock and restricted stock units will lapse and all performance goals or other vesting requirements for his or her performance shares and units will be deemed achieved at 100% of target levels, and all other terms and conditions met.

Our 2007 Plan provides that, in the event of a merger or change in control, as defined under our 2007 Plan, each outstanding award may be assumed or substituted for an equivalent award. In the event that awards are not assumed or substituted for, then the vesting of outstanding awards will be accelerated, and stock options will become exercisable in full prior to such transaction. In addition, if an option is not assumed or substituted in the event of a merger or change in control, the administrator will notify the participant that such award will be fully vested and exercisable for a specified period prior to the transaction, and such award will terminate upon the expiration of such period for no consideration, unless otherwise determined by the administrator.

401(k) Plan

We maintain a tax-qualified retirement plan, or the 401(k) plan, that provides eligible employees with an opportunity to save for retirement on a tax-advantaged basis. Eligible employees are able to participate in the 401(k) plan as of the first day of the month following the date they meet the 401(k) plan's eligibility requirements, and participants are able to defer up to 100% of their eligible compensation subject to applicable annual Internal Revenue Code limits. All participants' interests in their deferrals are 100% vested when contributed. We have not made any matching contributions to the 401(k) plan to date.

Fiscal 2019 Summary Compensation Table

The following table presents information regarding the compensation awarded to, earned by and paid to each individual who served as one of our named executive officers during fiscal 2019, fiscal 2018, and fiscal 2017.

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)(1)	Option Awards ($)(2)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Jay Chaudhry	2019	23,660	—	5,556,000	—	—	—	5,579,660
Chief Executive Officer	2018	96,500	—	—	—	—	200,809	297,309
	2017	—	—	—	—	—	—	—
Remo Canessa	2019	300,000	—	3,125,250	—	—	—	3,425,250
Chief Financial Officer	2018	300,000	—	—	—	169,359	—	469,359
	2017	146,591	72,313	—	2,161,320	—	—	2,380,224
Amit Sinha(3)	2019	300,000	—	6,945,000	—	—	—	7,245,000
President of Research and Development, Chief Technology Officer	2018	300,000	—	—	—	129,519	1,457	430,976
Majoj Apte(4)	2019	275,000	—	6,250,500	—	—	—	6,525,500
Chief Strategy Officer								
Robert Schlossman(5)	2019	275,000	—	3,472,500	—	—	—	3,747,500
Chief Legal Officer								

(1) The amounts reported represent the grant date fair value of the awards granted to the named executive officers during fiscal years 2019, 2018 and 2017 as computed in accordance with FASB ASC Topic 718. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in Note 10 to our audited consolidated financial statements included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2019. The awards for fiscal year 2019 are comprised of (i) time-based RSU and (ii) PSU awards. The amounts shown in respect of the PSUs represent the grant date fair value of the first of multiple tranches of the PSU award that was granted in October 2018 based upon the probable outcome of the fiscal 2019 performance condition as of the grant date. The grant date fair value of the PSU awards granted in fiscal years 2019 assuming achievement of the maximum level of performance are: Mr. Chaudhry, $8,334,000; Mr. Canessa $1,562,625; Dr. Sinha $3,472,500; Dr. Apte $3,125,250; and Mr. Schlossman $1,736,250. These amounts do not necessarily correspond to the actual value recognized by our named executive officers. For example, no PSUs were earned for fiscal year 2019.

(2) The amounts reported represent the aggregate grant date fair value of the stock options granted to our named executive officers, calculated in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value of the awards reported in this column are set forth in Note 10 to our audited consolidated financial statements included in our Annual Report on Form 10-K for our fiscal year ended July 31, 2019. These amounts do not necessarily correspond to the actual value recognized by the named executive officers.

(3) Dr. Sinha was an executive officer but not a named executive officer for fiscal 2017.

(4) Dr. Apte was an executive officer but not a named executive officer for fiscal 2017 and 2018.

(5) Mr. Schlossman was an executive officer but not a named executive officer for fiscal 2017 and 2018.

Fiscal 2019 Grants of Plan-Based Awards Table

The following table sets forth certain information with respect to all plan-based awards granted to our named executive officers during fiscal 2019.

		Estimated Possible Payouts under Non-Equity Incentive Plan Awards (1)			Estimated Possible Payouts under Equity Incentive Plan Awards (2)				
Name	**Grant Date**	**Threshold ($)**	**Target ($)**	**Maximum ($)**	**Threshold (#)**	**Target (#)**	**Maximum (#)**	**All Other Stock Awards: Number of shares of Stock or Units (#)**	**Grant Date Fair Value of Stock and Options Awards ($)(3)**
Jay Chaudhry		—	—	—	—	—	—	—	—
	10/05/2018	—	—	—	—	150,000	225,000	—	5,556,000
Remo Canessa		—	150,000	225,000	—	—	—	—	—
	10/05/2018	—	—	—	—	—	—	56,250 (4)	2,083,500
	10/05/2018	—	—	—	—	28,125	42,188	—	1,041,750
Amit Sinha		—	125,000	187,500	—	—	—	—	—
	10/05/2018	—	—	—	—	—	—	125,000 (5)	4,630,000
	10/05/2018	—	—	—	—	62,500	93,750	—	2,315,000
Manoj Apte		—	100,000	150,000	—	—	—	—	—
	10/05/2018	—	—	—	—	—	—	112,500 (6)	4,167,000
	10/05/2018	—	—	—	—	56,250	84,375	—	2,083,500
Robert Schlossman		—	75,000	112,500	—	—	—	—	—
	10/05/2018	—	—	—	—	—	—	62,500 (7)	2,315,000
	10/05/2018	—	—	—	—	31,250	46,875	—	1,157,500

(1) These amounts reflect the fiscal 2019 target cash bonus amounts for each of our named executive officers under our Incentive Compensation Plan. Mr. Chaudhry did not participate in the Incentive Compensation Plan. There are no threshold bonus amounts under the Incentive Compensation Plan. As set forth in the Summary Compensation Table, no bonuses were earned for fiscal 2019. As such, the amounts set forth do not represent actual compensation earned or earnable by the named executive officers for fiscal 2019. For a description of the Incentive Compensation Plan, see "Compensation Discussion and Analysis –Annual Cash Bonuses" above.

(2) These amounts reflect PSUs for the 2019 fiscal year performance period granted during the 2019 fiscal year to each of our named executive officers under our 2018 Equity Incentive Plan. The PSUs were eligible to be earned based on the achievement of 2019 fiscal year ACV targets established by the compensation committee. There were no threshold amounts for the 2019 fiscal year performance period. The amounts set forth do not represent actual compensation earned or earnable by the named executive officers for fiscal 2019. For a description of the 2019 fiscal year PSU program, see "Compensation Discussion and Analysis –Long-Term Incentive Compensation" above.

(3) The amounts reported represent the aggregate grant date fair value of the stock awards granted to our named executive officers in fiscal 2019, calculated in accordance with ASC Topic 718. The assumptions used in calculating the grant date fair value are set forth in the notes to our consolidated financial statements included in the Annual Report. These amounts do not necessarily correspond to the actual value recognized by our named executive officers.

(4) The RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(5) The RSUs vest as follows: (i) 62,500 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 62,500 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(6) The RSUs vest as follows: (i) 56,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 56,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(7) The RSUs vest as follows: (i) 31,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 31,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

Fiscal 2019 Outstanding Equity Awards at Fiscal Year-End Table

The following table provides information regarding outstanding equity awards held by our named executive officers as of July 31, 2019.

			Option Awards				Stock Awards			
Name	Grant Date		Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)(1)	Equity Incentive Plan Awards: Number of Unearned Shares or Units That Have Not Vested (#)	Equity Incentive Plan Awards: Market Value of Unearned Shares or Units or That Have Not Vested ($)
Jay Chaudhry	10/05/2018	(2)	—	—	—	—	—	—	150,000	12,640,500
	10/05/2018	(3)	—	—	—	—	—	—	150,000	12,640,500
	10/05/2018	(4)	—	—	—	—	—	—	150,000	12,640,500
	10/05/2018	(5)	—	—	—	—	—	—	150,000	12,640,500
Remo Canessa	03/02/2017	(6)	530,000	—	5.82	03/02/2024	—	—	—	—
	10/05/2018	(7)	—	—	—	—	56,250	4,740,188	—	—
	10/05/2018	(8)	—	—	—	—	—	—	28,125	2,370,094
	10/05/2018	(9)	—	—	—	—	—	—	28,125	2,370,094
Amit Sinha	01/29/2013	(10)	101,333	—	1.34	01/29/2020	—	—	—	—
	04/06/2017	(11)	138,891	194,442	5.93	04/06/2024	—	—	—	—
	10/05/2018	(12)	—	—	—	—	125,000	10,533,750	—	—
	10/05/2018	(13)	—	—	—	—	—	—	62,500	5,266,875
	10/05/2018	(14)	—	—	—	—	—	—	62,500	5,266,875
Majoj Apte	04/03/2015	(10)	266,666	—	2.63	04/03/2022	—	—	—	—
	04/06/2017	(11)	97,227	136,106	5.93	04/06/2024	—	—	—	—
	10/05/2018	(15)	—	—	—	—	112,500	9,480,376	—	—
	10/05/2018	(13)	—	—	—	—	—	—	56,250	4,740,188
	10/05/2018	(14)	—	—	—	—	—	—	56,250	4,740,188
Robert Schlossman	01/15/2016	(16)	230,000	—	4.40	01/15/2023	—	—	—	—
	10/05/2018	(17)	—	—	—	—	62,500	5,266,876	—	—
	10/05/2018	(13)	—	—	—	—	—	—	31,250	2,633,438
	10/05/2018	(14)	—	—	—	—	—	—	31,250	2,633,438

(1) This column represents the market value of the shares underlying the RSUs or PSUs, as applicable, as of July 31, 2019, based on the closing price of our common stock, as reported on NASDAQ, of $84.27 per share on July 31, 2019.

(2) Upon achievement of specified performance metrics, earned PSUs vest on September 15, 2019, or the first quarterly vesting date after achievement has been certified. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%. None of these PSUs were earned in fiscal 2019.

(3) Upon achievement of specified performance metrics, earned PSUs vest on September 15, 2020, or the first quarterly vesting date after achievement has been certified. Because the performance metrics for this award had not been determined in FY 2019 (and hence, no grant date fair value could be determined), it was not included in the summary

compensation table or grants of plan-based awards table above. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%.

(4) Upon achievement of specified performance metrics, earned PSUs vest on September 15, 2021, or the first quarterly vesting date after achievement has been certified. Because the performance metrics for this award had not been determined in FY 2019 (and hence, no grant date fair value could be determined), it was not included in the summary compensation table or grants of plan-based awards table above. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%.

(5) Upon achievement of specified performance metrics, earned PSUs vest on September 15, 2022, or the first quarterly vesting date after achievement has been certified. Because the performance metrics for this award had not been determined in FY 2019 (and hence, no grant date fair value could be determined), it was not included in the summary compensation table or grants of plan-based awards table above. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%.

(6) The option is subject to an early exercise provision and is immediately exercisable. One-fourth of the shares subject to the option vested on February 6, 2018 and 1/48 of the shares vest monthly thereafter.

(7) The RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(8) Upon achievement of specified performance metrics, earned PSUs vest in 16 equal quarterly installments beginning on December 15, 2020. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%. None of these PSUs were earned in fiscal year 2019.

(9) Upon achievement of specified performance metrics, earned PSUs vest in 16 equal quarterly installments beginning on December 15, 2020. Because the performance metrics for this award had not been determined in FY 2019 (and hence, no grant date fair value could be determined), it was not included in the summary compensation table or grants of plan-based awards table above. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%.

(10) Shares subject to the option are fully vested and immediately exercisable.

(11) One-fourth of the shares subject to the option vested on November 1, 2018 and 1/48 of the shares vest monthly thereafter.

(12) The RSUs vest as follows: (i) 62,500 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 62,500 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(13) Upon achievement of specified performance metrics, earned PSUs vest in 16 equal quarterly installments beginning on December 15, 2019. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%. None of these PSUs were earned in fiscal year 2019.

(14) Upon achievement of specified performance metrics, earned PSUs vest in 16 equal quarterly installments beginning on December 15, 2020. Because the performance metrics for this award had not been determined in FY 2019 (and hence, no grant date fair value could be determined), it was not included in the summary compensation table or grants of plan-based awards table above. Amounts reported are at 100% target level of achievement, with maximum achievement paying out at 150%.

(15) The RSUs vest as follows: (i) 56,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 56,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

(16) One-fourth of the shares subject to the option vested on January 14, 2017 and 1/48 of the shares vest monthly thereafter.

(17) The RSUs vest as follows: (i) 31,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2019 and (ii) 31,250 RSUs vest in 16 equal quarterly installments beginning on December 15, 2020.

Fiscal 2019 Option Exercises Table

The following table presents, for each of our named executive officers, the shares of our common stock that were acquired upon the exercise of stock options and the related value realized upon exercise during fiscal 2019. No RSUs held by our named executive officers vested in fiscal 2019.

	Option Awards	
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)(1)
Jay Chaudhry	—	—
Remo Canessa	220,000	13,690,600
Amit Sinha	—	—
Manoj Apte	—	—
Robert Schlossman	200,000	9,199,950

(1) The value realized on exercise is pre-tax and represents the difference between the market price of our company's common stock on the date of exercise less the option exercise price paid for those shares, multiplied by the number of shares for which the option was exercised.

Potential Payments upon Termination or Change in Control

The tables below quantify (i) the potential payments to Messrs. Canessa and Schlossman under the terms of the Severance Policy in the event of a qualifying termination of employment that is not in connection with a change in control of the Company and (ii) the potential payments to our named executive officers under the terms of the Severance Policy in the event of a qualifying termination of employment in connection with a change in control of the Company. The amounts shown assume that the change in control and/or termination of employment occurred on July 31, 2019, the last business day of fiscal 2019. The values reflected also assume that the payments and benefits to our named executive officers are not reduced by virtue of the provision in the Severance Policy relating to Sections 280G and 4999 of the Code.

Potential Payments Upon Termination Not in Connection with a Change in Control

		Value of Accelerated Equity Awards		
Named Executive Officer	Salary Severance ($)	Restricted Stock Units ($)	Options ($)(1)	Total ($)
Mr. Canessa	150,000	—	9,806,250	9,956,250
Mr. Schlossman	68,750	—	—	68,750

(1)These amounts reflect the aggregate market value of the unvested shares of our common stock underlying outstanding options. The aggregate market value is equal to (i) the product obtained by multiplying (x) the number of unvested shares of our common stock subject to vesting of outstanding options as of July 31, 2019, by (y) $84.27 (the closing market price of our common stock on the Nasdaq Global Select Market on July 31, 2019, the last trading day in the fiscal year ended July 31, 2019), minus (ii) the aggregate exercise price for such unvested shares.

Potential Payments Upon Termination in Connection with a Change in Control

Named Executive Officer	Salary Severance ($)	Bonus Severance ($)	Value of Accelerated Equity Awards		Health Benefit Severance Payments ($)	Total ($)
			Restricted Stock Units ($)(1)	Options ($)(2)		
Mr. Chaudhry	23,660	—	50,562,000	—	36,000	50,621,660
Mr. Canessa	300,000	300,000	9,480,375	31,053,177	36,000	41,169,552
Mr. Sinha	300,000	250,000	21,067,500	15,232,821	36,000	36,886,321
Mr. Apte	275,000	200,000	18,960,750	10,662,936	36,000	30,134,686
Mr. Schlossman	275,000	150,000	10,533,750	4,659,137	36,000	15,653,887

(1) These amounts reflect the aggregate market value of the unvested shares of our common stock underlying outstanding restricted stock unit awards. The aggregate market value is equal to the product obtained by multiplying (i) the number of unvested shares of our common stock subject to outstanding restricted stock unit awards as of July 31, 2019, by (ii) $84.27 (the closing market price of our common stock on the Nasdaq Global Select Market on July 31, 2019, the last trading day in the fiscal year ended July 31, 2019). For performance-based restricted stock unit awards, the assumed number of unvested shares is equal to the target number of shares subject to such award, which includes the target number of shares subject to the portions of such awards that had a fiscal 2019 performance period since those portions of the awards were outstanding as of July 31, 2019 (even though those portions of the awards were subsequently forfeited due to the failure to achieve the relevant performance objectives).

(2) These amounts reflect the aggregate market value of the unvested shares of our common stock underlying outstanding options. The aggregate market value is equal to (i) the product obtained by multiplying (x) the number of unvested shares of our common stock subject to outstanding options as of July 31, 2019, by (y) $84.27 (the closing market price of our common stock on the Nasdaq Global Select Market on July 31, 2019, the last trading day in the fiscal year ended July 31, 2019), minus (ii) the aggregate exercise price for such unvested shares.

Equity Compensation Plan Information

The following table provides information as of July 31, 2019 with respect to shares of our common stock that may be issued under our existing equity compensation plans.

Plan Category	Number of Securities to be Issued upon Exercise of Outstanding Options, Restricted Stock Units and Rights (#)	Weighted Average Exercise Price of Outstanding Options and Rights ($)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in the First Column) (#)
Equity compensation plans approved by security holders			
2007 Stock Plan (1)	8,853,237	7.13	—
Fiscal Year 2018 Equity Incentive Plan (2)(3)	5,620,328	41.25	15,012,216
Fiscal Year 2018 Employee Stock Purchase Plan (4)	—	—	2,266,337
Equity compensation plans not approved by security holders	—	—	—
TOTAL	14,473,565	7.16	17,278,553

(1) As a result of the adoption of the 2018 Plan, we no longer grant awards under the 2007 Plan; however, all outstanding options issued pursuant to the 2007 Plan continue to be governed by their existing terms. To the extent that any such awards are forfeited or lapse unexercised or are repurchased, the shares of common stock subject to such awards will become available for issuance under the 2018 Plan.

(2) Our 2018 Plan provides that the number of shares available for issuance under the 2018 Plan will be increased on the first day of each fiscal year, in an amount equal to the least of (i) 12,700,000 shares, (ii) five percent (5%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year or (iii) such other amount as our board of directors may determine.

(3) Includes all PSUs granted in fiscal 2019 which consists of (i) fiscal 2019 PSUs at the maximum payout (no PSUs were paid out for fiscal 2019 resulting in 696,369 PSUs being forfeited) (ii) fiscal 2020, fiscal 2021, fiscal 2022 at target (100%), as no metrics had been determined as of fiscal 2019 year-end.

(4) Our Fiscal Year 2018 Employee Stock Purchase Plan (the "ESPP") provides that the number of shares available for issuance under the ESPP will be increased on the first day of each fiscal year, in an amount equal to the least of (i) 2,200,000 shares, (ii) one percent (1%) of the outstanding shares of common stock on the last day of the immediately preceding fiscal year or (iii) such other amount as may be determined by the administrator of the ESPP.

COMPENSATION COMMITTEE REPORT

The compensation committee has reviewed and discussed the section titled "Executive Compensation" with management. Based on such review and discussion, the compensation committee has recommended to the board of directors that the section titled "Executive Compensation" be included in this proxy statement.

Respectfully submitted by the members of the compensation committee of the board of directors:

Andrew Brown (Chair)
Karen Blasing
Charles Giancarlo

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 November 15, 2019 for:

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

We have determined beneficial ownership in accordance with the rules of the SEC and the information is not necessarily indicative of beneficial ownership for any other purpose. Unless otherwise indicated below, to our knowledge, the persons and entities named in the table have sole voting and sole investment power with respect to all shares that they beneficially owned, subject to community property laws where applicable.

We have based our calculation of the percentage of beneficial ownership on 127,939,822 shares of our common stock outstanding as of November 15, 2019. We have deemed shares of our common stock subject to stock options that are currently exercisable or exercisable within 60 days of November 15, 2019, to be outstanding and to be beneficially owned by the person holding the stock option for the purpose of computing the percentage ownership of that person. We did not deem these shares outstanding, however, 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 Zscaler, Inc., 110 Rose Orchard Way, San Jose, California 95134.

Name of Beneficial Owner	Number of Shares Beneficially Owned	Percentage of Shares Beneficially Owned
5% Stockholders:		
Ajay Mangal, as trustee(1)	29,824,532	23.3
FMR, LLC(2)	6,410,165	5.0
Named Executive Officers, Directors and Director Nominee:		
Jay Chaudhry(3)	26,802,039	21.0
Remo Canessa(4)	782,554	*
Amit Sinha(5)	1,153,913	*
Manoj Apte(6)	622,146	*
Robert Schlossman(7)	207,419	*
Karen Blasing(8)	242,553	*
Andrew Brown(9)	178,628	*
Scott Darling(10)	67,095	*
Charles Giancarlo(11)	362,928	*
Nehal Raj(12)	1,382	*
David Schneider(13)	2,500	*
All current executive officers and directors as a group (11 persons)(14)	30,420, 657	23.8

* Represents beneficial ownership of less than one percent (1%) of the outstanding shares of our common stock.

(1) Consists of (i) 21,566,041 shares held of record by The CJCP Trust for which Mr. Mangal serves as trustee and (ii) 8,258,491 shares held of record by The CKS Trust for which Mr. Mangal serves as trustee. The beneficiaries of The CJCP Trust and The CKS Trust are members of Jay Chaudhry's family. The address for The CJCP Trust and The CKS Trust is c/o The Goldman Sachs Trust Company, 200 Bellevue Parkway, Suite 250, Wilmington, Delaware 19809.

(2) Based solely on Schedule 13G filed with the SEC on February 13, 2019. Consists of 6,410,165 shares held of record in accounts managed by direct or indirect subsidiaries of FMR LLC. Abigail P. Johnson is a Director, the Chairman, the Chief Executive Officer, and the President of FMR LLC. Members of the Johnson family, including Abigail P. Johnson, are the predominant owners, directly or through trusts, of Series B voting common shares of FMR LLC, representing 49% of the voting power of FMR LLC. The Johnson family group and all other Series B stockholders have entered into a stockholders' voting agreement under which all Series B voting common shares will be voted in accordance with the majority vote of Series B voting common shares. Accordingly, through their ownership of voting common shares and the execution of the stockholders' voting agreement, members of the Johnson family may be deemed, under the Investment Company Act of 1940, to form a controlling group with respect to FMR LLC. Neither FMR LLC nor Ms. Johnson has the sole power to vote or direct the voting of the shares owned directly by the various investment companies registered under the Investment Company Act of 1940 (the Fidelity Funds), advised by Fidelity Management & Research Company ("FMR Co"), a wholly owned subsidiary of FMR LLC, which power resides in the Fidelity Funds' Boards of Trustees. FMR Co carries out the voting of the shares under written guidelines established by the Fidelity Funds' Boards of Trustees. The address for FMR LLC is 245 Summer Street, Boston, Massachusetts 02210.

(3) Consists of (i) 2,177,994 shares held of record by Mr. Chaudhry, (ii) 24,617,379 shares held of record by Jyoti Chaudhry and (iii) 6,666 shares held of record by P. Jyoti Chaudhry Family Trust dated March 1, 2000 for which Surjit Kaur serves as trustee.

(4) Consists of (i) 252,554 shares held of record by Mr. Canessa and (ii) 530,000 shares subject to options exercisable within 60 days of November 15, 2019, of which 259,171 are fully vested.

(5) Consists of (i) 2,664 shares held of record by Dr. Sinha, (ii) 566,702 shares held of record by the Sinha Revocable Trust dated September 24, 2011 for which Dr. Sinha serves as trustee, (iii) 298,749 shares held of record by the ADRR Trust for which Neha Kumar serves as trustee, (iv) 281,892 shares subject to options exercisable within 60 days of November 15, 2019, all of which are fully vested and (v) 3,906 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(6) Consists of (i) 2,573 shares held of record by Dr. Apte, (ii) 36,022 shares of record by the Akshay Kosh Family Trust dated December 18, 2006 for which Dr. Apte and his spouse serve as trustees, (iii) 132 shares held of record directly by Dr. Apte's mother-in-law, (iv) 132 shares held of record directly by Dr. Apte's father-in-law, (v) 138,594 shares held of record directly by the Manoj Apte 2017 GRAT for which Dr. Apte serves as trustee, (vi) 141,784 shares held of record directly by the Lalita Godbole 2017 GRAT for which Dr. Apte's spouse serves as trustee, (vii) 299,394 shares subject to options exercisable within 60 days of November 15, 2019, all of which are fully vested and (viii) 3,515 issuable upon vesting of RSUs within 60 days of November 15, 2019.

(7) Consists of (i) 30,466 shares held of record by Mr. Schlossman, (ii) 175,000 shares subject to options exercisable within 60 days of November 15, 2019, all of which are fully vested and (iii) 1,953 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(8) Consists of (i) 446 shares held of record by Ms. Blasing, (ii) 55,624 shares held of record by The Blasing Family Revocable Trust U/A dtd 12/22/2005 for which Ms. Blasing serves as trustee and (iii) 185,334 shares subject to options exercisable within 60 days of November 15, 2019, of which 127,002 shares are fully vested and (iv) 1,149 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(9) Consists of (i) 4,633 shares held of record by Mr. Brown, (ii) 42,513 shares held of record by the Andrew W.F. Brown 2017 Grantor Retained Annuity Trust, for which Mr. Brown’s spouse serves as a trustee and (iii) 130,333 shares subject to options exercisable within 60 days of November 15, 2018, of which 125,757 are vested and (iv) 1,149 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(10) Consists of (i) 65,946 shares held of record by Mr. Darling and (ii) 1,149 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(11) Consists of (i) 183,307 shares held of record by Mr. Giancarlo, of which 53,471 may be repurchased by us at the original exercise price as of November 15, 2019, (ii) 125,000 shares are held of record by The Charles H. & Dianne G. Giancarlo Family Trust U/D/T 11/2/98 for which Mr. Giancarlo serves as trustee, (iii) 26,736 shares held of record by The 2012 Marielle Christina Giancarlo Trust UAD 12/26/12 for which Mr. Giancarlo serves as a trustee, (iv) 26,736 shares held of record by The 2012 Gianna Marie Giancarlo Trust UAD 12/26/12 for which Mr. Giancarlo serves as a trustee and (v) 1,149 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(12) Consists of (i) 233 shares held of record by Mr. Raj and (ii) 1,149 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(13) Consists of (i) 2,250 shares held of record by Mr. Schneider and (ii) 250 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

(14) Consists of (i) 28,803,585 shares beneficially owned by our current executive officers and directors, of which 53,471 shares may be repurchased by us at the original exercise price as of November 15, 2019, (ii) 1,601,953 shares subject to options exercisable within 60 days of November 15, 2019, and (iii) 15,119 shares issuable upon vesting of RSUs within 60 days of November 15, 2019.

RELATED PERSON TRANSACTIONS

We describe below transactions and series of similar transactions, since the beginning of our last fiscal year, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, nominees for director, executive officers or beneficial holders of more than 5% of our outstanding capital stock, or any immediate family member of, or person sharing the household with, any of these individuals or entities (each, a related person), had or will have a direct or indirect material interest.

Investors' Rights Agreement

We are party to an amended and restated investors' rights agreement dated July 24, 2015 which provides, among other things, that certain holders of our capital stock, including (i) entities affiliated with Mr. Chaudhry, (ii) entities affiliated with Mr. Chaudhry's wife, Jyoti Chaudhry, who was a member of our board of directors at the time we entered into such investors' rights agreement, (iii) entities affiliated with Lane Bess, who was a member of our board of directors at the time we entered into such investors' rights agreement, and (iv) entities affiliated with Kailash Kailash, who was a member of our board of directors at the time we entered into such investors' rights agreement, have the right to demand that we file a registration statement or request that their shares of our capital stock be covered by a registration statement that we are otherwise filing.

Transactions with Stockholders

From time to time, stockholders, including those that may beneficially own more than 5% of our outstanding capital stock subscribe to, license or otherwise purchase, in the normal course of business, certain of our products and services. These transactions are negotiated on an arm's-length basis and are subject to review under the Company's policies and procedures for related person transactions described below. During fiscal year 2019, in the ordinary course of business, we provided FMR, LLC (together with its affiliates, "Fidelity"), a greater than 5% beneficial holder of our capital stock, with certain services and products. The aggregate revenue recognized by us in fiscal year 2019 for such services and products exceeded $120,000. The transaction with Fidelity was entered into on an arm's-length basis, contains customary terms and conditions and was approved under the Company's related person transactions policy. In the future, we may provide, in the ordinary course of business, additional services and products to Fidelity.

Other Agreements

In addition to the indemnification required in our amended and restated certificate of incorporation and amended and restated bylaws, we have entered into an indemnification agreement with each member of our board of directors and each of our officers. These agreements provide for the indemnification of our directors and officers for certain expenses and liabilities incurred in connection with any action, suit, proceeding or alternative dispute resolution mechanism, or hearing, inquiry or investigation that may lead to the foregoing, to which they are a party, or are threatened to be made a party, by reason of the fact that they are or were a director, officer, employee, agent or fiduciary of the Company, or any of our subsidiaries, by reason of any action or inaction by them while serving as an officer, director, agent or fiduciary, or by reason of the fact that they were serving at our request as a director, officer, employee, agent or fiduciary of another entity. In the case of an action or proceeding by or in the right of the Company or any of our subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified

party is prohibited from receiving indemnification. We believe that these charter and bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers.

We have entered into employment agreements with certain of our executive officers that, among other things, provide for certain severance and change of control benefits. For a description of employment agreements with our named executive officers, see "Executive Compensation—Executive Employment Agreements."

We have granted stock options to our named executive officers, other executive officers and certain of our directors. See "Executive Compensation—Executive Employment Agreements."

Other than as described above, since August 1, 2018, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, $120,000, and in which any related person had or will have a direct or indirect material interest.

We believe the terms of the transactions described above were comparable to terms we could have obtained in arm's-length dealings with unrelated third parties.

Policies and Procedures for Related Party Transactions

We have adopted a formal written policy providing that our executive officers, directors, nominees for election as directors, beneficial owners of more than 5% of any class of our common stock and any member of the immediate family of any of the foregoing persons, is not permitted to enter into a related-party transaction with us without the consent of our audit committee, subject to the exceptions described below.

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 no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances, and the extent of the related party's interest in the transaction. Our audit committee has determined that certain transactions will not require audit committee approval, including certain employment arrangements of executive officers, director compensation, transactions with another company at which a related party's only relationship is as a non-executive employee, director or beneficial owner of less than 10% of that company's shares and the aggregate amount involved does not exceed $120,000 in any fiscal year, transactions where a related party's interest arises solely from the ownership of our common stock and all holders of our common stock received the same benefit on a pro rata basis and transactions available to all employees generally.

OTHER MATTERS

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act requires that our executive officers and directors, and persons who own more than 10% of our common stock, file reports of ownership and changes of ownership with the SEC. Such directors, executive officers and 10% stockholders are required by SEC regulation to furnish us with copies of all Section 16(a) forms they file.

SEC regulations require us to identify in this proxy statement anyone who filed a required report late during the most recent fiscal year. Based on our review of forms we received, or written representations from reporting persons stating that they were not required to file these forms, we believe that during our fiscal year ended July 31, 2019, all Section 16(a) filing requirements were satisfied on a timely basis with the exception that Dr. Sinha did not timely file a Form 4 with respect to one transaction occurring in May 2019, but such Form 4 was subsequently filed.

Fiscal Year 2019 Annual Report and SEC Filings

Our financial statements for our fiscal year ended July 31, 2019 are included in our Annual Report on Form 10-K filed with the SEC on September 18, 2019 (File No. 001-38413). This proxy statement and our Annual Report are posted in the Financial Information section of the Investors webpage at http://ir.zscaler.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 Zscaler, Inc., Attention: Investor Relations, 110 Rose Orchard Way, San Jose, California 95134.

Company Website

We maintain a website at www.zscaler.com. Information contained on, or that can be accessed through, our website is not intended to be incorporated by reference into this proxy statement, and references to our website address in this proxy statement are inactive textual references only.

PROPOSALS OF STOCKHOLDERS FOR FISCAL 2020 ANNUAL MEETING

Stockholders who wish to present proposals for inclusion in the proxy materials to be distributed in connection with next year's annual meeting must submit their proposals so that they are received at Zscaler's principal executive offices no later than July 30, 2020. Pursuant to the rules promulgated by the SEC, simply submitting a proposal does not guarantee that it will be included.

In order to be properly brought before the fiscal 2020 annual meeting of stockholders, a stockholder's notice of a matter the stockholder wishes to present, or the person or persons the stockholder wishes to nominate as a director, must be delivered to the Secretary of Zscaler at its principal executive offices not less than 45 nor more than 75 days before the first anniversary of the date on which Zscaler first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting. As a result, any notice given by a stockholder pursuant to these provisions of our bylaws must be received no earlier than September 13, 2020, and no later than October 13, 2020, unless our annual meeting date occurs more than 30 days before or 60 days after January 10, 2021. In that case, we must receive proposals not earlier than the close of business on the 120th day prior to the date of the fiscal 2020 annual meeting and not later than the close of business on the later of the 90th day prior to the date of the annual meeting or the 10th day following the day on which we first make a public announcement of the date of the meeting.

To be in proper form, a stockholder's notice must include the specified information concerning the proposal or nominee as described in our bylaws. A stockholder who wishes to submit a proposal or nomination is encouraged to seek independent counsel about our bylaws and SEC requirements. Zscaler will not consider any proposal or nomination that is not timely or otherwise does not meet the bylaws and SEC requirements for submitting a proposal or nomination.

Notices of intention to present proposals at the fiscal 2020 annual meeting of stockholders must be addressed to: Secretary, Zscaler, Inc., 110 Rose Orchard Way, San Jose, California 95134. We reserve the right to reject, rule out of order, or take other appropriate action with respect to any proposal that does not comply with these and other applicable requirements.

* * *

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 on the enclosed proxy card will have discretion to vote the shares of common stock they represent in accordance with their own judgment on such matters.

It is important that your shares of 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, by using the Internet or by mail at your earliest convenience, as instructed on the Notice of Internet Availability of Proxy Materials.

THE BOARD OF DIRECTORS
San Jose, California
November 27, 2019

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, 2019

OR

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

For the transition period from to _ to _

Commission File Number: 001-38413

ZSCALER, INC.
(Exact Name of Registrant as Specified in Its Charter)

Delaware (State or other jurisdiction of incorporation or organization)	**26-1173892** (I.R.S. Employer Identification Number)

110 Rose Orchard Way
San Jose, California 95134
(Address of principal executive offices)

Registrant's telephone number, including area code: (408) 533-0288

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, $0.001 Par Value	ZS	The Nasdaq Stock Market LLC

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 of 1933, as amended. 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

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

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 is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the registrant, based on the closing price of a share of the registrant's common stock on January 31, 2019 (the last business day of the registrant's most recently completed second fiscal quarter) as reported by the Nasdaq Global Select Market on such date was approximately $2.8 billion.

As of August 30, 2019, the number of shares of registrant's common stock outstanding was 127,454,926.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2019 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K where indicated. Such Proxy Statement will be filed with the United States Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Annual Report on Form 10-K relates.

ZSCALER, INC.

TABLE OF CONTENTS

		Page
	PART I	
Item 1.	Business	3
Item 1A.	Risk Factors	13
Item 1B.	Unresolved Staff Comments	47
Item 2.	Properties	47
Item 3.	Legal Proceedings	47
Item 4.	Mine Safety Disclosures	47
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	48
Item 6.	Selected Financial Data	50
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations	53
Item 7A.	Quantitative and Qualitative Disclosures about Market Risk	80
Item 8.	Financial Statements and Supplementary Data	82
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	125
Item 9A.	Controls and Procedures	125
Item 9B.	Other Information	126
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance	127
Item 11.	Executive Compensation	127
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	127
Item 13.	Certain Relationships and Related Transactions and Director Independence	127
Item 14.	Principal Accountant Fees and Services	127
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules	128
Item 16.	Form 10-K Summary	128
	Signatures	

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including but not limited to, statements regarding our financial outlook and market positioning. These forward-looking statements are made as of the date they were first issued and were based on current expectations, estimates, forecasts and projections as well as the beliefs and assumptions of management. 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:

- our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit or gross margin, operating expenses (including changes in sales and marketing, research and development and general and administrative expenses), and our ability to achieve, and maintain, future profitability;
- market acceptance of our cloud platform;
- the effects of increased competition in our markets and our ability to compete effectively;
- our ability to maintain the security and availability of our cloud platform;
- our ability to maintain and expand our customer base, including by attracting new customers;
- our ability to develop new solutions, or enhancements to our existing solutions, and bring them to market in a timely manner;
- market acceptance of any new solutions or enhancements to our existing solutions;
- anticipated trends, growth rates and challenges in our business and in the markets in which we operate;
- our business plan and our ability to effectively manage our growth and associated investments;
- beliefs about and objectives for future operations;
- beliefs about and objectives for future acquisitions, strategic investments, partnerships and alliances;
- our relationships with third parties, including channel partners;
- our ability to maintain, protect and enhance our intellectual property rights;
- our ability to successfully defend litigation brought against us;
- our ability to successfully expand in our existing markets and into new markets;
- sufficiency of cash to meet cash needs for at least the next 12 months;
- our ability to comply with laws and regulations that currently apply or become applicable to our business both in the United States and internationally;
- beliefs about the impacts of legal and geopolitical developments upon our business;
- the attraction and retention of qualified employees and key personnel; and
- the future trading prices of our common stock.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Risk Factors" 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 and you should not place undue reliance on our forward-looking statements.

The forward-looking statements made in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this Annual Report on Form 10-K to reflect events or circumstances after the date of this Annual Report on Form 10-K or to reflect new information or the occurrence of unanticipated events, except as required by law.

PART I

Item 1. Business

Overview

Zscaler's mission is to provide fast, secure and reliable access to information no matter where it lives.

We were incorporated in 2007, during the early stages of cloud adoption and mobility, based on a vision that the internet would become the new corporate network as the cloud becomes the new data center. We predicted that with rapid cloud adoption and increasing workforce mobility, traditional perimeter security approaches would provide inadequate protection for users and data and an increasingly poor user experience. We pioneered a security cloud that represents a fundamental shift in the architectural design and approach to network security.

Enterprise applications are rapidly moving to the cloud to achieve greater IT agility, a faster pace of innovation and lower costs. Organizations are increasingly relying on internet destinations for a range of business activities, adopting new external SaaS applications for critical business functions and moving their internally managed applications to the public cloud, or IaaS. Enterprise users now expect to be able to seamlessly access applications and data, wherever they are hosted, from any device, anywhere in the world. We believe these trends are indicative of the broader digital transformation agenda, as businesses increasingly succeed or fail based on their IT outcomes.

We believe that securing the on-premises corporate network to protect users and data is becoming increasingly irrelevant in a cloud and mobile-first world where organizations depend on the internet, a network they do not control and cannot secure, to access critical applications that power their businesses. We pioneered a new approach to security that connects the right user to the right application, regardless of network. Our cloud platform, which delivers security as a service, eliminates the need for traditional on-premises security appliances that are difficult to maintain and require compromises between security, cost and user experience. Our cloud platform incorporates the security functionality needed to enable users to safely utilize authorized applications and services based on an organization's policies. Our solution is a purpose-built, multi-tenant, distributed cloud security platform that secures access for users and devices to applications and services, regardless of location.

Before our platform, the corporate data center served as the central hub of IT security, with a physical network perimeter used to separate corporate users, devices and applications from the internet. Today, the network perimeter consists of appliances that have become fundamentally less effective as applications, data, users and devices rapidly move off the corporate network, making the notion of a corporate perimeter obsolete. In a world where more companies are shifting their most critical IT assets to the cloud, cloud-first security is required. Our architecture is vastly different from the traditional "hub-and-spoke" corporate perimeter, where traffic from branch offices is routed to centralized data centers for security scanning and policy enforcement before reaching its destination. In contrast, our security cloud sits between an organization's users and devices, and the internet, inspecting traffic on a direct path to the destination. Our solutions enable customers to set policies that follow users, so a consistent level of protection is applied no matter where users are located or how they are connected to the internet. We provide all of this security at scale, processing approximately 70 billion internet requests per day. Our platform eliminates the need for organizations to buy and manage a variety of appliances that need to be maintained by a large number of highly skilled security personnel, who are expensive and in increasingly short supply.

Our multi-tenant architecture is distributed across over 150 data centers globally, which allows us to secure users across 185 countries. Each day, we block over 100 million threats and perform over 120,000 unique security updates. Our customers benefit from the network effect of our growing cloud because once a new threat is detected, it can be blocked for users across our entire customer base within minutes.

Our customers protect their users by routing their internet traffic through our cloud platform. Some of the largest enterprises and government agencies in the world rely on our solutions to help them accelerate their move to the cloud. We have over 3,900 customers across all major geographies, with an emphasis on larger organizations, and we currently count over 400 of the Forbes Global 2000 as customers. Our customers span every major industry, including airlines and transportation, conglomerates, consumer goods and retail, financial services, healthcare, manufacturing, media and communications, public sector and education, technology and telecommunications services.

We have experienced significant growth, with revenue increasing from $125.7 million in fiscal 2017 to $190.2 million in fiscal 2018 to $302.8 million in fiscal 2019, representing year-over-year revenue growth of 51% and 59%, respectively. We experienced net losses of $28.7 million, $33.6 million and $35.5 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. We expect we will continue to incur net losses for the foreseeable future.

Our Solutions and Platform

Our purpose-built cloud security platform offers two principal services built natively in the cloud.

Zscaler Internet Access

Our Zscaler Internet Access solution, or ZIA, was designed to securely connect users to externally managed applications, including SaaS applications and internet destinations regardless of device, location or network. Our ZIA solution provides inline content inspection and firewall access controls across all ports and protocols to protect organizations and users from external threats as well as protecting an organization's data from leaking out. Policies follow the user to provide identical protection on any device, regardless of location; any policy changes are enforced for users worldwide. Our cloud security platform provides full inline content inspection of webpages to assess and correlate the risk of webpage objects, continuously discovering and blocking sophisticated threats.

Our ZIA solution includes broad functionality, which we categorize by three areas:

Access Control

The access control functionality of our ZIA solution enforces access and usage policies to externally managed applications, including SaaS application and internet destinations. This provides functionality that has traditionally been provided by stand-alone point products.

- **Cloud Firewall:** Our cloud firewall was designed to protect users by inspecting internet traffic on all ports and protocols, and it offers user level policies, application identification with deep packet inspection and intrusion prevention.

- **URL Filtering:** Our URL filtering capability enables customers to enforce acceptable usage policies and protects organizations from users visiting unauthorized websites or illegally downloading content that can increase liability and impact their brand.

- **Bandwidth Control:** Our bandwidth control and traffic shaping capabilities ensure that business critical applications are prioritized over non-business critical applications, improving productivity and user experience. By enforcing quality of service in the cloud, our platform can optimize "last-mile" utilization of a customer's network, providing significant value.

- **DNS Filtering:** Our Domain Name System, or DNS, filtering solution provides a local DNS resolver and enforces acceptable use policies.

Threat Prevention

Our second area of functionality, threat prevention, protects users from threats using a range of approaches and techniques. Our robust threat prevention capabilities provide multiple layers of protection to prevent cyberattacks. We provide functionality that traditionally has been offered by disparate, stand-alone products.

- **Advanced Threat Protection:** Our advanced protection solution delivers real-time protection from malicious internet content like browser exploits, scripts, zero-pixel iFrames, malware and botnet callbacks. Over 120,000 unique security updates are performed every day to the Zscaler cloud to keep users protected. Once we detect a new threat to a user, we block it for all users. We call this the "cloud security effect."

- **Cloud Sandbox:** Our cloud sandbox enables enterprises to block zero-day exploits and advanced persistent threats, or APTs, by analyzing unknown files for malicious behavior, and it can scale to every user regardless of location. Our sandbox was designed and built to be multi-tenant and allows customers to determine which traffic should be sent to the cloud sandbox. As an integrated cloud security platform, customers can set policies by users and destinations to prevent patient-zero scenarios by holding, detonating and analyzing suspicious files in the sandbox before being sent to the user.

- **Anti-Virus:** Our anti-virus technology uses a signature database of files and objects on the internet known to be unsafe and runs traffic through multiple anti-virus engines in a single pass.

- **DNS Security:** Our DNS security blocks access to known malicious sites, including command and control sites, and routes suspicious traffic to our threat detection engines for content inspection.

Data Protection

Our third area of functionality, data protection, prevents unauthorized sharing or exfiltration of confidential information, reducing our customers' business and compliance risk.

- **Data Loss Protection:** Our data loss protection enables enterprises to use standard or custom dictionaries using efficient pattern-matching algorithms to easily scale to all users and traffic, including compressed or encrypted traffic, to prevent, monitor or block unauthorized or sensitive data exfiltration. Our exact data match or EDM functionality significantly improves the accuracy and efficacy of our data loss prevention solution by enabling our customers to populate a custom database scaling to billions of unique fields. These fields may contain, for example, personally identifiable information like credit card or social security numbers, that our customers want to protect.

- **Cloud Application Control:** Our cloud application control allows enterprises to discover and granularly control user access to known and unknown cloud applications. By doing SSL interception at scale, we provide malware protection, data loss prevention and similar Cloud Access Security Broker, or CASB, functions that can be performed inline, for specific sanctioned applications. Business policies can be defined with granular access control for specified cloud applications, such as the ability to upload or download files or post comments or videos based on different user or group identity. We partner with specific CASB vendors to extend their policy controls and visibility of out-of-band cloud applications.

- **File Type Controls:** Our file type control allows policies to be defined that control which file types are allowed to be downloaded and uploaded based on application, user, location and destination.

Zscaler Private Access

Our Zscaler Private Access solution, or ZPA, was designed to provide secure access to internally managed applications, either hosted internally in data centers, private or public clouds. Our ZPA solution was designed around four key tenants that fundamentally change the way users access internal applications:

- connect users to applications without bringing users on the network;
- never expose applications to the internet;
- segment access to applications without relying on traditional approach of network segmentation; and
- provide remote access over the internet without virtual private networks, or VPNs.

Our ZPA solution enforces a global policy engine that manages access to internally managed applications regardless of location. If access is granted to a user, our ZPA solution connects the user's device only to the authorized application without exposing the identity or location of the application. Hence applications are not exposed to the internet, further limiting threat exposure. This results in reduced cost and complexity, while offering better security and an improved user experience.

ZPA functionality falls in three major areas:

- **Secure Application Access:** Our ZPA solution delivers seamless connectivity to internally managed applications and assets whether they are in the cloud, enterprise data center, or both. Administrators can set global policies from a single console, enabling policy-driven access that is agnostic to the network the users are on. By creating seamless access to applications regardless of a user's network, our ZPA solution subsumes the need for traditional remote access VPNs, Secure Sockets Layer, or SSL, VPNs, reverse proxies and other similar products.
- **Application Segmentation:** This fundamentally new architecture provides capabilities that enable user and application level segmentation, a vast improvement over traditional network segmentation. As each user-to-application connection is segmented with microtunnels, each of which is a temporary session between a specific user and a specific application, lateral movement across the network is prevented which significantly reduces security risk. Similar to CASB application discovery reports for internet applications, our ZPA solution provides granular discovery of internally managed applications to aid the creation of segmentation policies. Because our ZPA solution sits on the application layer and is name- or domain-based, organizations can quickly and easily identify the internally-managed applications that are running and then easily provision appropriate policies. Microtunnels subsume the need for internal firewalls, which are required for protecting against lateral malware propagation from machine to machine, and traditional network access control functionality since users are granted access only to applications for which they have permission and are not granted full access to the network.
- **Application Protection:** Our ZPA solution initiates and connects together outbound-only links between authenticated users and internally managed applications using microtunnels. Access is provided to users without bringing them onto the corporate network and without exposing applications to the internet. Internally managed applications are not discoverable or identifiable. With no inbound connections and no public IP addresses, there is no inbound attack surface and therefore no threat of distributed denial-of-service, or DDoS, attacks. With our innovative approach, we subsume the need for a next-generation firewall. Similarly, by completely removing the need for an exposed IP address or DNS to the internet, we subsume the functionality of DDoS mitigation systems.

The primary use cases for our ZPA solution includes:

- VPN replacement;
- providing non-employees with secure access to internal applications;
- direct-to-cloud access to internally managed applications hosted in public cloud environments, such as Microsoft Azure, Amazon Web Services and Google Cloud Platform; and
- access to applications following a merger or acquisition by providing named users with access to named applications, without the need to merge networks.

Our Technology and Architecture

Zscaler is driven by technology and innovation. We developed a highly scalable, multi-tenant, globally distributed cloud capable of providing inline inspection that offers a full range of enterprise network security services. We designed and built a purpose-built three-tier architecture starting with our core operating system and adding layers of security and networking innovations over time. Our cloud platform is protected by more than 130 issued and pending patents. Our cloud is distributed across more than 150 data centers on five continents and processes approximately 70 billion requests per day from users across 185 countries.

The platform is designed to be resilient, redundant and high-performing. Our platform is built as software modules that run on standard x86 platforms without any dependency on custom hardware. The platform modules are split into the control plane (Zscaler Central Authority), the enforcement plane (Zscaler Enforcement Nodes) and the logging and statistics plane (Zscaler Nanolog Servers) as described below:

- **Zscaler Central Authority:** The Zscaler Central Authority monitors our entire security cloud and provides a central location for software and database updates, policy and configuration settings and threat intelligence. The collection of Zscaler Central Authority instances together act like the brain of the cloud, and they are geographically distributed for redundancy and performance.
- **Zscaler Enforcement Nodes:** Customer traffic gets directed to the nearest Zscaler Enforcement Node, where security, management and compliance policies served by the Zscaler Central Authority are enforced. The Zscaler Enforcement Node also incorporates our differentiated authentication and policy distribution mechanism that enables any user to connect to any Zscaler Enforcement Node at any time to ensure full policy enforcement. The Zscaler Enforcement Node utilizes a full proxy architecture and is built to ensure data is not written to disk to maintain the highest level of data security. Data is scanned in RAM only and then erased. Logs are continuously created in memory and forwarded to our logging module.
- **Zscaler Nanolog Servers:** Our Nanolog technology is built into the Zscaler Enforcement Node to perform lossless compression of logs, enabling our platform to collect over 70 terabytes of unique raw log data every day. Logs are transmitted to our Nanolog Servers over secure connections and multicast to multiple servers for redundancy. Our dashboards provide visibility into our customer’s traffic to enable troubleshooting, policy changes and other administrative actions. Our analytics capabilities allow customers to interactively mine billions of transaction logs to generate reports that provide insight on network utilization and traffic. We do not rely on batch reporting; we continuously update our dashboards and reporting and can stream logs to a third-party Security Information and Event Management, or SIEM, service as they arrive. Regardless of where users are located, customers can choose to have logs stored in the United States, the European Union or Switzerland.

Our platform is a critical integration point positioned in the data path providing secure access to the internet, cloud and internal applications. We complement and interoperate with key technology vendors across major market segments, including software-defined networking in a wide area network, or SD-WAN, identity and access management, device and endpoint management, as well as SIEM for reporting and analytics. Many of these vendors, like us, were developed in the cloud and together provide a foundation for a modern access and security architecture.

Growth Strategies

The growing use of the internet and the increasing adoption of the cloud and mobility are driving network and application transformation. As a provider of a fully integrated, multi-tenant cloud security solution, we enable our customers to accelerate this secure transformation to the cloud and believe we are uniquely positioned to maximize value as they undertake these transitions. Key elements of our growth strategy include:

- ***Continue to win new customers.*** We believe that we have a significant opportunity to expand our customer base, both in the United States and internationally. We have invested significantly in our sales and marketing organization to execute against this opportunity.

- ***Expand in existing customers.*** We plan to leverage a land-and-expand approach with our existing customers to sell subscriptions to additional users, additional suites that contain more functionality and a la carte services.

- ***Leverage channel partners to participate in cloud transformation initiatives.*** We have invested in establishing long-standing relationships with global telecommunications service providers and are expanding our network of global system integrators and regional telecommunications service providers.

- ***Expansion and innovation of services.*** We continue to invest in research and development and acquire new technologies and products in order to add new and differentiated solutions to our existing product portfolio and to improve the overall functionality, reliability, availability and scalability of our cloud security platform.

- ***Expansion into additional market segments.*** We are targeting the expansion of our immediate addressable market, emphasizing U.S. federal government agencies in the near- to medium-term as well as additional international markets such as Japan and the Asia Pacific region.

- ***Extend our platform to third-party developers.*** We intend to open our cloud security platform to third-party developers and vendors to offer new functionality and solutions that may target specific use cases, verticals and niche requirements.

Our Customers

We sell to enterprises of all sizes. As of July 31, 2019, we had over 3,900 customers, including over 400 of the Forbes Global 2000. Many of our customers include major global enterprises that send virtually all of their internet traffic through our cloud security platform. Our customers operate in a variety of industries, including airlines and transportation, conglomerates consumer goods and retail, financial services, health-care, manufacturing, media and communications, public sector and education, technology and telecommunications services. Approximately 51% of our revenue in fiscal 2019, 55% of our revenue in fiscal 2018 and 54% of our revenue in fiscal 2017 was from customers outside the United States. No customer contributed more than 10% of our revenue in fiscal 2019, fiscal 2018 or fiscal 2017.

Sales and Marketing

Although we have a channel sales model, we use a joint sales approach in which our sales force develops relationships directly with our customers, and together with our channel account teams, works with our channel partners on account penetration, account coordination, sales and overall market development. Our customer care and success teams maintain high-touch relationships with our customers to deploy and manage our cloud platform, identify, analyze and resolve performance issues and respond to security threats. We believe customer service touchpoints are opportunities to further develop our relationship with our customers and potentially generate incremental revenue through the addition of new users and services.

Our channel partners consist of global telecommunications service provider, system integrator and value-added reseller partners, and we leverage their relationships to expand our reach, improve procurement and accelerate customer fulfillment.

We enter into agreements with our channel partners in the ordinary course of business. The contracts typically have a one-year term and renew automatically, subject to cancellation by either party upon 90 days' notice. These agreements contain standard commercial terms and conditions, including payment terms, billing frequency, warranties and indemnification. Our channel partners generally place purchase orders with us after receiving orders from customers. We generally maintain privity of contract with customers through end user subscription agreements.

We expect to continue investing in our channel partners as we provide them with education, training and programs, including supporting their independent sales of our solutions. We believe that such investment, and investments in our sales force, will lead to significant expansion in our customer base, which will materially impact our business and results of operations.

Our marketing strategy is focused on platform and brand awareness, which drives our opportunity pipeline and customer demand. This strategy is account-based, enabling us to pursue targeted marketing activities across both digital and non-digital channels. We anticipate increasing our marketing team headcount and are investing in programs designed to elevate our brand in the market and engage new enterprise accounts. We also participate in a number of cloud and security industry events. In addition, we have a deeply integrated ecosystem of channel partners, with whom we engage in joint marketing activities.

Data Center Operations

We operate our services across more than 150 data centers around the world, which are built to be highly resilient, have multiple levels of redundancy and provide failover to other data centers in our network. Our data centers are co-located within top-tier internet interconnection hubs that have direct connectivity, known as peering, to major telecommunication service providers, SaaS providers, public cloud providers, internet content providers and popular internet destinations. A number of our data centers are also located with our service provider partners. Our platform has received ISO 27001 certification since 2014.

Research and Development

Our research and development organization is responsible for the design, architecture, operation and quality of our cloud platform. In addition to improving on our features, functionality and scalability, this organization works closely with our cloud operations team to ensure that our platform is reliable, available and scalable. ThreatLabZ, our internal team of security experts, researchers and network engineers, analyzes the global threat landscape, works to eliminate threats across our cloud platform and reports on emerging security issues.

Research and development expense was $62.0 million, $39.4 million and $33.6 million for fiscal 2019, fiscal 2018 and fiscal 2017, respectively. Our research and development leadership team is based in San Jose, California, and we also maintain research and development centers in India and Canada.

Competition

The market for security solutions is defined by changing technologies, an evolving threat landscape and complex enterprise needs. Our competitors and potential competitors include legacy on-premises appliance vendors across a number of categories:

- independent IT security vendors, such as Check Point Software Technologies Ltd., Fortinet, Inc., Palo Alto Networks, Inc. and Symantec Corporation, which offer a broad mix of network and endpoint security products;

- large networking vendors, such as Cisco Systems, Inc. and Juniper Networks, Inc., which offer security appliances and incorporate security capabilities in their networking products;

- companies such as FireEye, Inc., Forcepoint Inc. (previously, Websense, Inc.), F5 Networks, Inc. and Pulse Secure, LLC with point solutions that compete with some of the features of our cloud platform, such as proxy, firewall, sandboxing and advanced threat protection, data loss prevention, encryption, load balancing and VPN; and

- other providers of IT security services that offer, or may leverage related technologies to introduce, products that compete with or are alternatives to our cloud platform.

The principal competitive factors in the markets in which we operate include:

- delivering security from the cloud regardless of location of the user;

- platform features, effectiveness and extensibility;

- platform reliability, availability and scalability;

- rapid development and delivery of new capabilities and services;

- ability to integrate with other participants in the security and networking ecosystem;

- price, total cost of ownership and network cost savings;

- brand awareness, reputation and trust in the provider's services;

- strength of sales, marketing and channel partner relationships; and

- quality of customer support.

We believe we are positioned favorably against our competitors based on these factors. Our cloud platform integrates many of the point products offered by our competitors and potential competitors, which is a key differentiator. However, many of our competitors have substantially greater financial, technical and other resources, greater brand recognition, larger sales forces and marketing budgets, broader distribution networks, more diverse product and services offerings and larger and more mature intellectual property portfolios. They may be able to leverage these resources to gain business in a manner that discourages users from purchasing our services, including through selling at zero or negative margins, offering concessions,

product bundling or maintaining closed technology platforms. Further, many organizations have invested substantial personnel and financial resources to design and operate their appliance-based network security architecture, and may not be willing or ready to abandon those historical investments. As our market grows and rapidly changes, we expect it will continue to attract new companies, including smaller emerging companies, which could introduce new products and services. In addition, we may expand into new markets and encounter additional competitors in such markets.

Intellectual Property

Our success depends in part upon our ability to protect and use our core technology and intellectual property rights. We rely on a combination of patents, copyrights, trademarks, trade secret laws, contractual provisions and confidentiality procedures to protect our intellectual property rights. As of July 31, 2019, we had over 130 total issued and pending patents, including in excess of 80 issued patents, in the United States and other countries. Our issued patents expire between 2028 and 2036 and cover various aspects of our cloud platform. In addition, we have registered "Zscaler" as a trademark in the United States and other jurisdictions, and we have registered other trademarks and filed other trademark applications in the United States. We are also the registered holder of a variety of domestic and international domain names that include "Zscaler" and similar variations. In addition to the protection provided by our intellectual property rights, we enter into confidentiality and invention assignment or similar agreements with our employees, consultants and contractors. We further control the use of our proprietary technology and intellectual property rights through provisions in our subscription and license agreements. Despite our efforts to protect our trade secrets and proprietary rights through intellectual property rights, licenses and confidentiality agreements, unauthorized parties may still copy or otherwise obtain and use our software and technology. In addition to our internally developed technology, we also license software, including open source software, from third parties that we integrate into or bundle with our cloud platform.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation based on allegations of patent infringement or other violations of intellectual property rights. We believe that competitors will try to develop products and services that are similar to ours and that may infringe our intellectual property rights. Our competitors or other third-parties may also claim that our platform infringes their intellectual property rights. In particular, leading companies in our industry have extensive patent portfolios. From time to time, third parties, including certain of these leading companies and non-practicing entities, have in the past and may in the future assert claims of infringement, misappropriation and other violations of intellectual property rights against us or our customers or channel partners, with whom our license or other agreements may obligate us to indemnify against these claims. Successful claims of infringement by a third-party could prevent us from offering certain services or features, require us to develop alternate, non-infringing technology, which could require significant time and during which we could be unable to continue to offer our affected subscriptions or services, require us to obtain a license, which may not be available on reasonable terms or at all, or force us to pay substantial damages, royalties or other fees. As we face increasing competition and gain an increasingly higher profile, the possibility of intellectual property rights claims against us grows. We cannot assure you that we do not currently infringe, or that we will not in the future infringe, upon any third-party patents or other proprietary rights. See "Risk Factors-Claims by others that we infringe their proprietary technology or other rights, or other lawsuits asserted against us, could result in significant costs and substantially harm our business, financial condition, results of operations and prospects" for additional information.

Employees

We had approximately 1,480 employees worldwide as of July 31, 2019. None of our employees in the United States are represented by a labor organization or are party to any collective bargaining arrangement. In certain countries in which we operate, we are subject to, and comply with, local labor law requirements which may automatically make our employees subject to industry-wide collective bargaining agreements. We may be required to comply with the terms of these collective bargaining agreements.

Corporate Information

We were incorporated in the state of Delaware in September 2007 as SafeChannel, Inc., and in August 2008, we changed our name to Zscaler, Inc. Our principal executive offices are located at 110 Rose Orchard Way, San Jose, CA 95134, and our telephone number is (408) 533-0288. Our website address is www.zscaler.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, proxy statement, and all amendments to these filings, are available free of charge from our investor relations website (https://ir.zscaler.com/financial-information/sec-filings) as soon as reasonably practicable following our filing with or furnishing to the SEC of any of these reports. The SEC's website (https://www.sec.gov) contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC.

Zscaler investors and others should note that we announce material information to the public about our company, products and services and other issues through a variety of means, including our website (https://www.zscaler.com/), our investor relations website (https://ir.zscaler.com), our blogs (https://www.zscaler.com/blogs), press releases, SEC filings, public conference calls and social media, in order to achieve broad, non-exclusionary distribution of information to the public. We encourage our investors and others to review the information we make public in these locations as such information could be deemed to be material information. Please note that this list may be updated from time to time.

The contents of any website referred to in this Form 10-K are not intended to be incorporated into this Annual Report on Form 10-K or in any other report or document we file.

Item 1A. Risk Factors.

Risk Factors

A description of the risks and uncertainties associated with our business is set forth below. You should carefully consider the risks and uncertainties described below, as well as the other information in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations." The occurrence of any of the events or developments described below, or of additional risks and uncertainties not presently known to us or that we currently deem immaterial, could materially and adversely affect our business, results of operations, financial condition and growth prospects. In such an event, the market price of our common stock could decline and you could lose all or part of your investment.

Risks Related to Our Business

We have a history of losses and may not be able to achieve or sustain profitability in the future.

We have incurred net losses in all periods since our inception, and we expect we will continue to incur net losses for the foreseeable future. We experienced net losses of $28.7 million, $33.6 million and $35.5 million for fiscal 2019, fiscal 2018 and fiscal 2017, respectively. As of July 31, 2019 we had an accumulated deficit of $224.5 million. Because the market for our cloud platform is rapidly evolving and cloud security solutions have not yet reached widespread adoption, it is difficult for us to predict our future results of operations. We expect our operating expenses to increase significantly over the next several years as we continue to hire additional personnel, particularly in sales and marketing, expand our operations and infrastructure, both domestically and internationally, and continue to develop our platform. In addition to the expected costs to grow our business, we also expect to incur significant additional legal, accounting and other expenses as a newly public company. If we fail to increase our revenue to offset the increases in our operating expenses, we may not achieve or sustain profitability in the future.

If organizations do not adopt our cloud platform, our ability to grow our business and operating results may be adversely affected.

Cloud technologies are still evolving, and it is difficult to predict customer demand and adoption rates for our solutions or cloud-based offerings generally. We believe that our cloud platform offers superior protection to our customers, who are becoming increasingly dependent on the internet as they move their applications and data to the cloud. We also believe that our cloud platform represents a major shift from on-premises appliance-based security solutions. However, traditional on-premises security appliances are entrenched in the infrastructure of many of our potential customers, particularly large enterprises, because of their prior investment in and the familiarity of their IT personnel with on-premises appliance-based solutions. As a result, our sales process often involves extensive efforts to educate our customers on the benefits and capabilities of our cloud platform, particularly as we continue to pursue customer relationships with large organizations. Even with these efforts, we cannot predict market acceptance of our cloud platform, or the development of competing products or services based on other technologies. If we fail to achieve market acceptance of our cloud platform or are unable to keep pace with industry changes, our ability to grow our business and our operating results will be materially and adversely affected.

If we are unable to attract new customers, our future results of operations could be harmed.

To increase our revenue and achieve and maintain profitability, we must add new customers. To do so, we must successfully convince IT decision makers that, as they adopt SaaS applications and the public cloud, security delivered through the cloud provides significant advantages over legacy on-premises appliance-based security products. Additionally, many of our customers broadly deploy our products, which requires a significant commitment of resources. These factors significantly impact our ability to add new customers and increase the time, resources and sophistication required to do so. In addition, numerous other factors, many of which are out of our control, may now or in the future impact our ability to add new customers, including potential customers' commitments to legacy IT security vendors and products, real or perceived switching costs, our failure to expand, retain and motivate our sales and marketing personnel, our failure to develop or expand relationships with our channel partners or to attract new channel partners, failure by us to help our customers to successfully deploy our cloud platform, negative media or industry or financial analyst commentary regarding us or our solutions, litigation and deteriorating general economic conditions. If our efforts to attract new customers are not successful, our revenue and rate of revenue growth may decline, we may not achieve profitability and our future results of operations could be materially harmed.

If our customers do not renew their subscriptions for our services and add additional users and services to their subscriptions, our future results of operations could be harmed.

In order for us to maintain or improve our results of operations, it is important that our customers renew their subscriptions for our services when existing contract terms expire, and that we expand our commercial relationships with our existing customers. Our customers have no obligation to renew their subscriptions for our services after the expiration of their contractual subscription period, which is typically one to three years, and in the normal course of business, some customers have elected not to renew. In addition, in certain cases, customers may cancel their subscriptions without cause either at any time or upon advance written notice (typically ranging from 30 days to 60 days), typically subject to an early termination penalty for unused services. In addition, our customers may renew for fewer users, renew for shorter contract lengths or switch to a lower-cost suite. If our customers do not renew their subscription services, we could incur impairment losses related to our deferred contract acquisition costs. It is difficult to accurately predict long-term customer retention because of our varied customer base and given the length of our subscription contracts. Our customer retention and expansion may decline or fluctuate as a result of a number of factors, including our customers' satisfaction with our services, our prices and pricing plans, our customers' spending levels, decreases in the number of users to which our customers deploy our solutions, mergers and acquisitions involving our customers, competition and deteriorating general economic conditions.

Our future success also depends in part on the rate at which our current customers add additional users or services to their subscriptions, which is driven by a number of factors, including customer satisfaction with our services, customer security and networking issues and requirements, general economic conditions and customer reaction to the price per additional user or of additional services. If our efforts to expand our relationship with our existing customers are not successful, our business may materially suffer.

We face intense and increasing competition and could lose market share to our competitors, which could adversely affect our business, financial condition and results of operations.

The market for network security solutions is intensely competitive and characterized by rapid changes in technology, customer requirements, industry standards and frequent introductions of new and improvements of existing products and services. Our business model of delivering security through the cloud rather than legacy on-premises appliances is still relatively new and has not yet gained widespread market traction. Moreover, we compete with many established network and security vendors who are aggressively competing against us with their legacy appliance-based solutions and are also seeking to introduce cloud-based services that have functionality similar to our cloud platform. We expect competition to increase as other established and emerging companies enter the security solutions market, in particular with respect to cloud-based security solutions, as customer requirements evolve and as new products, services and technologies are introduced. If we are unable to anticipate or effectively react to these competitive challenges, our competitive position could weaken, and we could experience a decline in revenue or our growth rate that could materially and adversely affect our business and results of operations.

Our competitors and potential competitors include:

- independent IT security vendors, such as Check Point Software Technologies Ltd., Fortinet, Inc., Palo Alto Networks, Inc. and Symantec Corporation, which offer a broad mix of network and endpoint security products;
- large networking vendors, such as Cisco Systems, Inc. and Juniper Networks, Inc., which offer security appliances and incorporate security capabilities in their networking products;
- companies such as FireEye, Inc., Forcepoint Inc. (previously, Websense, Inc.), F5 Networks, Inc. and Pulse Secure, LLC with point solutions that compete with some of the features of our cloud platform, such as proxy, firewall, sandboxing and advanced threat protection, data loss prevention, encryption, load balancing and virtual private network vendors; and
- other providers of IT security services that offer, or may leverage related technologies to introduce, products that compete with or are alternatives to our cloud platform.

Many of our existing competitors have, and some of our potential competitors could have, substantial competitive advantages such as:

- greater name recognition, longer operating histories and larger customer bases;
- larger sales and marketing budgets and resources;
- broader distribution and established relationships with channel partners and customers;
- greater customer support resources;
- greater resources to make acquisitions and enter into strategic partnerships;
- lower labor and research and development costs;
- larger and more mature intellectual property rights portfolios; and
- substantially greater financial, technical and other resources.

Our competitors may be successful in convincing IT decision makers that legacy appliance-based security products or hybrid security cloud solutions based on legacy appliances are sufficient to meet their security needs and provide security performance that competes with our cloud platform. In addition, our competitors may develop cloud-based solutions with

architectures similar to our products. Further, many organizations have invested substantial personnel and financial resources to design and operate their appliance-based networks and have established deep relationships with appliance vendors. As a result, these organizations may prefer to purchase from their existing suppliers rather than add or switch to a new supplier.

Our larger competitors have substantially broader and more diverse product and services offerings, which may 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 services, including through selling at zero or negative margins, offering concessions, bundling products or maintaining closed technology platforms. Many competitors that specialize in providing protection from a single type of security threat may be able to deliver these targeted security products to the market more quickly than we can or to convince organizations that these limited products meet their needs.

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, services and technologies that compete with our cloud platform. In addition, large companies with substantial communications infrastructure, such as global telecommunications services provider partners or public cloud providers, could choose to enter the security solutions market. Some of our current or potential competitors have made or could make acquisitions of businesses or establish cooperative relationships that may allow them to offer more directly competitive and comprehensive solutions than were previously offered and adapt more quickly to new technologies and customer needs. These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins, increased net losses and loss of market share. Any failure to meet and address these factors could materially harm our business and operating results.

We have experienced rapid revenue and other growth in recent periods, which may not be indicative of our future performance.

We have experienced rapid growth in revenue, operations and employee headcount in recent periods. In addition, the number of customers, users and internet traffic on our cloud platform has increased rapidly in recent years. You should not consider our recent growth in these areas as indicative of our future performance. While we expect to continue to expand our operations and to increase our headcount significantly in the future, both domestically and internationally, our growth may not be sustainable. In particular, our recent revenue growth rates may decline in the future and may not be sufficient to achieve and sustain profitability, as we also expect our costs to increase in future periods. We believe that historical comparisons of our revenue may not be meaningful and should not be relied upon as an indication of future performance. Accordingly, you should not rely on our revenue and other growth for any prior quarter or fiscal year as an indication of our future revenue or revenue growth.

If we fail to effectively manage our growth, we may be unable to execute our business plan, maintain high levels of service, adequately address competitive challenges or maintain our corporate culture, and our business, financial condition and results of operations would be harmed.

Our growth has placed, and future growth will continue to place, a significant strain on our management and our administrative, operational and financial infrastructure. Our success will depend in part on our ability to manage this growth effectively, which will require that we continue to improve our administrative, operational, financial and management systems and controls by, among other things:

- effectively attracting, training and integrating a large number of new employees, particularly members of our sales and management teams;
- further improving our key business applications, processes and IT infrastructure, including our data centers, to

support our business needs;

- enhancing our information and communication systems to ensure that our employees and offices around the world are well coordinated and can effectively communicate with each other and our growing base of channel partners, customers and users; and

- appropriately documenting and testing our IT systems and business processes.

These and other improvements in our systems and controls will require significant capital expenditures and the allocation of valuable management and employee resources. If we fail to implement these improvements effectively, our ability to manage our expected growth, ensure uninterrupted operation of our cloud platform and key business systems and comply with the rules and regulations applicable to public companies could be impaired, the quality of our platform and services could suffer and we may not be able to adequately address competitive challenges.

In addition, we believe that our corporate culture has been a contributor to our success, which we believe fosters innovation, teamwork and an emphasis on customer-focused results. We also believe that our culture creates an environment that drives and perpetuates our strategy and cost-effective distribution approach. As we grow and develop the infrastructure of a public company, we may find it difficult to maintain our corporate culture. Any failure to preserve our culture could harm our future success, including our ability to retain and recruit personnel, innovate and operate effectively and execute on our business strategy. If we experience any of these effects in connection with future growth, it could materially impair our ability to attract new customers, retain existing customers and expand their use of our platform, all of which would materially and adversely affect our business, financial condition and results of operations.

Our relatively limited operating history makes it difficult to evaluate our current business and prospects and may increase the risk that we will not be successful.

Our relatively limited operating history makes it difficult to evaluate our current business and prospects and plan for our future growth. We were incorporated in 2007, with much of our growth occurring in recent years. As a result, our business model has not been fully proven, which subjects us to a number of uncertainties, including our ability to plan for and model future growth. While we have continued to develop our solutions to incorporate multiple security and compliance applications into a single purpose-built, multi-tenant, distributed cloud platform, we have encountered and will continue to encounter risks and uncertainties frequently experienced by rapidly growing companies in developing markets, including our ability to achieve broad market acceptance of our cloud security platform, attract additional customers, grow partnerships, withstand increasing competition and manage increasing expenses as we continue to grow our business. If our assumptions regarding these risks and uncertainties are incorrect or change in response to changes in the market for network security solutions, our operating and financial results could differ materially from our expectations and our business could suffer.

Our operating results may fluctuate significantly, which could make our future results difficult to predict and could cause our operating results to fall below expectations.

Our operating results may fluctuate from quarter to quarter as a result of a number of factors, many of which are outside of our control and may be difficult to predict. Some of the factors that may cause our results of operations to fluctuate from quarter to quarter include:

- broad market acceptance and the level of demand for our cloud platform;

- our ability to attract new customers, particularly large enterprises;

- our ability to retain customers and expand their usage of our platform, particularly our largest customers;

- our ability to successfully expand internationally and penetrate key markets;

- the effectiveness of our sales and marketing programs;
- the length of our sales cycle, including the timing of renewals;
- technological changes and the timing and success of new service introductions by us or our competitors or any other change in the competitive landscape of our market;
- increases in and timing of operating expenses that we may incur to grow and expand our operations and to remain competitive;
- pricing pressure as a result of competition or otherwise;
- seasonal buying patterns for IT spending;
- the quality and level of our execution of our business strategy and operating plan;
- adverse litigation judgments, settlements or other litigation-related costs;
- changes in the legislative or regulatory environment;
- the impact and costs related to the acquisition of businesses, talent, technologies or intellectual property rights; and
- general economic conditions in either domestic or international markets, including geopolitical uncertainty and instability.

Any one or more of the factors above may result in significant fluctuations in our results of operations. We also intend to continue to invest significantly to grow our business in the near future rather than optimizing for profitability or cash flows. In addition, we generally experience seasonality in terms of when we enter into agreements with customers. We typically enter into a higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in the second and fourth quarters of our fiscal year. This seasonality is reflected to a much lesser extent, and sometimes is not immediately apparent, in revenue, due to the fact that we recognize subscription revenue ratably over the term of the subscription, which is generally one to three years. We expect that seasonality will continue to affect our operating results in the future and may reduce our ability to predict cash flow and optimize the timing of our operating expenses.

The variability and unpredictability of our quarterly results of operations or other operating metrics could result in our failure to meet our expectations or those of industry or financial analysts. 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.

If the delivery of our services to our customers is interrupted or delayed for any reason, our business could suffer.

Any interruption or delay in the delivery of our services will negatively impact our customers. Our solutions are deployed via the internet, and our customers' internet traffic is routed through our cloud platform. Our customers depend on the continuous availability of our cloud platform to access the internet, and our services are designed to operate without interruption in accordance with our service level commitments. If our entire platform were to fail, customers and users could lose access to the internet until such disruption is resolved or customers deploy disaster recovery options that allow them to bypass our cloud platform to access the internet. The adverse effects of any service interruptions on our reputation and financial condition may be disproportionately heightened due to the nature of our business and the fact that our customers expect continuous and uninterrupted internet access and have a low tolerance for interruptions of any duration. While we do not consider them to have been material, we have experienced, and may in the future experience, service disruptions and other performance problems due to a variety of factors.

The following factors, many of which are beyond our control, can affect the delivery and availability of our services and the performance of our cloud:

- the development and maintenance of the infrastructure of the internet;
- the performance and availability of third-party telecommunications services with the necessary speed, data capacity and security for providing reliable internet access and services;
- decisions by the owners and operators of the data centers where our cloud infrastructure is deployed or by global telecommunications service provider partners who provide us with network bandwidth to terminate our contracts, discontinue services to us, shut down operations or facilities, increase prices, change service levels, limit bandwidth, declare bankruptcy or prioritize the traffic of other parties;
- the occurrence of earthquakes, floods, fires, power loss, system failures, physical or electronic break-ins, acts of war or terrorism, human error or interference (including by disgruntled employees, former employees or contractors) and other catastrophic events;
- cyberattacks, including denial of service attacks, targeted at us, our data centers, our global telecommunications service provider partners or the infrastructure of the internet;
- failure by us to maintain and update our cloud infrastructure to meet our traffic capacity requirements;
- errors, defects or performance problems in our software, including third-party software incorporated in our software, which we use to operate our cloud platform;
- improper classification of websites by our vendors who provide us with lists of malicious websites;
- improper deployment or configuration of our services;
- the failure of our redundancy systems, in the event of a service disruption at one of our data centers, to provide failover to other data centers in our data center network; and
- the failure of our disaster recovery and business continuity arrangements.

The occurrence of any of these factors, or if we are unable to efficiently and cost-effectively fix such errors or other problems that may be identified, could damage our reputation, negatively impact our relationship with our customers or otherwise materially harm our business, results of operations and financial condition.

In addition, we provide our services through a cloud-based inline proxy, and some governments, third-party products, websites or services may block proxy-based traffic under certain circumstances. For example, vendors may attempt to block traffic from our cloud platform or blacklist our IP addresses because they cannot identify the source of the proxy-based traffic. Our competitors may use this as an excuse to block traffic from their solutions or blacklist our IP addresses, which may result in our customers' traffic being blocked from our platform. If our customers experience significant instances of traffic blockages, they will experience reduced functionality or other inefficiencies, which would reduce customer satisfaction with our services and likelihood of renewal.

The actual or perceived failure of our cloud platform to block malware or prevent a security breach could harm our reputation and adversely impact our business, financial condition and results of operations.

Our cloud platform may fail to detect or prevent security breaches for any number of reasons. Our cloud platform is complex and may contain performance issues that are not detected until after its deployment. We also provide frequent solution updates and fundamental enhancements, which increase the possibility of errors, and our reporting, tracking, monitoring and quality assurance procedures may not be sufficient to ensure we detect any such defects in a timely manner. The performance of our cloud platform can be negatively impacted by our failure to enhance, expand or update our cloud platform, errors or defects in our software, improper classification of websites by our vendors who provide us with lists of malicious websites, improper deployment or configuration of our services and many other factors.

In addition, because the techniques used by computer hackers to access or sabotage networks change frequently and generally are not recognized until launched against a target, there is a risk that a cyber threat could emerge that our services are unable to detect or prevent until after some of our customers are impacted. Moreover, as our services are adopted by an increasing number of enterprises, it is possible that the individuals and organizations behind cyber threats will focus on finding ways to defeat our services. If this happens, our cloud platform could be targeted by attacks specifically designed to disrupt our business and create the perception that our cloud platform is not capable of providing superior security, which, in turn, could have a serious impact on our reputation as a provider of security solutions. Further, if a high profile security breach occurs with respect to another cloud services provider, our customers and potential customers may lose trust in cloud solutions generally, and with respect to security in particular, which could materially and adversely impact our ability to retain existing customers or attract new customers.

Increasingly, companies are subject to a wide variety of attacks on their networks and systems, including traditional computer hackers, malicious code (such as viruses and worms), distributed denial-of-service attacks, sophisticated attacks conducted or sponsored by nation-states, advanced persistent threat intrusions, ransomware, and theft or misuse of intellectual property or business or personal data, including by disgruntled employees, former employees or contractors. No security solution, including our cloud platform, can address all possible security threats or block all methods of penetrating a network or otherwise perpetrating a security incident. Our customers must rely on complex network and security infrastructures, which include products and services from multiple vendors, to secure their networks. If any of our customers becomes infected with malware or experiences a security breach, they could be disappointed with our services, regardless of whether our services are intended to block the attack or would have blocked the attack if the customer had properly configured our cloud platform. Additionally, if any enterprises that are publicly known to use our services are the subject of a cyberattack that becomes publicized, our current or potential customers may look to our competitors for alternatives to our services.

From time to time, industry or financial analysts and research firms test our solutions against other security products. Our services may fail to detect or prevent threats in any particular test for a number of reasons, including misconfiguration. To the extent potential customers, industry or financial analysts or testing firms believe that the occurrence of a failure to detect or prevent any particular threat is a flaw or indicates that our services do not provide significant value, our reputation and business could be materially harmed.

Any real or perceived flaws in our cloud platform or any real or perceived security breaches or other security incidents of our customers could result in:

- a loss of existing or potential customers or channel partners;
- delayed or lost sales and harm to our financial condition and results of operations;
- a delay in attaining, or the failure to attain, market acceptance;

- the expenditure of significant financial resources in efforts to analyze, correct, eliminate, remediate or work around errors or defects, to address and eliminate vulnerabilities and to address any applicable legal or contractual obligations relating to any actual or perceived security breach;
- negative publicity and damage to our reputation and brand; and
- legal claims and demands (including for stolen assets or information, repair of system damages, and compensation to customers and business partners), litigation, regulatory inquiries or investigations and other liability.

Any of the above results could materially and adversely affect our business, financial condition and results of operations.

If our global network of data centers which deliver our services was damaged or otherwise failed to meet the requirement of our business, our ability to provide services to our customers and maintain the performance of our cloud platform could be negatively impacted, which could cause our business to suffer.

We currently host our cloud platform and serve our customers from a global network of over 150 data centers. While we have electronic access to the components and infrastructure of our cloud platform that are hosted by third parties, we do not control the operation of these facilities. Consequently, we may be subject to service disruptions as well as failures to provide adequate support for reasons that are outside of our direct control. Our data centers are vulnerable to damage or interruption from a variety of sources, including earthquakes, floods, fires, power loss, system failures, computer viruses, physical or electronic break-ins, human error or interference (including by disgruntled employees, former employees or contractors), and other catastrophic events. Our data centers may also be subject to local administrative actions, changes to legal or permitting requirements and litigation to stop, limit or delay operations. Despite precautions taken at these facilities, such as disaster recovery and business continuity arrangements, the occurrence of a natural disaster or an act of terrorism, a decision to close the facilities without adequate notice or other unanticipated problems at these facilities could result in interruptions or delays in our services, impede our ability to scale our operations or have other adverse impacts upon our business. In addition, if we do not accurately plan for our infrastructure capacity requirements and we experience significant strains on our data center capacity, we may experience delays and additional expenses in arranging new data centers, and our customers could experience performance degradation or service outages that may subject us to financial liabilities, result in customer losses and materially harm our business.

Our business and growth depend in part on the success of our relationships with our channel partners.

We currently derive most of our revenue from sales through our channel partner network, and we expect for the foreseeable future most of our future revenue growth will also be driven through this network. Not only does our joint sales approach require additional investment to grow and train our sales force, but we believe that continued growth in our business is dependent upon identifying, developing and maintaining strategic relationships with our existing and potential channel partners, including global systems integrators and regional telecommunications service providers that will in turn drive substantial revenue and provide additional value-added services to our customers. Our agreements with our channel partners are generally non-exclusive, meaning our channel partners may offer customers the products of several different companies, including products that compete with our cloud platform. In general, our channel partners may also cease marketing or reselling our platform with limited or no notice and without penalty. If our channel partners do not effectively market and sell subscriptions to our cloud platform, choose to promote our competitors' products or fail to meet the needs of our customers, our ability to grow our business and sell subscriptions to our cloud platform may be adversely affected. For example, sales through our top five channel partners and their affiliates, in aggregate, represented 42% of our revenue for fiscal 2019 and fiscal 2018 and 47% of our revenue for fiscal 2017. In addition, our channel partner structure could subject us to lawsuits or reputational harm if, for example, a channel partner misrepresents the functionality of our cloud platform to customers or violates applicable laws or our corporate policies. Our ability to achieve revenue growth in the future will depend in large part on our success in maintaining successful relationships with our channel partners, identifying additional channel partners

and training our channel partners to independently sell and deploy our platform. If we are unable to maintain our relationships with our existing channel partners or develop successful relationships with new channel partners or if our channel partners fail to perform, our business, financial position and results of operations could be materially and adversely affected.

If we are not able to maintain and enhance our brand, our business and results of operations may be adversely affected.

We believe that maintaining and enhancing our reputation as a provider of high-quality security solutions is critical to our relationship with our existing customers and channel partners and our ability to attract new customers and channel partners. The successful promotion of our brand will depend on a number of factors, including our marketing efforts, our ability to continue to develop high-quality features and solutions for our cloud platform and our ability to successfully differentiate our platform from competitive products and services. Our brand promotion activities may not be successful or yield increased revenue. In addition, independent industry or financial analysts often provide reviews of our platform, as well as products and services of our competitors, and perception of our platform in the marketplace may be significantly influenced by these reviews. If these reviews are negative, or less positive as compared to those of our competitors' products and services, our brand may be adversely affected. Additionally, the performance of our channel partners may affect our brand and reputation if customers do not have a positive experience with our channel partners' services. The promotion of our brand requires us to make substantial expenditures, and we anticipate that the expenditures will increase as our market becomes more competitive, we expand into new markets and more sales are generated through our channel partners. To the extent that these activities yield increased revenue, this revenue may not offset the increased expenses we incur. If we do not successfully maintain and enhance our brand, our business may not grow, we may have reduced pricing power relative to competitors and we could lose customers or fail to attract potential customers, all of which would materially and adversely affect our business, results of operations and financial condition.

If we do not effectively develop and expand our sales and marketing capabilities, we may be unable to add new customers or increase sales to our existing customers, and our business will be adversely affected.

To increase the number of customers and increase the market acceptance of our platform, we will need to expand our sales and marketing operations, including our domestic and international sales force. Although we have a channel sales model, our sales representatives typically engage in direct interaction with our prospective customers. Therefore, we continue to be substantially dependent on our sales force to obtain new customers. Increasing our customer base and achieving broader market acceptance of our cloud platform will depend, to a significant extent, on our ability to expand and further invest in our sales and marketing operations and activities. There is significant competition for sales personnel with the advanced sales skills and technical knowledge we need. We believe that selling a cloud-based security solution requires particularly talented sales personnel with the ability to communicate the transformative potential of our cloud platform. Our ability to achieve significant growth in revenue in the future will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of these talented sales personnel in both the U.S. and international markets. In particular, in the near term, we expect to expand our sales and marketing organization significantly.

New hires require significant training and may take significant time before they achieve full productivity. As a result, our new hires and planned hires may not become as productive as we would like, and we may be unable to hire or retain sufficient numbers of qualified individuals in the future. As a result of our rapid growth, a large percentage of our sales and marketing team is new to our company and selling our solutions, and therefore this team may be less effective than our more seasoned employees. Furthermore, hiring sales personnel in new countries, or expanding our existing presence, requires upfront and ongoing expenditures that we may not recover if the sales personnel fail to achieve full productivity. We cannot predict whether, or to what extent, our sales will increase as we expand our sales force or how long it will take for sales personnel to become productive. For example, we recently hired a new president go-to-market and chief revenue officer. The effectiveness of our sales and marketing has also varied over time and, together with the effectiveness of any partners or resellers we may engage, may vary in the future. Our business and operating results may be harmed if our efforts do not generate a correspondingly significant increase in revenue. We may not achieve anticipated revenue growth from expanding our sales force if we are unable to hire, develop and retain talented sales personnel, if our new sales personnel are unable to achieve desired productivity levels in a reasonable period of time, or if our sales and marketing programs are not effective.

Our sales cycles can be long and unpredictable, and our sales efforts require considerable time and expense.

The timing of our sales and related revenue recognition is difficult to predict because of the length and unpredictability of the sales cycle for our cloud platform, particularly with respect to large organizations. Our sales efforts typically involve educating our prospective customers about the uses, benefits and the value proposition of our cloud platform. Customers often view the subscription to our cloud platform as a significant decision as part of a strategic transformation initiative and, as a result, frequently require considerable time to evaluate, test and qualify our platform prior to entering into or expanding a relationship with us. Large enterprises and government entities in particular often undertake a significant evaluation process that further lengthens the sales cycle.

Our sales force develops relationships directly with our customers, and together with our channel account teams, works with our channel partners on account penetration, account coordination, sales and overall market development. We spend substantial time and resources on our sales efforts without any assurance that our efforts will produce a sale. Platform purchases are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. As a result, it is difficult to predict whether and when a sale will be completed and when revenue from a sale will be recognized.

Sales to larger customers involve risks that may not be present, or that are present to a lesser extent, with sales to smaller customers, which can act as a disincentive to our sales team to pursue these larger customers. These risks include:

- competition from companies that traditionally target larger enterprises and that may have pre-existing relationships or purchase commitments from such customers;
- increased purchasing power and leverage held by larger customers in negotiating contractual arrangements with us;
- more stringent requirements in our support obligations; and
- longer sales cycles and the associated risk that substantial time and resources may be spent on a potential customer that elects not to purchase our solutions.

The failure of our efforts to secure sales after investing resources in a lengthy sales process could materially and adversely affect our business and operating results.

If we fail to develop or introduce new enhancements to our cloud platform on a timely basis, our ability to attract and retain customers, remain competitive and grow our business could be impaired.

The industry in which we compete is characterized by rapid technological change, frequent introductions of new products and services, evolving industry standards and changing regulations, as well as changing customer needs, requirements and preferences. Our ability to attract new customers and increase revenue from existing customers will depend in significant part on our ability to anticipate and respond effectively to these changes on a timely basis and continue to introduce enhancements to our cloud platform. The success of our cloud platform depends on our continued investment in our research and development organization to increase the reliability, availability and scalability of our existing solutions. The success of any enhancement depends on several factors, including the timely completion and market acceptance of the enhancement. Any new service that we develop might not be introduced in a timely or cost-effective manner and might not achieve the broad market acceptance necessary to generate significant revenue. If new technologies emerge that deliver competitive products and services at lower prices, more efficiently, more conveniently or more securely, these technologies could adversely impact our ability to compete effectively. Any delay or failure in the introduction of enhancements could materially harm our business, results of operations and financial condition.

Because we recognize revenue from subscriptions for our services over the term of the subscription, downturns or upturns in new business may not be immediately reflected in our operating results and may be difficult to discern.

We generally recognize revenue from customers ratably over the terms of their subscriptions, which are typically one to three years. As a result, a substantial portion of the revenue we report in each period is attributable to the recognition of deferred revenue relating to agreements that we entered into during previous periods. Consequently, any increase or decline in new sales or renewals in any one period may not be immediately reflected in our revenue for that period. Any such change, however, may affect our revenue in future periods. Additionally, subscriptions that are invoiced annually in advance or multi-year in advance contribute significantly to our short-term and long-term deferred revenue in comparison to our invoices issued quarterly and monthly in advance, which will also affect our financial position in any given period. Accordingly, the effect of downturns or upturns in new sales and potential changes in our rate of renewals may not be fully reflected in our results of operations until future periods. We may also be unable to reduce our cost structure in line with a significant deterioration in sales or renewals. Our subscription model also makes it difficult for us to rapidly increase our revenue through additional sales in any period, as revenue from new customers must be recognized over the applicable subscription term.

If our cloud platform or internal networks, systems or data are or are perceived to have been breached, our solution may be perceived as insecure, our reputation may be damaged and our financial results may be negatively impacted.

It is virtually impossible for us to entirely mitigate the risk of breaches of our cloud platform or other security incidents affecting our internal systems, networks or data. In addition, the functionality of our platform may be disrupted, either intentionally or due to negligence, by third parties, including disgruntled employees or contractors and other current or former employees or contractors. The security measures we use internally and have integrated into our cloud platform, which are designed to detect unauthorized activity and prevent or minimize security breaches, may not function as expected or may not be sufficient to identify or protect against certain attacks. Companies are subject to a wide variety of attacks on their networks and systems, and techniques used to sabotage or to obtain unauthorized access to networks in which data is stored or through which data is transmitted change frequently and generally are not recognized until launched against a target. As a result, we may be unable to anticipate these techniques or implement adequate measures to prevent an electronic intrusion into our customers through our cloud platform or to prevent breaches and other security incidents affecting our cloud platform, internal networks, systems or data. Further, once identified, we may be unable to remediate or otherwise respond to a breach or other incident in a timely manner. Actual or perceived security breaches of our cloud platform could result in actual or perceived breaches of our customers' networks and system.

Our internal systems are exposed to the same cybersecurity risks and consequences of a breach as our customers and other enterprises. However, since our business is focused on providing reliable security services to our customers, we believe that an actual or perceived breach of, or security incident affecting, our internal networks, systems or data, could be especially detrimental to our reputation, customer confidence in our solution and our business.

Any real or perceived security breaches or other security incidents that we suffer with regard to our systems, networks or data, including any such actual or perceived security breaches or security incidents that result, or are believed to result, in actual or perceived breaches of our customers' networks or systems, could result in:

- the expenditure of significant financial resources in efforts to analyze, correct, eliminate, remediate or work around errors or defects, to address and eliminate vulnerabilities and to address any applicable legal or contractual obligations relating to any actual or perceived security breach or other security incident;
- negative publicity and damage to our reputation, brand, and market position;
- harm to our relationships with, and a loss of, existing or potential customers or channel partners;
- delayed or lost sales and harm to our financial condition and results of operations;
- a delay in attaining, or the failure to attain, market acceptance; and
- legal claims and demands (including for stolen assets or information, repair of system damages and compensation to customers and business partners), litigation, regulatory inquiries or investigations and other liability.

Any of the above could materially and adversely affect our business, financial condition and results of operations.

While we maintain insurance, our insurance may be insufficient to cover all liabilities incurred in relation to actual or perceived security breaches or other security incidents. We also cannot be certain that our insurance coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on economically reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, operating results, and reputation.

If our cloud platform does not interoperate with our customers' network and security infrastructure or with third-party products, websites or services, our cloud platform may become less competitive and our results of operations may be harmed.

Our cloud platform must interoperate with our customers' existing network and security infrastructure. These complex systems are developed, delivered and maintained by the customer and a myriad of vendors and service providers. As a result, the components of our customers' infrastructure have different specifications, rapidly evolve, utilize multiple protocol standards, include multiple versions and generations of products and may be highly customized. We must be able to interoperate and provide our security services to customers with highly complex and customized networks, which requires careful planning and execution between our customers, our customer support teams and our channel partners. Further, when new or updated elements of our customers' infrastructure or new industry standards or protocols, such as HTTP/2, are introduced, we may have to update or enhance our cloud platform to allow us to continue to provide service to customers. Our competitors or other vendors may refuse to work with us to allow their products to interoperate with our solutions, which could make it difficult for our cloud platform to function properly in customer networks that include these third-party products.

We may not deliver or maintain interoperability quickly or cost-effectively, or at all. These efforts require capital

investment and engineering resources. If we fail to maintain compatibility of our cloud platform with our customers' network and security infrastructures, our customers may not be able to fully utilize our solutions, and we may, among other consequences, lose or fail to increase our market share and experience reduced demand for our services, which would materially harm our business, operating results and financial condition.

We provide service level commitments under our customer contracts. If we fail to meet these contractual commitments, we could be obligated to provide credits for future service and our business could suffer.

Our customer agreements contain service level commitments, which contain specifications regarding the availability and performance of our cloud platform. Any failure of or disruption to our infrastructure could impact the performance of our platform and the availability of services to customers. If we are unable to meet our stated service level commitments or if we suffer extended periods of poor performance or unavailability of our platform, we may be contractually obligated to provide affected customers with service credits for future subscriptions, and, in certain cases, refunds. To date, there has not been a material failure to meet our service level commitments, and we do not currently have any material liabilities accrued on our balance sheet for such commitments. Our revenue, other results of operations and financial condition could be harmed if we suffer performance issues or downtime that exceeds the service level commitments under our agreements with our customers.

Our ability to maintain customer satisfaction depends in part on the quality of our customer support, including the quality of the support provided on our behalf by certain channel partners. Failure to maintain high-quality customer support could have an adverse effect on our business, financial condition and results of operations.

If we do not provide superior support to our customers, our ability to renew subscriptions, increase the number of users and sell additional services to customers will be adversely affected. We believe that successfully delivering our cloud solution requires a particularly high level of customer support and engagement. We or our channel partners must successfully assist our customers in deploying our cloud platform, resolving performance issues, addressing interoperability challenges with a customer's existing network and security infrastructure and responding to security threats and cyberattacks. Many enterprises, particularly large organizations, have very complex networks and require high levels of focused support, including premium support offerings, to fully realize the benefits of our cloud platform. Any failure by us to maintain the expected level of support could reduce customer satisfaction and hurt our customer retention, particularly with respect to our large enterprise customers. Additionally, if our channel partners do not provide support to the satisfaction of our customers, we may be required to provide this level of support to those customers, which would require us to hire additional personnel and to invest in additional resources. We may not be able to hire such resources fast enough to keep up with demand, particularly if the sales of our platform exceed our internal forecasts. To the extent that we or our channel partners are unsuccessful in hiring, training and retaining adequate support resources, our ability and the ability of our channel partners to provide adequate and timely support to our customers will be negatively impacted, and our customers' satisfaction with our cloud platform could be adversely affected. We currently rely in part on contractors provided by third-party service providers internationally to provide support services to our customers, and we expect to expand our international customer service support team to other countries. Any failure to properly train or oversee such contractors could result in a poor customer experience and an adverse impact on our reputation and ability to renew subscriptions or engage new customers. Furthermore, as we sell our solutions internationally, our support organization faces additional challenges, including those associated with delivering support, training and documentation in languages other than English. Any failure to maintain high-quality customer support, or a market perception that we do not maintain high-quality support, could materially harm our reputation, adversely affect our ability to sell our solutions to existing and prospective customers and could harm our business, financial condition and results of operations.

We rely on our key technical, sales and management personnel to grow our business, and the loss of one or more key employees or the inability to attract and retain qualified personnel could harm our business.

Our future success is substantially dependent on our ability to attract, retain and motivate the members of our management team and other key employees throughout our organization. In particular, we are highly dependent on the services of Jay Chaudhry, our president, chief executive officer and chairman of our board of directors, who is critical to our future vision and strategic direction. We rely on our leadership team in the areas of operations, security, marketing, sales, support and general and administrative functions, and on individual contributors on our research and development team. Although we have entered into employment agreements 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 executive officers or key employees could seriously harm our business. For example, we recently hired Dali Rajic as our president go-to-market and chief revenue officer following the departure of our prior head of sales in May 2018.

To execute our growth plan, we must attract and retain highly qualified personnel. Competition for these personnel in the San Francisco Bay Area, where our headquarters are located, and in other locations where we maintain offices, is intense, especially for experienced sales professionals and for engineers experienced in designing and developing cloud applications and security software. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. For example, in recent years, recruiting, hiring and retaining employees with expertise in the cybersecurity industry has become increasingly difficult as the demand for cybersecurity professionals has increased as a result of the recent cybersecurity attacks on global corporations and governments. Many of the companies with which we compete for experienced personnel have greater resources than we have. In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. Also, many of our employees have become, or will soon become, vested in a substantial amount of equity awards, which may give them a substantial amount of personal wealth. This may make it more difficult for us to retain and motivate these employees, and this wealth could affect their decision about whether or not they continue to work for us. Any failure to successfully attract, integrate or retain qualified personnel to fulfill our current or future needs could materially and adversely affect our business, operating results and financial condition.

Our business is subject to the risks of earthquakes, fire, floods and other natural catastrophic events, and to interruption by man-made problems such as power disruptions, computer viruses, data security breaches or terrorism.

Our corporate headquarters are located in the San Francisco Bay Area, a region known for seismic activity. A significant natural disaster, such as an earthquake, fire or a flood, occurring at our headquarters, at one of our other facilities or where a key channel partner or data center is located could adversely affect our business, results of operations and financial condition. Further, if a natural disaster or man-made problem were to affect our component suppliers or other third-party providers, including our network bandwidth providers, this could materially and adversely affect our ability to provide services in a timely or cost-effective manner. In addition, natural disasters and acts of terrorism could cause disruptions in our or our customers' businesses, national economies or the world economy as a whole. In addition, computer malware, viruses and computer hacking, fraudulent use attempts and phishing attacks have become more prevalent in our industry, and our internal systems may be victimized by such attacks. Although we maintain incident management and disaster response plans, in the event of a major disruption caused by a natural disaster or man-made problem, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our development activities, lengthy interruptions in service, breaches of data security and loss of critical data. Though it is difficult to determine what, if any, harm may directly result from any specific interruption or attack, any failure to maintain performance, reliability, security and availability of our platform to the satisfaction of our users may materially harm our reputation and our ability to retain existing customers and attract new customers.

We incorporate technology from third parties into our cloud platform, and our inability to obtain or maintain rights to the technology could harm our business.

We license software and other technology from third parties that we incorporate into or integrate with, our cloud platform. 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 services. In addition, many licenses are 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, or otherwise provide for a limited term. If we are unable to continue to license any of this technology for any reason, our ability to develop and sell our services containing such technology could be harmed. Similarly, if we are unable to license necessary technology from third parties now or in the future, 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 could limit and delay our ability to offer new or competitive products and services and increase our costs of production. As a result, our business and results of operations could be significantly harmed. Additionally, as part of our longer-term strategy, we plan to open our cloud security platform to third-party developers and applications to further extend its functionality. We cannot be certain that such efforts to grow our business will be successful.

Some of our technology incorporates "open source" software, and we license some of our software through open source projects, which could negatively affect our ability to sell our platform and subject us to possible litigation.

Our solutions incorporate software licensed by third parties under open source licenses, including open source software included in software we receive from third-party commercial software vendors. Use of open source software may entail greater risks than use of third-party commercial software, as open source licensors generally do not provide support, updates or warranties or other contractual protections regarding infringement claims or the quality of the code. In addition, the wide availability of open source software used in our solutions could expose us to security vulnerabilities. Furthermore, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that imposes unanticipated conditions or restrictions on our ability to market or commercialize our solutions. As a result, we could be subject to lawsuits by parties claiming ownership of what we believe to be open source software. Litigation could be costly for us to defend, have a negative effect on our results of operations and financial condition or require us to devote additional research and development resources to change our solutions. In addition, by the terms of some open source licenses, under certain conditions we could be required to release the source code of our proprietary software, and to make our proprietary software available under open source licenses, including authorizing further modification and redistribution. In the event that portions of our proprietary software are determined to be subject to such requirements by an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our platform or otherwise be limited in the licensing of our services, each of which provide an advantage to our competitors or other entrants to the market, create security vulnerabilities in our solutions and could reduce or eliminate the value of our services. Further, if we are held to have breached or otherwise failed to comply with the terms of an open source software license, we could be required to release certain of our proprietary source code under open source licenses, pay monetary damages, seek licenses from third parties to continue offering our services on terms that are not economically feasible or be subject to injunctions that could require us to discontinue the sale of our services if re-engineering could not be accomplished on a timely basis. Many of the risks associated with use of open source software cannot be eliminated and could negatively affect our business. Moreover, we cannot assure you that our processes for controlling our use of open source software in our platform will be effective. Responding to any infringement or noncompliance claim by an open source vendor, regardless of its validity, or discovering open source software code in our platform could harm our business, operating results and financial condition by, among other things:

- resulting in time-consuming and costly litigation;

- diverting management's time and attention from developing our business;
- requiring us to pay monetary damages or enter into royalty and licensing agreements that we would not normally find acceptable;
- causing delays in the deployment of our platform or service offerings to our customers;
- requiring us to stop offering certain services on or features of our platform;
- requiring us to redesign certain components of our platform using alternative non-infringing or non-open source technology, which could require significant effort and expense;
- requiring us to disclose our software source code and the detailed program commands for our software; and
- requiring us to satisfy indemnification obligations to our customers.

We rely on third parties for certain essential financial and operational services, and a failure or disruption in these services could materially and adversely affect our ability to manage our business effectively.

We rely on third parties to provide many essential financial and operational services to support our business. Many of these vendors are less established and have shorter operating histories than traditional software vendors. Moreover, these vendors provide their services to us via a cloud-based model instead of software that is installed on our premises. As a result, we depend upon these vendors to provide us with services that are always available and are free of errors or defects that could cause disruptions in our business processes. Any failure by these vendors to do so, or any disruption in our ability to access the internet, would materially and adversely affect our ability to manage our operations.

We rely on a limited number of suppliers for certain components of the equipment we use to operate our cloud platform, and any disruption in the availability of these components could delay our ability to expand or increase the capacity of our global data center network or replace defective equipment in our existing data centers.

We rely on a limited number of suppliers for several components of the equipment we use to operate our cloud platform and provide services to our customers. Our reliance on these suppliers exposes us to risks, including reduced control over production costs and constraints based on the then current availability, terms and pricing of these components. For example, we generally purchase these components on a purchase order basis, and do not have long-term contracts guaranteeing supply. In addition, the technology industry has experienced component shortages and delivery delays in the past, and we may experience shortages or delays, including as a result of natural disasters, increased demand in the industry or if our suppliers do not have sufficient rights to supply the components in all jurisdictions in which we may host our services. If our supply of certain components is disrupted or delayed, there can be no assurance that additional supplies or components can serve as adequate replacements for the existing components or that supplies will be available on terms that are favorable to us, if at all. Any disruption or delay in the supply of our components may delay opening new data centers, delay increasing capacity or replacing defective equipment at existing data centers or cause other constraints on our operations that could damage our channel partner or customer relationships.

Claims by others that we infringe their proprietary technology or other rights, such as the lawsuits filed by Symantec Corporation, or other lawsuits asserted against us, could result in significant costs and substantially harm our business, financial condition, results of operations and prospects.

A number of companies in our industry hold a large number of patents and also protect their copyright, trade secret and other intellectual property rights, and companies in the networking and security industry frequently enter into litigation based on allegations of patent infringement or other violations of intellectual property rights. In addition, patent holding companies seek to monetize patents they previously developed, have purchased or otherwise obtained. Many companies, including our competitors, may now, and in the future, have significantly larger and more mature patent, copyright, trademark and trade secret portfolios than we have, which they may use to assert claims of infringement, misappropriation and other violations of intellectual property rights against us. In addition, future litigation may involve non-practicing entities or other patent owners who have no relevant product offerings or revenue and against whom our own patents may therefore provide little or no deterrence or protection. As we face increasing competition and gain an increasingly higher profile, including as a result of becoming a public company, the possibility of intellectual property rights claims against us grows. Third parties have asserted in the past and may in the future assert claims of infringement of intellectual property rights against us and these claims, even without merit, could harm our business, including by increasing our costs, reducing our revenue, creating customer concerns that result in delayed or reduced sales, distracting our management from the running of our business and requiring us to cease use of important intellectual property. In addition, because patent applications can take years to issue and are often afforded confidentiality for some period of time, there may currently be pending applications, unknown to us, that later result in issued patents that could cover one or more of our services. Moreover, in a patent infringement claim against us, we may assert, as a defense, that we do not infringe the relevant patent claims, that the patent is invalid or both. The strength of our defenses will depend on the patents asserted, the interpretation of these patents, and our ability to invalidate the asserted patents. However, we could be unsuccessful in advancing non-infringement and/or invalidity arguments in our defense. In the United States, issued patents enjoy a presumption of validity, and the party challenging the validity of a patent claim must present clear and convincing evidence of invalidity, which is a high burden of proof. Conversely, the patent owner need only prove infringement by a preponderance of the evidence, which is a lower burden of proof. Furthermore, because of the substantial amount of discovery required in connection with patent and other intellectual property rights litigation, there is a risk that some of our confidential information could be compromised by the discovery process.

For example, we are currently involved in legal proceedings with Symantec Corporation. For additional details, see Part I, Item 3 - Legal Proceedings. We are vigorously defending ourselves against these claims; however, we cannot assure you that we will be successful in defending against these lawsuits or any future allegations of infringement. We are unable to predict the likelihood of success in defending against these infringement claims. If we are not successful, we could be required to pay substantial damages for past and future sales and/or licensing of our services, enjoined from making, using, selling or otherwise offering our services if a license or other right to continue selling our services is not made available to us, and required to pay substantial ongoing royalties and comply with unfavorable terms even if such a license is made available to us. Any of these outcomes could result in a material adverse effect on our business. Even if we were to prevail, these lawsuits, and any other third-party infringement claims, could be costly and time-consuming, divert the attention of our management and key personnel from our business operations, deter channel partners from selling or licensing our services and dissuade potential customers from purchasing our services, which would also materially harm our business. In addition, any public announcements of the results of any proceedings in these or other third-party infringement claims could be negatively perceived by industry or financial analysts and investors and could cause our stock price to experience volatility or decline. The expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations.

As the number of products and competitors in our market increases and overlaps occur, claims of infringement, misappropriation and other violations of intellectual property rights may increase. Our insurance may not cover intellectual property rights infringement claims. Third parties have in the past and may in the future also assert infringement claims

against our customers or channel partners, with whom our agreements may obligate us to indemnify against these claims. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that such employees have divulged proprietary or other confidential information to us.

In the event that we fail to successfully defend ourselves against an infringement claim, a successful claimant could secure a judgment or otherwise require payment of legal fees, settlement payments, ongoing royalties or other costs or damages; or we may agree to a settlement that prevents us from offering certain services or features; or we may be required to obtain a license, which may not be available on reasonable terms, or at all, to use the relevant technology. If we are prevented from using certain technology or intellectual property, we may be required to develop alternative, non-infringing technology, which could require significant time, during which we could be unable to continue to offer our affected services or features, effort and expense and may ultimately not be successful.

From time to time, the U.S. Supreme Court, other U.S. federal courts and the U.S. Patent and Trademark Appeals Board, and their foreign counterparts, have made and may continue to make changes to the interpretation of patent laws in their respective jurisdictions. We cannot predict future changes to the interpretation of existing patent laws or whether U.S. or foreign legislative bodies will amend such laws in the future. Any changes may lead to uncertainties or increased costs and risks surrounding the outcome of third-party infringement claims brought against us and the actual or enhanced damages, including treble damages, that may be awarded in connection with any such current or future claims and could have a material adverse effect on our business and financial condition.

Any of these events could materially and adversely harm our business, financial condition and results of operations.

We may become involved in other litigation that may materially adversely affect us.

From time to time, we may become involved in various legal proceedings relating to matters incidental to the ordinary course of our business, including patent, commercial, product liability, employment, class action, whistleblower and other litigation and claims, and governmental and other regulatory investigations and proceedings. Such matters can be time-consuming, divert management’s attention and resources, cause us to incur significant expenses or liability and/or require us to change our business practices. In addition, the expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations. Because of the potential risks, expenses and uncertainties of litigation, we may, from time to time, settle disputes, even where we have meritorious claims or defenses, by agreeing to settlement agreements. Because litigation is inherently unpredictable, we cannot assure you that the results of any of these actions will not have a material adverse effect on our business, financial condition, results of operations and prospects.

The success of our business depends in part on our ability to protect and enforce our intellectual property rights.

We believe our intellectual property is an essential asset of our business, and our success and ability to compete depend in part upon protection of our intellectual property rights. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality procedures and contractual provisions, to establish and protect our intellectual property rights, all of which provide only limited protection. The efforts we have taken to protect our intellectual property rights may not be sufficient or effective, and our patents, trademarks and copyrights may be held invalid or unenforceable. Moreover, we cannot assure you that any patents will be issued with respect to our currently pending patent applications in a manner that gives us adequate defensive protection or competitive advantages, or that any patents issued to us will not be challenged, invalidated or circumvented. We have filed for patents in the United States and in certain non-U.S. jurisdictions, but such protections may not be available in all countries in which we operate or in which we seek to enforce our intellectual property rights, or may be difficult to enforce in practice. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against certain third parties, including government agencies or government contractors. In these countries, patents may

provide limited or no benefit. Moreover, we may need to expend additional resources to defend our intellectual property rights in these countries, and our inability to do so could impair our business or adversely affect our international expansion. Our currently issued patents and any patents that may be issued in the future with respect to pending or future patent applications may not provide sufficiently broad protection or they may not prove to be enforceable in actions against alleged infringers. Additionally, the U.S. Patent and Trademark Office and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process and to maintain issued patents. There are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If this occurs, it could materially harm our business, operating results, financial condition and prospects.

We may not be effective in policing unauthorized use of our intellectual property rights, and even if we do detect violations, litigation may be necessary to enforce our intellectual property rights. In addition, our intellectual property may be stolen, including by cybercrimes, and we may not be able to identify the perpetrators or prevent the exploitation of our intellectual property by our competitors or others. Protecting against the unauthorized use of our intellectual property rights, technology and other proprietary rights is expensive and difficult, particularly outside of the United States. Any enforcement efforts we undertake, including litigation, could be time-consuming and expensive and could divert management's attention, either of which could harm our business, operating results and financial condition. Further, 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. The inability to adequately protect and enforce our intellectual property and other proprietary rights could seriously harm our business, operating results, financial condition and prospects. Even if we are able to secure our intellectual property rights, we cannot assure you that such rights will provide us with competitive advantages or distinguish our services from those of our competitors or that our competitors will not independently develop similar technology, duplicate any of our technology, or design around our patents.

Our business depends, in part, on sales to government organizations, and significant changes in the contracting or fiscal policies of such government organizations could have an adverse effect on our business and operating results.

We derive a portion of our revenue from contracts with government organizations, and we believe the success and growth of our business will in part depend on our successful procurement of additional public sector customers. However, demand from government organizations is often unpredictable, and we cannot assure you that we will be able to maintain or grow our revenue from the public sector. Sales to government entities are subject to substantial risks, including the following:

- selling to government agencies can be highly competitive, expensive and time-consuming, often requiring significant upfront time and expense without any assurance that such efforts will generate a sale;
- U.S. or other government certification requirements applicable to our cloud platform, including the Federal Risk and Authorization Management Program, are often difficult and costly to obtain and maintain and failure to do so will restrict our ability to sell to government customers;
- government demand and payment for our services may be impacted by public sector budgetary cycles and funding authorizations; and
- governments routinely investigate and audit government contractors' administrative processes and any unfavorable audit could result in fines, civil or criminal liability, further investigations, damage to our reputation and debarment from further government business.

The occurrence of any of the foregoing could cause governments and governmental agencies to delay or refrain from purchasing our solutions in the future or otherwise have an adverse effect on our business and operating results.

Failure to comply with laws and regulations applicable to our business could subject us to fines and penalties and could also cause us to lose customers in the public sector or negatively impact our ability to contract with the public sector.

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing privacy and data protection laws and regulations, employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, anti-bribery laws, import and export controls, federal securities laws and tax laws and regulations. In certain jurisdictions, these regulatory requirements may be more stringent than in the United States. These laws and regulations impose added costs on our business. Noncompliance with applicable regulations or requirements could subject us to:

- investigations, enforcement actions and sanctions;
- mandatory changes to our cloud platform;
- disgorgement of profits, fines and damages;
- civil and criminal penalties or injunctions;
- claims for damages by our customers or channel partners;
- termination of contracts;
- loss of intellectual property rights; and
- temporary or permanent debarment from sales to government organizations.

If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, operating results and financial condition could be 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 and sanctions could materially harm our business, operating results and financial condition.

We endeavor to properly classify employees as exempt versus non-exempt under applicable law. Although there are no pending or threatened material claims or investigations against us asserting that some employees are improperly classified as exempt, the possibility exists that some of our current or former employees could have been incorrectly classified as exempt employees.

In addition, we must comply with laws and regulations relating to the formation, administration and performance of contracts with the public sector, including U.S. federal, state and local governmental organizations, which affect how we and our channel partners do business with governmental agencies. Selling our solutions to the U.S. government, whether directly or through channel partners, also subjects us to certain regulatory and contractual requirements. Failure to comply with these requirements by either us or our channel partners could subject us to investigations, fines and other penalties, which could have an adverse effect on our business, operating results, financial condition and prospects. As an example, the U.S. Department of Justice, or DOJ, and the General Services Administration, or GSA, have in the past pursued claims against and financial settlements with IT vendors under the False Claims Act and other statutes related to pricing and discount practices and compliance with certain provisions of GSA contracts for sales to the federal government. The DOJ and GSA continue to actively pursue such claims. Violations of certain regulatory and contractual requirements could also result in us being suspended or debarred from future government contracting. Any of these outcomes could have a material adverse effect on our revenue, operating results, financial condition and prospects.

These laws and regulations impose added costs on our business, and failure to comply with these or other applicable regulations and requirements could lead to claims for damages from our channel partners or customers, penalties, termination of contracts, loss of exclusive rights in our intellectual property and temporary suspension or permanent debarment from government contracting. Any such damages, penalties, disruptions or limitations in our ability to do business with the public sector could have a material adverse effect on our business and operating results.

If we were not able to satisfy data protection, security, privacy and other government- and industry-specific requirements or regulations, our business, results of operations and financial condition could be harmed.

Personal privacy, data protection, information security and other telecommunications regulations are significant issues in the United States, Europe and in other jurisdictions where we offer our solutions. The regulatory framework for privacy, data protection and security matters is rapidly evolving and is likely to remain uncertain for the foreseeable future. Our handling of data is subject to a variety of laws and regulations, including regulation by various government agencies.

The U.S. federal government, and various state and foreign governments, have adopted or proposed limitations on the collection, distribution, use and storage of information relating to individuals. Laws and regulations outside the United States, and particularly in Europe, often are more restrictive than those in the United States. Such laws and regulations may require companies to implement privacy and security policies, permit customers to access, correct and delete information stored or maintained by such companies, inform individuals of security breaches that affect their information, and, in some cases, obtain individuals' consent to use information for certain purposes. In addition, some foreign governments require that certain information collected in a country be retained within that country. We also may find it necessary or desirable to join industry or other self-regulatory bodies or other information security or data protection-related organizations that require compliance with their rules pertaining to information security and data protection. We also may be bound by additional, more stringent contractual obligations relating to our collection, use and disclosure of personal, financial and other data.

We also expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection, information security and telecommunications services in the United States, the European Union and other jurisdictions in which we operate or may operate, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. For example, the European Union implemented the General Data Protection Regulation in May 2018, which imposes stringent data protection requirements and provides for significant penalties for noncompliance. In addition, changes in laws or regulations that adversely affect the use of the internet, including laws impacting net neutrality, could impact our business. Similarly, California in 2018 adopted the California Consumer Privacy Act, which will take effect in January 2020 and seeks to provide California consumers with increased privacy rights and protections for their personal information. Further, China and Russia, countries in which we offer our solutions, recently enacted legislation regulating certain technologies, and it is not clear how broadly such legislation will be interpreted or applied in relation to our business. We expect that existing laws, regulations and standards may be interpreted in new manners in the future. Future laws, regulations, standards and other obligations, and changes in the interpretation of existing laws, regulations, standards and other obligations could require us to modify our solutions, restrict our business operations, increase our costs and impair our ability to maintain and grow our customer base and increase our revenue.

Although we work to comply with applicable laws and regulations, industry standards, contractual obligations and other legal obligations, those laws, regulations, standards and obligations are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another. In addition, they may conflict with other requirements or legal obligations that apply to our business or the security features and services that our customers expect from our solutions. As such, we cannot assure ongoing compliance with all such laws, regulations, standards and obligations. Any failure or perceived failure by us to comply with applicable laws, regulations, standards or obligations, or any actual or suspected security breach or other security incident, whether or not resulting in unauthorized access to, or acquisition, release or transfer of information relating to individuals or other data, may result in governmental

enforcement actions and prosecutions, private litigation, fines and penalties or adverse publicity, and could cause our customers to lose trust in us, which could have an adverse effect on our reputation and business. Any inability to adequately address privacy and security concerns, even if unfounded, or comply with applicable laws, regulations, standards and obligations, could result in additional cost and liability to us, damage our reputation, inhibit sales, and materially and adversely affect our business and operating results.

We are subject to anti-corruption, anti-bribery and similar laws, and noncompliance with such laws can subject us to criminal penalties or significant fines and harm our business and reputation.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, the U.K. Bribery Act 2010 and other anti-corruption, anti-bribery, anti-money laundering and similar laws in the United States and other countries in which we conduct activities. Anti-corruption and anti-bribery laws, which have been enforced aggressively and are interpreted broadly, prohibit companies and their employees and agents from promising, authorizing, making or offering improper payments or other benefits to government officials and others in the private sector. We leverage third parties, including channel partners, to sell subscriptions to our platform and conduct our business abroad. We and these third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we may be held liable for the corrupt or other illegal activities of these third-party business partners and intermediaries, our employees, representatives, contractors, channel partners and agents, even if we do not explicitly authorize such activities. While we have policies and procedures to address compliance with such laws, we cannot assure you that all of our employees and agents will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible. As we increase our international sales and business, our risks under these laws may increase. Noncompliance with these laws could subject us to investigations, severe criminal or civil sanctions, settlements, prosecution, loss of export privileges, suspension or debarment from U.S. government contracts, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, whistleblower complaints, adverse media coverage and other consequences. Any investigations, actions or sanctions could materially harm our reputation, business, results of operations and financial condition.

We are subject to governmental export and import controls that could impair our ability to compete in international markets and subject us to liability if we are not in full compliance with applicable laws.

Our business activities are subject to various restrictions under U.S. export and similar laws and regulations, including the U.S. Department of Commerce's Export Administration Regulations and various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control. The U.S. export control laws and U.S. economic sanctions laws include restrictions or prohibitions on the sale or supply of certain products and services to U.S. embargoed or sanctioned countries, governments, persons and entities. In addition, various countries regulate the import of certain technology and have enacted or could enact laws that could limit our ability to provide our services and operate our cloud platform or could limit our customers' ability to access or use our services in those countries.

Although we take precautions to prevent our services from being provided in violation of such laws, our services may have been in the past, and could in the future be, provided inadvertently in violation of such laws, despite the precautions we take. If we fail to comply with these laws and regulations, we and certain of our employees could be subject to civil or criminal penalties, including the possible loss of export privileges and fines. We may also be materially and adversely affected through penalties, reputational harm, loss of access to certain markets, or otherwise. Obtaining the necessary authorizations, including any required license, for a particular transaction may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities. In addition, changes in our platform, or changes in export, sanctions and import laws, could delay the introduction and sale of subscriptions to our platform in international markets, prevent users in certain countries from accessing our services or, in some cases, prevent the provision of our services to certain countries, governments, persons or entities altogether. Any change in export or import regulations, economic sanctions or related laws,

shift in the enforcement or scope of existing regulations or change in the countries, governments, persons or technologies targeted by such regulations could decrease our ability to sell subscriptions to our platform to existing customers or potential new customers with international operations. Any decrease in our ability to sell subscriptions to our platform could materially and adversely affect our business, results of operations and financial condition.

Our international operations expose us to significant risks, and failure to manage those risks could materially and adversely impact our business.

Historically, we have derived a significant portion of our revenue from outside the United States. We derived approximately 51%, 55% and 54% of our revenue from our international customers in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. As of July 31, 2019, approximately 55% of our full-time employees were located outside of the United States. We are continuing to adapt to and develop strategies to address international markets and our growth strategy includes expansion into target geographies, such as Japan and the Asia-Pacific region, but there is no guarantee that such efforts will be successful. We expect that our international activities will continue to grow in the future, as we continue to pursue opportunities in international markets. These international operations will require significant management attention and financial resources and are subject to substantial risks, including:

- political, economic and social uncertainty;
- unexpected costs for the localization of our services, including translation into foreign languages and adaptation for local practices and regulatory requirements;
- greater difficulty in enforcing contracts and accounts receivable collection, and longer collection periods;
- reduced or uncertain protection for intellectual property rights in some countries;
- greater risk of unexpected changes in regulatory practices, tariffs and tax laws and treaties;
- greater risk of a failure of foreign employees, partners, distributors and resellers to comply with both U.S. and foreign laws, including antitrust regulations, anti-bribery laws, export and import control laws, and any applicable trade regulations ensuring fair trade practices;
- requirements to comply with foreign privacy, data protection and information security laws and regulations and the risks and costs of noncompliance;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- greater difficulty in identifying, attracting and retaining local qualified personnel, and the costs and expenses associated with such activities;
- differing employment practices and labor relations issues;
- difficulties in managing and staffing international offices and increased travel, infrastructure and legal compliance costs associated with multiple international locations; and
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business, including the British Pound, Indian Rupee and Euro, and related impact on sales cycles.

Further, following a referendum in June 2016 in which voters in the United Kingdom approved an exit from the EU, the government of the United Kingdom initiated a process to leave the EU (often referred to as "Brexit"). Brexit has led to legal uncertainty in the region and could adversely affect the tax, operational, legal and regulatory regimes to which our business is

subject. In addition, any continued or further uncertainty, weakness or deterioration in global macroeconomic and market conditions may cause our UK or EU customers to modify spending priorities or delay purchasing decisions, and may result in lengthened sales cycles, any of which could harm our business and operating results. In the event of a "hard exit" where the United Kingdom would exit the EU without an agreement in place, these uncertainties and the risks associated with them would increase.

As we continue to develop and grow our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these risks. 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 could limit the future growth of our business.

Our failure to raise additional capital necessary to expand our operations and invest in new solutions could reduce our ability to compete and could harm our business.

We expect that our existing cash, cash equivalents and short-term investments will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next 12 months. We may, however, need to raise additional funds in the future to fund our operating expenses, make capital purchases and acquire or invest in business or technology, and we may not be able to obtain those funds on favorable terms, or at all. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests and the per share value of our common stock could decline. Furthermore, if we engage in debt financing, the holders of debt would have priority over the holders of our common stock, and we may be required to accept terms that restrict our ability to incur additional indebtedness or our ability to pay any dividends on our common stock, though we do not intend to pay dividends in the foreseeable future. We may also be required to take other actions, any of which could harm our business and operating results. 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 limited, and our business, operating results, financial condition and prospects could be materially and adversely affected.

Adverse economic conditions or reduced IT security spending may adversely impact our revenue and profitability.

Our operations and performance depend in part on worldwide economic conditions and the impact these conditions have on levels of spending on IT networking and security solutions. Our business depends on the overall demand for these solutions and on the economic health and general willingness of our current and prospective customers to purchase our security services. Weak economic conditions, or a reduction in IT security spending, could materially and adversely affect our business, operating results and financial condition in a number of ways, including by reducing sales, lengthening sales cycles and lowering prices for our services.

We believe our long-term value as a company will be greater if we focus on growth, which may negatively impact our profitability in the near term.

Part of our business strategy is to primarily focus on our long-term growth. As a result, our profitability may be lower in the near term than it would be if our strategy were to maximize short-term profitability. Significant expenditures on sales and marketing efforts, and expenditures on growing our cloud platform and expanding our research and development, each of which we intend to continue to invest in, may not ultimately grow our business or cause long-term profitability. If we are ultimately unable to achieve profitability at the level anticipated by industry or financial analysts and our stockholders, our stock price may decline.

If we fail to maintain an effective system of internal controls, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the rules and regulations of The Nasdaq Global Select Market, or Nasdaq. The requirements of these rules and regulations will increase our legal, accounting and financial compliance costs; make some activities more difficult, time-consuming and costly; and place significant strain on our personnel, systems and resources.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We have developed our disclosure controls, internal control over financial reporting and other procedures to ensure information required to be disclosed by us in the reports that we will file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers.

Our current controls and any new controls we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our internal controls may be discovered in the future. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal controls also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the market price of our common stock.

In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting, we have expended and anticipate we will continue to expend significant resources, including accounting-related costs, and provide significant management oversight. Any failure to maintain the adequacy of our internal controls, or consequent inability to produce accurate financial statements on a timely basis, could increase our operating costs and could materially impair our ability to operate our business. If our internal controls are perceived as inadequate or we are unable to produce timely or accurate financial statements, investors may lose confidence in our operating results and our stock price could decline. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on Nasdaq.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we are required to have our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. We are also required to have our independent registered public accounting firm issue an opinion on the effectiveness of our internal control over financial reporting. During the evaluation and testing process, if we identify one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective.

If we are unable to assert that our internal control over financial reporting is effective, or if, when required, our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our common stock to decline, and we may be subject to investigation or sanctions by the SEC.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our operating results.

The vast majority of our sales contracts are denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, a strengthening of the U.S. dollar could increase the real cost of our solutions to our customers outside of the United States, which could adversely affect our financial condition and operating results. In addition, an increasing portion of our operating expenses is incurred outside the United States, is denominated in foreign currencies, such as the British Pound, Indian Rupee and Euro, and is subject to fluctuations due to changes in foreign currency exchange rates. If we become more exposed to currency fluctuations and are not able to successfully hedge against the risks associated with currency fluctuations, our operating results could be materially and adversely affected.

Taxing authorities may successfully assert that we should have collected or in the future should collect sales and use, value added or similar taxes, and we could be subject to liability with respect to past or future sales, which could adversely affect our operating results.

We do not collect sales and use, value added or similar taxes in all jurisdictions in which we have sales because we have been advised that such taxes are not applicable to our services in certain jurisdictions. Sales and use, value added and similar tax laws and rates vary greatly by jurisdiction. Certain jurisdictions in which we do not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties and interest, to us or our customers for the past amounts, and we may be required to collect such taxes in the future. If we are unsuccessful in collecting such taxes from our customers, we could be held liable for such costs, which may materially and adversely affect our operating results.

Our corporate structure and intercompany arrangements are subject to the tax laws of various jurisdictions, and we could be obligated to pay additional taxes, which would harm our results of operations.

We are expanding our international operations and staff to support our business in international markets. Our corporate structure and associated transfer pricing policies contemplate the business flows and future growth into the international markets, and consider the functions, risks and assets of the various entities involved in the intercompany transactions. The amount of taxes we pay in different jurisdictions may depend on the application of the tax laws of the various jurisdictions, including the United States, to our international business activities, changes in tax rates, new or revised tax laws or interpretations of existing tax laws and policies, and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The taxing authorities of the jurisdictions in which we operate may challenge our methodologies for pricing intercompany transactions pursuant to the intercompany arrangements or disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a challenge or disagreement were to occur, and our position was not sustained, or if there are changes in tax laws or the way existing tax laws are interpreted or applied, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations. Our financial statements could fail to reflect adequate reserves to cover such a contingency.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

As of July 31, 2019, we had net operating loss carryforwards for U.S. federal income tax purposes and state income tax purposes of approximately $360.0 million and $109.5 million, respectively, available to offset future taxable income. We also had U.S. federal and California research and development credits of $8.4 million and $6.3 million, respectively. If not utilized, a portion of the federal net operating loss carryforwards will begin to expire in 2027 and the state net operating loss carryforwards will begin to expire in 2024. A portion of our federal and state net operating losses will carry forward indefinitely. Additionally, if not utilized, our federal research and development credits will begin to expire in 2033. Our California research and development credits may be carried forward indefinitely. Realization of these net operating loss carryforwards depends on future income, and there is a risk that a portion of our existing carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could materially and adversely affect our results of

operations.

In addition, under Section 382 and 383 of the Internal Revenue Code of 1986, as amended, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in its equity ownership by "5% shareholders" over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards and other pre-change tax attributes, such as research tax credits, to offset its post-change income may be limited. As a result, in the event that it is determined that we have in the past experienced an ownership change, or if we experience one or more ownership changes in the future as a result of subsequent shifts in our stock ownership, our ability to use our pre-change net operating loss carry-forwards to offset U.S. federal taxable liability may be subject to limitations, which could potentially result in increased future tax liability to us.

Furthermore, the recently enacted legislation commonly referred to as the Tax Cuts and Jobs Act of 2017 (the "Tax Act") imposes certain limitations on the deduction of net operating losses, including a limitation on use of net operating losses generated in tax years that began on or after January 1, 2018 to offset 80% of taxable income and disallowance of carryback of post-2017 net operating losses, which could further increase our future tax liability.

Future acquisitions, strategic investments, partnerships or alliances could be difficult to identify and integrate, divert the attention of key management personnel, disrupt our business, dilute stockholder value and adversely affect our operating results, financial condition and prospects.

Our business strategy may, from time to time, include acquiring other complementary solutions, technologies or businesses. We have in the past acquired, and expect in the future to acquire, businesses that we believe will complement or augment our existing business. In order to expand our security offerings and features, we also may enter into relationships with other businesses, which could involve preferred or exclusive licenses, additional channels of distribution or investments in other companies. Negotiating these transactions can be time-consuming, difficult and costly, and our ability to close these transactions may be subject to third-party approvals, such as government regulatory approvals, which are beyond our control. Consequently, we cannot assure you that these transactions, once undertaken and announced, will close.

These kinds of acquisitions or investments may result in unforeseen operating difficulties and expenditures. In particular, we may encounter difficulties assimilating or integrating the businesses, technologies, products and services, personnel or operations of companies that we may acquire, particularly if the key personnel of an acquired business choose not to work for us. We may have difficulty retaining the customers of any acquired business or using or continuing the development of the acquired technologies. Acquisitions may also disrupt our ongoing business, divert our resources and require significant management attention that would otherwise be available for development of our business. We may not successfully evaluate or utilize the acquired technology or personnel, or accurately forecast the financial impact of an acquisition transaction, including accounting charges. Any acquisition or investment could expose us to unknown liabilities. Moreover, we cannot assure you that the anticipated benefits of any acquisition or investment would be realized or that we would not be exposed to unknown liabilities. In connection with these types of transactions, we may:

- issue additional equity securities that would dilute our stockholders;
- use cash that we may need in the future to operate our business;
- incur debt on terms unfavorable to us or that we are unable to repay;
- incur large charges or substantial liabilities;
- encounter difficulties integrating diverse business cultures; and
- become subject to adverse tax consequences, substantial depreciation or deferred compensation charges.

These challenges related to acquisitions or investments could adversely affect our business, operating results, financial condition and prospects.

If our estimates or judgments relating to our critical accounting policies prove to be incorrect or financial reporting standards or interpretations change, our results of operations could be adversely affected.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in 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, as provided in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations." The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to determination of revenue recognition, deferred revenue and deferred contract acquisition costs, allowance for doubtful accounts, valuation of common stock options, valuation of intangible assets and goodwill, useful lives of property and equipment and definite-lived intangible assets, the period of benefit generated from our deferred contract acquisition costs, loss contingencies related to litigation, and valuation of deferred tax assets. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of industry or financial analysts and investors, resulting in a decline in the trading price of our common stock.

Additionally, we regularly monitor our compliance with applicable financial reporting standards and review new pronouncements and drafts thereof that are relevant to us. As a result of new standards, changes to existing standards and changes in their interpretation, we might be required to change our accounting policies, alter our operational policies and implement new or enhance existing systems so that they reflect new or amended financial reporting standards, or we may be required to restate our published financial statements. Such changes to existing standards or changes in their interpretation may have an adverse effect on our reputation, business, financial position and profit, or cause an adverse deviation from our revenue and operating profit target, which may negatively impact our financial results.

Risks Related to the Ownership of Our Common Stock

The concentration of our stock ownership with insiders will likely limit your ability to influence corporate matters, including the ability to influence the outcome of director elections and other matters requiring stockholder approval.

As of July 31, 2019, our executive officers, directors, current 5% or greater stockholders and affiliated entities together beneficially owned approximately 50.9% of our common stock outstanding with Jay Chaudhry, our president, chief executive officer and chairman of our board of directors, and his affiliates beneficially owning approximately 21.1% of our common stock. As a result, these stockholders, acting together, will have control over most matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. Corporate action might be taken even if other stockholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of us that other stockholders may view as beneficial.

The issuance of additional stock in connection with financings, acquisitions, investments, our stock incentive plans or otherwise will dilute all other stockholders.

Our amended and restated certificate of incorporation authorizes us to issue up to one billion shares of common stock and up to two hundred 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 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.

Certain provisions in our charter documents and under Delaware law could make an acquisition of our company more difficult, limit attempts by our stockholders to replace or remove members of our board of directors or current management and may adversely affect the market price of our common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could delay or prevent a change in control of our company. These provisions could also make it difficult for stockholders to elect directors that are not nominated by the current members of our board of directors or take other corporate actions, including effecting changes in our management. These provisions include:

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;
- the ability of 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, which could be used to significantly dilute the ownership of a hostile acquirer;
- the exclusive right of our board of directors 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, which prevents stockholders from being able to fill vacancies on our board of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- the requirement that a special meeting of stockholders may be called only by the chairperson of our board of directors, chief executive officer or president (in the absence of a chief executive officer) or a majority vote of our board of directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;
- the requirement for 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, which may inhibit the ability of an acquirer to affect such amendments to facilitate an unsolicited takeover attempt;
- the ability of our board of directors, by majority vote, to amend our amended and restated bylaws, which may allow our board of directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend our amended and restated bylaws to facilitate an unsolicited takeover attempt; and
- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders’ meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer’s own slate of directors or otherwise attempting to obtain control of us.

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.

The market price of our common stock may be volatile, and you could lose all or part of your investment.

There was no public market for our common stock prior to the IPO. The market price of our common stock following the IPO has fluctuated substantially and may fluctuate significantly in the future in response to a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. These fluctuations could cause you to lose all or part of your investment in our common stock. Factors that could cause fluctuations in the market price of our common stock include the following:

- actual or anticipated changes or fluctuations in our operating results;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- announcements by us or our competitors of new products or new or terminated significant contracts, commercial relationships or capital commitments;
- industry or financial analyst or investor reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- price and volume fluctuations in the overall stock market from time to time;
- volume fluctuations in the trading of our common stock from time to time;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- the sales of shares of our common stock by us or our stockholders;
- failure of industry or financial analysts to maintain coverage of us, changes in financial estimates by any analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- actual or anticipated developments in our business or our competitors’ businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property rights or our solutions, or third-party proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- any major changes in our management or our board of directors, particularly with respect to Mr. Chaudhry;
- general economic conditions and slow or negative growth of our markets; and
- other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

In addition, the stock market in general, and the market for technology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of those

companies. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. In addition, in the past, following periods of volatility in the overall market and the market prices of a particular company's securities, securities class action litigation has often been instituted against that company. Securities litigation, if instituted against us, could result in substantial costs and divert our management's attention and resources from our business. This could have an adverse effect on our business, operating results and financial condition.

Sales of substantial amounts of our common stock in the public markets, or the perception that they might occur, could reduce the price that our common stock might otherwise attain and may dilute your voting power and your ownership interest in us.

Sales of a substantial number of shares of our common stock in the public market, particularly sales by our directors, executive officers and significant stockholders, or the perception that these sales could occur, could adversely affect the market price of our common stock and may make it more difficult for you to sell your common stock at a time and price that you deem appropriate.

In addition, certain holders of our common stock are entitled to rights with respect to registration of their shares under the Securities Act pursuant to our amended and restated investors' rights agreement. If these holders of our common stock, by exercising their registration rights, sell a large number of shares, they could adversely affect the market price for our common stock.

We may also issue our shares of common stock or securities convertible into shares of our common stock from time to time in connection with a financing, acquisition, investments 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 do not intend to pay dividends in the foreseeable future. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends on our common stock in the foreseeable future. Any determination to pay dividends in the future will be at the discretion of our board of directors. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investments.

If industry or financial analysts issue inaccurate or unfavorable research regarding our common stock, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that industry or financial analysts publish about us or our business. We do not control these analysts or the content and opinions included in their reports. As a new public company, we may be slow to attract research coverage and the analysts who publish information about our common stock will have had relatively little experience with our company, which could affect their ability to accurately forecast our results and make it more likely that we fail to meet their estimates. If any of the analysts who cover us issues an inaccurate or unfavorable opinion regarding our stock price, our stock price would likely decline. In addition, the stock prices of many companies in the technology industry have declined significantly after those companies have failed to meet, or significantly exceed, the financial guidance publicly announced by the companies or the expectations of analysts. If our financial results fail to meet, or significantly exceed, our announced guidance or the expectations of analysts or public investors, analysts could downgrade our common stock or publish unfavorable research about us. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, our visibility in the financial markets could decrease, which in turn could cause our stock price or trading volume to decline.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts of the United States are the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a breach of fiduciary duty;
- any action asserting a claim against us arising under the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws;
- any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

Our amended and restated certificate of incorporation further provides that the federal district courts of the United States are the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act.

Each of these exclusive-forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage lawsuits against us and our directors, officers and other employees.

If a court were to find either exclusive-forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business. For example, on December 19, 2018, the Delaware Court of Chancery issued a decision in Matthew Sciabacucchi v. Matthew B. Salzberg et al., C.A. No. 2017-0931-JTL (Del. Ch.), finding that provisions such as selecting the federal district courts of the United States of America as the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933 are not valid under Delaware law.

The requirements of being a public company may strain our resources, divert management's attention and affect our ability to attract and retain executive management and qualified board members.

As a public company, we are subject to the reporting and corporate governance requirements of the Exchange Act, the listing requirements of Nasdaq and other applicable securities rules and regulations, including the Sarbanes-Oxley Act and the Dodd-Frank Wall Street Reform and Consumer Protection Act. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. In order to improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business, financial condition, results of operations and prospects. Although we have hired additional personnel to help comply with these requirements, we may need to further expand our legal and finance departments in the future, which will increase our costs and expenses.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business and prospects may be harmed.

We ceased to be an "emerging growth company" as defined in the Jumpstart our Business Startups Act of 2012 with our transition to large accelerated filer status as of July 31, 2019. As a result, we have experienced, and expect to continue to experience, additional costs associated with being a public company going forward, including costs associated with compliance with the auditor attestation requirement of Section 404 of the Sarbanes-Oxley Act.

As a result of disclosure of information in the filings required of a public company, our business and financial condition have become more visible, which we believe may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business, financial condition, results of operations and prospects could be materially harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and materially harm our business, financial condition, results of operations and prospects. These factors could also make it more difficult for us to attract and retain qualified employees, executive officers and members of our board of directors.

In addition, as a result of our disclosure obligations as a public company, we have reduced strategic flexibility and are under pressure to focus on short-term results, which may materially and adversely affect our ability to achieve long-term profitability.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters are located in San Jose, California, where we currently lease approximately 56,000 square feet of space under lease agreements that expire in 2021. Effective April 2019, we entered into a sublease agreement (the "lease agreement"), for approximately 172,000 square feet of corporate office space in San Jose, California (the "leased premises"), which will serve as our new corporate headquarters. The lease agreement has a commencement date of October 1, 2019, and its initial lease term expires in September 2026. We will initially occupy approximately 69,000 square feet with the remainder of the leased premises to be occupied in phases over the initial term of the lease, with full occupancy expected to occur by October 2025. We also maintain offices in Atlanta, Georgia; New York, New York; Raleigh, North Carolina; and Tysons, Virginia, as well as multiple locations internationally, including in Australia, Canada, France, Germany, India, Japan, the Netherlands, Singapore and the United Kingdom. We lease all of our facilities and do not own any real property. We expect to add facilities as we grow our employee base and expand geographically.

We believe that our facilities are adequate to meet our needs for the immediate future and that, should it be needed, suitable additional space will be available to accommodate expansion of our operations.

Item 3. Legal Proceedings

The information called for by this Item is incorporated herein by reference to Item 8. "Financial Statements and Supplementary Data," Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Markets Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information for Common Stock

Our common stock has been listed on The Nasdaq Global Select Market under the ticker symbol "ZS" since March 16, 2018. Prior to that time, there was no public market for our common stock.

Holders of Record

As of July 31, 2019, we had 105 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends in the foreseeable future. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on our financial condition, operating results, capital requirements, general business conditions and other factors that our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item with respect to our equity compensation plans is incorporated by reference to our Proxy Statement for the 2019 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended July 31, 2019.

Recent Sales of Unregistered Equity Securities and Use of Proceeds

(a) Sale of Unregistered Equity Securities

None.

(b) Use of Proceeds from Public Offering of Common Stock

On March 15, 2018, the SEC declared our registration statement on Form S-1 (File No. 333-223072) for our IPO effective. There have been no material changes in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on March 16, 2018.

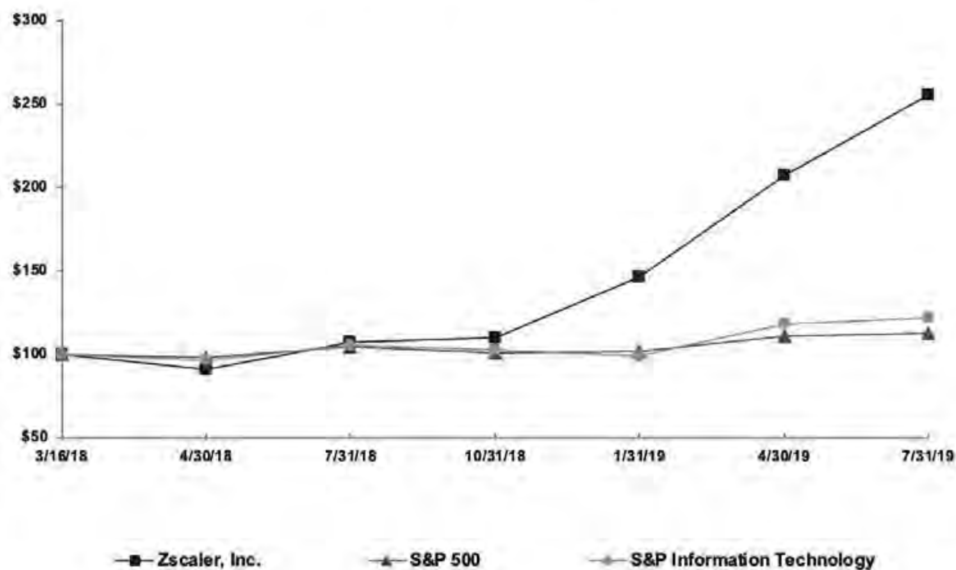
Issuer Purchases of Equity Securities

None

Stock Performance Graph

This performance graph shall not be deemed "soliciting material" or to be "filed" with the SEC for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any filing of Zscaler, Inc. under the Securities Act or the Exchange Act.

We have presented below the cumulative total return to our stockholders between March 16, 2018 (the date our common stock commenced trading on the Nasdaq) through July 31, 2019 in comparison to the Standard & Poor's 500 Index and Standard & Poor Information Technology Index. All values assume a $100 initial investment and data for the Standard & Poor's 500 Index and Standard & Poor Information Technology Index assume reinvestment of dividends. The comparisons are based on historical data and are not indicative of, nor intended to forecast, the future performance of our common stock.



Company/Index	March 16, 2018 (*)	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019
Zscaler, Inc.	$ 100.00	$ 90.58	$ 107.00	$ 109.97	$ 146.58	$ 207.00	$ 255.36
S&P 500 Index	$ 100.00	$ 97.83	$ 104.56	$ 101.16	$ 101.42	$ 111.03	$ 112.91
S&P 500 Information Technology Index	$ 100.00	$ 96.18	$ 105.06	$ 103.05	$ 99.00	$ 118.07	$ 121.58

(*) Base period.

Item 6. Selected Financial Data

The selected consolidated statements of operations data presented below for fiscal 2019, fiscal 2018 and fiscal 2017 and the consolidated balance sheet data as of July 31, 2019 and 2018 are derived from our audited consolidated financial statements that are included elsewhere in this Annual Report on Form 10-K. The selected consolidated statements of operations data for fiscal 2016 and fiscal 2015 and the consolidated balance sheet data as of July 31, 2017, 2016 and 2015 have been derived from our audited consolidated financial statements not included elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future. The selected consolidated financial data and other data set forth below should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

	Year Ended July 31,				
	2019	2018	2017	2016	2015
	(in thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue	$ 302,836	$ 190,174	$ 125,717	$ 80,325	$ 53,707
Cost of revenue[1][2]	59,669	37,875	27,472	20,127	14,431
Gross profit	243,167	152,299	98,245	60,198	39,276
Operating expenses:					
Sales and marketing[1][2]	169,913	116,409	79,236	56,702	32,191
Research and development[1][2]	61,969	39,379	33,561	20,940	15,034
General and administrative[1][3]	46,598	31,135	20,521	9,399	4,469
Total operating expenses	278,480	186,923	133,318	87,041	51,694
Loss from operations	(35,313)	(34,624)	(35,073)	(26,843)	(12,418)
Interest income, net	7,730	2,236	597	289	162
Other income (expense), net	(329)	79	(107)	(416)	(343)
Loss before income taxes	(27,912)	(32,309)	(34,583)	(26,970)	(12,599)
Provision for income taxes	743	1,337	877	468	233
Net loss	$ (28,655)	$ (33,646)	$ (35,460)	$ (27,438)	$ (12,832)
Accretion of Series C and D redeemable convertible preferred stock	—	(6,332)	(9,570)	(8,648)	(147)
Net loss attributable to common stockholders	$ (28,655)	$ (39,978)	$ (45,030)	$ (36,086)	$ (12,979)
Net loss per share attributable to common stockholders, basic and diluted[4]	$ (0.23)	$ (0.63)	$ (1.54)	$ (1.36)	$ (0.55)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted[4]	123,566	63,881	29,221	26,521	23,519

(1) Includes stock-based compensation expense as follows:

	Year Ended July 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Cost of revenue	$ 2,926	$ 757	$ 348	$ 189	$ 116
Sales and marketing	23,118	5,044	2,794	1,574	611
Research and development	15,090	3,045	5,574	1,025	648
General and administrative	5,289	2,378	1,203	829	186
Total	$ 46,423	$ 11,224	$ 9,919	$ 3,617	$ 1,561

(2) Includes amortization expense of acquired intangible assets as follows:

	Year Ended July 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Cost of revenue	$ 512	$ —	$ —	$ —	$ —
Sales and marketing	386	—	—	—	—
Research and development	10	—	—	—	—
Total	$ 908	$ —	$ —	$ —	$ —

(3) Includes certain litigation-related expenses as follows:

	Year Ended July 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Litigation-related expenses	$ 13,079	$ 8,039	$ 5,827	$ —	$ —

(4) See Note 12, Net Loss Per Share Attributable to Common Stockholders, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for an explanation of the method used to calculate our basic and diluted net loss per share attributable to common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

	July 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	$ 78,484	$ 135,579	$ 87,978	$ 92,842	$ 83,842
Short-term investments	$ 286,162	$ 162,960	$ —	$ —	$ —
Working capital[(*)]	$ 234,137	$ 204,332	$ 22,450	$ 49,157	$ 50,625
Total assets	$ 604,162	$ 447,781	$ 182,902	$ 153,518	$ 116,620
Deferred revenue, current and noncurrent	$ 251,202	$ 164,023	$ 96,619	$ 65,913	$ 49,780
Redeemable convertible preferred stock	$ —	$ —	$ 200,977	$ 191,407	$ 157,802
Accumulated deficit	$ (224,455)	$ (196,100)	$ (162,016)	$ (126,556)	$ (109,442)
Total stockholders' equity (deficit)	$ 308,558	$ 240,236	$ (151,142)	$ (124,740)	$ (105,656)

[(*)] Working capital is defined as current assets less current liabilities.

Non-GAAP Financial Measures and Key Business Metrics

The following table shows certain non-GAAP financial measures. A reconciliation for each non-GAAP measure is contained in the "Non-GAAP Financial Measures" section of Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Annual Report on Form 10-K.

	Year Ended July 31,				
	2019	2018	2017	2016	2015
	(in thousands)				
Gross profit	$ 243,167	$ 152,299	$ 98,245	$ 60,198	$ 39,276
Non-GAAP gross profit	$ 246,605	$ 153,056	$ 98,593	$ 60,387	$ 39,392
Gross margin	80 %	80 %	78 %	75 %	73 %
Non-GAAP gross margin	81 %	80 %	78 %	75 %	73 %
Loss from operations	$ (35,313)	$ (34,624)	$ (35,073)	$ (26,843)	$ (12,418)
Non-GAAP income (loss) from operations	$ 25,097	$ (15,361)	$ (19,327)	$ (23,226)	$ (10,857)
Operating margin	(12)%	(18)%	(28)%	(33)%	(23)%
Non-GAAP operating margin	8 %	(8)%	(15)%	(29)%	(20)%
Net cash provided by (used in) operating activities	$ 58,027	$ 17,307	$ (6,019)	$ (11,916)	$ (3,279)
Net cash used in investing activities	$ (162,074)	$ (178,103)	$ (8,174)	$ (6,247)	$ (595)
Net cash provided by financing activities	$ 46,384	$ 208,397	$ 9,497	$ 27,563	$ 85,615
Free cash flow	$ 29,345	$ 2,137	$ (14,193)	$ (18,163)	$ (9,984)
Net cash provided by (used in) operating activities as a percentage of revenue	19 %	9 %	(5)%	(15)%	(6)%
Free cash flow margin	10 %	1 %	(11)%	(23)%	(19)%

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 included elsewhere in this Annual Report on Form 10-K. As discussed in the section titled "Special Note Regarding Forward-Looking Statements," the following discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below. Factors that could cause or contribute to such difference include, but are not limited to, those identified below and those discussed in the section titled "Risk Factors" and elsewhere in this Annual Report on Form 10-K. Our fiscal year ends July 31, and our fiscal quarters end on October 31, January 31, April 30 and July 31. Our fiscal years ended July 31, 2019, July 31, 2018 and July 31, 2017 are referred to as fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Overview

Zscaler was incorporated in 2007, during the early stages of cloud adoption and mobility, based on a vision that the internet would become the new corporate network as the cloud becomes the new data center. We predicted that with rapid cloud adoption and increasing workforce mobility, traditional perimeter security approaches would provide inadequate protection for users and data and an increasingly poor user experience. We pioneered a security cloud that represents a fundamental shift in the architectural design and approach to network security.

We generate revenue primarily from sales of subscriptions to access our cloud platform, together with related support services. We also generate an immaterial amount of revenue from professional and other services, which consist primarily of fees associated with mapping, implementation, network design and training. Our subscription pricing is calculated on a per-user basis. We recognize subscription and support revenue ratably over the life of the contract, which is generally one to three years. As of July 31, 2019, we had expanded our operations to over 3,900 customers across every major industry, with users in 185 countries. Government agencies and some of the largest enterprises in the world rely on us to help them transform to the cloud, including more than 400 of the Forbes Global 2000.

We operate our business as one reportable segment. Our revenue has experienced significant growth in recent periods. For fiscal 2019, fiscal 2018 and fiscal 2017, our revenue was $302.8 million, $190.2 million and $125.7 million, respectively, representing year-over-year growth rate for fiscal 2019 and fiscal 2018 of 59% and 51%, respectively. However, we have incurred net losses in all periods since our inception. For fiscal 2019, fiscal 2018 and fiscal 2017, our net loss was $28.7 million, $33.6 million and $35.5 million, respectively. We expect we will continue to incur net losses for the foreseeable future, as we continue to invest in our sales and marketing organization to take advantage of our market opportunity, to invest in research and development efforts to enhance the functionality of our cloud platform, to incur additional compliance and other related costs as we operate as a public company, and address ongoing legal matters and related accruals, certain of which are described in further detail in Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Initial Public Offering

In March 2018, we completed our initial public offering (IPO) of common stock, in which we sold 13,800,000 shares. The shares were sold at an IPO price of $16.00 per share for net proceeds of $205.3 million, after deducting underwriters' discounts and commissions of $15.5 million. In connection with the IPO, we incurred offering costs of $6.2 million which were recorded within stockholders' equity as a reduction of the net proceeds received from the IPO. Immediately prior to the closing of the IPO, all our outstanding shares of convertible preferred stock were automatically converted into 72,500,750 shares of common stock on a one-to-one basis.

Certain Factors Affecting Our Performance

Increased Internet Traffic and Adoption of Cloud-Based Software and Security

The adoption of cloud applications and infrastructure, explosion of internet traffic volumes and shift to mobile-first computing generally, and the pace at which enterprises adopt the internet as their corporate network in particular, impact our ability to drive market adoption of our cloud platform. We believe that most enterprises are in the early stages of a broad transformation to the cloud. Organizations are increasingly relying on the internet to operate their businesses, deploying new SaaS applications and migrating internally managed line-of-business applications to the cloud. However, the growing dependence on the internet has increased exposure to malicious or compromised websites, and sophisticated hackers are exploiting the gaps left by legacy network security appliances. To securely access the internet and transform their networks, organizations must also make fundamental changes in their network and security architectures. We believe that most organizations have yet to fully make these investments. Since we enable organizations to securely transform to the cloud, we believe that the imperative for organizations to securely move to the cloud will increase demand for our cloud platform and broaden our customer base.

New Customer Acquisition

We believe that our ability to increase the number of customers on our cloud platform is an indicator of our market penetration and our future business opportunities. As of July 31, 2019, 2018 and 2017, we had over 3,900, 3,250 and 2,800 customers, respectively, across all major geographies. As of July 31, 2019, we had over 400 of the Forbes Global 2000 as customers. Our ability to continue to grow this number will increase our future opportunities for renewals and follow-on sales. We believe that we have significant room to capture additional market share and intend to continue to invest significantly in sales and marketing to engage our prospective customers, increase brand awareness, further leverage our channel partnerships and drive adoption of our solution.

Follow-On Sales

We typically expand our relationship with our customers over time. While most of our new customers route all of their internet-bound web traffic through our cloud platform, some of our customers initially use our services for specific users or specific security functionality. We leverage our land-and-expand model with the goal of generating incremental revenue, often within the term of the initial subscription, by increasing sales to our existing customers in one of three ways:

- expanding deployment of our cloud platform to cover additional users;
- upgrading to a more advanced Business, Transformation or Secure Transformation suite; and
- selling a ZPA subscription to a ZIA customer, a ZIA subscription to a ZPA customer, or other features on an a la carte basis.

These purchases increase the Annual Recurring Revenue ("ARR") attributable to our customers over time. To establish ARR for a customer, we use the total amount of each order booked to compute the annual recurring value of revenue that we would recognize if the customer continues to renew all contractual subscriptions. For example, a contract for $3.0 million with a contractual term of three years would have ARR of $1.0 million as long as our customer uses our cloud platform.

Investing in Business Growth

Since our founding, we have invested significantly in growing our business. We intend to continue (i) investing in our research and development organization and our development efforts to offer new solutions on our platform and (ii) dedicating resources to update and upgrade our existing solutions. In addition, we expect our general and administrative expenses to

increase in absolute dollars in the foreseeable future, as we continue to operate as a public company and deal with ongoing legal matters and related accruals, certain of which are described in further detail in Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

We also intend to continue to invest significantly in sales and marketing to grow and train our sales force, broaden our brand awareness and expand and deepen our channel partner relationships. While these planned investments will increase our operating expenses in the short term, we believe that over the long term these investments will help us to expand our customer base and grow our business. We also are investing in programs to increase recognition of our brand and solutions, including joint marketing activities with our channel partners and strategic partners.

While we expect our operating expenses to increase in absolute dollars in the foreseeable future, as a result of these activities, we will balance these investments in future growth with a continued focus on managing our results of operations and investing judiciously. In the long term we anticipate that these investments will positively impact our business and results of operations.

Key Business Metrics and Other Financial Measures

We review a number of operating and financial metrics, including the following key metrics, to measure our performance, identify trends, formulate business plans and make strategic decisions.

Dollar-Based Net Retention Rate

We believe that dollar-based net retention rate is a key metric to measure the long-term value of our customer relationships because it is driven by our ability to retain and expand the recurring revenue generated from our existing customers. Our dollar-based net retention rate compares the recurring revenue from a set of customers against the same metric for the prior 12-month period on a trailing basis. Because our customers have repeat buying patterns and the average term of our contracts is more than 12 months, we measure this metric over a set of customers who were with us as of the last day of the same reporting period in the prior fiscal year. Our dollar-based net retention rate includes customer attrition. We have not experienced a material increase in customer attrition rates in recent periods.

We calculate our dollar-based net retention rate as follows:

- Denominator: To calculate our dollar-based net retention rate as of the end of a reporting period, we first establish the ARR from all active subscriptions as of the last day of the same reporting period in the prior fiscal year. This effectively represents recurring dollars that we expect in the next 12-month period from the cohort of customers that existed on the last day of the same reporting period in the prior fiscal year.

- Numerator: We measure the ARR for that same cohort of customers representing all subscriptions based on confirmed customer orders booked by us as of the end of the reporting period.

Dollar-based net retention rate is obtained by dividing the numerator by the denominator. Our dollar-based net retention rate may fluctuate due to a number of factors, including the performance of our cloud platform, the timing and the rate of ARR expansion of our existing customers, potential changes in our rate of renewals and other risk factors described in this Annual Report on Form 10-K.

	Trailing 12 Months Ended July 31,		
	2019	**2018**	**2017**
Dollar-based net retention rate	118%	117%	115%

Non-GAAP Financial Measures

In addition to our results determined in accordance with U.S. GAAP, we believe the following non-GAAP measures are useful in evaluating our operating performance. We use the following non-GAAP financial information to evaluate our ongoing operations and for internal planning and forecasting purposes. We believe that non-GAAP financial information, when taken collectively, may be helpful to investors because it provides consistency and comparability with past financial performance. However, non-GAAP financial information is presented for supplemental informational purposes only, has limitations as an analytical tool and should not be considered in isolation or as a substitute for financial information presented in accordance with U.S. GAAP. In particular, free cash flow is not a substitute for cash used in operating activities. Additionally, the utility of free cash flow as a measure of our liquidity is further limited as it does not represent the total increase or decrease in our cash balance for a given period. In addition, other companies, including companies in our industry, may calculate similarly-titled non-GAAP measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures as tools for comparison. A reconciliation is provided below for each non-GAAP financial measure to the most directly comparable financial measure stated in accordance with U.S. GAAP. Investors are encouraged to review the related GAAP financial measures and the reconciliation of these non-GAAP financial measures to their most directly comparable GAAP financial measures, and not to rely on any single financial measure to evaluate our business.

Non-GAAP Gross Profit and Non-GAAP Gross Margin

We define non-GAAP gross profit as GAAP gross profit excluding stock-based compensation expense and amortization of acquired intangible assets. We define non-GAAP gross margin as non-GAAP gross profit as a percentage of revenue.

	Year Ended July 31,		
	2019	**2018**	**2017**
		(in thousands)	
Gross profit	$ 243,167	$ 152,299	$ 98,245
Add:			
Stock-based compensation expense	2,926	757	348
Amortization expense of acquired intangible assets	512	—	—
Non-GAAP gross profit	$ 246,605	$ 153,056	$ 98,593
Gross margin	80 %	80 %	78 %
Non-GAAP gross margin	81 %	80 %	78 %

Non-GAAP Income (Loss) from Operations and Non-GAAP Operating Margin

We define non-GAAP income (loss) from operations as GAAP loss from operations excluding stock-based compensation expense, certain litigation-related expenses and amortization expense of acquired intangible assets. We define non-GAAP operating margin as non-GAAP loss from operations as a percentage of revenue. These excluded litigation-related expenses are professional fees and related costs incurred by us in defending against significant claims that we deem not to be in the ordinary course of our business and, if applicable, accruals related to estimated losses in connection with these claims. There are many uncertainties and potential outcomes associated with any litigation, including the expense of litigation, timing of such expenses, court rulings, unforeseen developments, complications and delays, each of which may affect our results of operations from period to period, as well as the unknown magnitude of the potential loss relating to any lawsuit, all of which are inherently subject to change, difficult to estimate and could adversely affect our results of operations.

	Year Ended July 31,		
	2019	2018	2017
	(in thousands)		
Loss from operations	$ (35,313)	$ (34,624)	$ (35,073)
Add:			
Stock-based compensation expense	46,423	11,224	9,919
Litigation-related expenses	13,079	8,039	5,827
Amortization expense of acquired intangible assets	908	—	—
Non-GAAP income (loss) from operations	$ 25,097	$ (15,361)	$ (19,327)
Operating margin	(12)%	(18)%	(28)%
Non-GAAP operating margin	8 %	(8)%	(15)%

Free Cash Flow and Free Cash Flow Margin

Free cash flow is a non-GAAP financial measure that we calculate as net cash provided by (used in) operating activities less purchases of property, equipment and other and capitalized internal-use software. Free cash flow margin is calculated as free cash flow divided by revenue. We believe that free cash flow and free cash flow margin are useful indicators of liquidity that provide information to management and investors about the amount of cash generated from our operations that, after the investments in property, equipment and other and capitalized internal-use software, can be used for strategic initiatives, including investing in our business, and strengthening our financial position.

Free cash flow includes the cyclical impact of inflows and outflows resulting from contributions to our employee stock purchase plan for which the purchase period of approximately six months ends in each of our second and fourth fiscal quarter. As of July 31, 2019, the employee contributions to our employee stock purchase plan was $2.1 million, which will be reclassified to stockholders' equity upon issuance of the shares during our second quarter of fiscal 2020.

	Year Ended July 31,		
	2019	2018	2017
	(in thousands)		
Net cash provided by (used in) operating activities	$ 58,027	$ 17,307	$ (6,019)
Less: Purchases of property, equipment and other	(25,520)	(13,397)	(7,783)
Less: Capitalized internal-use software	(3,162)	(1,773)	(391)
Free cash flow	$ 29,345	$ 2,137	$ (14,193)
As a percentage of revenue:			
Net cash provided by (used in) operating activities	19 %	9 %	(5)%
Less: Purchases of property, equipment and other	(8)	(7)	(6)
Less: Capitalized internal-use software	(1)	(1)	—
Free cash flow margin	10 %	1 %	(11)%

Calculated Billings

Calculated billings is a non-GAAP financial measure that we believe is a key metric to measure our periodic performance. Calculated billings represents our total revenue plus the change in deferred revenue in a period. Calculated billings in any particular period aims to reflect amounts invoiced for subscriptions to access our cloud platform, together with related support services related to our new and existing customers. We typically invoice our customers annually in advance, and to a lesser extent quarterly in advance, monthly in advance or multi-year in advance. Calculated billings increased $132.4 million, or 51%, in fiscal 2019 over fiscal 2018, and $101.2 million, or 65%, in fiscal 2018 over fiscal 2017. As calculated

billings continues to grow in absolute terms, we expect our calculated billings growth rate to trend down over time. We also expect that calculated billings will be affected by seasonality in terms of when we enter into agreements with customers; and the mix of billings in each reporting period as we typically invoice customers annually in advance, and to a lesser extent quarterly in advance, monthly in advance or multi-year in advance.

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Revenue	$ 302,836	$ 190,174	$ 125,717
Add: Total deferred revenue, end of period	251,202	164,023	96,619
Less: Total deferred revenue, beginning of period	(164,023)	(96,619)	(65,913)
Calculated billings	$ 390,015	$ 257,578	$ 156,423

Components of Results of Operations

Revenue

We generate revenue primarily from sales of subscriptions to access our cloud platform, together with related support services. These subscription and related support services accounted for approximately 99% of our revenue for fiscal 2019, fiscal 2018 and fiscal 2017. Our contracts with our customers do not at any time provide the customer with the right to take possession of the software that runs our cloud platform. Our customers may also purchase professional services, such as mapping, implementation, network design and training. Professional services account for an immaterial portion of our revenue.

We generate revenue from contracts with typical durations ranging from one to three years. We typically invoice our customers annually in advance, and to a lesser extent quarterly in advance, monthly in advance or multi-year in advance. We recognize revenue ratably over the life of the contract. Amounts that have been invoiced are recorded in deferred revenue, or they are recorded in revenue if the revenue recognition criteria have been met. Subscriptions that are invoiced annually in advance or multi-year in advance represent a significant portion of our short-term and long-term deferred revenue in comparison to invoices issued quarterly in advance or monthly in advance. Accordingly, we cannot predict the mix of invoicing schedules in any given period.

We generally experience seasonality in terms of when we enter into agreements with our customers. We typically enter into a higher percentage of agreements with new customers, as well as renewal agreements with existing customers, in our second and fourth fiscal quarters. However, because we recognize revenue ratably over the terms of our subscription contracts, a substantial portion of the revenue that we report in each period is attributable to the recognition of deferred revenue relating to agreements that we entered into during previous periods. Consequently, increases or decreases in new sales or renewals in any one period may not be immediately reflected as revenue for that period. Accordingly, the effect of downturns in sales and market acceptance of our platform, and potential changes in our rate of renewals, may not be fully reflected in our results of operations until future periods.

Cost of Revenue

Cost of revenue includes expenses related to operating our cloud platform in data centers, depreciation of our data center equipment, related overhead costs and the amortization of our capitalized internal-use software. Cost of revenue also includes employee-related costs, including salaries, bonuses, stock-based compensation expense and employee benefit costs associated with our customer support and cloud operations organizations. Cost of revenue also includes overhead costs for facilities, IT, and amortization and depreciation expense.

As our customers expand and increase the use of our cloud platform driven by additional applications and connected devices, our cost of revenue will increase due to higher bandwidth and data center expenses. However, we expect to continue to benefit from economies of scale as our customers increase the use of our cloud platform. We intend to continue to invest additional resources in our cloud platform and our customer support organizations as we grow our business. The level and timing of investment in these areas could affect our cost of revenue in the future.

Gross Profit and Gross Margin

Gross profit, or revenue less cost of revenue, and gross margin, or gross profit as a percentage of revenue, have been and will continue to be affected by various factors, including the timing of our acquisition of new customers and our renewals of and follow-on sales to existing customers, the average sales price of our services, mix of services offered in our solutions, the data center and bandwidth costs associated with operating our cloud platform, the extent to which we expand our customer support and cloud operations organizations and the extent to which we can increase the efficiency of our technology, infrastructure and data centers through technological improvements. We expect our gross profit to increase in absolute dollars and our gross margin to remain relatively unchanged over the long-term, although our gross profit and gross margin could fluctuate from period to period depending on the interplay of all of the above factors.

Operating Expenses

Our operating expenses consist of sales and marketing, research and development and general and administrative expenses. Personnel costs are the most significant component of operating expenses and consist of salaries, benefits, bonuses, stock-based compensation expense and, with respect to sales and marketing expenses, sales commissions that are recognized as expenses. Operating expenses also include overhead costs for facilities, IT and depreciation expense and amortization expense.

Sales and Marketing

Sales and marketing expenses consist primarily of employee compensation and related expenses, including salaries, bonuses and benefits for our sales and marketing employees, sales commissions that are recognized as expenses over the period of benefit, stock-based compensation expense, marketing programs, travel and entertainment expenses, expenses for conferences and events and allocated overhead costs. We capitalize our sales commissions and associated payroll taxes and recognize them as expenses over the estimated period of benefit. The amount recognized in our sales and marketing expenses reflects the amortization of cost previously deferred as attributable to each period presented in this Annual Report on Form 10-K, as described below under "Critical Accounting Policies and Estimates." We intend to continue to make significant investments in our sales and marketing organization to drive additional revenue, further penetrate the market and expand our global customer base. As a result, we expect our sales and marketing expenses to continue to increase in absolute dollars and to be our largest operating expense category for the foreseeable future. In particular, we will continue to invest in growing and training our sales force, broadening our brand awareness and expanding and deepening our channel partner relationships. However, we expect our sales and marketing expenses to decrease as a percentage of our revenue over the long term,

although our sales and marketing expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses.

Research and Development

Our research and development expenses support our efforts to add new features to our existing offerings and to ensure the reliability, availability and scalability of our solutions. Our cloud platform is software-driven, and our research and development teams employ software engineers in the design, and the related development, testing, certification and support, of these solutions. Accordingly, a majority of our research and development expenses result from employee-related costs, including salaries, bonuses and benefits, stock-based compensation expense and costs associated with technology tools used by our engineers. We expect our research and development expenses to continue to increase in absolute dollars for the foreseeable future, as we continue to invest in research and development efforts to enhance the functionality of our cloud platform, improve the reliability, availability and scalability of our platform and access new customer markets. However, we expect our research and development expenses to decrease as a percentage of our revenue over the long term, although our research and development expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses.

General and Administrative

General and administrative expenses consist primarily of employee-related costs, including salaries and bonuses, stock-based compensation expense and employee benefit costs for our finance, legal, human resources and administrative personnel, as well as professional fees for external legal services (including certain litigation-related expenses), accounting and other related consulting services. These litigation-related expenses include professional fees and related costs incurred by us in defending significant claims that we deem not to be in the ordinary course of our business and, if applicable, accruals related to estimated losses in connection with these claims. We expect our general and administrative expenses to increase in absolute dollars for the foreseeable future, as we continue to incur compliance costs and other related costs necessary to operate as a public company, and due to ongoing legal matters and related accruals, certain of which are described in further detail in Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. However, we expect our general and administrative expenses to decrease as a percentage of our revenue over the long term, although our general and administrative expenses may fluctuate as a percentage of our revenue from period to period due to the timing and extent of these expenses. In particular, litigation-related expenses related to significant litigation claims may result in significant fluctuations from period to period as they are inherently subject to change and difficult to estimate.

Interest Income, net

Interest income consist primarily of income earned on our cash equivalents and short-term investments and interest earned on outstanding notes receivable extended to certain current and former employees who early exercised their stock options. During the three months ended October 31, 2018, the principal amount and accrued interest of the outstanding notes receivable were fully repaid. For more information on these notes receivable, refer to Note 10, Stock-Based Compensation, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Other Income (expense), net

Other income (expense), net consists primarily of foreign currency transaction gains and losses.

Provision for Income Taxes

Our provision for income taxes consists primarily of income and withholding taxes in the foreign jurisdictions in which we conduct business, offset by the tax benefit for excess stock-based compensation deductions in the U.K. and partial release of our U.S. valuation allowance related to the Appsulate acquisition. We have not recorded any U.S. federal income tax expense. In the U.S. we have recorded deferred tax assets for which we provide a full valuation allowance, which includes net operating loss carryforwards and tax credits. We expect to maintain this full valuation allowance for the foreseeable future as it is more likely than not that some or all of those deferred tax assets may not be realized based on our history of losses. During fiscal 2019, we determined that due to the weight of objectively verifiable negative evidence, our deferred tax assets in United Kingdom ("U.K.") are no longer more likely than not to be realized in future and a full valuation allowance was recorded during the period.

Results of Operations

The following tables set forth our results of operations for the periods presented in dollars and as a percentage of our revenue:

	Year Ended July 31,		
	2019	2018	2017
	(in thousands)		
Revenue	$ 302,836	$ 190,174	$ 125,717
Cost of revenue[(1)(2)]	59,669	37,875	27,472
Gross profit	243,167	152,299	98,245
Operating expenses:			
Sales and marketing[(1)(2)]	169,913	116,409	79,236
Research and development[(1)(2)]	61,969	39,379	33,561
General and administrative[(1) (3)]	46,598	31,135	20,521
Total operating expenses	278,480	186,923	133,318
Loss from operations	(35,313)	(34,624)	(35,073)
Interest income, net	7,730	2,236	597
Other income (expense), net	(329)	79	(107)
Loss before income taxes	(27,912)	(32,309)	(34,583)
Provision for income taxes	743	1,337	877
Net loss	$ (28,655)	$ (33,646)	$ (35,460)

(1) Includes stock-based compensation expense as follows:

	Year Ended July 31,		
	2019	2018	2017
	(in thousands)		
Cost of revenue	$ 2,926	$ 757	$ 348
Sales and marketing	23,118	5,044	2,794
Research and development	15,090	3,045	5,574
General and administrative	5,289	2,378	1,203
Total	$ 46,423	$ 11,224	$ 9,919

[2] Includes amortization expense of acquired intangible assets as follows:

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Cost of revenue	$ 512	$ —	$ —
Sales and marketing	386	—	—
Research and development	10	—	—
Total	$ 908	$ —	$ —

[3] Includes certain litigation-related expenses as follows:

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Litigation-related expenses	$ 13,079	$ 8,039	$ 5,827

	Year Ended July 31,		
	2019	2018	2017
Revenue	100%	100%	100%
Cost of revenue	20	20	22
Gross margin	80	80	78
Operating expenses			
Sales and marketing	56	61	63
Research and development	21	21	27
General and administrative	15	16	16
Total operating expenses	92	98	106
Operating margin	(12)	(18)	(28)
Interest income, net	3	1	—
Other income (expense), net	—	—	—
Loss before income taxes	(9)	(17)	(28)
Provision for income taxes	—	1	—
Net loss	(9)%	(18)%	(28)%

Comparison of Fiscal 2019 and Fiscal 2018

Revenue

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Revenue	$ 302,836	$ 190,174	$ 112,662	59 %

Revenue increased by $112.7 million, or 59%, in fiscal 2019, compared to fiscal 2018. The increase was driven by an increase in users and sales of additional subscriptions to existing customers as reflected by our dollar-based net retention rate of 118% for the trailing 12 months ended July 31, 2019. The remainder of the increase in revenue was attributable to the

addition of new customers, which contributed $24.4 million in revenue, as we increased our customer base by 18% from July 31, 2018 to July 31, 2019.

Cost of Revenue and Gross Margin

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Cost of revenue	$ 59,669	$ 37,875	$ 21,794	58 %
Gross margin	80 %	80 %		

Cost of revenue increased by $21.8 million, or 58%, in fiscal 2019, compared to fiscal 2018. The overall increase in cost of revenue was driven primarily by the expanded use of our cloud platform by existing and new customers, which led to an increase of $11.0 million for data center and equipment related costs for hosting and operating our cloud platform for our expanded customer base. Additionally, our employee-related expenses increased by $8.7 million, inclusive of an increase of $2.2 million in stock-based compensation expense, driven primarily by a 52% increase in headcount in our customer support and cloud operations organizations from July 31, 2018 to July 31, 2019 and by the shift from granting stock options to restricted stock units subsequent to our IPO. The remainder of the increase was primarily attributable to increased expenses of $1.1 million in facility and IT expenses.

Gross margin remained flat for fiscal 2019 compared to fiscal 2018 as our cost of providing our services were proportionately offset by growth in our revenue.

Operating Expenses

Sales and Marketing Expenses

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Sales and marketing	$ 169,913	$ 116,409	$ 53,504	46 %

Sales and marketing expenses increased by $53.5 million, or 46%, for fiscal 2019, compared to fiscal 2018. The increase was primarily driven by an increase of $35.2 million in employee-related expenses, inclusive of an increase of $18.1 million in stock-based compensation expense, and an increase of $6.7 million in sales commissions expense, driven by a 38% increase in headcount in our sales and marketing organization from July 31, 2018 to July 31, 2019. The increase in stock-based compensation was also attributable to the shift from granting stock options to restricted stock units subsequent to our IPO. The remainder of the increase was primarily attributable to increased expenses of $5.9 million in marketing and advertising expenses, $2.8 million in travel expenses and $2.1 million in facility and IT expenses.

Research and Development Expenses

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Research and development	$ 61,969	$ 39,379	$ 22,590	57 %

Research and development expenses increased by $22.6 million, or 57%, for fiscal 2019, compared to fiscal 2018 as we continued to develop and enhance the functionality of our cloud platform. The increase was primarily driven by an increase of $21.3 million in employee-related expenses, inclusive of an increase of $12.0 million in stock-based compensation

expense, driven by a 36% increase in headcount from July 31, 2018 to July 31, 2019 and by our shift from granting stock options to granting restricted stock units subsequent to our IPO. The remainder of the increase was primarily attributable to increased expenses of $1.2 million for facility and IT expenses.

General and Administrative Expenses

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
General and administrative	$ 46,598	$ 31,135	$ 15,463	50 %

General and administrative expenses increased by $15.5 million, or 50%, for fiscal 2019, compared to fiscal 2018. The overall increase was primarily due to an increase of $6.3 million in employee-related expenses, inclusive of a net increase of $2.9 million in stock-based compensation expense, driven by a 37% increase in headcount from July 31, 2018 to July 31, 2019, and also by our shift from granting stock options to granting restricted stock units subsequent to our IPO. Additionally, we recognized an increase of $6.1 million in legal expenses, which is primarily attributable to $4.1 million expense recognized as a result of a legal settlement reached with Finjan in April 2019. For further information on this settlement refer to Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The remainder of increase was primarily attributable to $1.7 million in professional services as we transitioned to being a public company and $0.4 million in facility and IT expenses.

Interest Income, net

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Interest income, net	$ 7,730	$ 2,236	$ 5,494	246 %

Interest income, net increased by $5.5 million, or 246%, for fiscal 2019, compared to fiscal 2018. The increase was primarily driven by increased interest income earned from our investments in cash equivalents and short-term investments, as a result of additional cash received from our IPO and cash generated from our operations.

Other Income (expense), net

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Other income (expense), net	$ (329)	$ 79	$ (408)	(516)%

Other income (expense), net decreased by $0.4 million, or 516%, for fiscal 2019, compared to fiscal 2018. The decrease was primarily driven by fluctuations in foreign currency transaction gains and losses for fiscal 2019, compared to fiscal 2018.

Provision for Income Taxes

	Year Ended July 31,		Change	
	2019	2018	$	%
	(in thousands)			
Provision for income taxes	$ 743	$ 1,337	$ (594)	(44)%

Our provision for income taxes decreased by $0.6 million, or 44%, for fiscal 2019, compared to fiscal 2018. The decrease in the provision for income taxes was primarily due to a non-recurring tax benefit associated with the acquisition of

intangible assets from Appsulate, Inc., which reduced our deferred tax asset and the related valuation allowance. Refer to Note 11, Income Taxes, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Our effective tax rate of (2.7)% and (4.1)% in fiscal 2019 and fiscal 2018, respectively, differs from the applicable U.S. statutory federal income tax rate due to our valuation allowance against our U.S. federal, state, and U.K. deferred tax assets as well as the our foreign income being taxed at different rates than the U.S. statutory rate. The overall income tax expense recorded for the current fiscal year is driven by income taxes for the foreign countries in which we operate, offset by the tax benefit from the release of a portion of our valuation allowance on deferred tax assets as a result of deferred taxes recorded in purchase accounting as part of the acquisition of Appsulate, Inc.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or the Tax Act, was enacted. The Tax Act contains several key tax provisions that affect us, including, but not limited to, reducing the U.S. federal corporate tax rate, imposing a one-time mandatory transition tax on previously untaxed foreign earnings and changing rules related to the use of net operating loss carryforwards created in tax years beginning after December 31, 2017. During fiscal 2019, we completed our assessment of the impacts of the Tax Act including the remeasurement of our deferred taxes, the one-time mandatory transition tax, and the policy decision regarding whether to record deferred taxes associated with Global Intangible Low-Taxed Income ("GILTI") within the measurement period provided by Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"). Because of the full valuation allowance recorded against our U.S. federal deferred tax assets, there was no incremental tax expense (or benefit) recognized related to finalizing the accounting for the Tax Act. We have elected to account for the tax effects of GILTI as a period cost.

While we believe our current valuation allowance is sufficient, we assess the need for an adjustment to the valuation allowance on a quarterly basis. The assessment is based on our estimates of future sources of taxable income for the jurisdictions in which we operate and the periods over which our deferred tax assets will be realizable. In the event we determine that we will be able to realize all or part of our net deferred tax assets in the future, the valuation allowance will be reversed in the period in which we make such determination. The release of a valuation allowance against deferred tax assets may cause greater volatility in the effective tax rate in the periods in which it is reversed.

Comparison of Fiscal 2018 and Fiscal 2017

Revenue

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Revenue	$ 190,174	$ 125,717	$ 64,457	51 %

Revenue increased by $64.5 million, or 51%, for fiscal 2018, compared to fiscal 2017. The increase in revenue was partially due to the addition of new customers, which contributed $20.2 million, as we increased our customer base by 16% from July 31, 2017 to July 31, 2018. The remainder of the increase in revenue was attributable to an increase in users and sales of additional subscriptions to existing customers as reflected by our dollar-based net retention rate of 117% for the trailing 12 months ended July 31, 2018.

Cost of Revenue and Gross Margin

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Cost of revenue	$ 37,875	$ 27,472	$ 10,403	38 %
Gross margin	80 %	78 %		

Cost of revenue increased by $10.4 million, or 38%, for fiscal 2018, compared to fiscal 2017. The overall increase in cost of revenue was driven by expanded use of our cloud platform by existing and new customers. The increase in cost of revenue was primarily due to an increase of $4.9 million for data center and equipment related costs for hosting and operating our cloud platform for our expanded customer base and an increase in employee-related costs of $3.0 million, inclusive of an increase of $0.4 million in stock-based compensation expense, driven by a 38% increase in headcount in our customer support and cloud operations organizations from July 31, 2017 to July 31, 2018. The remainder of the increase was primarily attributable to increased expenses of $1.0 million for facility and IT costs, $0.7 million in depreciation and amortization expense and $0.4 million related to third-party consulting services.

Gross margin increased from 78% during fiscal 2017 to 80% during fiscal 2018. The increase in gross margin was driven by an increase in revenue and was also due in part to the increased efficiency of our technology, infrastructure and data centers enabled by technological improvements, even as our customers expanded their use of our cloud platform.

Operating Expenses

Sales and Marketing Expenses

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Sales and marketing	$ 116,409	$ 79,236	$ 37,173	47 %

Sales and marketing expenses increased by $37.2 million, or 47%, for fiscal 2018, compared to fiscal 2017. The increase was primarily driven by $24.1 million in increased employee-related costs, inclusive of an increase of $2.2 million in stock-based compensation expense, driven by a 16% increase in headcount in our sales and marketing organization from July 31, 2017 to July 31, 2018, and by an increase of $5.4 million in sales commissions expense. The remainder of the increase was primarily attributable to increased expenses of $4.5 million in marketing and advertising expenses and increased expenses of $2.4 million for facility and IT expenses.

Research and Development Expenses

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Research and development	$ 39,379	$ 33,561	$ 5,818	17 %

Research and development expenses increased by $5.8 million, or 17%, for fiscal 2018, compared to fiscal 2017 as we continued to develop and enhance the functionality of our cloud platform. In fiscal 2017, research and development expenses included $4.4 million in stock-based compensation expense, recognized during our fiscal quarter ended January 31, 2017, associated with a one-time secondary stock purchase transaction executed between certain of our employees and certain of our affiliated stockholders, including entities controlled by Jay Chaudhry, our president, chief executive officer and chairman of the board of directors, and Lane Bess, a former member of our board of directors. Refer to Note 15, Related Party Transactions, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K. Excluding this transaction, the increase in research and development expenses was primarily driven by $9.6 million in increased employee-related costs, inclusive of an increase of $1.9 million in stock-based compensation expense, driven by a 22% increase in headcount from July 31, 2017 to July 31, 2018, and by an increase of $0.7 million in professional services. These expense increases were partially offset by decreased expenses of $1.3 million as a result of higher capitalized internal-use software development costs.

General and Administrative Expenses

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
General and administrative	$ 31,135	$ 20,521	$ 10,614	52 %

General and administrative expenses increased by $10.6 million, or 52%, for fiscal 2018, compared to fiscal 2017. The increase was primarily driven by $6.1 million in employee-related costs, inclusive of an increase of $1.2 million in stock-based compensation expense, driven by a 45% increase in headcount from July 31, 2017 to July 31, 2018, as we transitioned to being a public company. The remainder of the increase was primarily driven by $3.4 million in increased legal expenses related to ongoing legal matters and related accruals and $0.6 million for third-party accounting and consulting services.

Interest Income, net

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Interest income, net	$ 2,236	$ 597	$ 1,639	275 %

Interest income, net increased by $1.6 million, or 275%, for fiscal 2018, compared to fiscal 2017. The increase was primarily driven by increased interest income earned from our investments in cash equivalents and short-term investments, as a result of additional cash received from our IPO.

Other Income (Expense), net

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Other income (expense), net	$ 79	$ (107)	$ 186	174 %

Other income (expense), net increased by $0.2 million, or 174%, for fiscal 2018, compared to fiscal 2017. The increase was primarily driven by fluctuations in foreign currency transaction gains and losses for fiscal 2018, compared to fiscal 2017.

Provision for Income Taxes

	Year Ended July 31,		Change	
	2018	2017	$	%
	(in thousands)			
Provision for income taxes	$ 1,337	$ 877	$ 460	52 %

Our provision for income taxes increased by $0.5 million, or 52%, for fiscal 2018, compared to fiscal 2017, primarily related to income taxes in the foreign jurisdictions in which we operate. Our effective tax rate of (4.1%) and (2.5%) in fiscal 2018 and fiscal 2017, respectively, differs from the applicable U.S. statutory federal income tax rate due to an increase in the valuation allowance against our U.S. federal and state deferred tax assets, as well as the benefit of our foreign income being taxed at different rates than the U.S. statutory rate.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or the Tax Act, was enacted. The Tax Act contains several key tax provisions that affect us, including, but not limited to, reducing the U.S. federal corporate tax rate, imposing a one-time mandatory transition tax on previously untaxed foreign earnings and changing rules related to the use of net operating loss carryforwards created in tax years beginning after December 31, 2017. During fiscal 2019, we completed our assessment

of the impacts of the Tax Act including the remeasurement of our deferred taxes, the one-time mandatory transition tax, and the policy decision regarding whether to record deferred taxes associated with GILTI within the measurement period provided by SAB 118. Because of the full valuation allowance recorded against our U.S. federal deferred tax assets, there was no incremental tax expense (or benefit) recognized related to finalizing the accounting for the Tax Act. We have elected to account for the tax effects of GILTI as a period cost.

Quarterly Results of Operations and Other Data

The following sets forth selected unaudited quarterly consolidated statements of operations data for each of the eight quarters in the period ended July 31, 2019. The unaudited quarterly statements of operations data set forth below have been prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for the fair statement of such data. The following quarterly financial data should be read in conjunction with our consolidated financial statements and the related notes included elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future, and the results for any quarter are not necessarily indicative of results to be expected for a full year or any other period.

Consolidated Statements of Operations

	Three Months Ended							
	Oct. 31 2017	Jan. 31 2018	Apr. 30 2018	Jul. 31 2018	Oct. 31 2018	Jan. 31 2019	Apr. 30 2019	Jul. 31 2019
	(in thousands)							
Revenue	$ 39,861	$ 44,976	$ 49,163	$ 56,174	$ 63,298	$ 74,302	$ 79,128	$ 86,108
Cost of revenue[(1)(2)]	8,271	8,679	9,424	11,501	12,099	15,271	14,960	17,339
Gross profit	31,590	36,297	39,739	44,673	51,199	59,031	64,168	68,769
Operating expenses:								
Sales and marketing[(1)(2)]	26,928	27,110	29,892	32,479	36,545	38,756	45,295	49,317
Research and development[(1)(2)]	8,809	9,183	9,907	11,480	13,186	15,071	16,499	17,213
General and administrative[(1)(3)]	7,130	6,403	8,964	8,638	10,131	10,386	15,911	10,170
Total operating expenses	42,867	42,696	48,763	52,597	59,862	64,213	77,705	76,700
Loss from operations	(11,277)	(6,399)	(9,024)	(7,924)	(8,663)	(5,182)	(13,537)	(7,931)
Interest income, net	195	213	596	1,232	1,590	1,924	2,081	2,135
Other income (expense), net	(27)	28	14	64	(188)	250	(144)	(247)
Loss before income taxes	(11,109)	(6,158)	(8,414)	(6,628)	(7,261)	(3,008)	(11,600)	(6,043)
Provision (benefit) for income taxes[(4)]	289	357	357	334	327	547	636	(767)
Net loss	$ (11,398)	$ (6,515)	$ (8,771)	$ (6,962)	$ (7,588)	$ (3,555)	$ (12,236)	$ (5,276)
Accretion of Series C and D redeemable convertible preferred stock	(2,530)	(2,579)	(1,223)	—	—	—	—	—
Net loss attributable to common stockholders	$ (13,928)	$ (9,094)	$ (9,994)	$ (6,962)	$ (7,588)	$ (3,555)	$ (12,236)	$ (5,276)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.45)	$ (0.29)	$ (0.14)	$ (0.06)	$ (0.06)	$ (0.03)	$ (0.10)	$ (0.04)

(1) Includes stock-based compensation expense as follows:

	Three Months Ended							
	Oct. 31 2017	Jan. 31 2018	Apr. 30 2018	Jul. 31 2018	Oct. 31 2018	Jan. 31 2019	Apr. 30 2019	Jul. 31 2019
	(in thousands)							
Cost of revenue	$ 109	$ 126	$ 199	$ 323	$ 503	$ 619	$ 686	$ 1,118
Sales and marketing	785	985	1,493	1,781	2,801	5,517	6,459	8,341
Research and development	398	494	960	1,193	2,795	4,398	4,194	3,703
General and administrative [(*)]	441	459	657	821	1,487	2,693	1,936	(827)
Total	$ 1,733	$ 2,064	$ 3,309	$ 4,118	$ 7,586	$ 13,227	$ 13,275	$ 12,335

(*) Additional information for the three months ended July 31, 2019 is described under "Performance Stock Units" included in Note 10, Stock-Based Compensation, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

(2) Includes amortization expense of acquired intangible assets as follows:

	Three Months Ended							
	Oct. 31 2017	Jan. 31 2018	Apr. 30 2018	Jul. 31 2018	Oct. 31 2018	Jan. 31 2019	Apr. 30 2019	Jul. 31 2019
	(in thousands)							
Cost of revenue	$ —	$ —	$ —	$ —	$ —	$ 144	$ 163	$ 205
Sales and marketing	—	—	—	—	—	—	3	7
Research and development	—	—	—	—	95	—	—	291
Total	$ —	$ —	$ —	$ —	$ 95	$ 144	$ 166	$ 503

(3) Includes litigation-related expenses as follows:

	Three Months Ended							
	Oct. 31 2017	Jan. 31 2018	Apr. 30 2018	Jul. 31 2018	Oct. 31 2018	Jan. 31 2019	Apr. 30 2019	Jul. 31 2019
	(in thousands)							
Litigation-related expenses	$ 2,146	$ 1,630	$ 2,836	$ 1,427	$ 2,174	$ 1,768	$ 6,164	$ 2,973

(4) In the fiscal quarter ended July 31, 2019, we recorded a non-recurring tax benefit of $1.4 million associated with an intangible asset recognized as a result of our acquisition of Appsulate, Inc. For further information, refer to Note 5, Business Combinations, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Consolidated Statements of Operations as a Percentage of Revenue

	Three Months Ended							
	Oct. 31 2017	Jan. 31 2018	Apr. 30 2018	Jul. 31 2018	Oct. 31 2018	Jan. 31 2019	Apr. 30 2019	Jul. 31 2019
Revenue	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Cost of revenue	21	19	19	20	19	21	19	20
Gross profit	79	81	81	80	81	79	81	80
Operating expenses:								
Sales and marketing	67	60	61	58	58	52	57	57
Research and development	22	21	20	21	21	20	21	20
General and administrative	18	14	18	15	16	14	20	12
Total operating expenses	107	95	99	94	95	86	98	89
Loss from operations	(28)	(14)	(18)	(14)	(14)	(7)	(17)	(9)
Interest income, net	—	—	1	2	3	3	2	2
Other income (expense), net	—	—	—	—	—	—	—	—
Loss before income taxes	(28)	(14)	(17)	(12)	(11)	(4)	(15)	(7)
Provision (benefit) for income taxes	1	—	1	—	1	1	—	(1)
Net loss	(29)%	(14)%	(18)%	(12)%	(12)%	(5)%	(15)%	(6)%

Liquidity and Capital Resources

As of July 31, 2019, our principal sources of liquidity were cash, cash equivalents and short-term investments totaling $364.6 million, which were held for working capital and general corporate purposes. Our cash equivalents and investments consist of highly liquid investments in money market funds, U.S. treasury securities, U.S. government agency securities and corporate debt securities.

In March 2018, upon completion of our IPO, we received net proceeds of $205.3 million, net of underwriters' discounts and commissions of $15.5 million. In connection with the IPO, we incurred offering costs of $6.2 million which were recorded into stockholders' equity as a reduction of the net proceeds received from the IPO. Previously, we have financed our operations principally through private placements of our equity securities, as well as payments received from customers using our cloud platform and services.

We have generated significant operating losses from our operations, as reflected in our accumulated deficit of $224.5 million as of July 31, 2019. We expect to continue to incur operating losses and generate negative cash flows from operations in future periods due to expected investments to grow our business.

We believe that our existing cash, cash equivalents and short-term investments will be sufficient to fund our operating and capital needs for at least the next 12 months from the issuance of our financial statements. Our assessment of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement and involves risks and uncertainties. Our actual results could vary as a result of, and our future capital requirements, both near-term and long-term, will depend on, many factors, including our growth rate, the timing and extent of spending to support our research and development efforts, the expansion of sales and marketing and international operating activities, the timing of new introductions of solutions or features, and the continuing market acceptance of our services. We have and may in the future enter into arrangements to acquire or invest in complementary businesses, services and technologies, including intellectual property rights. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. We may be required 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, or if we cannot expand our operations or otherwise capitalize on our business opportunities because we lack sufficient capital, our business, operating results and financial condition would be adversely affected.

We typically invoice our customers annually in advance, and to a lesser extent quarterly in advance, monthly in advance or multi-year in advance. Therefore, a substantial source of our cash is from such prepayments, which are included on our consolidated balance sheets as a contract liability. Deferred revenue consists of the unearned portion of billed fees for our subscriptions, which is subsequently recognized as revenue in accordance with our revenue recognition policy. As of July 31, 2019, we had deferred revenue of $251.2 million, of which $221.4 million was recorded as a current liability and is expected to be recorded as revenue in the next 12 months, provided all other revenue recognition criteria have been met. Subscriptions that are invoiced annually in advance or multi-year in advance contribute significantly to our short-term and long-term deferred revenue in comparison to our invoices issued quarterly in advance or monthly in advance. Accordingly, we cannot predict the mix of invoicing schedules in any given period.

The following table summarizes our cash flows for the periods presented:

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Net cash provided by (used in) operating activities	$ 58,027	$ 17,307	$ (6,019)
Net cash used in investing activities	$ (162,074)	$ (178,103)	$ (8,174)
Net cash provided by financing activities	$ 46,384	$ 208,397	$ 9,497

Operating Activities

Net cash provided by operating activities during fiscal 2019 was $58.0 million, which resulted from a net loss of $28.7 million, adjusted for non-cash charges of $73.1 million and net cash inflows of $13.6 million from changes in operating

assets and liabilities. Non-cash charges primarily consisted of $46.4 million for stock-based compensation expense, $18.7 million for amortization of deferred contract acquisition costs, $10.4 million for depreciation and amortization expense and $0.9 million for amortization expense of acquired intangible assets, partially offset by accretion of purchased discounts, net of amortization of investment premiums of $2.2 million and deferred income taxes of $1.4 million.

Net cash inflows from changes in operating assets and liabilities were primarily the result of an increase of $87.2 million in deferred revenue from advance invoicing in accordance with our subscription contracts and an increase of $0.5 million in accounts payable. Net cash inflows were partially offset by cash outflows resulting from an increase of $32.5 million in deferred contract acquisition costs, as our sales commission payments increased due to the addition of new customers and expansion of our existing customer subscriptions, an increase of $31.7 million in accounts receivable primarily due to customer growth, an increase of $7.6 million in prepaid expenses, other current and noncurrent assets, a decrease of $1.8 million in accrued compensation, primarily due to a decrease in accrued ESPP contributions as a result of a longer withholding period related to our first purchase period ended in December 2018, and a decrease of $0.3 million in accrued expenses, other current and noncurrent liabilities.

Net cash provided by operating activities during fiscal 2018 was $17.3 million, which resulted from a net loss of $33.6 million, adjusted for non-cash charges of $32.5 million and net cash inflows of $18.4 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $8.0 million for depreciation and amortization expense, $13.2 million for amortization of deferred contract acquisition costs and $11.2 million for stock-based compensation expense. The net cash inflows from changes in operating assets and liabilities was primarily the result of a $67.4 million increase in deferred revenue from advance invoicing in accordance with our subscription contracts and an aggregate $13.9 million increase in accrued compensation and accrued expenses and other liabilities. These cash inflows were partially offset by cash outflows resulting from a $34.4 million increase in deferred contract acquisition costs, as our sales commission payments increased due to the addition of new customers and expansion of our existing customer subscriptions, a $22.6 million increase in accounts receivable due to timing of collections, a $5.1 million increase in prepaid expenses and other assets, as we support our business growth, and a $0.8 million decrease in accounts payable.

Net cash used in operating activities during fiscal 2017 was $6.0 million, which resulted from a net loss of $35.5 million, adjusted for non-cash charges of $25.1 million, and net cash inflow of $4.3 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $6.8 million for depreciation and amortization expense, $8.5 million for amortization of deferred contract acquisition costs and $9.9 million for stock-based compensation expense. The net cash inflow from changes in operating assets and liabilities was primarily the result of a $30.7 million increase in deferred revenue from advance invoicing in accordance with our subscription contracts and an aggregate $12.9 million increase in accounts payable, accrued compensation and accrued expenses and other liabilities. The cash inflows were partially offset by cash outflows resulting from a $22.0 million increase in deferred contract acquisition costs, as our sales commission payments increased due to addition of new customers and expansion of our existing customer subscriptions, and a $14.6 million increase in accounts receivable due to increased billings from our growing customer base which resulted in an overall increased accounts receivable balance and a $2.7 million increase in prepaid expenses and other assets.

Investing Activities

Net cash used in investing activities during fiscal 2019 of $162.1 million was primarily attributable to the purchases of short-term investments of $335.2 million, capital expenditures to support our cloud platform and increased headcount, including increased office space needs, of $28.7 million, payments for business acquisitions, net of cash acquired, of $11.4 million and payments for acquired intangible assets of $1.5 million. These transactions were partially offset by proceeds from the maturities of short-term investments of $199.7 million and sales of short-term investments of $15.0 million.

Net cash used in investing activities during fiscal 2018 of $178.1 million was primarily attributable to the purchases of short-term investments of $163.4 million and investments in capital expenditures of $15.2 million to support our cloud

platform, additional office space and headcount. These activities were partially offset by proceeds from the maturities of short-term investments of $0.4 million.

Net cash used in investing activities during fiscal 2017 of $8.2 million resulted primarily from investments in capital expenditures to support our cloud platform, additional office space and headcount.

Financing Activities

Net cash provided by financing activities of $46.4 million during fiscal 2019 was primarily attributable to $29.9 million in proceeds from the exercise of stock options, driven mainly by the end of our initial public offering lock-up period in September 2018, $16.4 million in proceeds from issuance of common stock under the employee stock purchase plan and $1.9 million in proceeds from repayments of notes receivable for early exercised stock options. Proceeds were partially offset by $1.8 million in payments of offering costs related to our IPO.

Net cash provided by financing activities of $208.4 million during fiscal 2018 was primarily attributable to $205.3 million in proceeds from the completion of our IPO (net of underwriters' discounts and commissions of $15.5 million), $5.3 million in proceeds from repayments of notes receivable for the exercise of stock options, $5.0 million in proceeds from the exercise of stock options and $0.9 million in proceeds from early exercised stock options. These proceeds were partially offset by $3.8 million in payments for repurchases of common stock related to early exercised stock options and $4.3 million in payments for offering costs related to our IPO.

Net cash provided by financing activities of $9.5 million during fiscal 2017 was primarily due to $4.7 million in proceeds from the early exercise of stock options, $3.0 million in proceeds from the exercise of stock options and $1.9 million in proceeds from repayments of notes receivable for early exercised stock options.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as July 31, 2019:

	Payments Due by Period				
	Total	Less Than 1 Year	1 to 3 Years	3 to 5 Years	More Than 5 Years
			(in thousands)		
Operating leases[1]	$ 43,960	$ 4,624	$ 10,707	$ 12,652	$ 15,977
Data center contracts	27,295	11,766	15,423	106	—
Non-cancelable purchase obligations	9,508	8,200	1,308	—	—
Other long-term liabilities[2]	2,525	—	2,525	—	—
Total	$ 83,288	$ 24,590	$ 29,963	$ 12,758	$ 15,977

[1] Effective April 2019, we entered into a sublease agreement, or lease agreement, for approximately 172,000 square feet of corporate office space in San Jose, California, which will serve as our new corporate headquarters. The initial term of the lease expires in September 2026 and the total rent over the initial lease term is approximately $37.3 million, net of free rental periods. Future non-cancelable minimum rental payments related to this lease agreement are included in the table above. For further information, refer to Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information. Our ability to generate sublease income, as well as our ability to terminate existing lease obligations and recognize the anticipated related savings is highly dependent upon the economic conditions, particularly commercial real estate market conditions, at the time we negotiate the lease

termination and sublease arrangements with third parties as well as the performances by such third parties of their respective obligations.

(2) Includes holdback amounts associated with business combinations, which are payable upon the lapse of the contractual indemnification period. For further information, refer to Note 5, Business Combinations, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

The contractual commitment amounts in the table above are associated with agreements that are enforceable and legally binding. Obligations under contracts, including purchase orders, that we can cancel without a significant penalty are not included in the table above.

Off-Balance Sheet Arrangements

As of July 31, 2019, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

As of July 31, 2019, we had outstanding irrevocable standby unsecured letters of credits for an aggregate value of $3.1 million with a bank, which serve as security under certain operating leases included in Note 7, Commitments and Contingencies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

Critical Accounting Policies and Estimates

Our financial statements are prepared in accordance with U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, as well as related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our estimates are based on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Our actual results could differ from these estimates.

The critical accounting estimates, assumptions and judgments that we believe have the most significant impact on our consolidated financial statements are described below.

Revenue Recognition

We have adopted Accounting Standards Codification ("ASC") Topic 606, Revenue From Contracts With Customers ("ASC 606"), effective as of August 1, 2017, using the full retrospective transition method. Under this method, we are presenting the consolidated financial statements for fiscal 2017, as if ASC 606 had been effective for that period as well.

In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration that we expect to be entitled to receive in exchange for these services. To achieve the core principle of this standard, we apply the following five steps:

1) Identify the contract with a customer

We consider the terms and conditions of the contracts and our customary business practices in identifying our contracts under ASC 606. We determine we have a contract with a customer when the contract is approved, we can identify each party’s rights regarding the services to be transferred, we can identify the payment terms for the services, we have determined the customer to have the ability and intent to pay, and the contract has commercial substance. We apply judgment in determining the customer’s ability and intent to pay, which is based on a variety of factors, including the customer’s historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

2) Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the service either on its own or together with other resources that are readily available from third parties or from us, and are distinct in the context of the contract, whereby the transfer of the services is separately identifiable from other promises in the contract. Our performance obligations consist of (i) our subscription and support services and (ii) professional and other services.

3) Determine the transaction price

The transaction price is determined based on the consideration to which we expect to be entitled in exchange for transferring services to the customer. Variable consideration is included in the transaction price if, in our judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of our contracts contain a significant financing component.

4) Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price, or SSP.

5) Recognize revenue when or as we satisfy a performance obligation

Revenue is recognized at the time the related performance obligation is satisfied by transferring the promised service to a customer. Revenue is recognized when control of the services is transferred to our customers, in an amount that reflects the consideration that we expect to receive in exchange for those services. We generate all our revenue from contracts with customers and apply judgment in identifying and evaluating any terms and conditions in contracts which may impact revenue recognition.

Subscription and Support Revenue

We generate revenue primarily from sales of subscriptions to access our cloud platform, together with related support services to our customers. Arrangements with customers do not provide the customer with the right to take possession of our software operating our cloud platform at any time. Instead, customers are granted continuous access to our cloud platform over the contractual period. A time-elapsed output method is used to measure progress because we transfer control evenly over the contractual period. Accordingly, the fixed consideration related to subscription and support revenue is generally recognized on a straight-line basis over the contract term beginning on the date that our service is made available to the customer.

The typical subscription and support term is one to three years. Most of our contracts are non-cancelable over the contractual term. Customers typically have the right to terminate their contracts for cause if we fail to perform in accordance with the contractual terms. Some of our customers have the option to purchase additional subscription and support services at a stated price. These options generally do not provide a material right as they are priced at our SSP.

Professional and Other Services Revenue

Professional and other services revenue consists of fees associated with providing deployment advisory services that educate and assist our customers on the best use of our solutions, as well as advise customers on best practices as they deploy our solution. These services are distinct from subscription and support services. Professional services do not result in significant customization of the subscription service. Revenue from professional services provided on a time and materials

basis is recognized as the services are performed. Total professional and other services revenue has historically been insignificant.

Contracts with Multiple Performance Obligations

Most of our contracts with customers contain multiple promised services consisting of (i) our subscription and support services and (ii) professional and other services that are distinct and accounted for separately. The transaction price is allocated to the separate performance obligations on a relative SSP basis. We determine SSP based on our overall pricing objectives, taking into consideration the type of subscription and support services and professional and other services, the geographical region of the customer and the number of users.

Variable Consideration

Revenue from sales is recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. The amount of variable consideration that is included in the transaction price is constrained, and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue will not occur when the uncertainty is resolved.

If our services do not meet certain service level commitments, our customers are entitled to receive service credits, and in certain cases, refunds, each representing a form of variable consideration. We have not historically experienced any significant incidents affecting the defined levels of reliability and performance as required by our subscription contracts. Accordingly, any estimated refunds related to these agreements in the consolidated financial statements were not material during the periods presented.

We provide rebates and other credits within our contracts with certain customers which are estimated based on the most likely amounts expected to be earned or claimed on the related sales transaction. Overall, the transaction price is reduced to reflect our estimate of the amount of consideration to which we are entitled based on the terms of the contract. Estimated rebates and other credits were not material during the periods presented.

Contract Balances

Contract liabilities consist of deferred revenue and include payments received in advance of performance under the contract. Such amounts are recognized as revenue over the contractual period.

We receive payments from customers based upon contractual billing schedules; accounts receivable are recorded when the right to consideration becomes unconditional. Payment terms on invoiced amounts are typically 30 days. Contract assets include amounts related to our contractual right to consideration for both completed and partially completed performance obligations that may not have been invoiced and such amounts have been insignificant to date.

Costs to Obtain and Fulfill a Contract

We capitalize sales commissions and associated payroll taxes paid to internal sales personnel that are incremental to the acquisition of channel partner and direct customer contracts. These costs are recorded as deferred contract acquisition costs on the consolidated balance sheets. We determine whether costs should be deferred based on our sales compensation plans, if the commissions are in fact incremental and would not have occurred absent the customer contract.

Sales commissions for renewal of a contract are not considered commensurate with the commissions paid for the acquisition of the initial contract given the substantive difference in commission rates in proportion to their respective contract values. Commissions paid upon the initial acquisition of a contract are amortized over an estimated period of benefit of five years while commissions paid for renewal contracts are amortized over the contractual term of the renewals.

Amortization is recognized on a straight-line basis commensurate with the pattern of revenue recognition. We determine the period of benefit for commissions paid for the acquisition of the initial contract by taking into consideration the expected subscription term and expected renewals of our customer contracts, the duration of our relationships with customers, customer retention data, our technology development life cycle and other factors. Management exercises judgment to determine the period of benefit to amortize contract acquisition costs by considering factors such as expected renewals of customer contracts, duration of customer relationships and our technology development life cycle. Although we believe that the historical assumptions and estimates we have made are reasonable and appropriate, different assumptions and estimates could materially impact our reported financial results. Amortization of deferred contract acquisition costs is included in sales and marketing expense in the consolidated statements of operations. We periodically review these deferred costs to determine whether events or changes in circumstances have occurred that could impact the period of benefit of these deferred contract acquisition costs.

Business Combinations

We account for our business combinations using the acquisition method of accounting, which requires, among other things, allocation of the fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed at their estimated fair values on the acquisition date. The excess of the fair value of purchase consideration over the values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair value of assets acquired and liabilities assumed, we make estimates and assumptions, especially with respect to intangible assets. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the consolidated statements of operations. Acquisition costs, such as legal and consulting fees, are expensed as incurred.

Stock-Based Compensation

Stock-based compensation expense for common stock options granted to employees and non-employees is recognized based on the fair value of the awards granted, determined using the Black-Scholes option pricing model and a single option award approach. Stock-based compensation expense is recognized as expense over the requisite service period, generally four years. Unvested options issued to non-employees are remeasured at fair market value at the end of each reporting period.

Stock-based compensation expense related to purchase rights issued under the 2018 Employee Stock Purchase Plan ("ESPP") is based on the Black-Scholes option pricing model fair value of the estimated number of awards as of the beginning of the offering period. Stock-based compensation expense is recognized following the straight-line attribution method over the offering period.

We grant both stock awards with service condition only and with service and performance conditions. We recognize stock-based compensation expense for stock awards with a service condition only using the straight-line method over the requisite service period of the awards, which is generally the vesting period. We use the accelerated attribution method of recognizing stock-based compensation expense related to stock awards that contain both service and performance conditions.

Prior to the IPO, the fair value of our common stock for financial reporting purposes was determined considering numerous objective and subjective factors and required judgment to determine the fair value of common stock as of each grant date. Subsequent to the IPO, we determine the fair value using the market closing price of our common stock on the date of grant.

Prior to fiscal 2018, we recognized stock-based compensation expense, net of estimated forfeitures. We used historical data to estimate pre-vesting forfeitures and recorded stock-based compensation expense only for those grants that were expected to vest. On August 1, 2017, we adopted Accounting Standard Update ("ASU") No. 2016-09, Compensation—Stock Compensation: Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09"), which simplifies several aspects of the accounting for employee share-based payment transactions. In accordance with ASU 2016-09, we have elected to account for forfeitures as they occur instead of estimating the number of awards expected to be forfeited and adjusting the estimate when it is no longer probable that the employee will fulfill the service condition. We adopted this provision in our first quarter of fiscal 2018 which resulted in a cumulative-effect adjustment to accumulated deficit of $0.4 million, net of tax, as of the date of adoption. Additionally, upon adoption of ASU 2016-09, on a modified retrospective basis, the previously unrecognized excess tax benefits of $0.9 million as of July 31, 2018 were recorded as an increase to our U.S. federal and state deferred tax assets, which was fully offset by our valuation allowance. Prospectively, all excess tax benefits and deficiencies have been recognized in the income statement as a component of our income tax expense or benefit. Further, we have presented excess tax benefits as an operating activity in the consolidated statements of cash flows on a prospective basis. The net excess tax benefits related to equity awards was not material for fiscal 2018.

We also assess the impact of recording stock-based compensation expense when certain of our affiliated stockholders purchase shares from our employees in excess of fair value of such shares. We recognize any such excess value as stock-based compensation expense in our consolidated statements of operations. During fiscal 2017, we recorded $4.4 million in stock-based compensation expense from a one-time secondary stock purchase transaction that was executed among certain of our employees and certain of our affiliated stockholders, including entities controlled by Jay Chaudhry, our president, chief executive officer and chairman of the board of directors, and Lane Bess, a former member of our board of directors. Stock-based compensation expense related to non-employee stock options was immaterial to our consolidated statements of operations for the periods presented.

Our use of the Black-Scholes option pricing model to estimate the fair value of stock options requires the input of highly subjective assumptions. The assumptions used to determine the fair value of the option awards represent management's best estimates. These estimates involve inherent uncertainties and the application of management's judgment.

These assumptions and estimates are as follows:

- *Fair Value of Common Stock.* Prior to our IPO, the fair value of the common stock underlying our stock options was determined by our board of directors, after considering contemporaneous third-party valuations and input from management. Our board of directors considered this independent valuations and other factors, including, but not limited to, expected operating and financial performance, our stage of development, current business conditions and projections, history and the timing of the introduction of new services, our financial condition and market performance of comparable publicly traded companies to establish the fair value of our common stock at the time of grant of the option. The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation.* After the IPO, we used the publicly quoted price as reported on The Nasdaq Global Select Market as the fair value of our common stock.

- *Expected Term.* The expected term represents the period that our stock-based awards are expected to be outstanding. The expected term assumptions were determined based on the vesting terms, exercise terms and contractual lives of the options. The expected term was estimated using the simplified method allowed under SEC guidance.

- *Volatility.* Since we do not have sufficient trading history of our common stock, the expected volatility may be determined based on a mix between the historical volatility of our common stock and the historical stock volatilities of our comparable publicly-traded companies for the period we do not have trading history of our common stock.

Comparable companies consist of public companies in our industry, which are similar in size, stage of life cycle and financial leverage.

- *Risk-Free Interest Rate.* We base the risk-free interest rate used in the Black-Scholes option pricing model on the implied yield available on U.S. Treasury zero-coupon issues with a remaining term equivalent to that of the options for each expected term.
- *Dividend Yield.* The expected dividend assumption is based on our current expectations about our anticipated dividend policy. As we have no history of paying any dividends, we used an expected dividend yield of zero.

We estimated the fair value of employee stock options using the Black-Scholes option pricing model with the following assumptions:

	Year Ended July 31,	
	2018	**2017**
Expected term (in years)	4.6 - 5.1	4.6
Expected stock price volatility	40.3% - 42.3%	41.4% - 43.3%
Risk-free interest rate	1.7% - 2.8%	1.1% - 2.0%
Dividend yield	0.0%	0.0%

From the date of our IPO through July 31, 2019, we did not grant additional stock options.

We implemented our ESPP in fiscal 2018, the fair value of the purchase rights granted under the ESPP was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	Year Ended July 31,	
	2019	**2018**
Expected term (in years)	0.5 - 2.0	0.5 - 2.3
Expected stock price volatility	44.0% - 61.9%	30.7% - 53.2%
Risk-free interest rate	1.9% - 2.7%	2.0% - 2.6%
Dividend yield	0.0%	0.0%

Income Taxes

We are subject to federal, state and local taxes in the United States as well as in other tax jurisdictions or countries in which we conduct business. Earnings generated by our non-U.S. activities are related to applicable transfer pricing requirements under local country income tax laws. We account for uncertain tax positions based on those positions taken or expected to be taken in a tax return. We determine if the amount of available support indicates that it is more likely than not that the tax position will be sustained on audit, including resolution of any related appeals or litigation processes. We then measure the tax benefit as the largest amount that is more than 50% likely to be realized upon settlement.

We have a full valuation allowance for our net deferred tax assets generated from our U.S. and U.K. operations. We will continue to assess the need for such valuation allowance on our deferred tax assets by evaluating both positive and negative evidence that may exist. Any adjustment to the deferred tax asset valuation allowance would be recorded in the periods in which the adjustment is determined to be required.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or the Tax Act, was enacted. The Tax Act contains several key tax provisions that affect us, including, but not limited to, reducing the U.S. federal corporate tax rate, imposing a one-time mandatory transition tax on previously untaxed foreign earnings and changing rules related to the use of net operating loss carryforwards created in tax years beginning after December 31, 2017. During fiscal 2019, we completed our assessment

of the impacts of the Tax Act including the remeasurement of our deferred taxes, the one-time mandatory transition tax, and the policy decision regarding whether to record deferred taxes associated with GILTI within the measurement period provided by SAB 118. Because of the full valuation allowance recorded against our U.S. federal deferred tax assets, there was no incremental tax expense (or benefit) recognized related to finalizing the accounting for the Tax Act. We have elected to account for the tax effects of GILTI as a period cost.

JOBS Act Extended Transition Period

As a result of the market value of our common stock held by our non-affiliates as of January 31, 2019, we ceased to be an “emerging growth company” ("EGC"), as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), with our transition to a large accelerated filer status as of July 31, 2019. As an EGC, we elected not to avail ourselves of the extended transition periods available for complying with new or revised accounting pronouncements applicable to public companies that are not emerging growth companies. Accordingly, the transition to a large accelerated filer did not have an impact to our consolidated financial statements.

Recently Issued Accounting Pronouncements

Refer to Note 1, Business and Summary of Significant Accounting Policies, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information regarding recently issued accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

We have operations in the United States and internationally, and we are exposed to market risk in the ordinary course of our business.

Interest Rate Risk

As of July 31, 2019, we had cash, cash equivalents and short-term investments totaling $364.6 million, which were held for working capital purposes. Our cash equivalents and investments consist of highly liquid investments in money market funds, U.S. treasury securities, U.S. government agency securities and corporate debt securities. The primary objectives of our investment activities are the preservation of capital, the fulfillment of liquidity needs and the fiduciary control of cash and investments. We do not enter into investments for trading or speculative purposes. The carrying amount of our cash equivalents reasonably approximates fair value, due to the short maturities of these instruments. Our investments are exposed to market risk due to a fluctuation in interest rates, which may affect our interest income and the fair market value of our investments. As of July 31, 2019, the effect of a hypothetical 100 basis point change in interest rates would have changed the fair value of our investments in available-for-sale securities by $2.1 million. Fluctuations in the fair value of our investments in available-for-sale securities caused by a change in interest rates (gains or losses on the carrying amount) are recorded in other comprehensive income (loss), and are realized only if we sell the underlying securities prior to maturity.

Foreign Currency Risk

The vast majority of our sales contracts are denominated in U.S. dollars, with a small number of contracts denominated in foreign currencies. A portion of our operating expenses are incurred outside the United States, denominated in foreign currencies and subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the British Pound, Indian Rupee and Euro. Additionally, fluctuations in foreign currency exchange rates may cause us to recognize transaction gains and losses in our consolidated statements of operations. The effect of a hypothetical 10% change in foreign currency exchange rates applicable to our business would not have a material impact on our historical consolidated financial statements for fiscal 2019, fiscal 2018 and fiscal 2017. As the impact of foreign currency exchange rates has not been

material to our historical operating results, we have not entered into derivative or hedging transactions, but we may do so in the future if our exposure to foreign currency becomes more significant.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements

	Page
Report of Independent Registered Public Accounting Firm	83
Consolidated Financial Statements:	
Consolidated Balance Sheets as of July 31, 2019 and 2018	86
Consolidated Statements of Operations for the years ended July 31, 2019, 2018 and 2017	87
Consolidated Statements of Comprehensive Loss for the years ended July 31, 2019, 2018 and 2017	88
Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit) for the years ended July 31, 2019, 2018 and 2017	89
Consolidated Statements of Cash Flows for years ended July 31, 2019, 2018 and 2017	90
Notes to Consolidated Financial Statements	91
The supplementary financial information required by this Item 8, is included in Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, under the caption "Quarterly Results of Operations and Other Data," which is incorporated herein by reference.	69

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of Zscaler, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Zscaler, Inc. and its subsidiaries (the "Company") as of July 31, 2019 and 2018, and the related consolidated statements of operations, of comprehensive loss, of redeemable convertible preferred stock and stockholders’ equity (deficit), and of cash flows for each of the three years in the period ended July 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of July 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management’s Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (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 audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated 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 consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness

of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters 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 – Identifying and evaluating terms and conditions in contracts

As described in Note 1 to the consolidated financial statements, management applies the following steps in their determination of revenue to be recognized: 1) identification of the contract with a customer; 2) identification of the performance obligations in the contract; 3) determination of the transaction price; 4) allocation of the transaction price to the performance obligations in the contract; and 5) recognition of revenue when, or as, the Company satisfies a performance obligation. Management applies judgment in identifying and evaluating any terms and conditions in contracts which may impact revenue recognition. For the fiscal year ended July 31, 2019, the Company's revenue was $303 million.

The principal considerations for our determination that performing procedures relating to revenue recognition, specifically the identification and evaluation of terms and conditions in contracts, is a critical audit matter are that there was a significant amount of effort and judgment required by management in identifying and evaluating terms and conditions in contracts that impact revenue recognition. This in turn led to a high degree of auditor judgment and significant audit effort in performing our audit procedures to evaluate whether terms and conditions in contracts were appropriately identified and evaluated by management.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls related to the identification and evaluation of terms and conditions in contracts that impact revenue recognition. These procedures also included, among others, testing the completeness and accuracy of management's identification and evaluation of the terms and conditions in contracts by examining revenue

arrangements on a test basis and testing management’s process of identifying and evaluating the terms and conditions in contracts, including management’s determination of the impact of those terms and conditions on revenue recognition.

/s/ PricewaterhouseCoopers LLP

San Jose, California
September 18, 2019

We have served as the Company's auditor since 2015.

ZSCALER, INC.
Consolidated Balance Sheets
(in thousands, except per share amounts)

	July 31,	
	2019	**2018**
Assets		
Current assets:		
Cash and cash equivalents	$ 78,484	$ 135,579
Short-term investments	286,162	162,960
Accounts receivable, net	93,341	61,611
Deferred contract acquisition costs	21,219	16,136
Prepaid expenses and other current assets	16,880	10,878
Total current assets	496,086	387,164
Property and equipment, net	41,046	19,765
Deferred contract acquisition costs, noncurrent	48,566	39,774
Acquired intangible assets, net	8,708	—
Goodwill	7,479	—
Other noncurrent assets	2,277	1,078
Total assets	$ 604,162	$ 447,781
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 6,208	$ 4,895
Accrued expenses and other current liabilities	12,810	13,874
Accrued compensation	21,544	23,393
Deferred revenue	221,387	140,670
Total current liabilities	261,949	182,832
Deferred revenue, noncurrent	29,815	23,353
Other noncurrent liabilities	3,840	1,360
Total liabilities	295,604	207,545
Commitments and contingencies (Note 7)		
Stockholders' Equity		
Preferred stock; $0.001 par value; 200,000 shares authorized as of July 31, 2019 and 2018, respectively; no shares issued and outstanding as of July 31, 2019 and 2018	—	—
Common stock; $0.001 par value; 1,000,000 shares authorized as of July 31, 2019 and 2018, respectively; 127,253 and 119,764 shares issued and outstanding as of July 31, 2019 and 2018, respectively	127	119
Additional paid-in capital	532,618	438,392
Notes receivable from stockholders	—	(2,051)
Accumulated other comprehensive income (loss)	268	(124)
Accumulated deficit	(224,455)	(196,100)
Total stockholders' equity	308,558	240,236
Total liabilities and stockholders' equity	$ 604,162	$ 447,781

The accompanying notes are an integral part of these consolidated financial statements.

ZSCALER, INC.
Consolidated Statements of Operations
(in thousands, except per share amounts)

	Year Ended July 31,		
	2019	**2018**	**2017**
Revenue	$ 302,836	$ 190,174	$ 125,717
Cost of revenue	59,669	37,875	27,472
Gross profit	243,167	152,299	98,245
Operating expenses:			
Sales and marketing	169,913	116,409	79,236
Research and development	61,969	39,379	33,561
General and administrative	46,598	31,135	20,521
Total operating expenses	278,480	186,923	133,318
Loss from operations	(35,313)	(34,624)	(35,073)
Interest income, net	7,730	2,236	597
Other income (expense), net	(329)	79	(107)
Loss before income taxes	(27,912)	(32,309)	(34,583)
Provision for income taxes	743	1,337	877
Net loss	$ (28,655)	$ (33,646)	$ (35,460)
Accretion of Series C and D redeemable convertible preferred stock	—	(6,332)	(9,570)
Net loss attributable to common stockholders	$ (28,655)	$ (39,978)	$ (45,030)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.23)	$ (0.63)	$ (1.54)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	123,566	63,881	29,221

The accompanying notes are an integral part of these consolidated financial statements.

ZSCALER, INC.

Consolidated Statements of Comprehensive Loss

(in thousands)

	Year Ended July 31,		
	2019	**2018**	**2017**
Net loss	$ (28,655)	$ (33,646)	$ (35,460)
Other comprehensive income (loss), net of tax:			
Unrealized net gains (losses) on available-for-sale securities	392	(124)	—
Other comprehensive income (loss)	392	(124)	—
Comprehensive loss	$ (28,263)	$ (33,770)	$ (35,460)

The accompanying notes are an integral part of these consolidated financial statements.

ZSCALER, INC.

Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders’ Equity (Deficit)

(in thousands)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Notes Receivable From Stockholders	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders’ Equity (Deficit)
	Shares	Amount	Shares	Amount					
Balance as of July 31, 2016	72,501	$ 191,407	30,331	$ 16	$ 11,714	$ (9,914)	$ —	$ (126,556)	$ (124,740)
Accretion of Series C and D redeemable convertible preferred stock	—	9,570	—	—	(9,570)	—	—	—	(9,570)
Issuance of common stock upon exercise of stock options	—	—	1,347	1	2,970	—	—	—	2,971
Issuance of common stock related to early exercised stock options	—	—	781	—	—	—	—	—	—
Repurchases of unvested common stock	—	—	(100)	—	—	263	—	—	263
Repayments of notes receivable from stockholders	—	—	—	—	—	1,856	—	—	1,856
Additions to notes receivable related to early exercised stock options	—	—	—	—	—	(83)	—	—	(83)
Vesting of early exercised stock options	—	—	—	1	3,701	—	—	—	3,702
Stock-based compensation	—	—	—	—	9,919	—	—	—	9,919
Net loss	—	—	—	—	—	—	—	(35,460)	(35,460)
Balance as of July 31, 2017	72,501	200,977	32,359	18	18,734	(7,878)	—	(162,016)	(151,142)
Cumulative effect of accounting change	—	—	—	—	438	—	—	(438)	—
Accretion of Series C and D redeemable convertible preferred stock	—	6,332	—	—	(6,332)	—	—	—	(6,332)
Issuance of common stock upon exercise of stock options	—	—	1,712	2	4,983	—	—	—	4,985
Issuance of common stock related to early exercised stock options	—	—	180	—	—	—	—	—	—
Repurchases of unvested common stock	—	—	(788)	—	—	214	—	—	214
Repayments of notes receivable from stockholders	—	—	—	—	—	5,346	—	—	5,346
Accrued interest on notes receivable from stockholders, net of repayments	—	—	—	—	—	267	—	—	267
Vesting of early exercised stock options	—	—	—	12	3,243	—	—	—	3,255
Issuance of common stock upon initial public offering, net of underwriting discounts of $15,456 and issuance costs of $6,164	—	—	13,800	14	198,866	—	—	—	198,880
Conversion of redeemable convertible preferred stock to common stock upon initial public offering	(72,501)	(207,309)	72,501	73	207,236	—	—	—	207,309
Stock-based compensation	—	—	—	—	11,224	—	—	—	11,224
Unrealized net losses on available-for-sale-securities	—	—	—	—	—	—	(124)	—	(124)
Net loss	—	—	—	—	—	—	—	(33,646)	(33,646)
Balance as of July 31, 2018	—	—	119,764	119	438,392	(2,051)	(124)	(196,100)	240,236
Cumulative effect of accounting change	—	—	—	—	(300)	—	—	300	—
Issuance of common stock upon exercise of stock options	—	—	6,277	7	29,855	—	—	—	29,862
Issuance of common stock under the employee stock purchase plan	—	—	1,131	1	16,435	—	—	—	16,436
Vesting of restricted stock units	—	—	89	—	—	—	—	—	—
Repurchases of unvested common stock	—	—	(8)	—	—	—	—	—	—
Repayments of principal amount on notes receivable from stockholders	—	—	—	—	—	1,905	—	—	1,905
Accrued interest on notes receivable from stockholders, net of repayments	—	—	—	—	—	146	—	—	146
Adjustment to initial public offering costs	—	—	—	—	300	—	—	—	300
Vesting of early exercised stock options	—	—	—	—	983	—	—	—	983
Stock-based compensation	—	—	—	—	46,953	—	—	—	46,953
Unrealized net gains on available-for-sale-securities, net of tax	—	—	—	—	—	—	392	—	392
Net loss	—	—	—	—	—	—	—	(28,655)	(28,655)
Balance as of July 31, 2019	—	$ —	127,253	$ 127	$ 532,618	$ —	$ 268	$ (224,455)	$ 308,558

The accompanying notes are an integral part of these consolidated financial statements.

ZSCALER, INC.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended July 31,		
	2019	2018	2017
Cash Flows From Operating Activities			
Net loss	$ (28,655)	$ (33,646)	$ (35,460)
Adjustments to reconcile net loss to cash provided by operating activities:			
Depreciation and amortization expense	10,398	7,988	6,840
Amortization expense of acquired intangible assets	908	—	—
Amortization of deferred contract acquisition costs	18,651	13,181	8,474
Stock-based compensation expense	46,423	11,224	9,919
Deferred income taxes	(1,392)	—	—
Accretion of purchased discounts, net of amortization of investment premiums	(2,181)	—	—
Other	284	130	(89)
Changes in operating assets and liabilities, net of effects of business acquisitions:			
Accounts receivable	(31,730)	(22,559)	(14,563)
Deferred contract acquisition costs	(32,526)	(34,429)	(21,999)
Prepaid expenses, other current and noncurrent assets	(7,642)	(5,068)	(2,718)
Accounts payable	495	(779)	2,249
Accrued expenses, other current and noncurrent liabilities	(336)	2,076	5,376
Accrued compensation	(1,849)	11,785	5,246
Deferred revenue	87,179	67,404	30,706
Net cash provided by (used in) operating activities	58,027	17,307	(6,019)
Cash Flows From Investing Activities			
Purchases of property, equipment and other	(25,520)	(13,397)	(7,783)
Capitalized internal-use software	(3,162)	(1,773)	(391)
Acquired intangible assets	(1,480)	—	—
Payments for business acquisitions, net of cash acquired	(11,432)	—	—
Purchases of short-term investments	(335,186)	(163,366)	—
Proceeds from maturities of short-term investments	199,716	433	—
Proceeds from sale of short-term investments	14,990	—	—
Net cash used in investing activities	(162,074)	(178,103)	(8,174)
Cash Flows From Financing Activities			
Proceeds from initial public offering, net of underwriting discounts and commissions	—	205,344	—
Payments of offering costs related to initial public offering	(1,797)	(4,336)	(31)
Proceeds from issuance of common stock upon exercise of stock options	29,862	4,985	2,971
Proceeds from issuance of common stock related to early exercised stock options	—	869	4,701
Proceeds from issuance of common stock under the employee stock purchase plan	16,436	—	—
Repurchases of unvested common stock	(22)	(3,811)	—
Repayments of notes receivable from stockholders	1,905	5,346	1,856
Net cash provided by financing activities	46,384	208,397	9,497
Net increase (decrease) in cash, cash equivalents and restricted cash	(57,663)	47,601	(4,696)
Cash, cash equivalents and restricted cash at beginning of period	136,147	88,546	93,242
Cash, cash equivalents and restricted cash at end of period	$ 78,484	$ 136,147	$ 88,546
Supplemental Disclosure of Cash Flow Information:			
Cash paid for income taxes, net of tax refunds	$ 1,770	$ 870	$ 385
Supplemental Disclosure of Noncash Investing and Financing Activities:			
Net change in purchased equipment included in accounts payable and accrued expenses	$ 2,911	$ (537)	$ 746
Accretion of Series C and D redeemable convertible preferred stock	$ —	$ 6,332	$ 9,570
Repurchases of unvested common stock by cancellation of indebtedness	$ —	$ 214	$ 263
Vesting of early exercised common stock options	$ 983	$ 3,255	$ 3,702
Net change in deferred offering costs accrued	$ (2,097)	$ 940	$ 1,157
Conversion of redeemable convertible preferred stock to common stock	$ —	$ 207,309	$ —
Reconciliation of cash, cash equivalents and restricted cash within the consolidated balance sheets to the amounts shown in the statements of cash flows above:			
Cash and cash equivalents	$ 78,484	$ 135,579	$ 87,978
Restricted cash, current	—	236	—
Restricted cash, non-current	—	332	568
Total cash, cash equivalents and restricted cash	$ 78,484	$ 136,147	$ 88,546

The accompanying notes are an integral part of these consolidated financial statements.

ZSCALER, INC.

Notes to Consolidated Financial Statements

Note 1. Business and Summary of Significant Accounting Policies

Business

Zscaler, Inc. ("Zscaler," the "Company," "we," "us," or "our") is a cloud security company that developed a platform incorporating core security functionalities needed to enable users to safely utilize authorized applications and services based on an organization's policies. Our solution is a purpose-built, multi-tenant, distributed cloud security platform that secures access for users and devices to applications and services, regardless of location. We deliver our solutions using a software-as-a-service ("SaaS") business model and sell subscriptions to customers to access our cloud platform, together with related support services. We were incorporated in Delaware in September 2007 and conduct business worldwide, with presence in North America, Europe and Asia. Our headquarters are located in San Jose, California.

Reverse Stock Split

In March 2018, our board of directors approved an amendment to the Company's amended and restated certificate of incorporation effecting a 2-for-3 reverse stock split of the Company's issued and outstanding shares of common stock and convertible preferred stock. The reverse stock split was effected on March 1, 2018. The par value of the common stock and the convertible preferred stock was not adjusted as a result of the reverse stock split. All issued and outstanding share and per share amounts included in the accompanying consolidated financial statements have been adjusted to reflect this reverse stock split for all periods presented.

Initial Public Offering

In March 2018, we completed our initial public offering ("IPO") of common stock, in which we sold 13,800,000 shares. The shares were sold at an IPO price of $16.00 per share for net proceeds of $205.3 million, after deducting underwriters' discounts and commissions of $15.5 million. In connection with the IPO, we incurred offering costs of $6.2 million which were recorded within stockholders' equity (deficit) as a reduction of the net proceeds received from the IPO. Immediately prior to the closing of the IPO, all our outstanding shares of convertible preferred stock were automatically converted into 72,500,750 shares of common stock on a one-to-one basis.

Fiscal Year

Our fiscal year ends on July 31. References to fiscal 2019, for example, refer to our fiscal year ended July 31, 2019.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries and have been prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP"). All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates, judgments and assumptions that affect the amounts reported and disclosed in the financial statements and accompanying notes. Such estimates include, but are not limited to, the determination of revenue recognition, deferred revenue, deferred contract acquisition costs, the period of benefit generated from our deferred contract acquisition costs,

allowance for doubtful accounts, valuation of stock-based awards, useful lives of property and equipment and acquired intangible assets, fair value of acquired intangible assets and goodwill, legal contingencies and valuation of deferred tax assets. Management determines these estimates and assumptions on historical experience and on various other assumptions that are believed to be reasonable. Actual results could differ significantly from these estimates, and such differences may be material to our consolidated financial statements.

Foreign Currency

The functional currency of our foreign subsidiaries is the U.S. dollar. Accordingly, monetary assets and liabilities of our foreign subsidiaries are re-measured into U.S. dollars at the exchange rates in effect at the reporting date, non-monetary assets and liabilities are re-measured at historical rates, revenue and expenses are re-measured at average exchange rates in effect during each reporting period. Foreign currency transaction gains and losses are recorded in other income (expense), net in the consolidated statements of operations. We recognized re-measurement losses of $0.3 million, $0.1 million and $0.1 million for fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

JOBS Act Extended Transition Period

As a result of the market value of our common stock held by our non-affiliates as of January 31, 2019, we ceased to be an “emerging growth company” ("EGC"), as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"), with our transition to a large accelerated filer status as of July 31, 2019. As an EGC, we elected not to avail ourselves of the extended transition periods available for complying with new or revised accounting pronouncements applicable to public companies that are not emerging growth companies. Accordingly, the transition to a large accelerated filer did not have an impact to our consolidated financial statements.

Concentration of Risks

We generate revenue primarily from sale of subscriptions to access our cloud platform, together with related support services. Our sales team, along with our channel partner network of global telecommunications service providers, system integrators and value-added resellers (collectively "channel partners"), sells our services worldwide to organizations of all sizes. Due to the nature of our services and the terms and conditions of our contracts with our channel partners, our business could be affected unfavorably if we are not able to continue our relationships with them.

Our financial instruments that are exposed to concentrations of credit risk consist primarily of cash, cash equivalents, short-term investments and accounts receivable. Although we deposit our cash with multiple financial institutions, the deposits, at times, may exceed federally insured limits. Cash equivalents and short-term investments consist of highly liquid investments in money market funds, U.S. treasury, U.S. agency securities and corporate debt securities, which are invested through financial institutions in the United States.

We grant credit to our customers in the normal course of business. We monitor the financial condition of our customers to reduce credit risk.

The following table summarizes the concentration of 10% or more of the total balance of accounts receivable, net:

	July 31,	
	2019	2018
Channel partner A	12 %	*
Channel partner B	11 %	13 %
Channel partner C	10 %	13 %

_____

* Represents less than 10%.

No single customer accounted for 10% or more of revenue in fiscal 2019, fiscal 2018 and fiscal 2017.

Segment Information

We operate as one reportable and operating segment. Our chief operating decision maker is our chief executive officer, who reviews financial information presented on a consolidated basis for purposes of making operating decisions, assessing financial performance and allocating resources.

Revenue Recognition

We have adopted Accounting Standards Codification ("ASC") Topic 606, Revenue From Contracts With Customers ("ASC 606"), effective as of August 1, 2017, using the full retrospective transition method. Under this method, we are presenting the consolidated financial statements for fiscal 2017, as if ASC 606 had been effective for that period as well.

In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration that we expect to be entitled to receive in exchange for these services. To achieve the core principle of this standard, we apply the following five steps:

1) Identify the contract with a customer

We consider the terms and conditions of the contracts and our customary business practices in identifying our contracts under ASC 606. We determine we have a contract with a customer when the contract is approved, we can identify each party's rights regarding the services to be transferred, we can identify the payment terms for the services, we have determined the customer has the ability and intent to pay and the contract has commercial substance. We apply judgment in determining the customer's ability and intent to pay, which is based on a variety of factors, including the customer's historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

2) Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the service either on its own or together with other resources that are readily available from third parties or from us, and are distinct in the context of the contract, whereby the transfer of the services is separately identifiable from other promises in the contract. Our performance obligations consist of (i) our subscription and support services and (ii) professional and other services.

3) Determine the transaction price

The transaction price is determined based on the consideration to which we expect to be entitled in exchange for transferring services to the customer. Variable consideration is included in the transaction price if, in our judgment, it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of our contracts contain a significant financing component.

4) Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price ("SSP").

5) Recognize revenue when or as we satisfy a performance obligation

Revenue is recognized at the time the related performance obligation is satisfied by transferring the promised service to a customer. Revenue is recognized when control of the services is transferred to our customers, in an amount that reflects the consideration that we expect to receive in exchange for those services. We generate all our revenue from contracts with customers and apply judgment in identifying and evaluating any terms and conditions in contracts which may impact revenue recognition.

Subscription and Support Revenue

We generate revenue primarily from sales of subscriptions to access our cloud platform, together with related support services to our customers. Arrangements with customers do not provide the customer with the right to take possession of our software operating our cloud platform at any time. Instead, customers are granted continuous access to our cloud platform over the contractual period. A time-elapsed output method is used to measure progress because we transfer control evenly over the contractual period. Accordingly, the fixed consideration related to subscription and support revenue is generally recognized on a straight-line basis over the contract term beginning on the date that our service is made available to the customer.

The typical subscription and support term is one to three years. Most of our contracts are non-cancelable over the contractual term. Customers typically have the right to terminate their contracts for cause if we fail to perform in accordance with the contractual terms. Some of our customers have the option to purchase additional subscription and support services at a stated price. These options generally do not provide a material right as they are priced at our SSP.

Professional and Other Services Revenue

Professional and other services revenue consists of fees associated with providing deployment advisory services that educate and assist our customers on the best use of our solutions, as well as advise customers on best practices as they deploy our solution. These services are distinct from subscription and support services. Professional services do not result in significant customization of the subscription service. Revenue from professional services provided on a time and materials basis is recognized as the services are performed. Total professional and other services revenue has historically not been material.

Contracts with Multiple Performance Obligations

Most of our contracts with customers contain multiple promised services consisting of: (i) our subscription and support services and (ii) professional and other services that are distinct and accounted for separately. The transaction price is allocated to the separate performance obligations on a relative SSP basis. We determine SSP based on our overall pricing

objectives, taking into consideration the type of subscription and support services and professional and other services, the geographical region of the customer and the number of users.

Variable Consideration

Revenue from sales is recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. The amount of variable consideration that is included in the transaction price is constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue will not occur when the uncertainty is resolved.

If our services do not meet certain service level commitments, our customers are entitled to receive service credits, and in certain cases, refunds, each representing a form of variable consideration. We have historically not experienced any significant incidents affecting the defined levels of reliability and performance as required by our subscription contracts. Accordingly, estimated refunds related to these agreements were not material to the periods presented.

We provide rebates and other credits within our contracts with certain customers, which are estimated based on the value expected to be earned or claimed on the related sales transaction. Overall, the transaction price is reduced to reflect our estimate of the amount of consideration to which we are entitled based on the terms of the contract. Estimated rebates and other credits were not material during the periods presented.

Disaggregation of Revenue

Subscription and support revenue is recognized over time and accounted for approximately 99% of our revenue in fiscal 2019, fiscal 2018 and fiscal 2017.

The following table summarizes the revenue by region based on the shipping address of customers who have contracted to use our cloud platform:

	Year Ended July 31,					
	2019		**2018**		**2017**	
	Amount	**% Revenue**	**Amount**	**% Revenue**	**Amount**	**% Revenue**
	(in thousands, except for percentage data)					
United States	$ 148,807	49 %	$ 86,123	45 %	$ 57,990	46 %
Europe, Middle East and Africa (*)	124,437	41	84,828	45	56,857	45
Asia Pacific	23,838	8	14,465	8	9,853	8
Other	5,754	2	4,758	2	1,017	1
Total	$ 302,836	100 %	$ 190,174	100 %	$ 125,717	100 %

(*) Revenue from the United Kingdom represented 10%, 11% and 13% of the total revenue for fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

The following table summarizes the revenue from contracts by type of customer:

	Year Ended July 31,					
	2019		2018		2017	
	Amount	% Revenue	Amount	% Revenue	Amount	% Revenue
	(in thousands, except for percentage data)					
Channel partners	$ 289,579	96 %	$ 175,798	92 %	$ 110,900	88 %
Direct customers	13,257	4	14,376	8	14,817	12
Total	$ 302,836	100 %	$ 190,174	100 %	$ 125,717	100 %

Contract Balances

Contract liabilities consist of deferred revenue and include payments received in advance of performance under the contract. Such amounts are recognized as revenue over the contractual period. In fiscal 2019, fiscal 2018 and fiscal 2017 we recognized revenue of $143.9 million, $85.3 million and $58.5 million, respectively, that was included in the corresponding contract liability balance at the beginning of the related fiscal year.

We receive payments from customers based upon contractual billing schedules and accounts receivable are recorded when the right to consideration becomes unconditional. Payment terms on invoiced amounts are typically 30 days but may be up to 90 days for some of our channel partners. Contract assets include amounts related to our contractual right to consideration for both completed and partially completed performance obligations that may not have been invoiced and such amounts have historically not been material.

Remaining Performance Obligations

The typical subscription and support term is one to three years. Most of our subscription and support contracts are non-cancelable over the contractual term. However, customers typically have the right to terminate their contracts for cause, if we fail to perform. As of July 31, 2019, the aggregate amount of the transaction price allocated to remaining performance obligations was $554.2 million. We expect to recognize 55% of the transaction price over the next 12 months and 98% of the transaction price over the next three years, with the remainder recognized thereafter.

Costs to Obtain and Fulfill a Contract

We capitalize sales commission and associated payroll taxes paid to internal sales personnel that are incremental to the acquisition of channel partner and direct customer contracts. These costs are recorded as deferred contract acquisition costs in the consolidated balance sheets. We determine whether costs should be deferred based on our sales compensation plans, if the commissions are in fact incremental and would not have occurred absent the customer contract.

Sales commissions for renewal of a contract are not considered commensurate with the commissions paid for the acquisition of the initial contract given the substantive difference in commission rates in proportion to their respective contract values. Commissions paid upon the initial acquisition of a contract are amortized over an estimated period of benefit of five years while commissions paid for renewal contracts are amortized over the contractual term of the renewals. Amortization of deferred contract acquisition costs is recognized on a straight-line basis commensurate with the pattern of revenue recognition and included in sales and marketing expense in the consolidated statements of operations. We determine the period of benefit for commissions paid for the acquisition of the initial contract by taking into consideration the expected subscription term and expected renewals of our customer contracts, the duration of our relationships with our customers, customer retention data, our technology development lifecycle and other factors. We periodically review the carrying amount of deferred contract acquisition costs to determine whether events or changes in circumstances have occurred that could impact the period of benefit of these deferred costs. We did not recognize any impairment losses of deferred contract acquisition costs during the periods presented.

The following table summarizes the activity of the deferred contract acquisition costs:

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Beginning balance	$ 55,910	$ 34,662	$ 21,137
Capitalization of contract acquisition costs	32,526	34,429	21,999
Amortization of deferred contract acquisition costs	(18,651)	(13,181)	(8,474)
Ending balance	$ 69,785	$ 55,910	$ 34,662
Deferred contract acquisition costs	$ 21,219	$ 16,136	$ 10,469
Deferred contract acquisition costs, noncurrent	48,566	39,774	24,193
Total deferred contract acquisition costs	$ 69,785	$ 55,910	$ 34,662

Sales commissions accrued but not paid at July 31, 2019 and 2018, totaled $9.0 million and $10.0 million, respectively, which are included within accrued compensation in the consolidated balance sheets.

Accounts Receivable and Allowance

Accounts receivable are recorded at the invoiced amount and are non-interest bearing. Accounts receivable are stated at their net realizable value, net of an allowance for doubtful accounts. We have a well-established collections history from our customers. Credit is extended to customers based on an evaluation of their financial condition and other factors. In determining the necessary allowance for doubtful accounts, management considers the current aging and financial condition of our customers, the amount of receivables in dispute and current payment patterns. The allowance for doubtful accounts has historically not been material. There were no material write-offs recognized in the periods presented. Accordingly, the movements in the allowance for doubtful accounts were not material for any of the periods presented. We do not have any off-balance-sheet credit exposure related to our customers.

Cash Equivalents and Short-Term Investments

We classify all highly liquid investments purchased with an original maturity of 90 days or less from the date of purchase as cash equivalents and all highly liquid investments with original maturities beyond 90 days at the time of purchase as short-term investments. Our cash equivalents and short-term investments consist of highly liquid investments in money market funds, U.S. treasury securities, U.S. government agency securities and corporate debt securities.

We classify our investments as available-for-sale investments and present them within current assets since these investments represent funds available for current operations and we have the ability and intent, if necessary, to liquidate any of these investments in order to meet our liquidity needs within the next 12 months. Our investments are carried at fair value, with unrealized gains and losses, net of tax, reported in accumulated other comprehensive income (loss) within stockholders' equity.

Our investments are reviewed periodically to determine whether a decline in a security's fair value below the amortized cost basis is other-than-temporary. If the cost of an individual investment exceeds its fair value, we consider available quantitative and qualitative factors such as the length of time and extent to which the market value has been less than the cost, the financial condition and near-term prospects of the issuer and our intent to sell, or whether it is more likely than not we will be required to sell the investment before recovery of the investment's amortized cost basis. If we believe that a decline in fair value is determined to be other-than-temporary, we write down these investments to fair value. There were no impairments recognized on our investments during the periods presented.

Interest income, amortization of premiums and discounts, realized gains and losses and declines in fair value judged to be other-than-temporary on our available-for-sale securities are included in interest income, net in the consolidated statements of operations. We use the specific identification method to determine the cost in calculating realized gains and losses upon the sale of these investments.

Fair Value of Financial Instruments

Our financial instruments consist of cash equivalents, short-term investments, accounts receivable, accounts payable and accrued liabilities. Cash equivalents and short-term investments are recorded at fair value. Accounts receivable, accounts payable and accrued liabilities are stated at their carrying value, which approximates fair value due to the short-time to the expected receipt or payment date. Assets recorded at fair value on a recurring basis in the consolidated balance sheets, consisting of cash equivalents and short-term investments, are categorized in accordance with the fair value hierarchy based upon the level of judgment associated with the inputs used to measure their fair values.

Restricted Cash

We maintained restricted cash of $0.6 million as of July 31, 2018 through letters of credit related to certain lease agreements. In fiscal 2019, the letters of credit were converted to unsecured letters of credit and the underlying funds were released. As of July 31, 2019, we did not have restricted cash.

Property and Equipment

Property and equipment, net are stated at historical cost net of accumulated depreciation. Property and equipment, excluding leasehold improvements, are depreciated using the straight-line method over the estimated useful lives of the respective assets, generally ranging from three to five years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful lives of the respective assets or the lease term. Expenditures for maintenance and repairs are expensed as incurred and significant improvements and betterments that substantially enhance the life of an asset are capitalized.

Capitalized Internal-Use Software Development Costs

We capitalize certain costs incurred during the application development stage in connection with software development for our cloud security platform. Costs related to preliminary project activities and post-implementation activities are expensed as incurred. Capitalized costs are recorded as part of property and equipment in the consolidated balance sheets. Maintenance and training costs are expensed as incurred. Capitalized internal-use software is amortized on a straight-line basis over its estimated useful life, which is generally three years, and is recorded as cost of revenue in the consolidated statements of operations. We capitalized costs associated with the development of software for internal-use of $3.7 million, $1.8 million and $0.4 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively. We recognized amortization expense of capitalized internal-use software of $1.0 million, $0.9 million and $1.2 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Business Combinations

We account for our business combinations using the acquisition method of accounting, which requires, among other things, allocation of the fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed at their estimated fair values on the acquisition date. The excess of the fair value of purchase consideration over the values of these identifiable assets and liabilities is recorded as goodwill. When determining the fair value of assets acquired and liabilities assumed, we make estimates and assumptions, especially with respect to intangible assets. Our estimates of fair value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable and, as a result, actual results may differ from estimates. During the measurement period, not to exceed one year from the date of acquisition, we may record adjustments to the assets acquired and liabilities assumed, with a corresponding offset to goodwill

if new information is obtained related to facts and circumstances that existed as of the acquisition date. After the measurement period, any subsequent adjustments are reflected in the consolidated statements of operations. Acquisition costs, such as legal and consulting fees, are expensed as incurred.

Goodwill and Other Long-Lived Assets, including Acquired Intangible Assets

Goodwill represents the excess of the fair value of purchase consideration in a business combination over the fair value of net tangible and intangible assets acquired. Goodwill amounts are not amortized, but rather tested for impairment at least annually or more often if circumstances indicate that the carrying value may not be recoverable. No indications of impairment of goodwill were noted during the periods presented.

Acquired intangible assets consist of identifiable intangible assets, including developed technology and customer relationships, resulting from business combinations. Acquired finite-lived intangible assets are initially recorded at fair value and are amortized on a straight-line basis over their estimated useful lives. Amortization expense of developed technology and customer relationships is recorded primarily within cost of revenues and sales and marketing expenses, respectively, in the consolidated statements of operations.

Long-lived assets, such as property and equipment and acquired intangible assets, are reviewed for impairment whenever events or changes in circumstances indicate that their carrying amounts may not be recoverable. We measure the recoverability of these assets by comparing the carrying amounts to the future undiscounted cash flows that these assets are expected to generate. If the total of the future undiscounted cash flows are less than the carrying amount of an asset, we record an impairment charge for the amount by which the carrying amount of the asset exceeds the fair value. Impairment losses on long-lived assets were not material during the periods presented.

Deferred Offering Costs

Deferred offering costs consisted of fees and expenses incurred in connection with the sale of our common stock in an IPO, including legal, accounting, printing and other IPO-related costs. Total deferred offering costs of $6.2 million were reclassified into stockholders' equity as a reduction of the net proceeds received from the IPO in the year ended July 31, 2018.

Leases

We lease our facilities under operating lease agreements and recognize related rent expense on a straight-line basis over the term of the lease. Some of our lease agreements contain rent holidays, scheduled rent increases, lease incentives and renewal options. Rent holidays and scheduled rent increases are included in the determination of rent expense to be recorded over the lease term. Lease incentives are recognized as a reduction of rent expense on a straight-line basis over the term of the lease. Renewals are not assumed in the determination of the lease term unless they are deemed to be reasonably assured at the inception of the lease. We begin recognizing rent expense on the date that we obtain the legal right to use and control of the leased space.

Stock-Based Compensation

Compensation expense related to stock-based awards granted to employees and non-employees is calculated based on the fair value of stock-based awards on the date of grant.

Stock-based compensation for common stock options is recognized based on the fair value of the awards granted, determined using the Black-Scholes option pricing model and a single option award approach. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, generally four years. Stock-based compensation for purchase rights granted under the employee stock purchase plan is based on the Black-Scholes option pricing model fair value of the number of awards estimated as of the beginning of the offering period. Stock-based

compensation expense is recognized following the straight-line attribution method over the offering period. Stock-based compensation for restricted stock units is measured based on the market closing price of our common stock on the grant date. Stock-based compensation expense is recognized on a straight-line basis over the requisite service period, generally four years.

Prior to our IPO, the fair value of our common stock for financial reporting purposes was determined considering numerous objective and subjective factors and required judgment to determine the fair value of common stock as of each grant date. Subsequent to the IPO, we determine the fair value using the market closing price of our common stock on the date of grant.

Research and Development

Our research and development expenses support our efforts to add new features to our existing offerings and to ensure the reliability, availability and scalability of our solutions. Our cloud platform is software-driven, and our research and development teams employ software engineers in the design and the related development, testing, certification and support of our solutions. Accordingly, the majority of our research and development expenses result from employee-related costs, including salaries, bonuses and benefits and costs associated with technology tools used by our engineers.

Advertising Expenses

Advertising expenses are charged to sales and marketing expense in the consolidated statements of operations as incurred. We recognized advertising expense of $8.6 million, $3.4 million and $1.8 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Warranties and Indemnification

Our cloud platform is generally warranted to be free of defects under normal use and to perform substantially in accordance with the subscription agreement. Additionally, our contracts generally include provisions for indemnifying customers and channel partners against liabilities if our services infringe or misappropriate a third party's intellectual property rights. Costs and liabilities incurred as a result of warranties and indemnification obligations were not material during the periods presented.

Legal Contingencies

We may be subject to legal proceedings and litigation arising from time to time. We record a liability when we believe that it is both probable that a loss has been incurred and the amount can be reasonably estimated. We periodically evaluate developments in our legal matters that could affect the amount of liability that we accrue, if any, and adjust, as appropriate. Until the final resolution of any such matter for which we may be required to record a liability, there may be a loss exposure in excess of the liability recorded and such amount could be significant. We expense legal fees as incurred.

Income Taxes

We account for income taxes using the asset and liability method. Deferred income taxes are recognized by applying the enacted statutory tax rates applicable to future years to differences between the carrying amounts of existing assets and liabilities and their respective tax bases and net operating loss and tax credit carryforwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. The measurement of deferred tax assets is reduced, if necessary, by a valuation allowance to amounts that are more likely than not to be realized.

We recognize tax benefits from uncertain tax positions only if we believe that it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such positions are then measured based on the largest benefit that has a greater than 50% likelihood of being realized upon settlement.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017, or the Tax Act, was enacted. The Tax Act contains several key tax provisions that affect us, including, but not limited to, those reducing the U.S. federal corporate tax rate, imposing a one-time mandatory transition tax on previously untaxed foreign earnings and changing rules related to the use of net operating loss carryforwards created in tax years beginning after December 31, 2017. During fiscal 2019, we completed our assessment of the impacts of the Tax Act including the remeasurement of our deferred taxes, the one-time mandatory transition tax, and the policy decision regarding whether to record deferred taxes associated with GILTI within the measurement period provided by SAB 118. Because of the full valuation allowance recorded against our U.S. federal deferred tax assets, there was no incremental tax expense (or benefit) recognized related to finalizing the accounting for the Tax Act. We have elected to account for the tax effects of GILTI as a period cost.

Comprehensive Loss

Comprehensive loss consists of two components, net loss and other comprehensive income (loss). Other comprehensive income (loss) refers to unrealized gains or losses on available-for-sale investments, net of tax, that are recorded as an element of stockholders' equity (deficit) and are excluded from net loss.

Net Loss Per Share Attributable to Common Stockholders

Prior to the IPO, basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. We consider all series of our convertible preferred stock to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the convertible preferred stock as the holders of our convertible preferred stock do not have a contractual obligation to share in our losses. Under the two-class method, net income is attributed to common stockholders and participating securities based on their participation rights.

Under the two-class method, basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Net loss attributable to common stockholders is calculated by adjusting the net loss for the accretion of redeemable convertible preferred stock outstanding during the period.

Diluted earnings per share attributable to common stockholders adjusts basic earnings per share for all potentially dilutive common stock equivalents outstanding during the period. Potentially dilutive securities consist of convertible preferred stock, stock options, shares subject to repurchase from early exercised stock options and estimated shares to be issued under the employee stock purchase plan. Since we have reported net losses for all periods presented, we have excluded all potentially dilutive securities from the calculation of the diluted net loss per share attributable to common stockholders as their effect is antidilutive and accordingly, basic and diluted net loss per share attributable to common stockholders is the same for all periods presented.

Upon closing of the IPO, all shares of convertible preferred stock then outstanding were automatically converted into an equivalent number of shares of common stock on a one-to-one basis and their carrying amount reclassified into stockholders' equity (deficit). As of July 31, 2019 and 2018, we did not have shares of preferred stock issued and outstanding.

Recently Adopted Accounting Pronouncements

In January 2017, the Financial Accounting Standard Board ("FASB") issued Accounting Standard Update ("ASU") No. 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business. The amendment was issued to clarify the definition of a business with the objective of adding guidance to assist entities with evaluating whether transactions should be accounted for as acquisitions of assets or businesses. This standard provides a screen test to determine when a set (inputs and processes that produce an output) is not a business. The screen requires that when substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets, the set is not a business. We adopted this standard as of August 1, 2018, and it did not have a material impact to our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350), which simplifies the accounting for goodwill impairments by eliminating step 2 from the goodwill impairment test. Instead, if the carrying amount of a reporting unit exceeds its fair value, an impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. For public business entities, this standard is effective for annual periods beginning after December 15, 2019. Early adoption is permitted. We early adopted this standard on February 1, 2019, and it did not have a material impact to our consolidated financial statements.

In May 2017, the FASB issued ASU No. 2017-09, Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting, which provides clarity in applying the guidance in Topic 718 around modifications of share-based payment awards. We adopted this standard as of August 1, 2018, and it did not have a material impact to our consolidated financial statements.

In August 2016, the FASB issued ASU No. 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments. The new standard eliminates the diversity in practice related to the classification of certain cash receipts and payments for debt prepayment or extinguishment costs, the maturing of a zero-coupon bond, the settlement of contingent liabilities arising from a business combination, proceeds from insurance settlements, distributions from certain equity method investees and beneficial interests obtained in a financial asset securitization. We adopted this standard as of August 1, 2018 using the retrospective transition method, and it did not have a material impact to our consolidated financial statements.

In November 2016, the FASB issued ASU No. 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires that amounts generally described as restricted cash or restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. We adopted this standard as of August 1, 2018 using the retrospective transition method and we have adjusted our prior period consolidated statement of cash flows to conform to the current presentation.

In June 2018, the FASB issued ASU No. 2018-07, Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting, which simplifies the accounting for equity awards granted to nonemployees. For public business entities, it is effective for fiscal years beginning after December 15, 2018, and interim periods therein. Early adoption is permitted. We early adopted this standard as of August 1, 2018 using the prospective transition method, which resulted in a cumulative-effect adjustment of $0.3 million recognized within stockholders' equity, as a reduction of additional paid-in capital against accumulated deficit, on the adoption date.

In August 2018, the FASB issued ASU No. 2018-15, “Intangibles-Goodwill and Other-Internal-Use Software (Subtopic 350-40): Customer’s Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract,” which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The new standard requires capitalized costs to be amortized on a straight-line basis generally over the term of the

arrangement, and the financial statement presentation for these capitalized costs would be the same as that of the fees related to the hosting arrangements. For public business entities, this standard is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. Early adoption is permitted. We early adopted this standard as of August 1, 2018 using the prospective transition method, and it did not have a material impact to our consolidated financial statements.

In August 2018, the SEC adopted the final rule under SEC Release No. 33-10532, "Disclosure Update and Simplification," amending certain disclosure requirements that have become redundant, duplicative, overlapping, outdated or superseded. In addition, the amendments expanded the disclosure requirements on the analysis of stockholders' equity for interim financial statements. Under the amendments, an analysis of changes in each caption of stockholders' equity presented in the balance sheet must be provided in a note or separate statement. The analysis should present a reconciliation of the beginning balance to the ending balance of each period for which a statement of comprehensive income is required to be filed. The final rule was effective November 5, 2018. We early adopted this requirement as of August 1, 2018, presenting the activity of the stockholder's equity accounts in the accompanying statements of redeemable convertible preferred stock and stockholders' equity (deficit) for the periods presented.

Recently Issued Accounting Pronouncements Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842) ("ASU 2016-02") as amended, which requires recognition of lease assets and liabilities for most leases with terms of more than 12 months. These standards are effective for fiscal years beginning after December 15, 2018, with early adoption permitted. We will adopt this standard effective August 1, 2019 on a modified retrospective basis and will not restate comparative periods. We plan to elect the package of practical expedients permitted under the transition guidance, which allows us to carryforward our historical lease classification, our assessment on whether a contract is or contains a lease, and our initial direct costs for any leases that exist prior to adoption of the new standard. We will also plan to elect to combine lease and non-lease components. In addition, we also plan to elect not to record leases that, at the lease commencement date, have a lease term of 12 months or less on the balance sheet. The standard will have a material impact on the Company's consolidated balance sheets, but it will not have a material impact on its consolidated statement of operations or consolidated statement of cash flows. Leases currently designated as operating leases and data centers in Note 7, Commitments and Contingencies, of these consolidated financial statements will be reported on the consolidated balance sheet upon adoption at their net present value, which will increase total assets and liabilities in the consolidated balance sheets.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments. This ASU amends guidance on reporting credit losses for assets held at amortized cost basis and available-for-sale debt securities to require that credit losses on available-for-sale debt securities be presented as an allowance rather than as a write-down. The measurement of credit losses for newly recognized financial assets and subsequent changes in the allowance for credit losses are recorded in the statements of operations. For public business entities, it is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. We are currently evaluating the potential impact of this standard on our consolidated financial statements.

Note 2. Cash Equivalents and Short-Term Investments

Cash equivalents and short-term investments consisted of the following as of July 31, 2019:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Cash equivalents:				
Money market funds	$ 55,036	$ —	$ —	$ 55,036
Short-term investments:				
U.S. treasury securities	$ 125,042	$ 248	$ (9)	$ 125,281
U.S. government agency securities	64,689	7	(50)	64,646
Corporate debt securities	96,047	207	(19)	96,235
Total	$ 285,778	$ 462	$ (78)	$ 286,162
Total cash equivalents and short-term investments	$ 340,814	$ 462	$ (78)	$ 341,198

Cash equivalents and short-term investments consisted of the following as of July 31, 2018:

	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
	(in thousands)			
Cash equivalents:				
Money market funds	$ 74,408	$ —	$ —	$ 74,408
U.S. treasury securities	17,488	—	—	17,488
U.S. government agency securities	1,999	—	—	1,999
Corporate debt securities	11,010	—	(1)	11,009
Total	$ 104,905	$ —	$ (1)	$ 104,904
Short-term investments:				
U.S. treasury securities	$ 55,768	$ —	$ (17)	$ 55,751
U.S. government agency securities	17,953	—	(19)	17,934
Corporate debt securities	89,362	1	(88)	89,275
Total	$ 163,083	$ 1	$ (124)	$ 162,960
Total cash equivalents and short-term investments	$ 267,988	$ 1	$ (125)	$ 267,864

The amortized cost and fair value of our short-term investments based on their stated maturities consisted of the following as of July 31, 2019:

	Amortized Cost	Fair Value
	(in thousands)	
Due within one year	$ 196,046	$ 196,194
Due between one and two years	89,732	89,968
Total	$ 285,778	$ 286,162

Short-term investments that were in an unrealized loss position consisted of the following as of July 31, 2019:

	Less than 12 Months		Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
			(in thousands)			
U.S. treasury securities	$ 5,719	$ (9)	$ —	$ —	$ 5,719	$ (9)
U.S. government agency securities	36,550	(37)	9,992	(13)	46,542	(50)
Corporate debt securities	14,279	(16)	8,364	(3)	22,643	(19)
Total	$ 56,548	$ (62)	$ 18,356	$ (16)	$ 74,904	$ (78)

The unrealized losses for the above securities as of July 31, 2019 were primarily attributable to changes in interest rates.

Short-term investments that were in an unrealized loss position consisted of the following as of July 31, 2018:

	Less than 12 Months		Greater than 12 Months		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
			(in thousands)			
U.S. treasury securities	$ 55,750	$ (17)	$ —	$ —	$ 55,750	$ (17)
U.S. government agency securities	17,934	(19)	—	—	17,934	(19)
Corporate debt securities	83,332	(88)	—	—	83,332	(88)
Total	$ 157,016	$ (124)	$ —	$ —	$ 157,016	$ (124)

We review the individual securities that have unrealized losses in our short-term investment portfolio on a regular basis to evaluate whether or not any security has experienced an other-than-temporary decline in fair value. We evaluate, among others, whether we have the intention to sell any of these investments and whether it is not more likely than not that we will be required to sell any of them before recovery of the amortized cost basis. Based on this evaluation, we determined that there were no other-than-temporary impairments associated with our short-term investments as of July 31, 2019.

Note 3. Fair Value Measurements

Fair value is defined as the exchange price that would be received from sale of an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We measure our financial assets and liabilities at fair value at each reporting period using a fair value hierarchy which requires us to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's classification within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs may be used to measure fair value:

- Level I - Observable inputs are unadjusted quoted prices in active markets for identical assets or liabilities;
- Level II - Observable inputs are quoted prices for similar assets and liabilities in active markets or inputs other than quoted prices that are observable for the assets or liabilities, either directly or indirectly through market corroboration, for substantially the full term of the financial instruments; and
- Level III - Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities. These inputs are based on our own assumptions used to measure assets and liabilities at fair value and require significant management judgment or estimation.

Our money market funds are classified within Level I due to the highly liquid nature of these assets and have quoted prices in active markets.

Certain of our investments in available-for-sale securities (i.e., U.S. treasury securities, U.S. government agency securities and corporate securities) are classified within Level II. The fair value of these securities is priced by using inputs based on non-binding market consensus prices that are primarily corroborated by observable market data or quoted market prices for similar instruments.

Assets that are measured at fair value on a recurring basis consisted of the following as of July 31, 2019:

	Total	Level I Quoted Prices in Active Markets for Identical Assets	Level II Significant Other Observable Inputs	Level III Significant Unobservable Inputs
	(in thousands)			
Cash equivalents:				
Money market funds	$ 55,036	$ 55,036	$ —	$ —
Short-term investments:				
U.S. treasury securities	$ 125,281	$ —	$ 125,281	$ —
U.S. government agency securities	64,646	—	64,646	—
Corporate debt securities	96,235	—	96,235	—
Total	$ 286,162	$ —	$ 286,162	$ —
Total cash equivalents and short-term investments	$ 341,198	$ 55,036	$ 286,162	$ —

Assets that are measured at fair value on a recurring basis consisted of the following as of July 31, 2018:

	Total	Level I Quoted Prices in Active Markets for Identical Assets	Level II Significant Other Observable Inputs	Level III Significant Unobservable Inputs
	(in thousands)			
Cash equivalents:				
Money market funds	$ 74,408	$ 74,408	$ —	$ —
U.S. treasury securities	17,488	—	17,488	—
U.S. government agency securities	1,999	—	1,999	—
Corporate debt securities	11,009	—	11,009	—
Total	$ 104,904	$ 74,408	$ 30,496	$ —
Short-term investments:				
U.S. treasury securities	$ 55,751	$ —	$ 55,751	$ —
U.S. government agency securities	17,934	—	17,934	—
Corporate debt securities	89,275	—	89,275	—
Total	$ 162,960	$ —	$ 162,960	$ —
Total cash equivalents and short-term investments	$ 267,864	$ 74,408	$ 193,456	$ —

We did not have transfers between levels of the fair value hierarchy of assets measured at fair value during the periods presented.

Note 4. Property and Equipment

Property and equipment consisted of the following:

	Estimated Useful Life	July 31, 2019	2018
		(in thousands)	
Hosting equipment	3 years	$ 56,910	$ 30,743
Computers and equipment	3-5 years	2,837	2,335
Purchased software	3 years	1,311	1,324
Capitalized internal-use software	3 years	9,904	6,163
Furniture and fixtures	5 years	1,566	1,478
Leasehold improvements	Shorter of useful life or lease term	2,255	2,123
Property and equipment, gross		74,783	44,166
Less: Accumulated depreciation and amortization		(33,737)	(24,401)
Total property and equipment, net		$ 41,046	$ 19,765

We recognized depreciation and amortization expense on property and equipment of $10.4 million, $8.0 million and $6.8 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Note 5. Business Combinations

In the fourth quarter of fiscal 2019, we completed the acquisition of an early stage software company, Appsulate, Inc. Pursuant to the terms of the purchase agreement, the aggregate purchase price was approximately $12.9 million, of which $10.3 million was paid in cash on the acquisition date and $2.3 million is to be paid upon the lapse of an indemnification period within 18 months of the acquisition date. As of July 31, 2019, this holdback amount is reflected within other noncurrent liabilities in the consolidated balance sheets.

In connection with this acquisition, we retained the services of a third-party firm to complete a valuation of the acquired identifiable intangible assets as of the closing date in order to allocate the purchase price consideration. The purchase price allocation resulted in the recognition of $5.9 million of goodwill, exclusive of goodwill recognized as a result of deferred tax liability generated by the acquired developed technology, and $7.0 million of developed technology. The developed technology was valued using a replacement cost approach, which is based on the cost of a market participant to reconstruct a substitute asset of comparable utility. Goodwill represents the excess of the purchase price paid over the fair value of the net assets acquired and is primarily attributable to the acquired workforce and expected operating synergies. Goodwill is not expected to be deductible for income tax purposes. We incurred approximately $0.3 million of acquisition related costs, which were recorded as general and administrative expenses in fiscal 2019.

The acquisition was a stock transaction for tax purposes. As a result, we recognized a deferred tax liability for approximately $1.4 million, which increased goodwill. As we have a full valuation allowance as of July 31, 2019, we recorded an income tax benefit for this deferred tax liability in the consolidated statement of operations for fiscal 2019. Refer to Note 11, Income Taxes, of these consolidated financial statements for further information.

The fair value of the net assets acquired as of the closing date, including goodwill, consisted of the following:

	Amount	Estimated Useful Life
	(in thousands)	
Cash and cash equivalents	$ 13	
Amortizable intangible assets:		
Developed technology	7,000	4 years
Goodwill	7,281	
Total assets acquired	14,294	
Deferred tax liability	(1,422)	
Total	$ 12,872	

The initial allocation of the purchase price was based on a preliminary valuation and assumptions and is subject to change within the measurement period. We expect to finalize the allocation of the purchase price as soon as practicable but no later than one year from the acquisition date.

In fiscal 2019, we also completed an additional business combination with a purchase price of $1.1 million of which $0.8 million was paid in cash on the acquisition date and $0.3 million is to be paid upon the lapse of an indemnification period within 18 months of the acquisition date. As of July 31, 2019, this holdback amount is reflected within other noncurrent liabilities in the consolidated balance sheets. Intangible assets acquired and goodwill recorded for this acquisition were not material to our consolidated financial statements.

The pro forma financial information assuming these acquisitions had occurred as of the beginning of the fiscal year prior to the fiscal year of the acquisitions, as well as the revenue and earnings generated during the current fiscal year, were not material for disclosure purposes, individually and in the aggregate.

Note 6. Goodwill and Acquired Intangible Assets

The changes in the carrying amount of goodwill consisted of the following:

	Amount
	(in thousands)
Balance as of July 31, 2018	$ —
Goodwill acquired	7,479
Balance as of July 31, 2019	$ 7,479

Acquired intangible assets consist of developed technology and customer relationships acquired through asset and business acquisitions. Acquired intangible assets are amortized using the straight-line method over their useful lives. The changes in acquired intangible assets consisted of the following:

	Gross			Accumulated Amortization			Net		
	July 31, 2018	Additions	July 31, 2019	July 31, 2018	Amortization Expense	July 31, 2019	July 31, 2018	July 31, 2019	Weighted Average Useful life
	(in thousands)								(years)
Developed technology	$ —	$ 9,456	$ 9,456	$ —	$ (897)	$ (897)	$ —	$ 8,559	3.5
Customer relationships	—	160	160	—	(11)	(11)	—	149	4.7
Total	$ —	$ 9,616	$ 9,616	$ —	$ (908)	$ (908)	$ —	$ 8,708	3.5

Amortization expense of developed technology and customer relationships is recorded primarily within cost of revenues, sales and marketing expenses and research and development expenses in the consolidated statements of operations.

Future amortization expense of acquired intangible assets consisted of the following as of July 31, 2019:

	Amortization Expense
	(in thousands)
Year ending July 31,	
2020	$ 2,602
2021	2,601
2022	1,994
2023	1,490
2024	21
Total	$ 8,708

Note 7. Commitments and Contingencies

Operating Leases

We lease our office space under various operating lease agreements expiring at various dates through September 2026. Certain of these lease agreements have escalating rent payments. We recognize rent expense under such agreements on a straight-line basis over the lease term. The difference between the rent paid and the straight-line rent expense is recorded as deferred rent, which current portion is included within accrued expenses and other current liabilities and noncurrent portion is included within other noncurrent liabilities in the consolidated balance sheets.

Effective April 2019, we entered into a sublease agreement, or lease agreement, for approximately 172,000 square feet of corporate office space in San Jose, California (the "leased premises"), which will serve as our new corporate headquarters. The lease agreement has a commencement date of October 1, 2019, and its initial lease term expires in September 2026. We will initially occupy approximately 69,000 square feet with the remainder of the leased premises to be occupied in phases over the initial term of the lease, with full occupancy occurring by October 2025. The total rent through the end of the initial lease term is approximately $37.3 million, net of free rental periods. In addition to the base rent, we will also be responsible for our pro rata portion of operating and other related expenses. The lease contains escalating rent payments and lease incentives. In connection with this lease agreement, we were required to issue an unsecured letter of credit for $2.8 million to the sublessor to secure our payment obligations. Future non-cancelable minimum lease payments under this lease agreement are reflected in the below table. As of July 31, 2019, we had not taken possession of the initial phase and accordingly, we have not recognized any rent expense associated with this lease agreement in fiscal 2019.

Future minimum payments under non-cancelable operating leases consisted of the following as of July 31, 2019:

	Operating Leases
	(in thousands)
Year ending July 31,	
2020	$ 4,624
2021	5,836
2022	4,871
2023	6,143
2024	6,509
Thereafter	15,977
Total	$ 43,960

Rent expense was $3.0 million, $2.5 million and $1.7 million in fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Data Center Contract Commitments

We enter into long-term non-cancelable agreements with providers in various countries to purchase data center capacity, such as bandwidth and colocation space, for our cloud platform.

Future minimum payments under non-cancelable data center contracts consisted of the following as of July 31, 2019:

	Data Center Contracts
	(in thousands)
Year ending July 31,	
2020	$ 11,766
2021	9,890
2022	5,533
2023	106
Total	$ 27,295

Bandwidth and colocation costs are recognized as cost of revenue and were $13.8 million, $9.4 million and $6.9 million for fiscal 2019, fiscal 2018 and fiscal 2017, respectively.

Non-cancelable Purchase Obligations

In the normal course of business, we enter into non-cancelable purchase commitments with various parties to purchase products and services such as technology equipment, subscription-based cloud service arrangements, corporate events and consulting services. As of July 31, 2019 and 2018, we had outstanding non-cancelable purchase obligations with a term of 12 months or longer of $2.5 million and $3.1 million, respectively.

Legal Matters

Symantec Litigation

We are currently involved in legal proceedings with Symantec Corporation ("Symantec"). On December 12, 2016, Symantec filed a complaint, which we refer to as "Symantec Case 1," in the U.S. District Court for the District of Delaware alleging that "Zscaler’s cloud security platform" infringes U.S. Patent Nos. 6,279,113, 7,203,959 ("’959 patent"), 7,246,227

("'227 patent"), 7,392,543, 7,735,116, 8,181,036 and 8,661,498. The complaint seeks compensatory damages, an injunction, enhanced damages and attorney fees. On August 2, 2017, the court granted our motion to transfer Symantec Case 1 from the District of Delaware to the Northern District of California. On March 23, 2018, the Northern District of California court granted our motion to dismiss the asserted claims of the '959 and '227 patents as invalid based on unpatentable subject matter.

On April 18, 2017, Symantec filed a second complaint, which we refer to as "Symantec Case 2," in the U.S. District Court for the District of Delaware alleging that "Zscaler's cloud security platform" infringes U.S. Patent Nos. 6,285,658 ("'658 patent"), 7,360,249 ("'249 patent"), 7,587,488 ("'488 patent"), 8,316,429 ("'429 patent"), 8,316,446 ("'446 patent"), 8,402,540 and 9,525,696 ("'696 patent"). The complaint seeks compensatory damages, an injunction, enhanced damages and attorney fees.

On June 22, 2017, Symantec filed a notice of voluntary dismissal of its complaint in Symantec Case 2 along with a new complaint alleging infringement of the same patents and adding Symantec Limited as a plaintiff and alleging willful infringement of the '429 and '446 patents. On July 31, 2017, the court granted our motion to transfer Symantec Case 2 from the District of Delaware to the Northern District of California. On May 21, 2018, Symantec filed an amended complaint adding allegations of willful infringement of all of the asserted patents in Symantec Case 2. On December 12, 2018, Symantec filed a notice of voluntary dismissal with prejudice of the '658, '249, and '696 Patents asserted in Symantec Case 2. On March 4, 2019, the court granted our motion to dismiss the asserted claims of the '488 patent as invalid based on unpatentable subject matter.

We have also received letters from Symantec alleging that our "cloud security platform" infringes U.S. Patent Nos. 7,031,327, 7,496,661, 7,543,036 and 7,624,110.

We believe that our technology does not infringe Symantec's asserted patents and that these patents are invalid.

Should Symantec prevail with its infringement allegations, we could be (i) required to pay substantial damages for past and future sales and/or licensing of our services, (ii) enjoined from making, using, selling or otherwise disposing of our services if a license or other right to continue selling our services is not made available to us, and (iii) required to pay substantial ongoing royalties and comply with unfavorable terms if such a license is made available to us. Any of these outcomes could result in a material adverse effect on our business. Even if we were to prevail, this litigation has been and could continue to be costly and time-consuming, could divert the attention of our management and key personnel from our business operations, could deter distributors from selling or licensing our services, and could dissuade potential customers from purchasing our services, which would also materially harm our business. The expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations. In addition, any public announcements of the results of any proceedings in Symantec Case 1 or Symantec Case 2 could be negatively perceived by industry or financial analysts and investors, and could cause our stock price to experience volatility or decline.

We have not recorded a liability with respect to Symantec Case 1 or Symantec Case 2 based on our determination that a loss in either case is not probable under the applicable accounting standards.

We are vigorously defending Symantec Case 1 and Symantec Case 2. We are unable to predict the likelihood of success of Symantec's infringement claims.

Finjan Litigation

On December 5, 2017, Finjan, Inc. filed a complaint, in the U.S. District Court for the Northern District of California, alleging that certain of our products infringed four U.S. patents held by Finjan, Inc. and seeking compensatory damages, an

injunction, enhanced damages and attorney fees. On April 30, 2019, we entered into patent license and settlement agreements with Finjan, Inc. and its affiliates (collectively "Finjan"), resolving all claims in the lawsuit, and made a payment of $7.3 million to Finjan, Inc. Pursuant to the agreements, Finjan provided us with a worldwide fully paid license to the broader Finjan patent portfolio, releases for past damages, and covenants not to sue. On May 1, 2019, the court dismissed Finjan, Inc.'s complaint with prejudice. We determined that there is no material future economic benefit from the acquired Finjan license and accordingly, we recorded an incremental expense of $4.1 million within general and administrative expenses in the consolidated statement of operations in fiscal 2019. In prior periods, we previously had recorded accruals related to this litigation for $0.7 million in fiscal 2018 and $2.5 million in fiscal 2017.

Other Litigation and Claims

In addition, from time to time we are a party to various litigation matters and subject to claims that arise in the ordinary course of business, including patent, commercial, product liability, employment, class action, whistleblower and other litigation and claims, as well as governmental and other regulatory investigations and proceedings. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. Except as otherwise described above, there is no pending or threatened legal proceeding to which we are a party that, in our opinion, is likely to have a material adverse effect on our future financial results or operations; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors. The expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations.

Note 8. Convertible Preferred Stock

Upon completion of our IPO, as further described in Note 1, Business and Summary of Significant Accounting Policies, of these consolidated financial statements all shares of convertible preferred stock then outstanding, totaling 72,500,750 shares, were automatically converted into an equivalent number of shares of common stock on a one-to-one basis and their carrying value, totaling $207.3 million, inclusive of accretion of Series C and D redeemable convertible preferred stock of $24.7 million, was reclassified to stockholders' equity.

Prior to the IPO, we recognized accretion to the redemption price of Series C and D redeemable convertible preferred stock. Accretion was recognized as a reduction of additional paid-in capital with a corresponding increase to the carrying value of Series C and D redeemable convertible preferred stock. Upon completion of the IPO, the accretion rights of Series C and D redeemable convertible preferred stock were terminated. We recognized accretion of Series C and D redeemable convertible preferred stock of $6.3 million and $9.6 million in fiscal 2018 and fiscal 2017, respectively.

Note 9. Common Stock

Holders of our common stock are entitled to one vote for each share of common stock held and are not entitled to receive dividends unless declared by our board of directors.

Common Stock Reserved for Future Issuance

The following table summarizes our shares of common stock reserved for future issuance:

	July 31, 2019 (in thousands)
Equity awards outstanding:	
Stock options	8,861
Unvested restricted stock units	4,152
Unvested performance stock units	764
Share purchase rights committed under the employee stock purchase plan	913
Equity awards available for future grants:	
Equity incentive plans	15,708
Employee stock purchase plan	1,353
Total	31,751

Note 10. Stock-Based Compensation

Equity Incentive Plans

We adopted the Fiscal Year 2018 Equity Incentive Plan (the "2018 Plan") in fiscal 2018 and the 2007 Stock Plan (the "2007 Plan") in fiscal 2008, collectively referred to as the "Plans." Equity incentive awards which may be granted to eligible participants under the Plans include restricted stock units, restricted stock, stock options, nonstatutory stock options, stock appreciation rights, performance units and performance shares. In March 2018, in connection with our IPO, the 2007 Plan was terminated along with its remaining balance of shares of common stock available for grant. With the establishment of the 2018 Plan, we no longer grant stock-based awards under the 2007 Plan and any shares underlying stock options that expire or terminate or are forfeited or repurchased by us under the 2007 Plan are automatically transferred to the 2018 Plan.

Stock Options

Under the Plans, the exercise price of a stock option grant must be not less than 100% of the fair market value of the common stock on the date of grant. Generally, stock options vest over four years with 25% of the option shares vesting one year from the date of grant and monthly thereafter over the remaining vesting term. Stock options granted under the 2018 Plan and 2007 Plan are exercisable over a maximum term of ten years and seven years, respectively, from the date of grant. Stock options that are forfeited or canceled shall become available for future grant or sale under the 2018 Plan.

As of July 31, 2019, we have reserved a total of approximately 18,688,000 shares of common stock for the issuance of equity awards under the 2018 Plan, of which approximately 15,708,000 shares were available for grant. The number of shares

of common stock available for issuance under the 2018 Plan also includes an annual increase on the first day of each fiscal year pursuant to its automatic annual increase provision.

The stock option activity consisted of the following:

	Outstanding Stock Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
	(in thousands, except per share amounts)			
Balance as of July 31, 2018	16,175	$6.20	5.1	$ 470,860
Stock options exercised	(6,277)	$4.76		$ 300,859
Stock options canceled, forfeited or expired	(1,037)	$6.77		
Balance as of July 31, 2019	8,861	$7.16	4.6	$ 683,294
Exercisable and expected to vest as of July 31, 2018	5,499	$3.97	4.0	$ 172,317
Exercisable and expected to vest as of July 31, 2019	3,311	$5.60	4.0	$ 260,479

The aggregate intrinsic value of the options exercised represents the difference between the estimated fair value of our common stock on the date of exercise and their exercise price. The total intrinsic value of options exercised was $300.9 million, $16.7 million and $4.5 million for fiscal 2019, fiscal 2018 and fiscal 2017, respectively. From the date of our IPO through July 31, 2019, we did not grant additional stock options. The weighted-average grant-date fair value per share of awards granted was $3.77 and $2.10 for fiscal 2018 and fiscal 2017, respectively.

We estimated the fair value of stock options using the Black-Scholes option pricing model with the following assumptions:

	Year Ended July 31,	
	2018	2017
Expected term (in years)	4.6 - 5.1	4.6
Expected stock price volatility	40.3% - 42.3%	41.4% - 43.3%
Risk-free interest rate	1.7% - 2.8%	1.1% - 2.0%
Dividend yield	0.0%	0.0%

Restricted Stock Units

The 2018 Plan allows for the grant of restricted stock units ("RSUs"). Generally, RSUs are subject to a four-year vesting period, with 25% of the shares vesting approximately one year from the vesting commencing date and quarterly thereafter over the remaining vesting term. We began granting RSUs in the fourth quarter of fiscal 2018.

The RSU activity consisted of the following:

	RSUs Outstanding	Weighted-Average Grant Date Fair Value per Share	Aggregate Intrinsic Value
	(in thousands, except per share data)		
Balance as of July 31, 2018	209	$26.26	$ 7,394
Granted	4,176	$49.13	
Vested	(89)	$33.52	6,608
Canceled or forfeited	(144)	$43.52	
Balance as of July 31, 2019	4,152	$48.51	$ 349,872

Performance Stock Units

The 2018 Plan allows for the grant of performance stock units ("PSUs"). In October 2018, the compensation committee of our board of directors approved the grant of PSUs to certain members of our executive team corresponding to the performance periods of fiscal 2019, fiscal 2020, fiscal 2021 and fiscal 2022. Additionally, the compensation committee determined and approved the corporate performance metrics for fiscal 2019. The corporate performance conditions of performance periods beyond fiscal 2019 will be established and approved at the beginning of each related fiscal year. The right to receive such awards is subject to achievement of the defined corporate performance metrics for each fiscal year and continuous service by the employee. Any earned awards are subject to additional time-based vesting in accordance with the respective award agreement. PSUs related to the fiscal 2019 performance period, totaling approximately 464,000 shares with a weighted-average grant date fair value per share of $36.90, were forfeited effective at the end of fiscal 2019, resulting in a reversal of $3.8 million of accrued stock-based compensation expense recognized in the nine months ended April 30, 2019. Accordingly, no stock-based compensation expense was recognized for these awards for fiscal 2019.

The number of unvested PSUs outstanding consisted of the following as of July 31, 2019:

Performance periods	Underlying Shares (in thousands)
Fiscal 2020	464
Fiscal 2021	150
Fiscal 2022	150
Total	764

Employee Stock Purchase Plan

We adopted the Fiscal Year 2018 Employee Stock Purchase Plan ("ESPP") in the third quarter of fiscal 2018. As of July 31, 2019, a total of approximately 3,398,000 shares of common stock were reserved for issuance under the ESPP. The ESPP provides eligible employees with an opportunity to purchase shares of our common stock through payroll deductions of up to 15% of their eligible compensation. A participant may purchase a maximum of 3,000 shares of common stock during a

purchase period. Amounts deducted and accumulated by the participant are used to purchase shares of our common stock at the end of each six-month purchase period. The purchase price of the shares is 85% of the lower of the fair market value of our common stock on (i) the first trading day of the applicable offering period and (ii) the last trading day of each purchase period in the related offering period. The ESPP provides for consecutive offering periods that will typically have a duration of approximately 24 months in length and is comprised of four purchase periods of approximately six months in length. The offering periods are scheduled to start on the first trading day on or after June 15 and December 15 of each year. Employee payroll contributions ultimately used to purchase shares will be reclassified to stockholders' equity on the purchase date. The number of shares of common stock available for issuance under ESPP also includes an annual increase on the first day of each fiscal year pursuant to its automatic annual increase provision.

Our first ESPP offering period commenced on March 16, 2018 and its first purchase period ended on December 17, 2018. During fiscal 2019, employees purchased approximately 1,131,000 shares of common stock under the ESPP at an average purchase price of $14.53 per share, resulting in total cash proceeds of $16.4 million. ESPP employee payroll contributions accrued at July 31, 2019 and 2018, totaled $2.1 million and $4.6 million, respectively, and are included within accrued compensation in the consolidated balance sheets.

The fair value of the purchase rights granted under the ESPP was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	Year Ended July 31,	
	2019	**2018**
Expected term (in years)	0.5 - 2.0	0.5 - 2.3
Expected stock price volatility	44.0% - 61.9%	30.7% - 53.2%
Risk-free interest rate	1.9% - 2.7%	2.0% - 2.6%
Dividend yield	0.0%	0.0%

Early Exercised Stock Options

The 2007 Plan allowed for the early exercise of stock options for certain individuals as determined by our board of directors. The consideration received for an early exercised stock option is considered to be a deposit of the exercise price and the related proceed is initially recorded as a liability in the consolidated balance and reclassified to additional paid-in capital as the awards vest. Upon an employee's termination, we have the option to repurchase unvested shares at a price per share equal to the lesser of the fair market value of the shares at the time of the repurchase or the original purchase price. We reclassified to additional paid-in capital $1.0 million, $3.2 million and $3.7 million related to awards vested during fiscal 2019, fiscal 2018 and fiscal 2017, respectively. As of July 31, 2019 and 2018, the number of shares of common stock subject to repurchase was approximately 122,000 shares and 423,000 shares with an aggregate exercise price of $0.6 million and $1.6 million, respectively. The liability for early exercised stock options is included within accrued expenses and other current liabilities in the consolidated balance sheets.

Notes Receivable from Stockholders

Prior to fiscal 2017, we entered into notes receivable agreements with certain of our current and former executives and employees in connection with the exercise of their stock options. The outstanding principal amount and related accrued interest on the notes are presented as contra-equity in the consolidated balance sheets until the notes are fully settled. As of July 31, 2018, the carrying amount of the outstanding notes receivable was $2.1 million, inclusive of accrued interest of $0.1 million. During fiscal 2019, the principal amount and accrued interest of the outstanding notes were fully repaid, resulting in cash proceeds of $2.1 million.

Stock-based Compensation Expense

The components of stock-based compensation expense recognized in the consolidated statements of operations consisted of the following:

	Year Ended July 31,		
	2019	2018	2017
		(in thousands)	
Cost of revenue	$ 2,926	$ 757	$ 348
Sales and marketing	23,118	5,044	2,794
Research and development	15,090	3,045	5,574
General and administrative	5,289	2,378	1,203
Total	$ 46,423	$ 11,224	$ 9,919

As of July 31, 2019, the unrecognized stock-based compensation cost related to outstanding equity-based awards was $194.6 million, which we expect to be amortized over a weighted-average period of 3.2 years.

In fiscal 2019, we capitalized stock-based compensation associated with the development of software for internal-use of $0.5 million. Stock-based compensation related to projects capitalized in prior periods was immaterial.

Note 11. Income Taxes

The following table sets forth the geographical breakdown of the income (loss) before the provision for income taxes:

	Year ended July 31,		
	2019	2018	2017
	(in thousands)		
Domestic	$ (34,145)	$ (36,455)	$ (36,874)
International	6,233	4,146	2,291
Loss before income taxes	$ (27,912)	$ (32,309)	$ (34,583)

The following table sets forth the components of the provision for income taxes:

	Year ended July 31,		
	2019	2018	2017
Current:	(in thousands)		
Federal	$ —	$ —	$ —
State	64	(2)	31
Foreign	2,325	1,480	874
Total current tax expense	2,389	1,478	905
Deferred:			
Federal	(1,431)	—	—
State	(107)	—	—
Foreign	(108)	(141)	(28)
Total deferred tax expense	(1,646)	(141)	(28)
Total provision for income taxes	$ 743	$ 1,337	$ 877

The following table presents the reconciliation of the statutory federal income tax rate to our effective tax rate:

	Year ended July 31,		
	2019	2018	2017
Tax at federal statutory rate	21.0 %	21.0 %	34.0 %
State taxes	0.1	—	1.5
Impact of foreign rate differential	(0.9)	0.3	(1.7)
Meals and entertainment	(1.9)	(1.3)	(0.5)
Stock-based compensation	147.2	(3.8)	(2.8)
Impact of U.S. tax reform	—	(58.6)	—
Provision to return adjustments	1.2	2.8	(0.3)
U.S. tax credits	10.0	3.7	—
Change in valuation allowance	(176.9)	33.5	(32.4)
Withholding Tax	(2.4)	(1.1)	—
Other	(0.1)	(0.6)	(0.3)
Effective tax rate	(2.7)%	(4.1)%	(2.5)%

Our estimated effective tax rate for the periods presented differs from the U.S. statutory rate primarily due to the benefit of a portion of our earnings being taxed at rates lower than the U.S. statutory rate and the benefit of stock compensation deductions, offset by the impact of the valuation allowance we maintain against our U.S. federal and state deferred tax assets. The impact of the Tax Act includes the effect of remeasuring our deferred tax assets and liabilities at 21% plus the effects of the one-time mandatory transition tax. During the current fiscal year, we recognized an income tax benefit of $1.4 million as a result of a release in our valuation allowance on deferred tax assets as a result of deferred taxes recorded in purchase accounting as part of the Appsulate, Inc. acquisition.

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 or the Tax Act was enacted. The Tax Act contains several key tax provisions that affect us, including, but not limited to, reducing the U.S. federal corporate tax rate from 34% to 21% imposing a one-time mandatory transition tax on previously untaxed foreign earnings, and changing rules related to the use of net operating loss carryforwards created in tax years beginning after December 31, 2017. In December 2017, the SEC staff issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act (“SAB 118”), which allows us to record provisional amounts during a measurement period not to extend beyond one year past the enactment date.

We currently maintain a full valuation allowance recorded against our U.S. federal deferred tax assets. As such, the provisional estimate associated with the remeasurement of our deferred tax assets and the one-time mandatory transition tax was offset by a change in our valuation allowance which resulted in no income tax expense or benefit. During fiscal 2019, we completed our accounting for the Tax Act in accordance with SAB 118. Because of the full valuation allowance recorded against our U.S. federal deferred tax assets, there was no incremental tax expense (or benefit) recognized related to finalizing the accounting for the Tax Act. We have elected to account for the tax effects of Global Intangible Low Taxed Income ("GILTI") as a period cost.

The following table presents the tax effects of temporary differences that give rise to significant portions of our deferred tax assets and liabilities:

	July 31,	
	2019	2018
	(in thousands)	
Deferred tax assets:		
Net operating losses carryovers	$ 87,413	$ 41,794
Accruals and reserves	1,763	2,863
Deferred revenue	14,752	6,071
Tax credits carryovers	10,330	6,118
Stock-based compensation	6,112	784
Property and equipment	560	303
Other	232	347
Gross deferred tax assets	121,162	58,280
Less: Valuation allowance	(103,732)	(45,578)
Total deferred tax assets	17,430	12,702
Deferred tax liabilities:		
Intangible Assets	(1,178)	—
Deferred contract acquisition costs	(15,906)	(12,561)
Other	(89)	—
Total deferred tax liabilities	(17,173)	(12,561)
Net deferred tax assets	$ 257	$ 141

A deferred tax liability has not been recognized on the excess of the amount for financial reporting over the tax basis of investments in foreign subsidiaries that are indefinitely reinvested outside the U.S. Income taxes are generally incurred upon a repatriation of assets, a sale, or a liquidation of the subsidiary. The excess of the amount for financial reporting over the tax basis in the investments in foreign subsidiaries, as well as the unrecognized deferred tax liability, are not material for the periods presented.

The following table presents the change in the valuation allowance:

	Year ended July 31,		
	2019	2018	2017
		(in thousands)	
Balance as of the beginning of the period	$ 45,578	$ 51,493	$ 40,299
Change during the period	58,154	(5,915)	11,194
Balance as of the end of the period	$ 103,732	$ 45,578	$ 51,493

The realization of deferred tax assets is dependent upon the generation of sufficient taxable income of the appropriate character in future periods. We regularly assess the ability to realize our deferred tax assets and establish a valuation allowance if it is more-likely-than-not that some portion of the deferred tax assets will not be realized. We weigh all available positive and negative evidence, including our earnings history and results of recent operations, scheduled reversals of deferred tax liabilities, projected future taxable income, and tax planning strategies. Due to the weight of objectively

verifiable negative evidence, including our history of losses, we believe that it is more likely than not that our U.S. federal and, state deferred tax assets will not be realized as of July 31, 2019 and 2018, and as such, we have maintained a full valuation allowance against such deferred tax assets. During fiscal 2019, we determined that due to the weight of objectively verifiable negative evidence, our U.K. deferred tax assets are no longer more likely than not to be realized in the future and a full valuation allowance was recorded.

The amount of the deferred tax asset considered realizable, however, could be adjusted if estimates of future taxable income during the carryforward period are reduced or increased or if objective negative evidence in the form of cumulative losses is no longer present and additional weight may be given to subjective evidence such as our projections for growth. In the event we determine that we will be able to realize all or part of our net deferred tax assets in the future, the valuation allowance against deferred tax assets will be reversed in the period in which we make such determination. The release of a valuation allowance against deferred tax assets may cause greater volatility in the effective tax rate in the periods in which the valuation allowance is released. The valuation allowance against our U.S. federal, state and U.K. deferred tax assets increased by $58.2 million, decreased by $5.9 million and increased by $11.2 million in fiscal 2019, fiscal 2018, and fiscal 2017, respectively. The decrease in the valuation allowance in fiscal 2018 was primarily related to the change in the federal statutory rate, while the increase in the valuation allowance in fiscal 2019 and fiscal 2017 was related to tax losses for which insufficient positive evidence exists to support their realizability.

As of July 31, 2019 and 2018, we have net operating loss carryforwards for U.S. federal income tax purposes of $360.0 million and $173.6 million, respectively, which are available to offset future federal taxable income. Beginning in 2027, $144.4 million of the federal net operating losses will begin to expire. The remaining $215.6 million of the federal net operating losses will carry forward indefinitely. As of July 31, 2019 and 2018, we have net operating loss carryforwards for state income tax purposes of $109.5 million and $62.4 million, respectively. Beginning in 2024, $102.6 million of state net operating losses will begin to expire at different periods. The remaining $6.9 million of state net operating losses will carry forward indefinitely. As of July 31, 2019, we had foreign net operating loss carryforward of $17.7 million. As of July 31, 2018, we did not have foreign net operating loss carry forward. All of the foreign net operating losses is from U.K. and it will carry forward indefinitely.

As of July 31, 2019, we had federal and California research and development tax credit carryforwards of approximately $8.4 million and $6.3 million, respectively. If not utilized, the federal credit carryforwards will begin expiring at different periods beginning in 2033. The California credit will carryforward indefinitely.

Federal and state tax laws impose restrictions on the utilization of net operating loss and research and development credit carryforwards in the event of a change in ownership of the Company as defined by the Internal Revenue Code, Sections 382 and 383. Under Section 382 and 383 of the Code, substantial changes in our ownership and the ownership of acquired companies may limit the amount of net operating loss and research and development credit carryforwards that are available to offset taxable income. The annual limitation would not automatically result in the loss of net operating loss or research and development credit carryforwards but may limit the amount available in any given future period.

We are subject to income taxes in the U.S. and various foreign jurisdictions. As of July 31, 2019, all years are open for examination and may become subject to examination in the future. Significant judgment is required in evaluating our tax positions and determining our for income tax expense for the fiscal year. During the ordinary course of business, there are transactions and calculations for which the ultimate tax determination is uncertain. Our estimate of the potential outcome of any tax position is subject to management's assessment of relevant risks, facts and circumstances existing at that time. These unrecognized tax benefits are established when we believe that certain positions might be challenged despite of belief that our tax return positions are fully supportable. We recognize interest and penalties associated with our unrecognized tax benefits as a component of our income tax expense. For the periods presented, we did not have material interest or penalties associated with the unrecognized tax benefits in the consolidated financial statements.

We had $4.4 million of gross unrecognized tax benefits as of July 31, 2019, none of which would affect our effective tax rate if recognized due to our U.S. valuation allowance. The gross unrecognized tax benefits relate to income tax positions which, if recognized, would be in the form of carryforward deferred tax asset that would be offset by a valuation allowance. As of July 31, 2019, we do not believe that our estimates, as otherwise provided for, on such tax positions will significantly increase or decrease within the next twelve months.

The changes in our gross unrecognized tax benefits for fiscal 2019 consisted of the following:

	Amount (in thousands)
Balance as of July 31, 2017	$ —
Gross increase for tax positions of prior fiscal years	1,746
Gross increase for tax positions in fiscal 2018	876
Balance as of July 31, 2018	2,622
Gross decrease for tax positions of prior years	(288)
Gross increase for tax positions of current year	2,093
Balance as of July 31, 2019	$ 4,427

Note 12. Net Loss Per Share Attributable to Common Stockholders

Basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. We consider all series of our convertible preferred stock to be participating securities. Under the two-class method, the net loss attributable to common stockholders is not allocated to the convertible preferred stock as the holders of our convertible preferred stock do not have a contractual obligation to share in our losses. In March 2018, upon completion of our IPO, all shares of convertible preferred stock then outstanding, were automatically converted into an equivalent number of shares of common stock on a one-to-one basis. As of July 31, 2019, we did not have shares of convertible preferred stock issued and outstanding.

Basic net loss per share attributable to common stockholders is computed by dividing the net loss by the weighted-average number of shares of common stock outstanding during the period, less shares subject to repurchase. The diluted net loss per share attributable to common stockholders is computed by giving effect to all potential dilutive common stock equivalents outstanding for the period. For purposes of this calculation, our convertible preferred stock, stock options, early exercised stock options, RSUs and purchase rights granted under the ESPP are considered to be potential common stock equivalents.

Since we have reported net losses for all periods presented, we have excluded all potentially dilutive securities from the calculation of the diluted net loss per share attributable to common stockholders as their effect is antidilutive and accordingly, basic and diluted net loss per share attributable to common stockholders is the same for all periods presented.

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders:

	Year Ended July 31,		
	2019	2018	2017
	(in thousands, except per share data)		
Net loss	$ (28,655)	$ (33,646)	$ (35,460)
Accretion of Series C and D redeemable convertible preferred stock	—	(6,332)	(9,570)
Net loss attributable to common stockholders	$ (28,655)	$ (39,978)	$ (45,030)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	123,566	63,881	29,221
Net loss per share attributable to common stockholders, basic and diluted	$ (0.23)	$ (0.63)	$ (1.54)

The following table summarizes the outstanding potentially dilutive securities that were excluded from the computation of diluted net loss per share attributable to common stockholders because the impact of including them would have been antidilutive:

	July 31,		
	2019	2018	2017
	(in thousands)		
Convertible preferred stock	—	—	72,501
Outstanding stock options	8,861	16,175	15,058
Shares subject to repurchase from early exercised stock options	122	423	1,888
Share purchase rights under the ESPP	913	2,044	—
Unvested RSUs	4,152	209	—
Total	14,048	18,851	89,447

Note 13. Segment and Geographic Information

Our chief operating decision maker ("CODM") is our chief executive officer. We derive our revenue primarily from sales of subscription services to our cloud platform and related support services. Our CODM reviews financial information presented on a consolidated basis for the purposes of allocating resources and evaluating financial performance. Accordingly, we determined that we operate as one operating segment.

Our long-lived assets consist of property and equipment, which are summarized by geographic area as follows:

	July 31,	
	2019	2018
	(in thousands)	
United States	$ 28,847	$ 14,742
Rest of the world	12,199	5,023
Total	$ 41,046	$ 19,765

Refer to Note 1, Business and Summary of Significant Accounting Policies, of these consolidated financial statements for information on revenue by geography.

Note 14. 401(k) Plan

We have a defined-contribution plan intended to qualify under Section 401 of the Internal Revenue Code (the "401(k) Plan"). We contracted with a third-party provider to act as a custodian and trustee, and to process and maintain the records of participant data. Substantially all the expenses incurred for administrating the 401(k) Plan are paid by us, which have not been material to the periods presented. We have not made any matching contributions during the periods presented.

Note 15. Related Party Transactions

In November 2016, we recorded $4.4 million of stock-based compensation expense within research and development expense in the consolidated statements of operations associated with a one-time secondary stock purchase transaction which was executed among certain of our employees and certain of our affiliated stockholders, including entities controlled by Jay Chaudhry, our president, chief executive officer and chairman of our board of directors, and Lane Bess, a former member of our board of directors. We assessed the impact of this transaction as holders of economic interest in our Company acquired shares from our employees at a price in excess of fair value of such shares. Accordingly, we recognized such excess value as stock-based compensation expense.

We previously entered into notes receivable agreements with certain of our current and former executives and employees in connection with the exercise of their stock options. Outstanding notes receivable were fully repaid during fiscal 2019. Refer to Note 10, Stock-Based Compensation, of these consolidated financial statements for further information.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rule 13a–15(e) and Rule 15d–15(e) under the Exchange Act that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of July 31, 2019. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate "internal control over financial reporting," as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of July 31, 2019 based on the criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on the results of its evaluation, management concluded that our internal control over financial reporting was effective as of July 31, 2019. The effectiveness of our internal control over financial reporting as of July 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change 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 fiscal quarter ended July 31, 2019 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design

of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost–effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item (other than the information set forth in the next paragraph) will be included in our definitive proxy statement for our 2019 annual meeting of stockholders (the "2019 Proxy Statement"), which will be filed with the SEC within 120 days after the end of our fiscal year ended July 31, 2019, and is incorporated herein by reference.

We have adopted a code of business conduct and ethics (the "Code of Conduct") that applies to all of our employees, executive officers and directors. The full text of the Code of Conduct is available on our website at ir.zscaler.com. The nominating and corporate governance committee of our board of directors is responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website, as required by applicable law or the listing standards of The Nasdaq Global Market.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedule

(a)(1) Financial Statements

See Index to Financial Statements in Item 8 of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedule

All financial statement schedules have been omitted as the information is not required under the related instructions or is not applicable or because the information required is already included in the financial statements or the notes to those financial statements.

(a)(3) Exhibits

We have filed the exhibits listed on the accompanying Exhibit Index, which is incorporated herein by reference.

Item 16. Form 10-K Summary

None.

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.

Zscaler, Inc.

September 18, 2019

/s/ Remo Canessa

Remo Canessa
Chief Financial Officer

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Incorporation.	10-Q	001-38413	3.1	June 7, 2018	
3.2	Amended and Restated Bylaws.	10-Q	001-38413	3.2	June 7, 2018	
4.1	Amended and Restated Investors' Rights Agreement among the Registrant and certain holders of its capital stock, dated as of July 24, 2015.	S-1	333-223072	4.1	February 16, 2018	
4.2	Form of common stock certificate of the Registrant.	S-1	333-223072	4.2	February 16, 2018	
4.3	Description of Capital Stock					X
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	333-223072	10.1	February 16, 2018	
10.2+	Fiscal Year 2018 Equity Incentive Plan and related form agreements.					X
10.3+	Fiscal Year 2018 Employee Stock Purchase Plan and related form agreements.	S-1/A	333-223072	10.3	March 13, 2018	
10.4+	2007 Stock Plan and related form agreements.	S-1/A	333-223072	10.4	March 5, 2018	
10.5+	Employee Incentive Compensation Plan.	S-1	333-223072	10.5	February 16, 2018	
10.6+	Change of Control and Severance Policy.	S-1	333-223072	10.7	February 16, 2018	
10.7+	Employment Agreement between the Registrant and Jagtar S. Chaudhry, dated as of August 23, 2017.	S-1	333-223072	10.8	February 16, 2018	
10.8+	Offer Letter between the Registrant and Manoj Apte, dated as of June 19, 2008.	S-1	333-223072	10.9	February 16, 2018	
10.9+	Offer Letter between the Registrant and Remo Canessa, dated as of January 8, 2017.	S-1	333-223072	10.10	February 16, 2018	
10.10+	Offer Letter between the Registrant and Robert Schlossman, dated as of December 22, 2015.	S-1	333-223072	10.11	February 16, 2018	
10.11+	Offer Letter between the Registrant and Amit Sinha, dated as of October 18, 2010.	S-1	333-223072	10.12	February 16, 2018	
10.12+	Offer Letter between the Registrant and Karen Blasing, dated as of December 23, 2016.	S-1	333-223072	10.14	February 16, 2018	
10.13+	Offer Letter between the Registrant and Andrew Brown, dated as of October 14, 2015.	S-1	333-223072	10.15	February 16, 2018	
10.14+	Offer Letter between the Registrant and Scott Darling, dated as of November 16, 2016.	S-1	333-223072	10.16	February 16, 2018	
10.15+	Offer Letter between the Registrant and Charles Giancarlo, dated as of November 22, 2016.	S-1	333-223072	10.17	February 16, 2018	
10.16	Office Lease Agreement, by and between the Registrant and SRI Eleven Row LLC, dated as of June 30, 2015.	S-1	333-223072	10.18	February 16, 2018	
10.17	First Amendment to Office Lease Agreement, by and between the Registrant and SRI Eleven Row LLC, dated as of October 30, 2015.	S-1	333-223072	10.19	February 16, 2018	
10.18	Sublease, by and between Registrant and Micron Technology, Inc.	10-Q	001-38413	10.1	June 5, 2019	
21.1	Significant subsidiaries of the Registrant.					X
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.					X
24.1	Power of Attorney (incorporated by reference to the signature page to this Annual Report on Form 10-K).					X
31.1	Certification of the Principal Executive Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of the Principal Financial Officer pursuant to Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X

32.1*	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.	X
101.INS	XBRL Instance Document	X
101.SCH	XBRL Taxonomy Extension Schema Document	X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document	X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document	X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document	X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document	X

+ Indicates management contract or compensatory plan or arrangement.

* The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints Jagtar S. Chaudhry and Remo Canessa, and each of them, as his or her true and lawful attorney-in-fact and agent with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this report, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact, proxy, and agent 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 for all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact, proxy and agent, or his substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Jagtar S. Chaudhry Jagtar S. Chaudhry	President, Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)	September 18, 2019
/s/ Remo Canessa Remo Canessa	Chief Financial Officer (Principal Accounting and Financial Officer)	September 18, 2019
/s/ Karen Blasing Karen Blasing	Director	September 18, 2019
/s/ Andrew Brown Andrew Brown	Director	September 18, 2019
/s/ Scott Darling Scott Darling	Director	September 18, 2019
/s/ Charles Giancarlo Charles Giancarlo	Director	September 18, 2019
/s/ Nehal Raj Nehal Raj	Director	September 18, 2019
/s/ Amit Sinha Amit Sinha	Director	September 18, 2019

CORPORATE INFORMATION

CORPORATE EXECUTIVES

Jay Chaudhry
President, Chief Executive Officer and Chairman of the Board of Directors

Remo Canessa
Chief Financial Officer

Amit Sinha
President of Research and Development, Operations and Customer Service, Chief Technology Officer

Dali Rajic
President Go-To-Market and Chief Revenue Officer

Manoj Apte
Chief Strategy Officer

Robert Schlossman
Chief Legal Officer

BOARD OF DIRECTORS

Jay Chaudhry
President, Chief Executive Officer and Chairman of the Board of Directors

Karen Blasing
Former Chief Financial Officer, Guidewire Software

Andrew Brown
Chief Executive Officer and Co-Founder, Sand Hill East

Scott Darling
President, Dell Technologies Capital

Charles Giancarlo
Chief Executive Officer, Pure Storage

Nehal Raj
Partner, TPG

Amit Sinha
President of Research and Development, Operations and Customer Service, Chief Technology Officer

CORPORATE INFORMATION

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San Jose, California 95134, USA
T: +1.408.533.0288
F: +1 408.868.4089
www.zscaler.com

Common Stock Listing
Nasdaq
Ticker Symbol: ZS

Annual Meeting
Friday, January 10, 2020, at 2 p.m. PST
Virtual Meeting

Registrar and Transfer Agent
For questions regarding your account, changes of address or consolidation of accounts, please contact the Company's transfer agent:

America Stock Transfer & Trust Company, LLC

6201 15th Avenue
Brooklyn, NY 11219
T: (800) 937.5449 or +1 708.921.8124

Legal Counsel
Wilson Sonsini Goodrich & Rosati
Professional Corporation
Palo Alto, California

Independent Auditors
PricewaterhouseCoopers
San Jose, California

Investor Relations
Zscaler, Inc.
Investor Relations
110 Rose Orchard Way
San Jose, California 95134
ir@zscaler.com

Secure your cloud transformation