

**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 December 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 _____

Commission file number 001-37825

Talend S.A.

(Exact name of Registrant as specified in its charter)

France
(State or other jurisdiction of incorporation or organization)

Not Applicable
(I.R.S. employer identification no.)

9, rue Pages
Suresnes, France
(Address of principal executive offices)

92150
(Zip Code)

+33 (0)1 46 25 06 00
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
American Depositary Shares, each representing one ordinary share, nominal value €0.08 per share	TLND	The NASDAQ Stock Market LLC
Ordinary shares, nominal value €0.08 per share*		The NASDAQ Stock Market LLC*

* Not for trading, but only in connection with the listing of the American Depositary Shares on The NASDAQ Stock Market LLC.

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☒ Yes ☐ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See 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 ☒
Non-accelerated filer ☐

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 by Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of ordinary shares held by non-affiliates of the Registrant on June 30, 2019, the last business day of the Registrant's most recently completed second fiscal quarter, based on the closing price for the Registrant's American Depositary Shares as reported on the NASDAQ Stock Market, was approximately \$1.1 billion. Ordinary shares held by each executive officer, director, and holder of 5% or more of the outstanding ordinary shares have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 10, 2020, the Registrant had 31,286,647 ordinary shares, nominal value €0.08 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the definitive proxy statement with respect to the Registrant's 2020 Annual Meeting of Shareholders to be filed by the Registrant with the Securities and Exchange Commission no later than 120 days after the end of the Registrant's fiscal year ended December 31, 2019 are hereby incorporated by reference into Part III of this Form 10-K (Items 10, 11, 12, 13 and 14).

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Special Note Regarding Forward-Looking Statements	1
PART I	
Item 1. Business.....	3
Item 1A. Risk Factors.....	13
Item 1B. Unresolved Staff Comments	54
Item 2. Properties.....	54
Item 3. Legal Proceedings.....	54
Item 4. Mine Safety Disclosures.....	54
PART II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	54
Item 6. Selected Financial Data	60
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	61
Item 7A. Quantitative and Qualitative Disclosures About Market Risk.....	77
Item 8. Financial Statements and Supplementary Data.....	79
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	124
Item 9A. Controls and Procedures.....	124
Item 9B. Other Information	125
PART III	
Item 10. Directors, Executive Officers and Corporate Governance.....	126
Item 11. Executive Compensation	126
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	126
Item 13. Certain Relationships and Related Transactions, and Director Independence	126
Item 14. Principal Accountant Fees and Services	126
PART IV	
Item 15. Exhibits and Financial Statement Schedules	127
Item 16. Form 10-K Summary	134
SIGNATURES	135

INTRODUCTION

The audited consolidated financial statements included herein have been presented in U.S. dollars and prepared in accordance with generally accepted accounting principles in the United States (“GAAP”). For Talend S.A. and our subsidiaries that use a functional currency that is not U.S. dollars, the assets and liabilities have been translated at the closing exchange rate as of the relevant balance sheet date, while the income and expenses have been translated at the average exchange rate for the month in which the transaction occurred. The resulting exchange differences are recognized in our consolidated statement of comprehensive loss.

All references in this Annual Report on Form 10-K, or Annual Report, to “\$,” “US\$,” “U.S.\$,” “U.S. dollars,” “dollars,” and “USD” mean U.S. dollars and all references to “€,” “EUR” and “euros” mean euros, unless otherwise noted. Certain information in this Annual Report is expressed in euros. We make no representation that the euro or U.S. dollar amounts referred to in this Annual Report could have been converted into U.S. dollars or euros, as the case may be, at any particular rate or at all. See “Item 1A. Risk Factors—We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial condition and results of operations”.

As used in this Annual Report, the term “ADSs” refers to the American Depositary Shares, each representing one ordinary share, nominal value €0.08 per share, of Talend S.A. As used in this Annual Report, the term “Company” refers to Talend S.A., and the terms “we,” “our,” “us,” and “the Group” refer to Talend S.A. and its consolidated subsidiaries, unless the context otherwise requires.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that relate to future events or our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to differ materially from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Words such as, but not limited to, “may,” “believe,” “can,” “intend,” “potential,” “designed to,” “expect,” “anticipate,” “estimate,” “predict,” “plan,” “targets,” “projects,” “likely,” “will,” “would,” “could,” “potential,” “continue,” “should,” “contemplate,” or similar expressions or phrases or the negative of these and similar expressions or phrases identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. Forward-looking statements include, but are not limited to, statements about:

- Our future financial performance, including our revenue, cost of revenue, gross profit or gross margin, operating expenses, expectations about our future cash flow, and ability to achieve and maintain profitability;
- The sufficiency of our cash and cash equivalents to meet our liquidity needs;
- Our expectation that as organizations adopt and scale out deployments of modern data technologies such as cloud data warehouses, machine learning, and big data processing, they will continue to use Talend to facilitate the integration of these big data technologies within their IT environments;
- Our plans to expand our non-U.S. presence to address the needs of our global customers and to acquire customers in new geographies;
- Our plans to invest in new product development, adding new features and services, increasing functionality, and enhancing our integration cloud infrastructure, which will increase research and development expenses in absolute dollars;
- Our plans to continue to invest additional resources in our cloud-based offerings and services and increased cost of hosting fees;
- The sufficiency of our security measures to protect our own proprietary and confidential information, as well as the personal information, personal data, and confidential information that we otherwise obtain, including confidential information we may obtain through customer usage;
- Our expectation that, over time, more of our existing customers will have subscription contracts with Annual Recurring Revenue, or ARR, of \$0.1 million or more;
- Our expectation that our dollar-based net expansion rate will potentially decline as we scale our business;
- Our expectation that our gross margin may fluctuate from period to period as a result of changes in the mix of our subscription and professional services revenue;

- Our expectation that our cloud integration business will grow as a percentage of revenue;
- Our expectation that as the portion of U.S. business increases relative to our global business, the impact of foreign currency exchange on our financial reporting will be reduced;
- Our expectation that professional services revenue growth will slow, and may decline, as we work with more systems integrators and as our cloud-based offerings increase;
- Our expectation that we will continue to invest in sales and marketing, particularly outside the U.S. and France, by expanding our global promotional activities, building brand awareness, attracting new customers, and sponsoring additional marketing events, which may affect our sales and marketing costs in a particular quarter;
- Our expectation that research and development expenses will increase in absolute dollars as we invest in building the necessary employee and system infrastructure required to enhance existing and support development of new, technologies and the integration of acquired businesses and technologies.
- Our plan to invest in training and retention of our sales team; and
- Our expectation that general and administrative expenses will increase as we invest in our infrastructure and incur additional employee-related costs and professional fees related to the growth of our business.

We caution you that the foregoing list may not contain all of the forward-looking statements made in this Annual Report. You should refer to the section of this Annual Report titled “Item 1A. Risk Factors” and those discussed in other reports and documents we file with the Securities and Exchange Commission, or the SEC, for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements.

You should read thoroughly this Annual Report and the documents that we refer to herein with the understanding that our actual future results may be materially different from and/or worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements. Other sections of this Annual Report include additional factors which could adversely impact our business and financial performance. Moreover, we operate in an evolving environment. New risk factors emerge from time to time and it is not possible for our management to predict all risk factors, 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. Furthermore, if any one or more of the assumptions underlying the market data turns out to be incorrect, actual results may differ from the projections based on these assumptions. You should not place undue reliance on these forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. The forward-looking statements made in this Annual Report relate only to events or information as of the date on which the statements are made in this Annual Report. We undertake no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this Annual Report, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

PART I

Item 1. Business

Company Overview

Talend is a leader in data integration and data integrity. We were founded on the principle that organizations can only maximize the value of their data by putting powerful yet easy-to-use solutions in the hands of users. Our mission is to provide data intelligence for all users by delivering trusted data when and where it is needed. Our customers rely on our software to better understand their customers, offer new applications and services, and improve operations.

Organizations need data to improve operations and make better decisions faster. We help organizations overcome the barriers that stand in the way of harnessing data, enabling them to discover it across systems, aggregate it to power analytics, clean it to correct errors, transform it through machine learning, share it across internal and external stakeholders and govern it holistically through our open source solution, Talend Open Studio, and our paid solution, Talend Data Fabric, a unified platform that provides enhanced software capabilities and customer support services.

Talend Data Fabric consists of a suite of applications that enables users to collect, transform, govern, and share data. It allows organizations to use data to make better strategic decisions, enhance customer experience and drive long-term business value. We provide Talend Data Fabric as a cloud service or an on-premise deployment. Our platform supports running data processing anywhere – in on-premise, hybrid and multi-cloud environments – managed from a central location to deliver end-to-end trusted data that is correct, complete, comparable and credible.

We are a recognized leader in the hybrid and cloud data integration market. In August 2019, Gartner identified us as a Leader in its report titled *Magic Quadrant for Data Integration Tools* for the fourth consecutive year and in March 2019, Gartner also named Talend a leader in its report titled *Magic Quadrant for Data Quality Tools* for the second time in a row.

As the need to leverage data escalates, so too does the need to ingest, integrate, improve data quality, and share data throughout today's enterprises. At the same time, trust and quality issues prevent companies from providing true data intelligence – access to the right data by the right people at the right time. International Data Corporation ("IDC") reports that users spend only 19% of their time on analyzing data, with the remaining 81% on preparing and managing the data. These are some of the issues in the data landscape that Talend helps organizations address by turning their data into a strategic asset that powers their business and unlocks value.

Our platform addresses the markets for Data Integration and Integrity Software, Applied Master Data Management, and Integration and Orchestration Middleware, which IDC forecasts will grow from \$18.5 billion in 2020 to \$28.2 billion in 2023. Specifically, IDC forecasts the data integration and integrity software market to grow from \$7.7 billion in 2020 to \$10.6 billion in 2023. We believe the continued expansion of these markets is driven by the transition in spend from hand-coded integrations to software-based integration solutions given the time consuming and expensive process of manual integrations coupled with the scarcity of personnel with the requisite technical skills. In addition, according to IDC, the market for Cloud Data Integration and Integrity Software is forecast to reach \$2.8 billion by 2023, representing a 28% compound annual growth rate from 2020. This significant growth rate represents the rapid expansion and pace of change in the markets underlying our opportunity.

We are living in a time of unprecedented innovation and technological change. Organizations are increasingly challenged to utilize new innovations and realize value from their legacy systems, cloud and open technologies are becoming key buying criteria for data integration, integrity and intelligence solutions, organizations need to have access to and trust the integrity and correctness of their data to make mission critical decisions and organizations need to effectively govern their data in light of the proliferation of new data privacy and data protection laws and regulations.

The rapid evolution of innovation and technological change is driving certain key trends shaping our industry:

Transition to the Cloud: Information technology, or IT, infrastructures are shifting rapidly toward virtualized, cloud-based platforms to increase agility and reduce operating costs. As a result, even traditionally on-premise workloads, like big data and legacy back-end systems, are increasingly moving to the cloud and new cloud

architectures are evolving to hybrid/multi-cloud, a mix of services running in public cloud and on-premise. The transformative change in information technology, or IT, infrastructure is driving a dramatic shift to cloud platforms to address infrastructure and data warehousing needs.

Modular Software: Software is becoming increasingly modular in response to the changing demands of the business to do things faster, at a greater scale, and at a lower cost. As a result, analytics use cases will be able to become increasingly real-time in nature rather than almost entirely batch as they are today. This shift to modular software is driven by high volume streams of things like sensor data, as well as increasing numbers of self-optimizing systems driven by machine learning.

Data Governance: As companies are forced to better account for how they manage data security, stewardship, usability and personal data in light of new laws and regulations, business needs, technological change, and consumer and customer expectations, they will need to implement appropriate data governance solutions. The resulting changes in the approach to data governance that will be necessary to manage data-related risks and liabilities may also present opportunities for organizations to promote initiatives that may lead to greater productivity, faster time to market and new revenue opportunities, including data monetization.

Machine Learning: Machine learning is becoming a meaningful driver of data usage. It is becoming key to removing the mundane error prone tasks by revolutionizing automation of the processes of data quality, IT operations support, and detection of anomalies. It is increasingly becoming part of every customer interaction, supply chain order, device, website and application. As a result, data volumes continue to explode, leading to more data and metadata management needs and the emergence of increasing growth of data science teams as companies are building capability to leverage their data.

Demand for Self-Service Technology: The proliferation of data, coupled with its strategic importance, has significantly increased business users' demand for tools to access the data themselves, but the available tools are often limited by the data they can access. This has led to demand for a new wave of self-service tools that allow both IT and business users to collect, govern, transform, and share data more quickly than before.

These trends and the underlying need for trusted data to deliver greater insight, are creating an increasing number of new opportunities for organizations to be data driven. Now more than ever, it is critical for organizations to have an IT strategy that enables them to leverage data to support their business initiatives. To do this, IT teams must be able to work with new data platforms and fluidly address high volume, internet-of-things ("IoT"), self-service and real-time scenarios.

Our Solution

Talend Data Fabric is a data integration and integrity platform that enables organizations to deliver trusted data at the speed required by their business. Talend Data Fabric enables them to improve productivity, lower time to value and become digital leaders with a breadth of data management capabilities delivered across cloud and hybrid environments. Talend Data Fabric is offered as both a SaaS and an on-premise offering and builds on our open source Talend Open Studio platform by providing customers with enhanced features such as collaboration, continuous integration, scheduling and monitoring. Talend Data Fabric's open source agility, along with the high-touch technical support and know-how we provide to our paying customers, makes it easy to embrace the latest cloud-based technologies. And, Talend Data Fabric enables organizations to govern and share data with pervasive data quality and governance features, a robust set of API services, and a broad set of role-based frictionless applications that provide self-service access to data for a broad range of users. It is a platform that abstracts integration complexity and natively generates code, which provides flexibility for users to, among other things, inspect, edit, share, and analyze their data. In sum, Talend Data Fabric enables organizations to do the following:

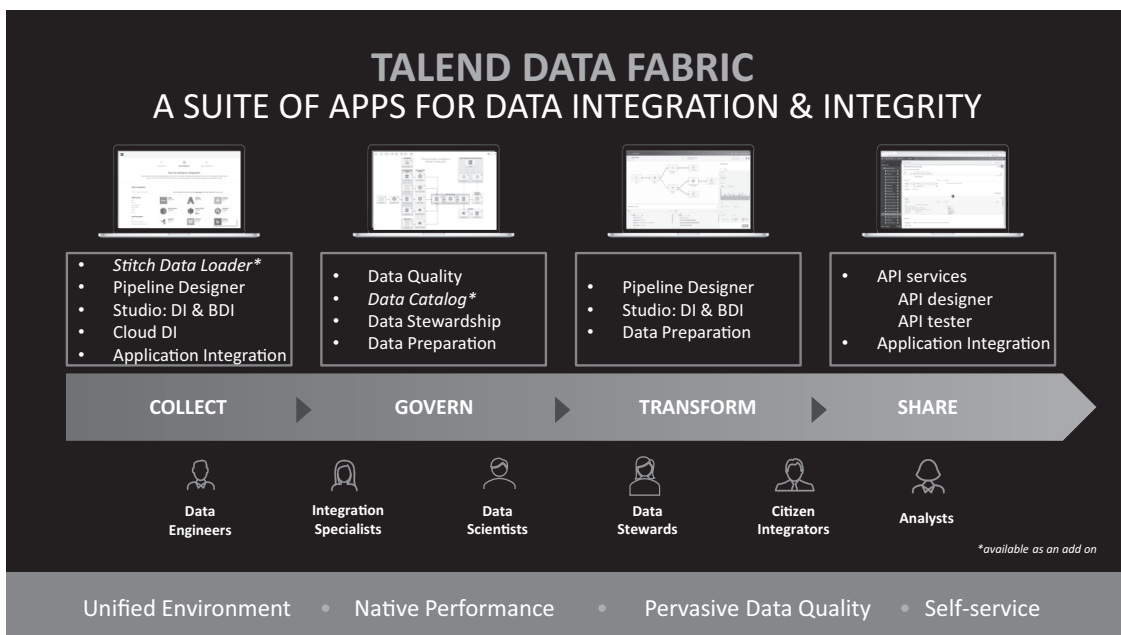
- **Collect:** Discover, capture, integrate and standardize data from any source to any location, on premise or in the cloud, intuitively building data pipelines with an easy-to-use graphical interface.
- **Govern:** Easily govern data and ensure its integrity with embedded, machine learning aided data quality functionality throughout, allowing customers to create a single point of trust and easily trace the lineage of all of their data.
- **Transform:** Achieve more efficient, more effective and faster data transformation with both batch and real-time processing, and AI enabled data matching, survivorship, and enrichment functionality.

- **Share:** Share trusted data internally and externally to gain better insights and create more useful experiences for internal and external data users with APIs and a multitude of self-service capabilities.

Ultimately, Talend Data Fabric ensures speed and trust in every step as an organization's data moves through the data pipeline from ingestion and integration to governance, transformation, and sharing, ensuring a successful digital transformation and enabling organizations to become truly data-driven.

Talend Data Fabric consist of applications for data ingestion, data integration, big data integration, application integration, cloud integration, data catalog, API design and testing, and self-service data preparation. Our applications can be purchased individually, in bundles that target particular customer needs, or in their entirety as Talend Data Fabric. They are designed for data in the cloud and on-premise, for integrating applications in real time, and for working with a wide range of databases, data warehouses, file formats, and applications, including Marketo, NetSuite, salesforce.com, and SAP. Talend Data Fabric combines all of our applications into a single solution with a common development and management environment to solve complex IT integration challenges. The solution enables users to shift between capabilities without learning additional tools, interfaces, and programming paradigms. Talend Data Fabric is seamlessly compatible and interoperable across cloud, on-premise and hybrid environments. Talend Data Fabric increases productivity by allowing developers to use the same integration applications to address a wide variety of integration and integrity challenges across big data, the cloud, IoT and traditional data sources.

Talend Data Fabric includes the following applications, each of which is available as a cloud service or an on-premise deployment, with the exceptions that Stitch Data Loader, Pipeline Designer, and API Services are cloud-based only and Data Catalog is available only on-premise:



- **Stitch Data Loader.** Stitch Data Loader is a data ingestion engine designed to quickly and efficiently connect a multitude of SaaS applications to cloud data warehouse systems including Snowflake, Amazon Web Services (AWS), Microsoft Azure SQL Database, and Google BigQuery. Stitch Data Loader is designed for frictionless adoption, enabling customers to discover, try, and purchase the solution without the involvement of sales personnel. This sales motion enables customers to start realizing value quickly from their cloud data warehouse and provides a high-volume landing strategy to then upsell and cross sell additional applications and capabilities.
- **Pipeline Designer.** Pipeline Designer is a self-service web-based application that allows for easy connectivity and integration of popular on-premise and cloud data sources, including SaaS application. The solution supports both batch and streaming through a single application and comes with a toolbox of standard integration functions for building quick data integration pipelines that run in the cloud, on-premise or in a hybrid environment and on the most popular cloud platforms. Pipeline Designer incorporates out-of-the-box support for Python, which enables data scientists to build their own integrations without relying on IT.
- **Data Integration.** Talend Data Integration allows customers to easily integrate, transform, and blend data from a wide variety of data sources. Our code generation architecture uses a visual interface to create high performance Java or SQL code. The solution contains over one thousand connectors to databases, flat files, cloud-based applications, and many other types of data. Talend Data Integration includes optional data quality features to profile, cleanse, anonymize, and mask data. These optional data quality features provide data de-duplication, validation, standardization, and enrichment that create high-quality, clean, and reliable data for access, reporting, and analytics.
- **Big Data Integration.** Talend Big Data Integration provides the same features and functionality as Talend Data Integration, in addition to specialized support for big data platforms. Our solution generates native code for modern big data systems to run real-time, large-scale data processing. It integrates with Apache Hadoop, Apache Spark, NoSQL databases either on-premise or in the cloud. The solution delivers large-scale, high performance in-memory processing by generating native Spark and Spark Streaming code, thus leveraging the full capabilities of the big data environment.
- **Application Integration.** Talend Application Integration enables organizations to integrate applications, services and APIs without coding, simplifies complex mapping challenges, and delivers and enforces enterprise security rules. Our solution provides a high-speed services backbone and enables building a service-oriented architecture to connect, mediate, and manage services in real time. The solution is built on extensible open source Enterprise Service Bus and data integration technology. Our built-in data mapper is intuitive and allows the manipulation of complex, legacy and vertical industry data formats with a graphical tool. Talend Application Integration is sold as a bundle with either Talend Data Integration or Talend Big Data Integration.
- **Data Quality.** Talend Data Quality helps organizations produce clean, reliable data for data operations by using machine learning-enabled de-duplication, validation, and standardization methods. It also enriches data with external sources like postal validation, business identification, credit score information, and much more. Talend Data Quality is sold as an optional add-on and is embedded into and works together with other Talend applications to ensure high quality, trustworthy data at each step as an organization's data moves through the data pipeline.
- **Data Catalog.** Talend Data Catalog enables business and IT users to search, find, and access any data from across their enterprise. It automatically crawls, profiles, organizes, links, and enriches data from any data source, third-party integration tool, and analytics tools. Talend Data Catalog automatically classifies and identifies the quality of data based on built-in data dictionary and quality services, thereby reducing the time for new data sources to be onboarded to users. Talend Data Catalog also leverages technology from third-party partners. By centralizing all information about the provenance and data lineage of data, Talend Data Catalog uses over 100 connectors to extract metadata from source systems, including all major databases, data warehouses, and new data platforms such as Spark.
- **Data Stewardship.** Talend Data Stewardship helps organizations curate and certify data that organizations already have. With Talend Data Stewardship, organizations can isolate data in any flow and bring it to the attention of the those administering it. This enables them to certify it, correct it, or reconcile it to ensure a

single source of truth. This can be done through well-defined campaigns where the tasks, the participants, and the related workflows are defined to ensure that the tasks are delegated and processed by the right stakeholders.

- **Data Preparation.** Talend Data Preparation allows anyone in IT or a business role to access, blend, clean and enrich data with a spreadsheet-like, easy-to-use point-and-click user interface. This empowers users to solve their data preparation challenges on their own without waiting for IT resources. The commercial version of Talend Data Preparation works seamlessly with Talend Big Data Integration, Talend Data Integration, and Talend Cloud such that IT and business users can create a data preparation process and share it with an IT developer to embed it into a more complex data integration flow. This allows IT organizations to accelerate data warehousing projects by partnering with business users that are experts in the data being processed.
- **API Services.** Talend API Services provides full API development lifecycle support that extends from design, test, documentation, implementation to deployment. Users can automatically simulate and test the API using live preview and generate API reference documentation for consumers to integrate. Talend API Services combines continuous integration capabilities and the ability to deploy web services modules as containerized microservices through visual tools, allowing teams to quickly deliver and deploy new applications and services. Developers can select from over 900+ pre-built components and connectors to natively connect databases, flat files, cloud-based applications, including mapping components for complex data formats such as EBCDIC files, XML, JSON, and EDI.

Customer Success Support

We provide maintenance and support services to our subscription customers. These include both minor and major upgrades that deliver feature developments, enhancements, patches, and connectivity updates. In addition, we provide our customers with technical support and customer success services. Our technical support includes diagnosis and resolution of product implementation, ongoing usage, and migration issues and our customer success services include access to customer success managers, regular case reviews, design of integration jobs and data flows, and reports on customers' operational performance metrics. Our maintenance and support services are typically scaled to align to the size and value of the customer. Our high-level of support results in regular interaction with customers to ensure maximum utilization of our software and we believe is a significant differentiator of our solution.

Professional Services

Talend Professional Services provides strategic enterprise architecture advisory services, implementation support, and private technical training courses for our customers and partners. Our team has staff based in over ten countries and supported hundreds of clients in more than 25 countries in 2019. Professional services accounted for 12%, 14% and 15% of revenue in the fiscal year ended December 31, 2019, 2018 and 2017, respectively, with the rest of our revenue derived from subscriptions to our Talend Data Fabric solution.

Open Source Applications

Our open source platform, Talend Open Studio, is the foundation of our business. Many of our applications are available via free open source versions. Talend Open Studio is designed to meet the requirements of a single user and is unlimited with respect to duration of use, processing volume, number of integration flows that can be designed using the solution and provides connectivity to the most commonly used data sources that can be accessed. Our open source approach enables us to engage with customers in all stages of their data integration journey because although our customers often gain experience with our open source versions, once multiple users within the same organization start using our applications, they tend to need to purchase the enhanced features that are only included in our commercial offerings. Our open source attitude provides a number of additional advantages. For example, our customers have access to the open source community that provides nearly constant additions (such as new connectors) and our open source platform makes it much easier for us to integrate with new innovations and solutions that are also part of the open source community.

Our Growth Strategy

Key elements of our growth strategy include:

- **Maintain our technology leadership.** We intend to continue to invest in Talend Data Fabric and innovate and develop new features, functionalities and app modules as our markets advance.
- **Grow our customer base.** We plan to grow our base of customers by increasing focus on frictionless, self-service deployment and pay-as-you-go payment model for our products, continuing to expand our sales organization, further developing our channel relationships, and converting open source and free trial users into paying customers. As of December 31, 2019, we had over 4,250 total customers and 593 enterprise customers that had annual recurring revenue, or ARR, of \$100,000 or more.
- **Further expand within our existing customer base.** Our customers typically make an initial purchase for a specific and immediate need and then subsequently expand their use cases. Our acquisition of Stitch enhanced our go-to-market reach with a cloud application available for self-service purchase which we believe reduces friction for customers and provides a basis for targeted expansions over time.
- **Expand our ecosystem of partners.** We will continue to invest in and grow our strong ecosystem of partners spanning big data vendors, cloud platform and application providers, analytical software providers, commercial use/OEM partners, systems integrators and VARs.
- **Continue to grow internationally.** We have employees in the United States, France, Germany, China, the United Kingdom, India, Singapore, Japan, Canada, Australia, Spain, Italy, Ireland, the Netherlands, Sweden, Switzerland and Denmark. We will continue to invest in further expanding our footprint in international markets.

Customers

We have a broad, global customer base that includes AstraZeneca, HP, Citi, General Electric, Lenovo, Lowe's, and Siemens, and spans a broad range of industries, including financial services, technology, telecommunications, healthcare, manufacturing, and retail. During 2019 we had customers in more than 60 countries and a variety of industries. As of December 31, 2019, we had over 4,250 paying subscription customers. We define a customer as a paid licensor of our technology, either directly from Talend or through an authorized reseller. We exclude users of our technology through OEM partnerships. We also exclude users who have downloaded the Open Source versions of our applications but have not entered into a commercial relationship with us and from whom we do not derive any recurring revenue.

Marketing

Our marketing organization is responsible for increasing the awareness of Talend's solution, fostering the Talend community, generating demand, gathering market feedback and enabling our field sales team to effectively sell our solution. The open source and free trial editions of our applications are key drivers of awareness and initial usage. Our open source applications have been downloaded more than three million times and seeded the market and led to Talend Data Fabric adoption by many of our current paying customers. When deciding whether to purchase our applications, our customers primarily learn from our Talend community, white papers, webinars and third-party research before engaging with our sales team. It is a key mission of the marketing organization to support and accelerate this learning process. The marketing organization includes the following functions: digital marketing, community marketing, marketing communications, field marketing and product management and product marketing.

Sales

We sell our software and services through both a direct sales force and indirect channel partners. As of December 31, 2019, we had a direct sales presence in 16 countries across North America, Europe and Asia. We sell our applications to organizations of all sizes and the majority of our sales are through our direct sales force. Our direct sales force includes an inside sales team, which is closely aligned with an outside sales team. In many countries we also sell through a VAR channel and we get referrals from a variety of partners including system integrators. We have a global

team of indirect channel managers responsible for these relationships. We also offer our Stitch Data Loader and Pipeline Designer offerings via a self-service e-commerce platform which typically does not require the involvement of sales personnel or partners.

Post-sale, our customers are managed by a dedicated customer success organization. Our customer success team is responsible for driving successful deployments, maintaining customer relationships, renewing existing contracts, identifying expansion opportunities within existing customers and providing a platform for ongoing learning and best practices for continued customer success.

Our business is subject to seasonal trends. See “Risk Factors—The seasonality of our business can create variance in our quarterly bookings, subscription revenue and cash flows from operations” for additional information.

Channels and Alliances

Talend maintains strategic relationships with a variety of partners that we view as playing a critical role in our growth and success. These partners jointly develop, market, sell, recommend and/or implement our solution. Our partners include:

- ***Technology Alliances.*** We work with big data, cloud application and analytical software vendors to provide integration solutions to their customers. We work with AWS, Microsoft, Google, Snowflake, Databricks and Cloudera among others.
- ***Value Added Resellers.*** Our network of resellers extends our sales and marketing efforts across North America, Europe, the Middle East and Asia-Pacific. Many of our VARs also bring deep vertical market knowledge and implementation expertise.
- ***Systems Integrators.*** We have partnered with over 100 large and small systems integrators worldwide, including Cognizant, Capgemini, Deloitte Consulting, Wipro and Virtusa, among others with whom we maintain close strategic relationships.

Research and Development

Our research and development team is globally distributed in France, Germany, the United States and China. We take pride in our ability to attract and retain the best talent to our team and to create a challenging yet fulfilling environment where engineers can thrive, solve complex problems and find innovative ways to address current and future data integration, data processing and data governance challenges. We follow agile development methodologies, work with the latest technologies and have created a modern, state of the art, flexible and automated software development process that has allowed us to deliver high-quality applications and adapt to market changes and new requirements quickly.

Talend has deep roots in the open source community. We believe our open source approach helps us maintain greater transparency, create better software and have happier customers. We have an open source core app that anyone can download, improve, enrich, or extend and we are very engaged with the open source community to get feedback to improve our applications. In addition to our own in-house developed open source projects, we employ open source committers to key shared projects from the Apache Software Foundation such as Apache Beam, ActiveMQ, Camel, CXF, Karaf and Syncope that are used in our own technology stack but also in many other enterprise software applications.

Backlog

Backlog represents the consideration amount of revenues we expect to recognize in the future from contracts with customers that we believe to be firm and are in progress. Backlog is a measure not defined by generally accepted accounting principles and may not be indicative of future operating results. Our methodology for determining backlog may not be comparable to methodologies used by other companies in determining their backlog amounts. The timing of our invoices to our customers is a negotiated term and thus varies among our support subscription agreements. For multi-year agreements, it is common for us to invoice an initial amount at contract signing followed by subsequent annual invoices. At any point in the contract term, there can be amounts that we have not yet been contractually able to invoice.

Until such time as these amounts are invoiced, we do not recognize them as revenue, deferred revenue or elsewhere in our consolidated financial statements. The change in backlog that results from changes in the average non-cancelable term of our support subscription arrangements may not be an indicator of the likelihood of renewal or expected future revenue and therefore we do not utilize backlog as a key management metric internally and do not believe that it is a meaningful measurement of our future revenue. The backlog values we disclose include anticipated revenues associated with: (1) the original contract amounts; (2) change to the term of the contract for which we have received written confirmations from the applicable customers; and (3) change to the term of the contract for which we expect to receive confirmations in the ordinary course of business. Our total backlog was \$46.4 million and \$32.1 million as of December 31, 2019 and 2018, respectively. Of the December 31, 2019 backlog, we expect to recognize revenue of \$13.2 million in 2020 and \$33.2 million thereafter.

Competition

The market for our applications is highly competitive, quickly evolving and subject to rapid changes in technology, which may expand the alternatives available to our customers for their data integration and integrity requirements. Our current primary competitors generally fall into six categories:

- Diversified technology companies that offer data integration solutions, including: IBM, Microsoft, Oracle and SAP;
- Pure-play data integration vendors, including: Ab Initio, Informatica and Tibco;
- Cloud providers such as Amazon, Google and Microsoft, which offer their own integration tools and services;
- Vendors from other related markets (for example, SnapLogic, a traditional integration platform as a service vendor, and MuleSoft and Boomi, API providers) entering into the data integration and integrity market;
- Early-stage, cloud native, niche data integration technologies, including Fivetran and Matillion; and
- Hand-coded, custom data integration solutions built internally by organizations that we target as potential customers.

We believe that we are well-positioned in the marketplace relative to our competitors. We are differentiated from traditional vendors by our advanced technology and rapid innovation, both of which are driven by our open source roots, and we believe emerging niche vendors cannot match the scale of our app breadth or go-to-market capabilities.

We expect competition to increase as other established and emerging companies enter the data integration software market, as customers' requirements evolve and as new products and technologies are introduced. We believe that the principal factors that drive our competitive edge in our market include:

- Application features, architecture reliability, scalability, performance and effectiveness;
- Name and reputation of the vendor or competitive offering;
- Vision for the market and application roadmap, as well as pace of innovation;
- Interoperability with numerous cloud and big data solutions vendors;
- Integration with leading cloud and on-premise systems;
- Automation and continuous integration and delivery (CI/CD) capabilities;
- Ability to adapt development, sales and marketing to the open source software model;
- Strength of sales and marketing efforts;
- Strategic partnerships with major enterprise software and infrastructure providers;
- Quality of support;
- Demonstrated return on investment through time-to-value and total cost of ownership; and
- Ease-of-use and efficiency during development and deployment.

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

- Greater name recognition and longer operating histories;
- Larger sales and marketing budgets and resources;
- Broader distribution and established relationships with distribution partners and customers;
- Greater customer support resources;
- Greater resources to make acquisitions;

- Lower labor and development costs;
- Larger and more mature intellectual property portfolios; and
- Substantially greater financial, technical and other resources.

Intellectual Property

We rely on a combination of trade secrets, trademarks, copyrights, patents, contractual restrictions and other intellectual property laws and confidentiality procedures to establish and protect our proprietary rights. We generally require our employees and consultants to execute invention assignment agreements with us that protect our intellectual property rights.

Intellectual property laws, together with our efforts to protect our proprietary rights, provide only limited protection and any of our intellectual property rights may be challenged, invalidated, circumvented, infringed or misappropriated. The laws of certain countries do not protect proprietary rights to the same extent as the laws of France and the United States and, therefore, in certain jurisdictions, we may be unable to protect our proprietary technology. Further, agreements with our employees and consultants may be breached and we may not have adequate remedies to redress any breach. Further, to the extent that our employees or consultants use intellectual property owned by others in their work for us, disputes may arise as to the rights in related or resulting know-how and inventions.

As of December 31, 2019, we had one issued patent and one pending patent application. While we have applied for patent protection for some of our intellectual property, we do not believe we are materially dependent on the issued or pending patent to protect our products and we believe the duration of our intellectual property rights are adequate. We may pursue additional patent protection in the future to the extent it would be beneficial to us and cost-effective. We also own and use registered and unregistered trademarks on or in connection with our applications and services in numerous jurisdictions. In addition, we have also registered numerous internet domain names.

Segment and Geographic Information

We operate as a single operating and reportable segment. Information about geographic revenue is described in Note 8, *Geographical information*, to our consolidated financial statements, which appears in Part II, Item 8 – “Financial Statements and Supplementary Data.

Employees

We had 1,219 employees as of December 31, 2019. We plan to continue to expand our non-U.S. presence to address the needs of our global customers as well as to acquire customers in new geographies and to invest in sales training to continue to attract and retain large enterprise customers. We also plan to continue to invest in new product development.

Corporate Information

We were organized as a *société par actions simplifiée*, or S.A.S., under the laws of France on September 19, 2005 and subsequently converted into a *société anonyme*, or S.A., on April 14, 2006. We are registered with the French Commerce and Companies Register under the number 484 175 252 RCS Nanterre. Our registered office is located at 9, rue Pages, 92150 Suresnes, France. Our telephone number at this address is +33 (0) 1 46 25 06 00. Our main place of business in the United States is located at 800 Bridge Parkway, Redwood City, CA 94065. Our telephone number at this address is (650) 539-3200. Our website is www.talend.com. Information contained on our website is not part of this Annual Report. Our agent for service of process in the United States is our wholly owned subsidiary, Talend, Inc., a Delaware corporation, located at 800 Bridge Parkway, Redwood City, CA 94065.

Available Information

Copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports or statements filed or furnished pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, or the Exchange Act, are available, free of charge, on our investor relations website as soon as reasonably practicable after we file such material electronically with or furnish such material to the Securities and Exchange Commission, or the SEC. Additionally, our website, located at www.talend.com, also provides notifications of

news or announcements regarding our financial performance, including press releases, public conference calls and webcasts. Information contained on our website is not incorporated by reference into this Annual Report on Form 10-K or our other filings with the SEC. The SEC also maintains a website that contains our SEC filings. The address of the site is www.sec.gov.

Investors and others should note that we announce material financial information to our investors using our investor relations website, SEC filings, press releases, public conference calls and webcasts. We use these channels as well as social media to communicate with the public about our company, our products and services and other matters. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media and others interested in our company to review the information we post on the social media channels listed on our investor relations website.

Item 1A. Risk Factors

You should carefully consider the risks and uncertainties described below and all other information contained in this Annual Report and in our public filings with the Securities and Exchange Commission. The risks and uncertainties described below are not the only ones facing us. Other events that we do not currently anticipate or that we currently deem immaterial also may affect our results of operations, cash flows and financial condition. This Annual Report also contains forward-looking information that involves risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of many factors, including the risks described below and elsewhere in this Annual Report. See “Special Note Regarding Forward-Looking Statements” above.

Risks Related to Our Business and Industry

We have a history of losses and may not be able to achieve profitability or positive cash flows on a consistent basis. If we cannot achieve profitability or positive cash flows, our business, financial condition and results of operations may suffer.

We have incurred losses in all years since our inception. We incurred a net loss of \$61.5 million in the year ended December 31, 2019, \$39.0 million in the year ended December 31, 2018 and \$31.2 million in the year ended December 31, 2017. As a result, we had accumulated losses of \$278.6 million as of December 31, 2019. We anticipate that our operating expenses will increase substantially in the foreseeable future as we continue to develop our technology, enhance our product and service offerings, broaden our installed customer base, expand our sales channels, expand our operations and hire additional employees. These efforts may prove more expensive than we currently anticipate, and we may not succeed in increasing our revenue sufficiently, or at all, to offset these higher expenses. Revenue growth may slow or revenue may decline for a number of possible reasons, including slowing demand for our products or services, increasing competition, a decrease in the growth of our overall market, failure to acquire or renew subscriptions with customers, particularly large enterprise customers, or a failure to capitalize on growth opportunities. Any failure to increase our revenue as we grow our business could prevent us from achieving profitability or improving cash flow on a consistent basis. If we are unable to meet these risks and challenges as we encounter them, our business, financial condition and results of operations may suffer.

Our business and operations have experienced rapid growth, and if we do not appropriately manage any future growth or are unable to improve our systems and processes, our business, financial condition, results of operations and prospects will be adversely affected.

We have experienced rapid growth and increased demand for our products over the last few years. You should not consider our revenue growth in recent periods as indicative of our future performance. While we have historically experienced significant revenue growth, we may not achieve similar revenue growth in future periods. Our employee headcount and number of customers have increased significantly, and we expect to continue to grow our headcount significantly over the next year. The growth and expansion of our business and product offerings places a continuous significant strain on our management, operational and financial resources. As we have grown, we have managed more complex deployments of our subscriptions with large enterprise customers, and our growth strategy is dependent upon increased sales to these large enterprise customers. We must continue to improve and expand our information technology and financial infrastructure, our operating and administrative systems, and our ability to manage headcount, capital and processes in an efficient manner to manage our growth to date and any future growth effectively.

We may not be able to scale improvements successfully to our product offering or implement our other systems, processes and controls in an efficient or timely manner or in a manner that does not negatively affect our results of operations. In addition, our existing systems, processes and controls may not prevent or detect all errors, omissions or fraud. We may experience difficulties in managing improvements to our systems, processes and controls or in connection with third-party software, which could disrupt existing customer relationships, cause us to lose customers, limit us to smaller deployments of our products, or increase our technical support costs. Our failure to improve our systems, processes and controls, or their failure to operate in the intended manner, may result in our inability to manage the growth of our business and to forecast our revenue, forecast our expenses and earnings accurately, or to prevent certain losses. For example, we are implementing certain new enterprise management systems and any failure to implement these systems may disrupt our operations and our operating expenses could increase. Additionally, our productivity and the quality of our products and services may be adversely affected if we do not integrate and train our new employees quickly and effectively. Any future growth would add complexity to our organization and require

effective coordination throughout our organization. If we do not successfully manage the coordination of our internal teams, including our sales and marketing functions, we may experience reduced productivity of our employees and may be constrained in our ability to further grow and scale our business. Failure to manage any future growth effectively could result in increased costs, negatively affect our customers' satisfaction with our products and services and harm our results of operations.

If we are unable to increase sales of our solution to new customers and sell additional products to our existing customers, our future revenue and results of operations will be harmed.

Our future success depends, in part, on our ability to sell our subscriptions to new customers, including small and medium businesses and large enterprise customers, and to expand the deployment of our platform with existing customers by selling additional subscriptions. As a result, we may be required to use increasingly sophisticated and costly sales efforts to differentiate our offerings from those of our competitors, which may not result in additional sales. In addition, the rate at which our customers purchase additional subscriptions depends on a number of factors, including the perceived need for additional data integration and integrity products, evolving sales strategies as well as general economic conditions. Even if we are able to convince a potential customer of the benefits of our solution, they may choose to adopt our competitors' offerings instead. If our efforts to sell additional subscriptions to our customers are not successful, our business may suffer.

The market for our cloud integration products is relatively new, unproven and evolving, and our future success depends on the growth and expansion of such market and our ability to adapt and respond effectively to an evolving market.

The market for cloud integration is relatively new, rapidly evolving and unproven. Our future success will depend in large part on our cloud integration solutions' ability to penetrate the existing market for data integration and integrity platforms, as well as the continued growth and expansion of the market for data integration and integrity platforms. It is difficult to predict subscription customer adoption and renewals, subscription customers' demand for our offerings, the size, growth rate and expansion of these markets, the entry of competitive products or the success of existing competitive products. If we do not correctly anticipate changes in these markets or are unable to respond quickly and effectively to changes in these markets, our business may be harmed. Our ability to penetrate the existing market and any expansion of the market depends on a number of factors, including the cost, performance and perceived value associated with our offerings, as well as subscription customers' willingness to adopt an alternative approach to data integration and integrity platforms. Additionally, demand for our cloud integration products will depend in large part on the adoption of cloud data warehouses. Furthermore, many potential subscription customers have made significant investments in hand coding or legacy ETL software and may be unwilling to invest in a new solution. If the market for cloud integration and management platforms fails to grow or decreases in size, or if we fail to adapt to any changes in the industry, our business would be harmed.

If we fail to successfully manage our business model transition to cloud-based products and a customer-centric sales model, our results of operations could be negatively impacted.

We have observed an industry transition to cloud-based technologies and a decrease in on-premise big data application adoption. To address these trends, we accelerated the development of our cloud offerings. In connection with the transition to cloud-based technologies, we have also shifted to a customer-centric sales model, which we expect will help drive increased subscriptions by providing us with competitive insights during the sales process and more flexible pricing approaches. During our business model transition, revenue, orders, gross margin, net income (loss), earnings (loss) per share, deferred revenue, and cash flow from operations will be impacted as more revenue is recognized ratably rather than up front. Further, our cloud customers typically demand fewer professional services from us compared to on-premise customers, which has had, and we anticipate will continue to have, a negative impact on our professional services revenue. In addition, the metrics we use to gauge the status of our business model transition may evolve over the course of the transition as significant trends emerge.

Our transition may give rise to a number of risks and uncertainties, and if we do not successfully navigate and execute this transition, our business and future operating results could be adversely affected. Continued development of existing cloud offerings as well as new cloud offerings requires a considerable investment of technical, financial, legal, and sales resources, and a scalable organization. Market acceptance of such offerings is affected by a variety of factors,

including but not limited to: security, reliability, performance, current license terms, customer preference, social/community engagement, customer concerns with entrusting a third-party to store and manage their data, public concerns regarding privacy and data protection and the enactment of restrictive laws or regulations. Whether our business model transition will prove successful and will accomplish our business and financial objectives is subject to numerous uncertainties, including but not limited to: customer demand, attach and renewal rates, channel acceptance, our ability to further develop and scale infrastructure, our ability to include functionality and usability in such offerings that address customer requirements, competitive offerings, particularly from low-end cloud competition, tax and accounting implications, pricing, and our costs. Even if we successfully implement this transition, new customers and existing customers may not purchase subscriptions for our new or redeveloped cloud offerings.

Moreover, if our sales model is not successful, or if new sales models we adopt are not successful, our business, financial condition and results of operation could be adversely affected. In addition, any failure of our management and sales personnel to develop and implement sales strategies for our new product offerings could harm our ability to successfully introduce new products.

If we are not successful in executing our strategy to increase sales of our solution to new and existing large enterprise customers, our operating results may suffer.

Our growth strategy is significantly dependent upon increasing sales of our solution to new and existing large enterprise customers, particularly when such sales result in large orders for our solution. Sales to these large enterprise 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 large enterprise customers in negotiating contractual arrangements with us;
- More stringent requirements in our support services, including demand for quicker support response times and penalties for any failure to meet support requirements; 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.

Large organizations often undertake a significant evaluation process that results in a lengthy sales cycle. Although we rely on our channel partners for a portion of our sales, our sales representatives typically engage in direct interaction with our prospective customers as well as our distributors and resellers. We typically provide evaluation products to these customers and may spend substantial time, effort and money in our sales efforts to these prospective customers. In addition, product purchases by large organizations are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. Finally, large organizations typically have longer implementation cycles, require greater product functionality and scalability, require a broader range of services, demand that vendors take on a larger share of risks, require acceptance provisions that can lead to a delay in revenue recognition and expect greater payment flexibility. If we fail to realize an expected sale from a large customer in a particular quarter or at all, our business and operating results could be adversely affected. All of these factors can add further risk to business conducted with these customers.

Recent significant changes to our leadership team and the resulting management transitions might harm our future operating results.

We have recently experienced significant changes to our leadership team. In January 2020, Mike Tuchen, who had served as our Chief Executive Officer, or CEO, for over six years resigned and was succeeded by Christal Bemont. At the same time, we announced the hiring of Ann-Christel Graham as our Chief Revenue Officer, or CRO, filling a head of sales position that had been vacant for approximately one year and we also announced the creation of a new Chief Customer Officer position, which was filled by Jamie Kiser. Although we believe the leadership transition is in the best interest of our stakeholders, this leadership transition may result in loss of personnel with deep institutional or technical knowledge and has the potential to disrupt our operations and relationships with employees and customers due to added

costs, operational inefficiencies, decreased employee morale and productivity and increased turnover. We must successfully integrate our new leadership team members within our organization to achieve our operating objectives and the leadership transition may temporarily affect the performance of our business and results of operations as the new members of our leadership team, particularly our CEO and CRO, become familiar with our business. In addition, our competitors may seek to use this transition and the related potential disruptions to gain a competitive advantage over us. Further, these changes also increase our dependency on other members of our leadership team who remain with us. Such individuals are not contractually obligated to remain employed by us and may leave at any time. Any such departure could be particularly disruptive in light of the recent leadership transition and to the extent we experience management turnover, competition for top management is high and it may take months to find a candidate that meets our requirements. If we are unable to mitigate these or other similar risks, our business, results of operation and financial condition may be adversely affected.

Prolonged economic uncertainties or downturns could harm our business.

Current or future economic downturns, fear or anticipation of such conditions, or uncertainty as to how the U.S. or foreign governments will act with respect to the outbreak of the coronavirus (COVID-19), tariffs, international trade agreements and policies, could harm our business and results of operations, cause a decrease in corporate spending on enterprise software in general and slow down the rate of growth of our business. We anticipate that current macroeconomic conditions and uncertainty in Europe may result in slower revenue growth in our Europe, Middle East and Africa region. The U.S. and global macroeconomic environment could be negatively affected by, among other things, the outbreak of COVID-19, financial and credit market fluctuations, the impact and uncertainty regarding global central bank monetary policy, changes in interest rates and inflation, changes in international trade relationships and trade disputes between the U.S. and other countries, instability in the geopolitical environment as a result of the United Kingdom “Brexit” decision to withdraw from the European Union, economic challenges in China, and terrorist attacks in the United States, Europe or elsewhere. A prolonged period of economic uncertainty or a downturn may also significantly affect financing markets, the availability of capital and the terms and conditions of financing arrangements, including the overall cost of financing. Circumstances may arise in which we need, or desire, to raise additional capital, and such capital may not be available on commercially reasonable terms, or at all.

A significant downturn in general worldwide economic conditions could make it extremely difficult for our customers and us to forecast and plan future business activities accurately and could cause our customers to reevaluate their decision to purchase our products, which could delay and lengthen our sales cycles or result in cancellations of planned purchases. Furthermore, during challenging economic times our customers may face issues in gaining timely access to sufficient credit, which could impair their ability to make timely payments to us. If that were to occur, we may be required to increase our allowance for doubtful accounts, which would harm our results of operations. We have a significant number of customers in the financial services, technology, telecommunications, healthcare, manufacturing and retail industries. A substantial downturn in any of these industries may cause firms to react to worsening conditions by reducing their capital expenditures in general or by specifically reducing their spending on information technology. Customers in these industries may delay or cancel information technology projects or seek to lower their costs by renegotiating vendor contracts. To the extent purchases of our offerings are perceived by customers and potential customers to be discretionary, our revenue may be disproportionately affected by delays or reductions in general information technology spending. Also, subscription customers may choose to develop or utilize in-house support capabilities as an alternative to purchasing our subscription offerings. Moreover, competitors may respond to market conditions by lowering prices of subscription offerings. In addition, the increased pace of consolidation in certain industries may result in reduced overall spending on our subscription offerings.

We cannot predict the timing, strength or duration of any economic slowdown, instability or recovery, generally or within any particular geographic region or industry. If the economic conditions of the general economy or industries in which we operate worsen from present levels, our business, results of operations, financial condition and cash flows could be harmed.

The recent global coronavirus outbreak could harm our business and results of operations.

In December 2019, a coronavirus (COVID-19) was reported in China, in January 2020 the World Health Organization (WHO) declared it a Public Health Emergency of International Concern, and in March 2020 the WHO declared it a pandemic. This contagious disease outbreak has continued to spread across the globe and is impacting

worldwide economic activity and financial markets. In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19, we have taken precautionary measures intended to minimize the risk of the virus to our employees, our customers, and the communities in which we operate, which could negatively impact our business. We are, with certain exceptions, requiring all employees around the globe to work remotely. We also have suspended all non-essential travel worldwide for our employees. While we have a distributed workforce and our employees are accustomed to working remotely or working with other remote employees, our workforce is not fully remote. Our employees travel frequently to establish and maintain relationships with one another, our customers and prospective customers, partners, and investors. Although we continue to monitor the situation and may adjust our current policies as more information and public health guidance become available, temporarily suspending travel and doing business in person could negatively affect our customer success efforts, sales and marketing efforts, challenge our ability to enter into customer contracts in a timely manner, slow down our recruiting efforts, or create operational or other challenges, any of which could harm our business and results of operations. In addition, COVID-19 may disrupt the operations of our customers, channel partners, resellers and systems integrators for an indefinite period of time, including as a result of travel restrictions and/or business shutdowns, all of which could negatively impact our business and results of operations. More generally, the COVID-19 outbreak could adversely affect economies and financial markets globally, potentially leading to an economic downturn, which could decrease technology spending and adversely affect demand for our solutions and harm our business and results of operations. It is not possible at this time to estimate the impact that COVID-19 could have on our business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted.

Interruptions or performance problems associated with our technology and infrastructure, such as security incidents, and our reliance on technologies from third parties, may adversely affect our business operations and financial results.

Our website and internal technology infrastructure may experience performance issues due to a variety of factors, including infrastructure changes, human or software errors, website or third-party hosting disruptions or capacity constraints due to a number of potential causes, including technical failures, natural disasters or fraud or security incidents, such as ransomware attacks. Our use and distribution of open source software may increase this risk. If our website is unavailable, our users are unable to use our products or download our tools, we fail to satisfy contractual obligations guaranteeing minimum availability rates, or users or prospective users are unable to order subscription offerings or professional services within a reasonable amount of time or at all, our business could be harmed.

Further, we expect to continue to make significant investments to maintain and improve website performance and to enable rapid releases of new features and applications for Talend Data Fabric and Talend Open Studio. To the extent that we do not effectively upgrade our systems as needed and continually develop our technology to accommodate actual and anticipated changes in technology, our business and results of operations may be harmed.

In addition, we rely on cloud technologies from third parties in order to operate critical functions of our business, including financial management services, relationship management services and lead generation management services. If these services become unavailable due to extended outages or interruptions or because they are no longer available on commercially reasonable terms or prices, our expenses could increase, our ability to manage our finances could be interrupted, our processes for managing sales of our subscription offerings and professional services and supporting our customers could be impaired, and our ability to generate and manage sales leads could be weakened until equivalent services, if available, are identified, obtained and implemented, all of which could harm our business and results of operations.

Our sales cycle can be long and unpredictable, particularly with respect to sales through our channel partners or sales to large enterprise customers, and our sales efforts require considerable time and expense.

Our results of operations may fluctuate, in part, because of the resource-intensive nature of our sales efforts, the length and variability of the sales cycle of our subscription offerings and the difficulty in making short-term adjustments to our operating expenses. Our results of operations depend in large part on sales to larger subscription customers and increasing sales to existing customers. The length of our sales cycle, from initial contact with our sales team to contractually committing to our subscription offerings, generally averages seven months, but can vary substantially from customer to customer based on deal complexity as well as whether a sale is made directly by us or through a channel partner. Particularly for larger enterprise customers, the sales cycle can be longer and require additional resources as

these customers may undertake an evaluation process and we may spend substantial time, effort and money in these sales efforts. Additionally, product purchases by larger organizations are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. Larger enterprise customers may also have longer implementation cycles and require greater product functionality or support. Our sales cycle can extend to more than a year for some customers. It is difficult to predict exactly when, or even if, we will make a sale to a potential customer or if we can increase sales to our existing customers. As a result, large individual sales have, in some cases, occurred in quarters subsequent to those we anticipated, or have not occurred at all. The loss or delay of one or more large transactions in a quarter could affect our cash flows and results of operations for that quarter and our revenue for any future quarters. Because a substantial proportion of our expenses are relatively fixed in the short term, our results of operations will suffer if we are unable to convert large enterprise customers and our revenue falls below our expectations in a particular quarter, which could cause the price of our ADSs to decline.

We rely significantly on revenue from subscriptions, which may decline and, because we recognize a significant portion of revenue from subscriptions over the term of the relevant subscription period, downturns or upturns in sales are not immediately reflected in full in our results of operations.

Subscription revenue accounts for a significant portion of our revenue, comprising 88% of total revenue in the year ended December 31, 2019, 86% in the year ended December 31, 2018 and 85% in the year ended December 31, 2017. Sales of new or renewal subscription contracts may decline and fluctuate as a result of a number of factors, including customers' level of satisfaction with our products, the prices of our products, the prices of products affected by our competitors and reductions in our customers' spending levels. If our sales of new or renewal subscription contracts decline, our total revenue and revenue growth rate may decline and our business will suffer.

Under ASC 606, the new revenue recognition standard, adopted by us on January 1, 2018, the support and maintenance element of on-premise subscription arrangements represents a series of performance obligations that are delivered over time and are recognized ratably over time. Our on-premise subscriptions are also comprised of a separate performance obligation related to the software license element of the subscription, which is a much smaller portion of the subscription arrangement. We allocate a portion of the transaction price of an on-premise subscription arrangement to the software license performance obligation and the remainder of the transaction price to the support and maintenance performance obligation (See Note 2(d), *Revenue recognition*, in the notes to our consolidated financial statements for more details). Subscriptions for our cloud-based offerings represent the right of access to our software as a service for which revenue is recognized ratably over the term of the arrangement. Subscription agreements typically have a contractual term of one to three years and are generally billed annually in advance and non-cancelable.

As a result, a significant portion of the subscription revenue we report each quarter continues to be recognition of deferred revenue from subscription contracts entered into during previous fiscal quarters. Consequently, a decline in new or renewed subscription contracts in any one fiscal quarter will not be fully or immediately reflected in revenue in that fiscal quarter but will negatively affect our revenue in future fiscal quarters. Accordingly, the effect of significant downturns in new or renewed sales of our subscriptions is not reflected in full in our results of operations until future periods. Also, it is difficult for us to increase our subscription revenue rapidly through additional sales in any period, as the vast majority of revenue from new and renewal subscription contracts must be recognized ratably over the applicable period.

We also pre-bill subscription orders and offer larger discounts to customers willing to pre-pay for longer, multi-year subscription contracts. Since 2014, we have decreased the average pre-billed duration of our subscriptions, which has directly reduced billing while decreasing the average discount related to longer-duration contracts.

If our existing customers terminate or do not renew their subscriptions, it could have an adverse effect on our business and results of operations.

We expect to derive a significant portion of our revenue from renewals of existing subscription agreements. For the year ended December 31, 2019, over half of our subscription bookings were generated from the renewals of existing subscription agreements or from the transition of our current on-premise customers to our cloud offering. As a result, achieving a high renewal rate of our subscription agreements, particularly with our large enterprise customers, is critical to our business. Our existing customers that purchase our subscription services have no contractual obligation to renew their contracts after the completion of their initial subscription term, which is typically one year, and some customers

may have a right to terminate during the subscription term. As a result, we may not accurately predict future revenue from existing customers. Our customers' renewal rates have in the past, and may in the future, decline or fluctuate, and termination rates may increase or fluctuate, as a result of a number of factors, including their satisfaction with our platform and our customer support, our products' ability to integrate with new and changing technologies, the frequency and severity of subscription outages, the capabilities of competing products, the introduction of competing technologies, our product uptime or latency, and the pricing of our, or competing, products. If our customers renew their subscriptions, they may renew for lower subscription amounts or for shorter subscription terms or on other terms that are less economically beneficial to us. We have limited historical data with respect to rates of customer terminations or renewals, particularly for our cloud-based products, so we may not accurately predict future renewal trends. If our customers terminate or do not renew their subscriptions, or renew on less favorable terms, our revenue may grow more slowly than expected or decline and our dollar-based net expansion rate, a key metric we use to track the growth of our business, may grow more slowly than expected or decline.

Our future success depends in large part on the growth of the market for big data applications and an increase in the desire to ingest, store and process big data, and the market for big data applications may not grow as expected and, even if such growth occurs, our business may not grow at similar rates, or at all.

Our ability to increase the adoption of our big data solutions, increase sales of related support subscriptions and professional services depends on the increased adoption of big data services and applications by enterprises. While we believe that big data services and applications can offer a compelling value proposition to many enterprises, the broad adoption of big data applications and services also presents challenges to enterprises, including developing the internal expertise and infrastructure to manage big data applications and services effectively, coordinating multiple data sources, defining a big data strategy that delivers an appropriate return on investment and implementing an information technology infrastructure and architecture that enables the efficient deployment of big data solutions. Accordingly, our expectations regarding the potential for future growth in the market for big data applications and services, and the third-party growth estimates for this market are subject to significant uncertainty. Market demand for on-premise big data systems and applications has slowed recently, due in part to the rapid advance of big data capabilities from cloud platform providers. If the overall market for big data applications and services does not grow as expected and if the market demand for on-premise big data applications slows further or declines, our business prospects may be adversely affected. Even if the market for big data applications and services increases, our business may not grow at a similar rate, or at all.

We derived a substantial portion of our subscription revenue in the year ended December 31, 2019 from our on-premise Talend Big Data Integration and Talend Cloud solutions and failure of these solutions to satisfy customer demands or to achieve increased market acceptance would harm our business, results of operations, financial condition and growth prospects.

We derived a substantial portion of our subscription revenue in the year ended December 31, 2019 and expect to continue to derive a significant portion of our subscription revenue from our on-premise Talend Big Data Integration and Talend Cloud solutions. Demand for on-premise Talend Big Data Integration and Talend Cloud is affected by a number of factors, many of which are beyond our control, including market acceptance of our solutions by referenceable accounts for existing and new use cases, the timing of development and release of new products by our competitors and additional capabilities and functionality by us, and technological change and growth or contraction in the market in which we compete, including the adoption of big data technologies. We expect the proliferation of data to lead to an increase in the IT integration needs of our customers, and on-premise Talend Big Data Integration and Talend Cloud may not be able to perform to meet those demands. If we are unable to continue to meet our subscription customer requirements, to achieve more widespread market acceptance of on-premise Talend Big Data Integration and Talend Cloud, or to increase demand for these solutions, our business, results of operations, financial condition and prospects will be harmed.

The estimates of market opportunities and expectations about market growth included in this Annual Report may prove to be inaccurate, and even if the markets in which we compete achieve the expected growth, our business could fail to grow at similar rates, if at all.

Market opportunity estimates and expectations about market growth included in this Annual Report are subject to significant uncertainty and are based on assumptions and estimates that may not prove to be accurate. Even if the

markets in which we compete meet the size estimates and growth expectations included in this Annual Report, our business could fail to grow for a variety of reasons, which would adversely affect our results of operations.

Incorrect implementation or use of our software could result in customer dissatisfaction and negatively affect our business, operations, financial results and growth prospects.

Our platform is designed to be operated in a self-service manner by our customers who subscribe to our cloud-based solution and our platform may also be deployed on-premise in large scale, complex IT environments of our customers. Our customers and channel partners require training and experience in the proper use of and the variety of benefits that can be derived from our platform to maximize its benefit for their business. If our platform is not implemented or used correctly or as intended, inadequate performance or security vulnerabilities may result. The incorrect implementation or use of our software or our failure to train customers on how to use our software productively may result in customer dissatisfaction, negative publicity and may adversely affect our reputation and brand. Failure by us to provide these training and implementation services to our customers would result in lost opportunities for follow-on sales to these customers and adoption of our platform by new customers and adversely affect our business and growth prospects. Further, we have in the past, and may in the future, experience reduced demand for our professional services. If we are not able to sell professional services to our customers, their ability to successfully implement our software may be harmed, which could result in customer dissatisfaction with our products, negatively impact renewal or expansion rates, harm our brand, and adversely affect our results of operations.

In cases where our platform has been deployed on-premise within a customer's IT environment, if we or our customers are unable to configure or implement our software properly, or unable to do so in a timely manner, customer perceptions of our platform may be impaired, our reputation and brand may suffer, and customers may choose not to increase their use of our platform or to discontinue its use. In addition, our on-premise solution imposes server load and data storage requirements for implementation. If our customers do not have the server load capacity or the storage capacity required, they may not be able to implement and use our platform effectively and, therefore, may choose to discontinue their use of our platform or not increase their use.

Our ability to increase sales of our solution is highly dependent on the quality of our customer support, and our failure to offer high quality support would have an adverse effect on our business, reputation and results of operations.

After our products are deployed within our customers' IT environments, our customers depend on our technical support services, as well as the support of our channel partners, including value added resellers, to resolve issues relating to our products. Our channel partners often provide similar technical support for third parties' products and may therefore have fewer resources to dedicate to the support of our products. If we or our channel partners do not succeed in helping our customers quickly resolve post-deployment issues or provide effective ongoing support, our ability to sell additional subscriptions to existing customers would be adversely affected and our reputation with potential customers could be damaged. Many larger enterprise and government entity customers have more complex IT environments and require higher levels of support than smaller customers. If we or our channel partners fail to meet the requirements of these enterprise customers, it may be more difficult to grow sales with enterprise customers.

Additionally, if our channel partners do not effectively provide support to the satisfaction of our customers, we may be required to provide direct support to such customers, which would require us to hire additional personnel and to invest in additional resources. It can take several months to recruit, hire and train qualified technical support employees. We may not be able to hire such resources fast enough to keep up with unexpected demand, particularly if the sales of our products exceed our internal forecasts. To the extent that we or our channel partners are unsuccessful in hiring, training and retaining adequate support resources, our and our channel partners' ability to provide adequate and timely support to our customers, and our customers' satisfaction with our products and services, will be adversely affected. Additionally, to the extent that we may need to rely on our sales engineers to provide post-sales support while we are ramping our support resources, our sales productivity will be negatively affected, which would harm our revenue. Our or our channel partners' failure to provide and maintain high-quality support services would have an adverse effect on our business, financial condition and results of operations.

We face intense competition in our market and we may lack sufficient financial or other resources to maintain or improve our competitive position.

The market for our products is highly competitive, quickly evolving and subject to rapid changes in technology, which may expand the alternatives to our customers for their data integration and integrity requirements. Our current primary competitors generally fall into six categories.

- Diversified technology companies that offer data integration solutions, including: IBM, Microsoft, Oracle and SAP;
- Pure-play data integration vendors, including: Ab Initio, Informatica and Tibco;
- Cloud providers such as Amazon, Google and Microsoft, which offer their own integration tools and services;
- Vendors from other related markets (for example, SnapLogic, a traditional integration platform as a service vendor, and MuleSoft and Boomi, API providers) entering into the data integration and integrity market;
- Early-stage, cloud native, niche data integration technologies, including Fivetran and Matillion; and
- Hand-coded, custom data integration solutions built internally by organizations that we target as potential customers.

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

- Greater name recognition and longer operating histories;
- Larger sales and marketing budgets and resources;
- Broader distribution and established relationships with distribution partners and customers;
- Greater customer support resources;
- Greater resources to make acquisitions;
- Lower labor and development costs;
- Larger and more mature intellectual property portfolios; and
- Substantially greater financial, technical and other resources.

Certain of our current strategic partners, such as Cloudera, Amazon Web Services (AWS), Google and Microsoft have developed or may develop and offer their own data integration solutions. Such competitors may be more likely to promote and sell their own solutions over our products and they may ultimately be able to transition customers onto their competing solutions, which could materially and adversely affect our revenues and growth. Further, such competitors may cease their relationships with us. For example, we use the cloud hosting services provided by AWS and Microsoft Azure for our cloud offerings. While our customer contracts do not obligate us to use a particular cloud hosting service platform, if either AWS or Microsoft denied us access to their cloud hosting services, we could lose customers who are sensitive to the cloud hosting service platform we utilize for their account.

In addition, some of our larger competitors have substantially broader and more diverse product offerings and leverage their relationships based on other products or incorporate functionality into existing products to gain business in a manner that discourages users from purchasing our products, including through selling at zero or negative margins, product bundling, or closed technology platforms. Potential customers may also prefer to purchase from their existing suppliers rather than a new supplier regardless of product performance or features. These larger competitors often have broader market focus and may therefore not be as susceptible to downturns in a particular market. Many of our smaller competitors that specialize in niche data integration technologies may introduce new products which are disruptive to our solution. Conditions in our market could change rapidly and significantly as a result of technological advancements, partnering by our competitors, or continuing market consolidation. New start-up companies that innovate and large competitors that are making significant investments in research and development may invent similar or superior products and technologies that compete with our products and technology. Our current and potential competitors may also establish cooperative relationships among themselves or with third parties that may further enhance their resources. While we endeavor to engage customers on our standard form agreements, in order to successfully engage larger customers in a highly competitive environment we may be required to negotiate our standard terms or transact on our customers' forms, which may result in accepting more onerous terms and obligations, and greater liability exposure, than we do in our standard forms.

Some of our competitors have made or could make acquisitions of businesses that may allow them to offer more directly competitive and comprehensive solutions than they had previously offered. As a result of such acquisitions, our current or potential competitors might be able to adapt more quickly to new technologies and customer needs, devote greater resources to the promotion or sale of their products and services, initiate or withstand substantial price competition, take advantage of acquisitions or other opportunities more readily, or develop and expand their product offerings more quickly than we do. Due to various reasons, organizations may be more willing to add solutions incrementally to their existing data management infrastructure from competitors than to replace it with our solution. These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins and loss of market share. Any failure to meet and address these factors could seriously harm our business and results of operations.

If we do not accurately predict, prepare for, and respond promptly to the rapidly evolving technological and market developments and changing customer needs in our market, our competitive position and prospects will be harmed.

The market for our products is characterized by continuing rapid technological development, the emergence of new technologies, evolving industry standards, changing customer needs and frequent new product introductions and enhancements. The introduction of products by our direct competitors or others incorporating new technologies, the emergence of new industry standards, or changes in customer requirements could render our existing products obsolete, unmarketable, or less competitive. In addition, industry-wide adoption or increased use of hand-coding, open source standards or other uniform open standards across heterogeneous applications could minimize the importance of the integration functionality of our products and materially adversely affect the competitiveness and market acceptance of our products. Furthermore, the standards on which we choose to develop new products or enhancements may not allow us to compete effectively for business opportunities.

Our success depends upon our ability to enhance existing products, respond to changing customer requirements and develop and introduce, in a timely manner, new products that keep pace with technological and competitive developments and emerging industry standards. For example, many of our customers have transitioned to cloud computing environments, which has accelerated the development of our cloud offerings. We have in the past experienced delays in releasing new products and product enhancements and may experience similar delays in the future. We may also pursue marketing strategies that focus on certain products or features over other offerings, and decisions to deploy our limited resources towards particular goals that do not meet a positive market response will harm our operating results. As a result, in the past, some of our customers deferred purchasing our products until the next upgrade was released. Additionally, the success of new product introductions depends on a number of factors including, but not limited to, timely and successful product development, market acceptance, our ability to manage the risks associated with new product releases, our ability to successfully plan and execute on a sales strategy for our new products, the availability of software components for new products, the effective management of development and other spending in connection with anticipated demand for new products, the availability of newly developed products and the risk that new products may have bugs, errors or other defects or deficiencies in the early stages of introduction. Future delays or problems in the installation or implementation of our new releases may cause customers to forgo purchases of our products and purchase those of our competitors instead. Additionally, even if we are able to develop new products and product enhancements, we may not achieve market acceptance.

One of our marketing strategies is to offer trial versions of our products, and we may not be able to realize the benefits of this strategy.

We are dependent upon lead generation strategies, including our marketing strategy of offering trial versions of our products, to generate sales opportunities. These strategies may not be successful in continuing to generate sufficient sales opportunities necessary to increase our revenue. Many users never convert from the trial versions to the paid versions of our products. To the extent that users do not become, or we are unable to successfully attract, paying customers, we will not realize the intended benefits of these marketing strategies and our ability to grow our revenue will be adversely affected.

Because of the characteristics of open source software, there are few technological barriers to entry into the open source market by new competitors and it may be relatively easy for competitors, some of whom may have greater resources than we have, to enter our markets and compete with us.

One of the characteristics of open source software is that anyone may obtain access to the source code for our open source products and then modify and redistribute the existing open source software and use it to compete in the marketplace. Such competition can develop without the degree of overhead and lead time required by traditional proprietary software companies. It is possible for competitors to develop their own software, including software based on Talend Open Studio, potentially reducing the demand for our solution and putting price pressure on our subscription offerings. We may not be able to compete successfully against current and future competitors and competitive pressure or the availability of new open source software may result in price reductions, reduced operating margins and loss of market share, any one of which could harm our business, financial condition, results of operations and cash flows.

We may be unable to predict the future course of open source technology development, which could reduce the market appeal of our offerings, damage our reputation and adversely affect our business, financial condition, results of operations and cash flows.

We do not exercise control over many aspects of the development of open source technology. Different groups of open source software programmers compete with one another to develop new technology. Typically, the technology developed by one group will become more widely used than that developed by others. If we acquire or adopt new technology and incorporate it into our offerings but competing technology becomes more widely used or accepted, the market appeal of our offerings may be reduced, which could harm our reputation, diminish our brands and adversely affect our business, financial condition, results of operations and cash flows.

A significant defect, security vulnerability, error or performance failure in our software could cause us to lose revenue and expose us to liability.

The software and professional services we offer are inherently complex and, despite extensive testing and quality control, have in the past and may in the future contain defects or errors or not perform as contemplated, especially when first introduced. These defects, security vulnerabilities, errors or performance failures could cause damage to our reputation, loss of customers or revenue, product returns, order cancellations, service terminations, or lack of market acceptance of our software, all of which could negatively impact our business and operating results and materially damage our reputation and brand. As the use of our solution, including products that were recently acquired or developed, expands to more sensitive, secure, or mission critical uses by our customers, we may be subject to increased scrutiny, potential reputational risk, or potential liability should our software fail to perform as contemplated in such deployments. We have in the past and may in the future need to issue corrective releases of our software to fix these defects, errors or performance failures, which could require us to allocate significant research and development and customer support resources and capital to address these problems.

Our standard form agreements with our customers typically contain provisions intended to limit both the types of claims for which we would be liable and the maximum amount of our liability. However, some of our customers require us to accept contract terms that do not include the same limitations. Additionally, any limitation of liability provisions that may be contained in our license agreements may not be effective as a result of existing or future national, federal, state, or local laws or ordinances or unfavorable judicial decisions. Although we have not experienced any liability claims to date with respect to defects, security vulnerabilities, errors, or performance failures, the sale and support of our products entail the risk of such claims, which could be substantial in light of the use of our products in enterprise-wide environments. In addition, our insurance against this liability may not be adequate to cover a potential claim, and if we experienced a significant incident that impacted many customers, we could be subject to indemnity claims or other damages that exceed our insurance coverage. If such a breach or incident occurred, our insurance coverage might not be adequate for data handling or data security liabilities actually incurred, such insurance may not continue to be available to us in the future on economically reasonable terms, or at all, and insurers may deny us 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.

A breach of our security measures or unauthorized access to private or proprietary data, or a perception that any security breach or other incident has occurred, may result in our software being perceived as not secure, lower customer use or stoppage of use of our products, and significant liabilities.

Our products involve the processing of large amounts of our customers' sensitive and proprietary information, as well as personal data and personal information. Additionally, we collect and store certain sensitive and proprietary information in the operation of our business, including trade secrets, intellectual property, employee data, and other confidential data. While we have taken measures to protect our own proprietary and confidential information, as well as the personal information, personal data, and confidential information that we otherwise obtain, including confidential information we may obtain through customer usage of our cloud-based services, we have experienced and may in the future experience, security breaches, including breaches resulting from a cybersecurity attack, phishing attack, or any unauthorized access, unauthorized usage, virus or similar breach or disruption. These attacks may come from individual hackers, criminal groups, and state-sponsored organizations. These sources can also implement social engineering techniques to induce our employees, contractors, or customers to disclose passwords or other sensitive information or take other actions to gain access to our data or our customers' data. Further, security breaches and other security incidents may result from employee or contractor error or negligence.

Any compromise of our security or any unauthorized access to or breaches of the security of our or our service providers' systems or data processing tools or processes, or of our product offerings, as a result of third-party action, employee error, defects or bugs, malfeasance, or otherwise, which results in someone obtaining unauthorized access to our proprietary or confidential information, personal information or other private or proprietary data, or any such information or data of our customers, could result in the loss or corruption of any such information or data, or unauthorized access to or acquisition of, such information or data. We have experienced unauthorized access to information from certain of our repositories, hosted by a third-party provider, and from a separate cloud services platform. Past and future security breaches could result in reputational damage, litigation, regulatory investigations and orders, loss of business, indemnity obligations, damages for contract breach, penalties for violation of applicable laws, regulations, or contractual obligations, and significant costs, fees and other monetary payments for remediation, including in connection with costly and burdensome breach notification requirements.

Further, any belief by customers or others that a security breach or other incident has affected us or any of our vendors or service providers, even if a security breach or other incident has not affected us or any of our vendors or service providers or has not actually occurred, could have any or all of the foregoing impacts on us, including damage to our reputation. Even the perception of inadequate security may damage our reputation and negatively impact our ability to win new customers and retain existing customers.

We incur significant costs in an effort to detect and prevent security breaches and other security-related incidents and we expect our costs will increase as we make improvements to our systems and processes to prevent future breaches and incidents. In the event of a future breach or incident, we could be required to expend additional significant capital and other resources in an effort to prevent further breaches or incidents. Moreover, we could be required to expend significant capital and other resources to address the incident and any future data security incident or breach.

We engage third-party vendors and service providers to store and otherwise process some of our and our customers' data, including sensitive and personal information. Our vendors and service providers may also be the targets of cyberattacks, malicious software, phishing schemes, fraud, and other risks to the confidentiality, security, and integrity of their systems and the data they process for us. Our ability to monitor our vendors and service providers' data security is limited, and, in any event, third parties may be able to circumvent those security measures, resulting in the unauthorized access to, misuse, disclosure, loss or destruction of our and our customers' data, including sensitive and personal information.

Techniques used to sabotage or obtain unauthorized access to systems or networks are constantly evolving and, in some instances, are not identified until launched against a target. We and our service providers may be unable to anticipate these techniques, react, remediate or otherwise address any security breach or other security incident in a timely manner, or implement adequate preventative measures.

Further, any limitations of liability provisions in our customer and user agreements, contracts with third-party vendors and service providers or other contracts may not be enforceable or adequate or otherwise protect us from any

liabilities or damages with respect to any particular claim relating to a security breach or other security-related matter. While our insurance policies include liability coverage for certain of these matters, if we experienced a widespread security breach or other incident that impacted a significant number of our customers, we could be subject to indemnity claims or other damages that exceed our insurance coverage. If such a breach or incident occurred, our insurance coverage might not be adequate for data handling or data security liabilities actually incurred, such insurance may not continue to be available to us in the future on economically reasonable terms, or at all, and insurers may deny us 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.

Our failure to raise additional capital or generate the significant capital necessary to expand our operations and invest in new products could reduce our ability to compete and could harm our business.

In September 2019, we received net proceeds of \$149.1 million from the issuance of the 1.75% Convertible Senior Notes due September 1, 2024, which we refer to as the 2024 Notes. To that end, we expect that our existing cash and cash equivalents will be sufficient to meet our anticipated cash needs for the foreseeable future. We anticipate negative cash flows during fiscal 2020 as we intend to make investments in our business in order to support our growth. We have a history of negative cash flow from operating activities and as a result may need to raise additional funds in the future or we may elect to raise additional capital to fund investments in our business or strategic investments. If we seek to raise capital for any reason, we may not be able to obtain additional debt or equity financing on favorable terms, if at all. If we raise additional capital by issuing equity or securities convertible into equity, our shareholders may experience significant dilution of their ownership interests and the per share value of our ordinary shares and ADSs could decline. Furthermore, if we engage in debt financing, the holders of debt would have priority over the holders of ADSs and underlying ordinary shares, and we may be required to accept terms that restrict our ability to incur additional indebtedness. We may also be required to take other actions that would otherwise be in the interests of the debt holders and force us to maintain specified liquidity or other ratios, any of which could harm our business, results of operations and financial condition. If we need or seek additional capital and cannot raise it on acceptable terms, we may not be able to, among other things:

- Develop or enhance our products and professional services;
- Continue to expand our sales and marketing and research and development organizations;
- Acquire complementary technologies, products or businesses;
- Expand operations in the United States or internationally;
- Hire, train and retain employees; or
- Respond to competitive pressures or unanticipated working capital requirements.

Our failure to have sufficient capital to do any of these things could seriously harm our business, financial condition and results of operations.

We may acquire other businesses which could require significant management attention, disrupt our business, dilute shareholder value and adversely affect our results of operations.

As part of our business strategy, we may acquire or make investments in complementary companies, products, or technologies. For example, in November 2018 we acquired Stitch Inc. Our ability as an organization to acquire and integrate other companies, products, or technologies in a successful manner is unproven given our limited track record, including our continued integration of Stitch. Our ability to successfully acquire companies, products and technologies depends, in part, on our ability to attract and retain highly skilled personnel. If we are unable to attract and retain qualified personnel, we may be unable to take advantage of opportunities to make beneficial acquisitions or investments. The identification of suitable acquisition candidates is difficult, and we may not be able to complete such acquisitions on favorable terms, if at all. If we do complete future acquisitions, we may not ultimately strengthen our competitive position or achieve our goals and business strategy, we may be subject to claims or liabilities assumed from an acquired company, product, or technology, and any acquisitions we complete could be viewed negatively by our customers, investors and securities analysts. In addition, if we are unsuccessful at integrating Stitch and any future acquisitions, or the technologies associated with such acquisitions, into our company, the revenue and results of operations of the combined company could be adversely affected. Any integration process may require significant time and resources,

which may disrupt our ongoing business and divert management's attention, and we may not be able to manage the integration process successfully.

We may not successfully evaluate or utilize the acquired technology or personnel, realize anticipated synergies from the acquisition, or accurately forecast the financial impact of an acquisition transaction and integration of such acquisition, including accounting charges. We may have to pay cash, incur debt, or issue equity to pay for any future acquisitions, each of which could adversely affect our financial condition or the market price of our ADSs. The sale of equity to finance any future acquisitions could result in dilution to our shareholders. The incurrence of indebtedness would result in increased fixed obligations and could also include covenants or other restrictions that would impede our ability to manage our operations. The occurrence of any of these risks could harm our business, results of operations and financial condition.

Our relatively limited operating history makes it difficult to evaluate our current business and prospects and may increase the risks associated with your investment.

We were founded in 2005, launched our first product in 2006 and began offering our platform on a subscription basis in 2007. Our relatively limited operating history makes it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in constantly evolving industries, including changing customer preferences, competing offerings and pricing, evolving sales strategies and other risks described in this Annual Report. If we do not address these risks successfully, our business and results of operations will be adversely affected, and the market price of our ADSs could decline. Further, we have limited historical financial data and we operate in a rapidly evolving market. As such, any predictions about our future revenue and expenses may not be as accurate as they would be if we had a longer operating history or operated in a more predictable market.

Delivering certain of our products via the cloud increases our expenses and may pose other challenges to our business.

We offer and sell our products via both the cloud and on premise using the customer's own infrastructure. Our cloud offering enables quick setup and subscription pricing. Historically, our products were developed in the context of the on-premise offering, and we have less operating experience offering and selling our products via our cloud offering. Although a majority of our revenue has historically been generated from customers using our on-premise products, a majority of our new subscription business comes from the cloud and we believe that over time more customers will continue to move to the cloud offering. As more of our customers transition to the cloud, we may be subject to additional contractual obligations with respect to privacy, security and data protection, as well as competitive pressures and higher operating costs, any of which may harm our business. If our cloud offering does not develop as quickly as we expect, or if we are unable to continue to scale our systems to meet the requirements of a large cloud offering, our business may be harmed. We are directing a significant portion of our financial and operating resources to implement a robust cloud offering for our products and to transition our existing customers to our cloud offerings, but even if we continue to make these investments, we may be unsuccessful in growing or implementing our cloud offering competitively, and our business, results of operations and financial condition could be harmed.

The sales prices of our products may decrease, which may reduce our gross profits and adversely affect our financial results.

The sales prices for our subscription offerings and professional services may decline for a variety of reasons, including competitive pricing pressures, discounts, a change in our mix of subscription offerings and professional services and their respective margins, introduction of new pricing models such as on-demand pricing or new sales models, anticipation of the introduction of new subscription offerings or professional services, or promotional programs. Competition continues to increase in the market segments in which we participate, and we expect competition to further increase in the future, thereby leading to increased pricing pressures. Larger competitors with more diverse product and service offerings may reduce the price of products or services that compete with ours or may bundle them with other products and services. Additionally, currency fluctuations in certain countries and regions may negatively impact actual prices that channel partners and customers are willing to pay in those countries and regions. We may not be successful in developing and introducing new subscription offerings with enhanced functionality on a timely basis. Any such new subscription offerings, if introduced, may not enable us to maintain our prices and gross profits at levels that will allow

us to achieve and maintain profitability.

The competitive position of our product offerings depends in part on their ability to operate with third-party products and services and our customers' existing infrastructure.

The competitive position of our product offering depends in part on their ability to operate with products and services of third parties, including companies that offer big data solutions, cloud-based solutions, software services and infrastructure, and our products must be continuously modified and enhanced to adapt to changes in hardware, software, networking, browser and database technologies. In the future, one or more technology companies, whether our partners or otherwise, may choose not to support the operation of their software, software services and infrastructure with our product offerings. In addition, to the extent that a third-party were to develop software or services that compete with ours, that provider may choose not to support our product offering. We intend to facilitate the compatibility of our solution with various third-party software, big data solutions, cloud-based solutions, software services and infrastructure offerings by maintaining and expanding our business and technical relationships. If we are not successful in achieving this goal, our business, financial condition and results of operations may suffer.

Additionally, our products must interoperate with our customers' existing infrastructure, which often have different specifications, deploy products from multiple vendors, and contain multiple generations of products that have been added over time. As a result, when problems occur, it may be difficult to identify the sources of these problems. If we find errors in the existing software that create integration errors or problems in our customers' IT environments, as we have in the past, we may have to issue software updates as part of our normal maintenance process. Any delays in identifying the sources of problems or in providing necessary modifications to our software could have a negative impact on our reputation and our customers' satisfaction with our products and services, and our ability to sell products and services could be adversely affected. In addition, governments and other customers may require our products to comply with certain security or other certifications and standards.

We depend on a highly skilled workforce, our executive officers and members of our leadership team. An inability to retain and attract highly skilled employees or the loss of one or more of our executive officers or members of our leadership team could harm our business.

Our future success depends, in part, on our ability to attract and retain highly skilled personnel. The inability to attract or retain qualified personnel, or delays in hiring required personnel, particularly in finance, engineering and sales, may seriously harm our business, financial condition and results of operations. In fact, we are substantially dependent on the continued service of our existing engineering personnel because of the complexity of our platform and any failure to hire, train, retain and adequately incentivize our sales personnel could negatively affect our growth and the inability of our recently hired sales personnel to effectively ramp up to target productivity levels could negatively affect our operating margins.

Our employees do not have employment arrangements that require them to continue to work for us for any specified period, and therefore, they can terminate their employment with us at any time. Additionally, the industry in which we operate generally experiences high employee attrition. We have experienced an increase in our employee attrition rates in recent quarters, particularly in our Europe, Middle East and Africa region and our North America region, and in our sales and marketing organizations.

Our future performance also depends on the continued services and continuing contributions of our executives and members of our leadership team to execute on our business plan and to identify and pursue new opportunities and product innovations. Although we have entered into employment offer letters with our executives and the members of our leadership team, these agreements have no specific duration and constitute at-will employment. The loss of one or more of our executives or members of our leadership team at any time, particularly following our recent significant changes to our leadership team could seriously harm our business and results of operations, reduce employee retention, disrupt our relationships with our employees, customers and vendors, and impair our ability to compete.

Further, competition for highly skilled personnel is often intense, especially in the San Francisco Bay Area, the United Kingdom and France, where we have substantial presence and need for highly skilled personnel. To the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited, that they have divulged proprietary or other confidential information, or that their former employers own their inventions or other

work product. In addition, we have experienced difficulty, and in the future may not be successful, in attracting or integrating qualified personnel to fulfill our current or future needs. We expect hiring challenges, coupled with increased attrition rates, will cause us to fall short of our headcount targets and as a result we may fail to execute and achieve our strategic plans and objectives, which could adversely affect our business, financial condition and results of operation.

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

We continue to be substantially dependent on our sales force to obtain new customers and to drive additional usage and sales among our existing customers. We believe that there is significant competition for sales personnel, including enterprise sales representatives and sales engineers, with the skills and technical knowledge that we require. In particular, there is significant demand for sales engineers with big data and cloud-based software expertise. Our ability to achieve significant revenue growth will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of sales personnel to support our growth. For example, attrition and changing sales team leadership have resulted and may continue to result in slower than expected growth in affected geographies. New hires require significant training and may take significant time before they achieve full productivity before we can continue to scale our sales efforts. Our recent hires and planned hires may not become productive as quickly as we expect, and we may be unable to hire or retain sufficient numbers of qualified individuals in the markets where we do business or plan to do business. In addition, as we continue to grow rapidly, a large percentage of our sales force will have relatively little experience working with us, our subscription offerings and our business model. If we are unable to hire and train sufficient numbers of effective sales personnel, or our sales personnel are not successful in obtaining new customers or increasing sales to our existing customer base, our business will be harmed.

Employment laws in some of the countries in which we operate are stringent, which could restrict our ability to react to market changes and cause us to incur higher expenses.

As of December 31, 2019, we had 1,219 full-time employees, of whom approximately 35% were located in the United States, 28% were located in France, 8% were located in China, 8% were located in Germany and 7% were located in the United Kingdom. In some of the countries in which we operate, employment laws may grant significant job protection to certain employees, including rights on termination of employment and setting maximum number of hours and days per week a particular employee is permitted to work. In addition, in certain countries in which we operate, we are often required to consult and seek the advice of employee representatives and unions. These laws, coupled with the requirement to consult with any relevant employee representatives and unions, could affect our ability to react to market changes and the needs of our business and cause us to incur higher expenses.

Any unauthorized, and potentially improper, actions of our sales or other personnel could adversely affect our business, results of operations and financial condition.

The recognition of our revenue depends on, among other things, the terms negotiated in our contracts with our customers. Our sales or other personnel may act outside of their authority and negotiate additional terms or terms inconsistent with obligations we have under other contractual arrangements without our knowledge or consent. We have implemented policies to help prevent and discourage such conduct, but in the past some personnel have not followed our internal policies and in the future not all personnel may follow our policies and procedures. For instance, in the event that our sales personnel negotiate terms that do not appear in the contract and of which we are unaware, whether such additional terms are written or verbal, we could be prevented from recognizing revenue in accordance with our plans. Furthermore, depending on when we learn of unauthorized actions and the size of the transactions involved, we may have to restate revenue for a previously reported period, which would seriously harm our business, results of operations and financial condition.

We rely on channel partners to execute a portion of our sales. If our channel partners fail to perform, our ability to sell our solution will be limited, and, if we fail to optimize our channel partner model going forward, our results of operations will be harmed.

A portion of our revenue is generated by sales through our channel partners, especially in international markets. As we grow our business into new and existing international markets, we expect that our reliance on channel partners to generate sales will also grow. We provide our channel partners with specific training and programs to assist them in

selling our products, but there can be no assurance that these steps will be effective. In addition, our channel partners may be unsuccessful in marketing, selling and supporting our products. If we are unable to develop and maintain effective sales incentive programs for our channel partners, we may not be able to incentivize these partners to sell our products to customers and, in particular, to large enterprises. These partners may also market, sell, and support products and services that are competitive with ours and may devote more resources to the marketing, sales and support of such competitive products. These partners may have incentives to promote our competitors' products to the detriment of our own or may cease selling our products altogether. Our agreements with our channel partners may generally be terminated for any reason by either party with advance notice prior to each annual renewal date. We may not retain these channel partners and may not be able to secure additional or replacement channel partners. The loss of one or more of our significant channel partners or a decline in the number or size of orders from any of them could harm our results of operations. In addition, any new channel partner requires extensive training and may take several months or more to achieve productivity. Our channel partner sales structure could subject us to lawsuits, potential liability and reputational harm if, for example, any of our channel partners misrepresents the functionality of our products or services to customers or violates laws or our corporate policies. If we fail to effectively manage our existing sales channels, if our channel partners are unsuccessful in fulfilling the orders for our products, or if we are unable to enter into arrangements with, and retain a sufficient number of, high-quality channel partners in each of the regions in which we sell products and services and keep them motivated to sell our products, our ability to sell our products and results of operations will be harmed.

If we are unable to maintain successful relationships with our strategic partners, our business operations, financial results and growth prospects could be adversely affected.

In addition to our direct sales force and channel partners, we maintain strategic relationships with a variety of strategic partners, including systems integrators and big data, cloud application and analytical software vendors, to jointly market and sell our subscription offerings. We expect that sales through our strategic partners will continue to grow as a proportion of our revenue for the foreseeable future.

Our agreements with our strategic partners are generally non-exclusive, meaning our strategic partners may offer customers the products and services of several different companies, including products and services that compete with ours, or may themselves be or become competitors. If our strategic partners do not effectively market and sell our subscription offerings, choose to use greater efforts to market and sell their own products and services or those of our competitors, or fail to meet the needs of our customers, our ability to grow our business and sell our subscription offerings may be harmed. Our strategic partners may cease marketing our subscription offerings with limited or no notice and with little or no penalty. The loss of a substantial number of our strategic partners, our possible inability to replace them, or the failure to recruit additional strategic partners could harm our results of operations.

Our ability to achieve revenue growth in the future will depend in part on our success in maintaining successful relationships with our strategic partners, and in helping our partners enhance their ability to market and sell our subscription offerings. If we are unable to maintain our relationships with these strategic partners, our business, results of operations, financial condition or cash flows could be harmed.

If we are not successful in sustaining and expanding our international business, we may incur additional losses and our revenue growth could be harmed.

Our future results depend, in part, on our ability to sustain and expand our penetration of the international markets in which we currently operate and to expand into additional international markets. We depend on direct sales and our channel partner relationships to sell our subscription offerings and professional services in international markets. Our ability to expand internationally will depend upon our ability to deliver functionality and foreign language translations that reflect the needs of the international clients that we target. Our ability to expand internationally involves various risks, including the need to invest significant resources in such expansion, and the possibility that returns on such investments will not be achieved in the near future or at all in these less familiar competitive environments. We may also choose to conduct our international business through strategic alliances. If we are unable to identify strategic alliance partners or negotiate favorable alliance terms, our international growth may be harmed. In addition, we have incurred and may continue to incur significant expenses in advance of generating material revenue as we attempt to establish our presence in particular international markets.

Sustaining and expanding our international business will also require significant attention from our management and will require us to add additional management and other resources in these new markets. Our ability to expand our business, attract talented employees, maintain consistent sales and marketing practices and standards across regions, and enter into channel partnerships in an increasing number of international markets requires considerable management attention and resources and is subject to the particular challenges of supporting a rapidly growing business in an environment of multiple languages, cultures, customs, legal systems, alternative dispute systems, regulatory systems, commercial infrastructures and technology infrastructure. If we are unable to grow our international operations in a timely and effective manner, we may incur additional losses and our revenue growth could be harmed.

Our business is substantially dependent on sales leads from digital marketing efforts and if we are unable to generate significant volumes of such leads, traffic to our websites and our revenue may decrease.

We utilize digital marketing channels, such as paid and free online search, display advertising, email and social media, in order to direct potential customers interested in our solution to our websites and generate sales leads. Many of these potential customers find our websites by searching for data integration solutions through Internet search engines, particularly Google. A critical factor in attracting potential customers to our websites is how prominently our websites are displayed in response to search inquiries. If we are listed less prominently or fail to appear in search result listings for any reason, visits to our websites by customers and potential customers could decline significantly and we may not be able to replace this traffic. Furthermore, if the costs associated with our digital marketing channels increase, we may be required to increase our sales and marketing expenses, which may not be offset by additional revenue, and our business and results of operations could be adversely affected.

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

We believe that the brand identities that we have developed have contributed significantly to the success of our business. We also believe that maintaining and enhancing our brands is important to expanding our customer base and attracting talented employees. In order to maintain and enhance our brands, we may be required to make further investments that may not be successful. Maintaining our brands will depend in part on our ability to remain a leader in data integration and integrity technology and our ability to continue to provide high-quality offerings. If we fail to promote and maintain our brands, or if we incur excessive costs in doing so, our business, financial condition, results of operations and cash flows may be harmed.

Reliance on sales at the end of the quarter could cause our revenue for the applicable period to fall below expected levels.

As a result of customer buying patterns, we have historically received a substantial portion of subscriptions during the last month or later of each fiscal quarter. If expected sales at the end of any fiscal quarter is delayed for any reason, including the failure of anticipated purchase orders to materialize, particularly larger deals that may be dictated by a customer's internal evaluation process outside of our control, our inability to release new products on schedule, any failure of our systems related to order review and processing, or any delays in order fulfillment based on trade compliance requirements, our cash flows and results of operations for that quarter, and our revenue for subsequent periods could fall below our expectations and the estimates of analysts, which could adversely impact our business and results of operations and cause a decline in the market price of our ADSs.

The seasonality of our business can create variance in our quarterly bookings, subscription revenue and cash flows from operations.

We operate on a December 31 fiscal year end and believe that there are seasonal factors which may cause us to experience lower levels of sales in our first fiscal quarter ending March 31 as compared with other quarters. We believe that this seasonality results from a number of factors, including:

- Companies using their IT budget at the end of the calendar year resulting in higher sales activity in the quarter ending December 31;

- Sales personnel being compensated on annual plans and finalizing sales transactions in the quarter ending December 31, thereby exhausting most of their sales pipeline for the quarter ending December 31; and
- Recruiting sales personnel primarily in the first and second quarters, which leads to greater sales productivity in the second half of the fiscal year.

Additionally, to the extent we experience lower new customer bookings in earlier quarters, the resulting reduced subscription revenue may not be reflected in our operating results until subsequent quarters. We believe that these seasonal trends have been masked in recent periods due to our growth, but we anticipate that they may be more pronounced in future periods.

Our future quarterly results may fluctuate significantly, which could adversely affect the trading price of our ADSs.

Our results of operations, including the levels of our revenue, cost of revenue, gross margin, operating expenses, cash flow and deferred revenue, have fluctuated from quarter-to-quarter in the past and may continue to vary significantly in the future so that period-to-period comparisons of our results of operations may not be meaningful. Accordingly, our financial results in any one quarter should not be relied upon as indicative of future performance. Our quarterly financial results may fluctuate as a result of a variety of factors, many of which are outside of our control, may be difficult to predict, and may or may not fully reflect the underlying performance of our business. Because the timing and amount of our revenue is difficult to forecast and because our operating costs and expenses are relatively fixed in the short term, if our revenue does not meet our expectations, we are unlikely to be able to adjust our spending to levels commensurate with our revenue. As a result, the effect of revenue shortfalls on our results of operations may be more accentuated, and these and other fluctuations in quarterly results may negatively affect the market price of our ADSs.

Factors that may cause fluctuations in our quarterly financial results include, but are not limited to, those listed below:

- Our ability to attract and retain new customers;
- The addition or loss of enterprise customers;
- Our ability to successfully expand our business domestically and internationally;
- Our ability to gain new channel partners and retain existing channel partners;
- Our ability to successfully integrate new leadership team members within our organization;
- Fluctuations in the growth rate of the overall market that our solution addresses;
- Fluctuations in the mix of our revenue;
- The amount of subscription revenue that we recognize ratably as the proportion of our business represented by cloud increases;
- The amount and timing of operating expenses related to the maintenance and expansion of our business and operations, including continued investments in sales and marketing, research and development and general and administrative resources;
- Network outages or performance degradation of our cloud service;
- Actual or perceived security breaches and incidents;
- General economic, industry and market conditions;
- Customer renewal rates;
- Increases or decreases in the number of elements of our subscription offerings or pricing changes upon any renewals of customer agreements;
- Changes in our pricing policies or those of our competitors;
- The budgeting cycles and purchasing practices of customers;
- Decisions by potential customers to purchase alternative solutions from larger, more established vendors, including from their primary software vendors;
- Decisions by potential customers to develop in-house solutions as alternatives to our platform;
- Insolvency or credit difficulties confronting our customers, which could adversely affect their ability to purchase or pay for our software and services;
- Delays in our ability to fulfill our customers' orders;
- Seasonal variations in sales of our solution;
- The cost and potential outcomes of future litigation or other disputes;
- Future accounting pronouncements or changes in our accounting policies;

- Our overall effective tax rate, including impacts caused by any reorganization in our corporate tax structure and any new legislation or regulatory developments;
- Fluctuations in share-based compensation expense;
- Fluctuations in foreign currency exchange rates;
- The timing and success of new products, features and service introductions by us or our competitors or any other change in the competitive dynamics of our industry, including consolidation among competitors, customers or strategic partners;
- The timing of expenses related to the development or acquisition of technologies or businesses and potential future charges for impairment of goodwill from acquired companies; and
- Other risk factors described in this Annual Report.

Our current research and development efforts may not produce successful products or features that result in significant revenue, cost savings or other benefits in the near future, if at all.

Developing our products and related enhancements is expensive. Our investments in research and development may not result in significant design improvements, marketable products or features, or may result in products that are more expensive than anticipated. Additionally, we may not achieve the cost savings or the anticipated performance improvements we expect, and we may take longer to generate revenue, or generate less revenue, than we anticipate. Our future plans include significant investments in research and development and related product opportunities. We believe that we must continue to dedicate a significant amount of resources to our research and development efforts to maintain our competitive position, including through the use of external consultant resources. However, we may not receive significant revenue from these investments in the near future, if at all, or these investments may not yield the expected benefits, either of which could adversely affect our business and results of operations.

Failure to protect our proprietary technology and intellectual property rights could substantially harm our business and results of operations.

Our success depends to a significant degree on our ability to protect our proprietary technology, methodologies, know-how and our brand. We rely on a combination of trade secrets, trademarks, copyrights, contractual restrictions, patents and other intellectual property laws and confidentiality procedures to establish and protect our proprietary rights. However, the steps we take to protect our intellectual property may be inadequate. We will not be able to protect our intellectual property if we are unable to enforce our rights or if we do not detect unauthorized use of our intellectual property, including any intellectual property, including trading secrets, obtained through a breach of our information technology systems. If we fail to protect our intellectual property rights adequately, our competitors may gain access to our technology and our business may be harmed. In addition, defending our intellectual property rights might entail significant expense. Any patents, trademarks, or other intellectual property rights that we have or may obtain may be challenged by others or invalidated through administrative process or litigation. As of December 31, 2019, we had one issued patent and one pending patent application. If we decide to seek further patent protection in the future, we may be unable to obtain any patent protection for our technology. In addition, our issued patent and any patents issued in the future may not provide us with competitive advantages or may be successfully challenged by third parties. Furthermore, legal standards relating to the validity, enforceability and scope of protection of intellectual property rights are uncertain. Despite our precautions, it may be possible for unauthorized third parties to copy our products and use information that we regard as proprietary to create products and services that compete with ours. Effective patent, trademark, copyright and trade secret protection may not be available to us in every country in which our products are available. We may be unable to prevent third parties from acquiring domain names or trademarks that are similar to, infringe upon, or diminish the value of our trademarks and other proprietary rights. The laws of some foreign countries may not be as protective of intellectual property rights as those in the United States, and mechanisms for enforcement of intellectual property rights may be inadequate. As we expand our international activities, our exposure to unauthorized copying and use of our products and proprietary information will likely increase. Accordingly, despite our efforts, we may be unable to prevent third parties from infringing upon or misappropriating our intellectual property.

We enter into confidentiality and invention assignment agreements with our employees and consultants and enter into confidentiality agreements with other parties. These agreements, however, may not be effective in controlling access to and distribution of our proprietary information. Further, these agreements may not prevent our competitors from independently developing technologies that are substantially equivalent or superior to our products.

In order to protect our intellectual property rights, we may be required to spend significant resources to monitor and protect our intellectual property rights. Litigation may be necessary in the future to enforce our intellectual property rights and to protect our trade secrets. Litigation brought to protect and enforce our intellectual property rights could be costly, time-consuming and distracting to management and could result in the impairment or loss of portions of our intellectual property. Further, our efforts to enforce our intellectual property rights may be met with defenses, counterclaims and countersuits attacking the validity and enforceability of our intellectual property rights. Our inability to protect our proprietary technology against unauthorized copying or use, as well as any costly litigation or diversion of our management's attention and resources, could delay further sales or the implementation of our products, impair the functionality of our products, delay introductions of new products, result in our substituting inferior or more costly technologies into our products, or injure our reputation.

We could incur substantial costs as a result of any claim of infringement or other violations by us of another party's intellectual property rights.

In recent years, there has been significant litigation involving patents, copyrights, trademarks, trade secrets and other intellectual property rights in the software industry. Companies providing software are increasingly bringing and becoming subject to suits alleging violations of proprietary rights, particularly patent infringement, misappropriation or other violations, and to the extent we gain greater market visibility, we face a higher risk of being the subject of intellectual property infringement, misappropriation or other claims. As of December 31, 2019, we had one issued patent and one pending patent application. As a result, we currently have a limited patent portfolio, which could prevent us from deterring patent infringement claims through our own patent portfolio, and our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we have. The risk of patent litigation has been amplified by the increase in the number of a type of patent holder, which we refer to as a non-practicing entity, whose sole business is to assert such claims and against whom our own intellectual property portfolio may provide little deterrent value. We could incur substantial costs in prosecuting or defending any intellectual property litigation. If we sue to enforce our rights or are sued by a third-party that claims that we or our solution violates its intellectual property rights, the litigation could be expensive and could divert our management resources. Any intellectual property litigation to which we might become a party, or for which we are required to provide indemnification, may require us to do one or more of the following:

- Cease selling or using products that incorporate the intellectual property that we allegedly infringe;
- Make substantial payments for legal fees, settlement payments or other costs or damages;
- Obtain a license, which may not be available on reasonable terms or at all, to sell or use the relevant technology; or
- Redesign the allegedly infringing products to avoid infringement, which could be costly, time-consuming or impossible.

If we are required to make substantial payments or undertake any of the other actions noted above as a result of any intellectual property infringement or other claims against us or any obligation to indemnify our customers for such claims, such payments or actions could harm our business.

Our use of open source software could negatively affect our ability to sell our solution and subject us to possible litigation.

A portion of our technologies incorporate open source software, and we expect to continue to incorporate open source software in our solution in the future. Few of the licenses applicable to open source software have been interpreted by courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Moreover, if we incorporate or have incorporated open source software in our software in a manner that is inconsistent with the terms of the applicable license or our current policies and procedures, then we may be subject to certain requirements, including requirements that we offer our solutions that incorporate the open source software for no cost, that we make available source code for modifications or derivative works we create based upon, incorporating or using the open source software and that we license such modifications or derivative works under the terms of applicable open source licenses. If an author or other third-party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur significant legal expenses defending against such allegations and could be subject to significant damages, enjoined from the sale of our solutions that contained the open source software

and required to comply with onerous conditions or restrictions on these solutions, which could disrupt the distribution and sale of these solutions. In addition, there have been claims challenging the ownership rights in of open source software against companies that incorporate open source software into their products, and the licensors of such open source software provide no warranties or indemnities with respect to such claims. In any of these events, we and our customers could be required to seek licenses from third parties in order to continue offering our products, and to re-engineer our products or discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely basis. We and our customers may also be subject to suits by parties claiming infringement due to the reliance by our solutions on certain open source software, and such litigation could be costly for us to defend or subject us to an injunction. Any of the foregoing could require us to devote additional research and development resources to re-engineer our solutions, could result in customer dissatisfaction, and may adversely affect our business, results of operations and financial condition.

We may be the subject of litigation which, if adversely determined, could harm our business and operating results.

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, workplace safety, product safety, environmental laws, consumer protection laws, anti-bribery laws, import/export controls, federal securities laws and tax laws and regulations. Noncompliance with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages and civil and criminal penalties or injunctions. We are, and may in the future be, subject to legal claims arising in the normal course of business, including patent, copyright, trade secret, commercial, product liability, employment, class action, whistleblower and other litigation and claims. An unfavorable outcome on any litigation matter could require that we pay substantial damages. In addition, we may decide to settle any litigation, which could cause us to incur significant costs.

The outcome of litigation and other claims or lawsuits is intrinsically uncertain. Management's view of the litigation might also change in the future. Actual outcomes of litigation and other claims or lawsuits could differ from the assessments made by management in prior periods, which are the basis for our accounting for these litigations and claims under GAAP. A settlement or an unfavorable outcome on any litigation matter could have a material adverse effect on our business, operating results, reputation, financial position or cash flows. 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 harm our business, operating results and financial condition.

In connection with the operation of our business, we collect, store, transfer and otherwise process certain personal data and personally identifiable information. As a result, our business is subject to a variety of federal, state, foreign government and industry regulations, as well as self-regulation, related to privacy, data security and data protection. Our actual or perceived failure to protect personal data and other information could have an adverse effect on our business.

Privacy, data protection and security have become significant issues in the United States, Europe and in other jurisdictions where we offer our products. The regulatory frameworks for privacy, data protection and information security issues worldwide are rapidly evolving, being tested in courts, likely to remain uncertain for the foreseeable future and may result in ever-increasing regulatory and public scrutiny as well as escalating levels of enforcement and sanctions. Federal, state, and foreign government bodies and agencies have in the past adopted, and may in the future adopt, new laws and regulations or may make amendments to existing laws and regulations affecting data protection, data privacy and/or security, including collection, use, retention, protection, disclosure, transfer and other processing of personal data and other information. Industry organizations also regularly adopt and advocate for new standards in these areas.

Moreover, evolving and changing definitions of personal data and personal information, within the European Union, the United States and elsewhere, especially relating to classification of IP addresses, machine identification, location data and other information, may limit or inhibit our ability to operate or expand our business, including limiting strategic partnerships that may involve the sharing of data. Any perception of privacy, data protection, or data security concerns or an inability to comply with applicable laws, regulations, policies, industry standards, contractual obligations or other legal obligations, even if unfounded, may result in additional cost and liability to us, harm our reputation and

inhibit adoption of our products by current and future customers, and adversely affect our business, financial condition and operating results.

In the United States, we may be subject to investigation and/or enforcement actions brought by federal agencies and state attorneys general and consumer protection agencies. We publicly post notices and other documentation regarding our practices concerning the processing, use and disclosure of personally identifiable information and other data. Although we endeavor to comply with our published notices and documentation, we may at times fail to do so or be alleged to have failed to do so. The publication of our privacy notices and other documentation that provide promises and assurances about privacy, data protection, and data security can subject us to potential state and federal action if they are found to be deceptive, unfair, or misrepresentative of our actual practices.

At the federal level, we have reviewed our information security and data protection policies and procedures to qualify as a business associate for customers that are covered entities under the Health Insurance Portability and Accountability Act, which we refer to as HIPAA. Consequently, as a business associate we are subjected to the privacy and security rules set out by HIPAA, and enforced by the Department of Health and Human Services, or HHS. Should we be deemed in violation of the HIPAA privacy and security rules as a result of an audit from HHS, we may be exposed to civil and criminal liabilities. State Attorneys General also have the authority to bring civil actions on behalf of state residents for violations of HIPAA's Privacy and Security Rules, obtain damages on behalf of state residents, or to enjoin further violations of the HIPAA Privacy and Security Rules.

At the state level, on June 28, 2018, California enacted the California Consumer Privacy Act, or CCPA, which became effective on January 1, 2020. The CCPA, among other things, requires covered companies to provide new disclosures to California consumers, and afford such consumers new abilities to opt-out of certain sales of personal information, and other information. The CCPA has been amended on multiple occasions and is the subject of proposed regulations of the California Attorney General that were released on October 10, 2019. Aspects of the CCPA and its interpretation remain unclear at this time. We cannot fully predict the impact of the CCPA on our business or operations, but it may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply.

Internationally, virtually every jurisdiction in which we operate has established its own data security, privacy and data protection legal frameworks with which we or our customers must comply. In the European Union, the GDPR replaced prior European Union data protection law as of May 25, 2018. The GDPR imposes additional obligations and risk upon our business and increases substantially the penalties to which we could be subject in the event of any non-compliance. Administrative fines under the GDPR can be as great as 20 million euros or four percent of annual global turnover, whichever is highest. We have incurred substantial expense in complying with the obligations imposed by the GDPR and we may be required to make significant changes in our business operations in connection with compliance with the GDPR, all of which may adversely affect our revenue and our business overall. Additionally, because the GDPR contains a number of obligations that differ from previously-effective data protection legislation in the European Union, and because the GDPR's enforcement history is limited, we are unable to predict how certain obligations under the GDPR may be applied to us. Despite our efforts to attempt to comply with the GDPR, a regulator may determine that we have not done so and subject us to fines and public censure, which could harm our company.

Among other requirements, the GDPR regulates transfers of personal data outside of the European Economic Area, or EEA, to third countries that have not been found to provide adequate protection to such personal data, including the United States. We have undertaken certain efforts to conform transfers of personal data from the EEA to the United States and other jurisdictions based on our understanding of current regulatory obligations and the guidance of data protection authorities, including the use of standard contractual clauses approved by the European Commission and our certifications under the EU-US and Swiss-US Privacy Shield Frameworks. Despite these measures, we may be unsuccessful in transferring such data from the EEA in a manner that conforms to data protection requirements in the EEA, in particular as a result of continued legal and legislative activity within the European Union that has challenged or called into question multiple means of data transfers to countries that have not been found to provide adequate protection for personal data. If any basis on which we rely to transfer personal data outside of the EEA is invalidated, we could be required to change our data transfer policies and procedures, which could result in increased compliance costs and may disrupt our operations. In addition, we are subject to the enforcement of the Federal Trade Commission with respect to our compliance with the EU-US and Swiss-US Privacy Shield Principles.

The GDPR also gave more weight to other existing EU data protection rules, and in particular the Privacy and Electronic Communications Directive 2002/58/EC (or ePrivacy Directive), which regulates electronic marketing activities in the EEA. The ePrivacy Directive has strict rules restricting communication with individuals for marketing purposes, and these rules have been implemented heterogeneously by EU member states. To comply with each local legal requirements, we have incurred significant costs to attempt to ensure that our electronic marketing activities are (1) adapted to the legal framework of the relevant EU member state in which we are sending electronic marketing communication, and (2) updated regularly to address changes in local case law and, as appropriate, privacy recommendations from local authorities. Failure to comply with this directive and the implementing rules exposes us to additional reputational and financial risk under the GDPR.

Further, in June 2016, the United Kingdom voted to leave the European Union, commonly referred to as “Brexit,” with the United Kingdom’s membership in the European Union ending on January 31, 2020. Brexit may lead to further legislative and regulatory changes. The United Kingdom Data Protection Act that substantially implements the GDPR became law in May 2018, and it has undergone further statutory amendments further aligning it with the GDPR. It remains unclear, however, how United Kingdom data protection laws or regulations will develop in the medium to longer term and how data transfers to and from the United Kingdom will be regulated.

Owing to the regulatory environment and sentiment regarding international data transfers, we may experience hesitancy, reluctance, or refusal by European or multi-national customers to continue to use our platform. We may find it necessary or appropriate to establish systems to maintain personal data originating from certain countries or regions within those regions. This may involve substantial expense and may cause us to need to divert resources from other aspects of our business, all of which may adversely affect our business.

In addition, some countries are considering or have enacted legislation, such as the Japan Act on Protection of Personal Information, which we are subject to, requiring local storage and processing of data that could increase the cost and complexity of delivering our services.

In addition to government regulation, privacy advocates and industry groups may propose new and different self-regulatory standards that may legally or contractually apply to us. One example of such a self-regulatory standard is the Payment Card Industry Data Security Standard, or PCI DSS, which relates to the processing of payment card information. In the event we fail to comply with the PCI DSS, fines and other penalties could result, and we may suffer reputational harm and damage to our business. We may also be bound by and agree to contractual obligations to comply with other obligations relating to privacy, data protection or data security, such as particular standards for information security measures. Further, we expect that there will continue to be changes in interpretations of existing laws and regulations, or new proposed laws and regulations concerning privacy, data protection and information security. We cannot yet determine the impact these laws and regulations or changed interpretations may have on our business, but we anticipate that they could impair our or our customers’ ability to collect, use or disclose information relating to consumers, which could decrease demand for our platform, increase our costs and impair our ability to maintain and grow our customer base and increase our revenue.

Moreover, because the interpretation and application of many laws and regulations relating to privacy, data protection and information security, along with mandatory industry standards, are uncertain, it is possible that these laws, regulations and standards, or contractual obligations to which we are or may become subject, may be interpreted and applied in a manner that is inconsistent with our existing or future data management practices or features of our products. Any actual or perceived loss, improper retention or misuse of personal data, personal information, or other information or any actual or alleged violations of laws and regulations relating to privacy, data protection or data security could result in us facing regulatory investigations, enforcement actions, fines, lawsuits and other claims (including from customers and individuals), penalties, consent decrees or other orders that may hamper our ability to conduct business or adapt our business, and liability, including potential criminal liability of company executives, and we could find it necessary or appropriate to fundamentally change our products, or our practices, which could have an adverse effect on our business. Any actual or perceived inability to adequately address privacy, data protection and data security concerns, even if unfounded, or to comply with applicable privacy, data protection and data security laws, regulations, policies or other obligations, could result in additional cost and liability to us, damage our reputation and market position (both in relation to existing customers and prospective customers), cause us to lose goodwill, inhibit sales and adversely affect our operations, financial performance and business. Furthermore, the costs of compliance with, and other burdens imposed by, the laws, regulations and policies that are applicable to the businesses of our

customers may limit the use and adoption of, and reduce the overall demand for, our products. Privacy, data protection and data security concerns, whether valid or not valid, may inhibit market adoption of our products, particularly in certain industries and foreign countries. If we are not able to adjust to changing laws, regulations and standards in these areas, our business may be harmed.

We are subject to governmental export and import controls and economic sanctions that could impair our ability to compete in international markets or subject us to liability if we violate these controls.

Our business activities are subject to U.S. export controls, specifically the Export Administration Regulations, and economic sanctions enforced by the Office of Foreign Assets Control. Because our products use encryption, certain of our products are subject to U.S. export controls and may be exported from the United States only with the required export license or through an export license exception. Obtaining the necessary export license for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. The inclusion of one of our foreign customers on any U.S. Government sanctioned persons list, including but not limited to the U.S. Department of Commerce's List of Denied Persons and the U.S. Department of Treasury's List of Specially Designated Nationals and Blocked Persons List, may also be material to our business. We take precautions to prevent our products and services from being exported in violation of these laws and, we have advised our channel partners and distributors that they must also comply with the laws when working with the Company.

Any failure to comply with the U.S. export requirements, U.S. customs regulations, U.S. economic sanctions, or other laws could result in the imposition of penalties against the Company or individuals responsible for any such violations. The penalties may include substantial civil and criminal fines, incarceration for responsible employees and managers, the possible loss of export or import privileges and reputational harm.

In addition, various countries regulate the import of certain encryption technology, including through import permit and license requirements, and have enacted laws that could limit our ability to distribute our products or could limit our customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products into international markets, prevent our customers with international operations from deploying our products globally or, in some cases, prevent or delay the export or import of our products to certain countries, governments, or persons altogether. Any change in export or import regulations, economic sanctions or related legislation, shift in the enforcement or scope of existing regulations, or change in the countries, governments, persons, or technologies targeted by such regulations, could result in decreased use of our products by, or our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export to or sell our products in international markets would likely adversely affect our business, financial condition and results of operations.

Our international operations and expansion expose us to several risks.

During the years ended December 31, 2019, 2018 and 2017, total revenue generated outside of France and the Americas was 42.5%, 41.4% and 38.2% of our total revenue, respectively. Our primary research and development operations are located in France, the United States, China and Germany. In addition, we currently have international offices outside of France, China, Germany and the United States, which focus primarily on selling and implementing our solution in those regions. In the future, we may expand to other international locations. Our current international operations and future initiatives will involve a variety of risks, including:

- Unexpected changes in regulatory requirements, taxes, trade laws, tariffs, export quotas, custom duties or other trade restrictions;
- Government trade restrictions, including those which may impose restrictions, including prohibitions, on the exportation, re-exportation, sale, shipment or other transfer of programming, technology, components and/or services to foreign persons;
- Changes in diplomatic and trade relationships, including new tariffs, trade protections measures, import or export licensing requirements, trade embargoes and other trade barriers;
- Tariffs imposed by the U.S. government on goods from other countries and tariffs imposed by other countries on U.S. goods, including the tariffs implemented and additional tariffs that have been proposed by the U.S. government on various imports from China, Canada, Mexico and the European Union and by the governments

of these jurisdictions on certain U.S. goods, and any other possible tariffs that may be imposed on services such as ours, the scope and duration of which, if implemented, remains uncertain;

- Different labor regulations, especially in the European Union, where labor laws are generally more advantageous to employees as compared to the United States, including deemed hourly wage and overtime regulations in these locations;
- Exposure to many onerous and potentially inconsistent privacy, data protection and data security laws and regulations, particularly in the European Union;
- Changes in a specific country's or region's political or economic conditions;
- Deterioration of political relations between the United States and France, the United Kingdom, Germany and Japan, which could have a material adverse effect on our sales and operations in these countries;
- Challenges inherent to efficiently managing an increased number of employees over large geographic distances, including the need to implement appropriate systems, policies, benefits and compliance programs;
- Risks resulting from changes in currency exchange rates and the implementation of exchange controls, including restrictions promulgated by the Office of Foreign Assets Control of the U.S. Department of the Treasury and other similar trade protection regulations and measures in the United States or in other jurisdictions;
- Reduced ability to timely collect amounts owed to us by our clients in countries where our recourse may be more limited;
- Limitations on our ability to reinvest earnings from operations derived from one country to fund the capital needs of our operations in other countries;
- Limited or unfavorable intellectual property protection;
- Exposure to liabilities under anti-corruption and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, and similar applicable laws and regulations in other jurisdictions; and
- Restrictions on repatriation of earnings.

Furthermore, weak domestic or global economic conditions, fear or anticipation of such conditions, or uncertainty how the U.S. or foreign governments will act with respect to tariffs, international trade agreements and policies, and the recent outbreak of the Coronavirus (COVID-19), could adversely affect our business, financial condition, results of operations and prospects in a number of ways, including lower prices for our products, reduced sales and lower or no growth. For example, the global macroeconomic environment could be negatively affected by, among other things, instability in global economic markets resulting from the COVID-19 outbreak, increased U.S. trade tariffs and trade disputes between the U.S. and other countries, instability in the global credit markets, the impact and uncertainty regarding global central bank monetary policy, changes in interest rates and increased inflation, the instability in the geopolitical environment as a result of the United Kingdom "Brexit" decision to withdraw from the European Union, economic challenges in China and ongoing U.S. and foreign governmental debt concerns. Such challenges have caused, and are likely to continue to cause, uncertainty and instability in local economies and in global financial markets, particularly if any future sovereign debt defaults or significant bank failures or defaults occur. Market uncertainty and instability in Europe, Asia or the United States could intensify or spread further, particularly if ongoing stabilization efforts prove insufficient. Continuing or worsening economic instability could adversely affect sales of our products. Moreover, continued turmoil in the geopolitical environment in many parts of the world may also affect the overall demand for our products. In fact, we anticipate that current political and economic conditions in Europe may negatively impact revenue growth in our Europe, Middle East and Africa region. A prolonged period of economic uncertainty or a downturn may also significantly affect financing markets, the availability of capital and the terms and conditions of financing arrangements, including the overall cost of financing. Circumstances may arise in which we need, or desire, to raise additional capital, and such capital may not be available on commercially reasonable terms, or at all.

We have limited experience in marketing, selling and supporting our solution outside of France, the United Kingdom, the United States, Germany and Japan. If we invest substantial time and resources to expand our international operations and are unable to do so successfully and in a timely manner, our business and results of operations will suffer.

Additionally, operating in international markets also requires significant management attention and financial resources. The investment and additional resources required in establishing operations in other countries may not produce desired levels of revenue or profitability.

We are exposed to fluctuations in currency exchange rates, which could negatively affect our financial condition and results of operations.

A portion of our subscription agreements and operating expenses are incurred outside the United States and denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the euro. The strengthening of the U.S. dollar increases the real cost of our products to some of our customers outside of the United States where we price in U.S. dollar instead of local currency, leading to delays in the purchase of our products and the lengthening of our sales cycle. The U.S. dollar has strengthened against the euro since early 2018 and if the U.S. dollar continues to strengthen, this could adversely affect our financial condition and results of operations. In addition, increased international sales in the future, including through our channel partners and other partnerships, may result in greater foreign currency denominated sales, increasing our foreign currency risk. Moreover, operating expenses incurred outside the United States and denominated in foreign currencies are increasing and are subject to fluctuations due to changes in foreign currency exchange rates. If we are not able to successfully hedge against the risks associated with currency fluctuations, our financial condition and results of operations could be adversely affected. To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedging transactions may be limited and we may not be able to successfully hedge our exposure, which could adversely affect our financial condition and results of operations.

Exposure to United Kingdom political developments, including the outcome of the United Kingdom referendum on membership in the European Union, could have a material adverse effect on us.

On June 23, 2016, a referendum was held on the United Kingdom's membership in the European Union, the outcome of which was a vote in favor of leaving the European Union. The United Kingdom's withdrawal from the European Union creates an uncertain political and economic environment in the United Kingdom and potentially across other European Union member states, for the foreseeable future, including while the UK negotiates terms of trade with the European Union and reviews and reforms regulations derived from its prior membership in the European Union.

The political and economic instability created by the United Kingdom's withdrawal from the European Union has caused and may continue to cause significant volatility in global financial markets and the value of the Pound Sterling currency or other currencies, including the euro. We are exposed to the economic, market and fiscal conditions in the United Kingdom and the European Union and to changes in any of these conditions. We anticipate that current political and economic conditions in Europe may negatively impact revenue growth in our Europe, Middle East and Africa region.

A significant amount of the regulatory regime that applies to us in the United Kingdom is derived from European Union directives and regulations. The United Kingdom exit, however, may change the legal and regulatory framework within which we operate in the United Kingdom. For example, the exit has created uncertainty with regard to the regulation of data protection in the United Kingdom. The GDPR became fully effective on May 25, 2018. Additionally, the United Kingdom implemented a Data Protection Act, effective May 25, 2018, that substantially implemented the GDPR. The GDPR has become applicable to the United Kingdom prior to the United Kingdom ceasing to be a member of the European Union, and following the expiration of a transition period that is scheduled to end December 31, 2020. However, it is unclear how data protection in the United Kingdom will be regulated in the medium term, and how data transfers to and from the United Kingdom will be regulated.

Consequently, the outcome of the United Kingdom's withdrawal from the European Union could adversely impact our operating results, financial condition and prospects.

Because we conduct substantial operations in China, risks associated with economic, political and social events in China could negatively affect our business and results of operations.

We operate a research and development center in Beijing, China and may plan to continue to increase our presence in China. Our operations in China are subject to a number of risks relating to China's economic and political systems, including:

- A government-controlled foreign exchange rate and limitations on the convertibility of the Chinese Renminbi;

- Uncertainty regarding the validity, enforceability and scope of protection for intellectual property rights and the practical difficulties of enforcing such rights;
- Ability to secure our business proprietary information located in China from unauthorized acquisition;
- Extensive government regulation;
- Changing governmental policies relating to tax benefits available to foreign-owned businesses;
- A relatively uncertain legal system; and
- Instability related to continued economic, political and social reform.

Any actions and policies adopted by the government of the People's Republic of China, particularly with regard to intellectual property rights, or any prolonged slowdown in China's economy, could have an adverse effect on our business, results of operations and financial condition.

Further, at various times during recent years, the United States and China have had disagreements over political and economic issues. Controversies may arise in the future between these two countries. Any political or trade controversy between the United States and China could adversely affect the U.S. and European economies and materially and adversely affect the market price of our ADSs, our business, financial position and financial performance.

Failure to comply with anti-bribery, anti-corruption and anti-money laundering laws, including the U.S. Foreign Corrupt Practices Act of 1977, as amended, or the FCPA, and similar laws associated with our activities outside of the United States could subject us to penalties and other adverse consequences.

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the United Kingdom Bribery Act of 2010, the French anti-corruption law known as "Sapin II" and possibly other anti-corruption, anti-bribery and anti-money laundering laws in countries in which we conduct activities. We face significant risks if we fail to comply with the FCPA and other anti-corruption and anti-bribery laws that prohibit companies and their employees and third-party intermediaries from authorizing, promising, offering or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties or candidates, employees of public international organizations and private-sector recipients for a corrupt purpose of obtaining or retaining business, directing business to any person, or securing any advantage. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses engage in practices that are prohibited by the FCPA or other applicable laws and regulations. In addition, we use various third-party intermediaries to sell our solutions and conduct our business abroad. We, our channel partners, and our other 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 intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. Although we continue to implement our FCPA/anti-corruption compliance program, some of our employees and agents, as well as those companies to which we outsource certain of our business operations, may nevertheless take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

Any violation of the FCPA, other applicable anti-bribery, anti-corruption laws and anti-money laundering laws could result in whistleblower complaints, adverse media coverage, investigations, loss of export privileges, severe criminal or civil sanctions and, in the case of the FCPA, suspension or debarment from U.S. government contracts, which could have a material and adverse effect on our reputation, business, results of operations and prospects. In addition, responding to any enforcement action may result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

A portion of our revenue is generated by sales to government entities, which are subject to a number of challenges and risks.

Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive and time-consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. Government certification requirements for products like ours may change, thereby restricting our ability to sell into the U.S. federal government, U.S. state government, or foreign government sectors until we have attained the revised certification. Government demand and payment for our subscription offerings and professional services may be affected by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our subscription offerings and professional services.

Governmental entities often require contract terms that differ from our standard arrangements, including terms that can lead to those customers obtaining broader rights in our products than would be standard. Government entities may have statutory, contractual, or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely affect our future results of operations. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our subscription offerings, a reduction of revenue, or fines or civil or criminal liability if the audit uncovers improper or illegal activities, which could adversely affect our results of operations in a material way.

We are exposed to the credit risk of some of our distributors, resellers and customers and to credit exposure in weakened markets, which could result in material losses.

We have programs in place that are designed to monitor and mitigate credit risks of some of our distributors, resellers and customers, and our credit exposure in weakened markets. However, these programs may not be effective in reducing our credit risks, especially as we expand our business internationally. If we are unable to adequately control these risks, our business, results of operations and financial condition could be harmed.

Unanticipated changes in effective tax rates, adverse outcomes resulting from examination of our income or other tax returns, and other aspects of our international operations and structure could expose us to greater than anticipated tax liabilities.

We are subject to income taxes in France, the United States and other jurisdictions, and our income tax obligations are based in part on our corporate structure and intercompany arrangements, including the manner in which we develop, value and use our intellectual property and the valuations of our intercompany transactions. Our effective tax rate could be adversely affected by changes in the mix of earnings and losses in countries with differing statutory tax rates, certain non-deductible expenses as a result of acquisitions, the valuation of deferred tax assets and liabilities, and changes in federal, state, or international tax laws and accounting principles. The tax laws applicable to our business are subject to interpretation and certain jurisdictions may aggressively interpret their laws in an effort to raise additional tax revenue. It is not uncommon for taxing authorities in different countries to have conflicting views with respect to, among other things, the manner in which the arm's length standard is applied for transfer pricing purposes, the valuation of intellectual property, or the tax treatment of SaaS-based companies, which could increase our worldwide effective tax rate and harm our financial position and results of operations. It is possible that tax authorities may disagree with certain positions we have taken or may determine that the manner in which we operate our business does not achieve our intended tax consequences and any adverse outcome of such a review or audit could have a negative effect on our financial position and results of operations. Further, the determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment by management, and there are transactions where the ultimate tax determination is uncertain. Although we believe that our estimates are reasonable, the ultimate tax outcome may differ from the amounts recorded in our condensed consolidated financial statements and may materially affect our financial results in the period or periods for which such determination is made.

On December 22, 2017, legislation commonly referred to as the Tax Cuts and Jobs Act, or the Tax Act, was enacted and significantly changed U.S. federal tax law. It includes several key tax provisions, including a reduction of the U.S. federal statutory tax rate to 21%, limitations on the use of net operating loss carryforwards and changes to the treatment of certain tax deductions which may affect our tax obligations in the future. If we attain profitability, these changes may materially impact the value and usability of our deferred tax assets and liabilities, which may impact our results of operations.

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 financial results.

The various jurisdictions in which we have sales and operations have different rules and regulations governing sales and use, value added, and similar taxes, and these rules and regulations are subject to varying interpretations that change over time. Certain jurisdictions in which we did not collect such taxes may assert that such taxes are applicable, which could result in tax assessments, penalties, and interest, and we may be required to collect such taxes in the future. Any tax assessments, penalties and interest, or future requirements may adversely affect our results of operations.

Moreover, imposition of such taxes on us going forward will effectively increase the cost of our products to our customers and might adversely affect our ability to retain existing customers or to gain new customers in the areas in which such taxes are imposed.

Our ability to use our accumulated gross tax losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2019, we had accumulated gross tax losses in various jurisdictions of \$290.5 million, which may be utilized against future income taxes. Limitations imposed by the applicable jurisdictions on our ability to utilize accumulated gross tax losses could cause income taxes to be paid earlier than would be paid if such limitations were not in effect and could cause such accumulated gross tax losses to expire unused, in each case reducing or eliminating the benefit of such accumulated gross tax losses. Furthermore, we may not be able to generate sufficient taxable income to utilize our accumulated gross tax losses before they expire. If any of these events occur, we may not derive some or all of the expected benefits from our accumulated gross tax losses.

Our failure to maintain certain tax benefits applicable to French technology companies may adversely affect our results of operations.

As a French technology company, we have benefited from certain tax advantages, including, for example, the French research tax credit (*crédit d'impôt recherche*), or CIR. The CIR is a French tax credit aimed at stimulating research and development. The CIR can be offset against French corporate income tax due and the portion in excess (if any) may be refunded at the end of a three fiscal-year period, subject to certain conditions. The CIR is reflected as an offset to our research and development expense. It is calculated based on our claimed amount of eligible research and development expenditures in France and represented \$0.5 million for 2019, \$0.5 million from 2018 and \$0.6 million for 2017. The French tax authority with the assistance of the Research and Technology Ministry may audit each research and development program in respect of which a CIR benefit has been claimed and assess whether such program qualifies in their view for the CIR benefit, in accordance with the French tax code (*Code général des impôts*) and the relevant official guidelines. If the French tax authority determines that our research and development programs do not meet the requirements for the CIR benefit, or that certain CIR rules were inconsistently applied, we could be liable for additional corporate tax, and penalties and interest related thereto, which could have a significant impact on our results of operations and future cash flows. Furthermore, if the French Parliament decides to eliminate, or reduce the scope or the rate of, the CIR benefit, either of which it could decide to do at any time, our results of operations could be adversely affected.

Catastrophic events or man-made problems may disrupt our business.

A significant natural disaster, such as an earthquake, fire or flood, or significant power outage could have an adverse impact on our business, results of operations and financial condition. Our functional corporate headquarters are located in the San Francisco Bay Area, a region known for seismic activity. In addition, the San Francisco Bay Area has been subject to power blackouts to mitigate the risk of wildfires and our functional corporate headquarters could be subject to such blackouts, potentially for an extended period of time. In the event our or our channel partners' abilities are hindered by any of the events discussed above, sales could be delayed, resulting in missed financial targets, such as revenue or cash flow, for a particular quarter. In addition, acts of terrorism, epidemics or pandemics, such as the outbreak of COVID-19, and other geopolitical unrest, or other man-made problems could cause disruptions in our business or the business of our channel partners, customers or the economy as a whole. Any disruption in the business of our channel partners or customers that affects sales at the end of a fiscal quarter could have a significant adverse impact on our future quarterly results. Further, if a natural disaster or man-made problem were to affect Internet service providers, this could adversely affect the ability of our customers to use our products. All of the aforementioned risks may be further increased if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above should result in our inability to continue our operations, system interruptions, reputational harm, delays in our development activities, breaches of data security and loss of critical data, delays or cancellations of customer orders, or the delay in the deployment of our products, our business, financial condition and results of operations would be adversely affected.

If our estimates or judgments relating to our critical accounting policies are based on assumptions that change or prove to be incorrect, our results of operations could fall below expectations of securities analysts and investors, resulting in a decline in the trading price of the ADSs.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets, liabilities, equity, revenue and expenses that are not readily apparent from other sources. 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 our publicly announced guidance or the expectations of securities analysts and investors, resulting in a decline in the market price of our ADSs. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition (including allocation of the transaction price to separate performance obligations), the amortization period for contract acquisition costs, fair value of acquired intangible assets, goodwill impairment test and measurement of share-based compensation. As of January 1, 2019, we were no longer a foreign private issuer and therefore have prepared the financial statements in this Annual Report in conformity with GAAP.

An impairment of the carrying value of goodwill or intangible assets could adversely affect our financial results and shareholders' equity.

As of December 31, 2019, we had goodwill of \$49.7 million and net intangible assets of \$14.0 million, which in the aggregate represent 16% of our total consolidated assets. Goodwill is not amortized, but we evaluate for impairment annually in the fourth quarter or more frequently if events or changes in circumstances indicate that impairment may exist. Intangible assets are amortized, and we review the net carrying value for impairment whenever events or changes in circumstances indicate that the net carrying value of an intangible asset may not be recoverable. Factors that could indicate that our goodwill or net intangible assets are impaired include, but are not limited to, a decline in our stock price and market capitalization; lower than projected sales growth rates, operating results and cash flows; slower growth rate in our industry; and a change in weighted average cost of capital or economic or market conditions. Some of these factors are outside of our control. In the future we may be required to record significant charges in our consolidated financial statements during the period in which we determine that our goodwill or net intangible assets are impaired. Any impairment charge may have an adverse effect on our results of operation and shareholders' equity.

Our reported financial results may be adversely affected by changes in accounting principles generally accepted in the United States.

We prepare our financial statements in conformity with GAAP. GAAP is subject to interpretation by the Financial Accounting Standards Board, or FASB, the SEC, and various bodies formed to promulgate and interpret appropriate accounting principles. A change in these principles or interpretations could have a significant effect on our reported financial results and could affect the reporting of transactions completed before the announcement of a change. For example, the adoption of ASC 842 in 2019, as discussed in Note 1, *Organization and Description of Business*, to our accompanying consolidated financial statements, has had and continues to have a significant impact on our consolidated statement of financial position. Further, the interpretation of these new standards may continue to evolve as other public companies adopt the new guidance and the standard setters issue new interpretative guidance related to these rules. New accounting pronouncements, changes in accounting principles, and changes in the interpretation of these rules have occurred in the past and are expected to occur in the future, which could adversely affect our financial results. Any difficulties in implementing these pronouncements could cause us to fail to meet our financial reporting obligations, which could result in regulatory discipline and harm investors' confidence in us.

Risks Related to Our Convertible Senior Notes

We have incurred substantial indebtedness that may decrease our business flexibility, access to capital, and/or increase our borrowing costs, and we may still incur substantially more debt, which may adversely affect our operations and financial results.

In September 2019, we issued €139.8 million (\$149.1 million) aggregate principal amount of 1.75% Convertible

Senior Notes due September 1, 2024, which we refer to as the 2024 Notes. Our indebtedness may:

- limit our ability to borrow additional funds for working capital, capital expenditures, acquisitions or other general business purposes;
- limit our ability to use our cash flow or obtain additional financing for future working capital, capital expenditures, acquisitions or other general business purposes;
- require us to use a substantial portion of our cash flow from operations to make debt service payments, including the 2024 Notes;
- limit our flexibility to plan for, or react to, changes in our business and industry;
- place us at a competitive disadvantage compared to our less leveraged competitors; and
- increase our vulnerability to the impact of adverse economic and industry conditions.

Further, we may incur substantial additional debt in the future, some of which may be secured debt. We are not restricted under the terms of the indenture governing the 2024 Notes, which we refer to as the indenture, from incurring additional indebtedness, securing existing or future debt, recapitalizing our debt or taking a number of other actions to increase our debt levels.

Servicing our debt, including the 2024 Notes, will require a significant amount of cash. We may not have sufficient cash flow from our business to pay our substantial debt, and we may not have the ability to raise the funds necessary to settle conversions of the 2024 Notes in cash or to repurchase the 2024 Notes upon a fundamental change, which could adversely affect our business and results of operations.

Our ability to make scheduled payments of the principal of, to pay interest on, or to refinance our indebtedness, including the amounts payable, under the 2024 Notes, depends on our future performance, which is subject to economic, financial, competitive, and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our indebtedness, including the 2024 Notes, and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt, or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance any of our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

Further, holders of the 2024 Notes have the right to require us to repurchase all or a portion of their 2024 Notes upon the occurrence of a “fundamental change” (as defined in the indenture for the 2024 Notes) before the maturity date at a repurchase price equal to 100% of the principal amount of the 2024 Notes to be repurchased, plus accrued and unpaid interest, if any, to, but excluding, the fundamental change repurchase date. In addition, upon conversion of the 2024 Notes, unless we elect to deliver solely ADSs to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the 2024 Notes being converted. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of 2024 Notes surrendered therefor upon a fundamental change or pay cash with respect to 2024 Notes being converted in lieu of delivering ADSs upon conversion.

In addition, our ability to repurchase the 2024 Notes or to pay cash upon conversion of the 2024 Notes may be limited by law, regulatory authority or agreements governing our future indebtedness. Our failure to repurchase 2024 Notes when the repurchase is required by the indenture or to pay cash upon conversion of the 2024 Notes as required by the indenture could constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our future indebtedness. If the payment of such related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase 2024 Notes or to pay cash upon conversion of the 2024 Notes.

While our 2024 Notes are denominated in euros, we may hold a significant portion of the proceeds in U.S. dollars and our reporting currency is the U.S. dollar, which subjects us to foreign exchange risk.

Our 2024 Notes are denominated in euros and the majority of the proceeds are held in euros as of December 31,

2019. We may choose to hold a significant amount of the proceeds from our 2024 Notes in U.S. dollars in the future. A weakening of the U.S. dollar relative to the euro could therefore adversely affect our ability to service our debt obligations and repay the aggregate principal amount of the 2024 Notes if we are obligated to repurchase the 2024 Notes in the event of a fundamental change or deliver cash at maturity or upon conversion of the 2024 Notes to the extent that the 2024 Notes are not converted solely into our ADSs. In addition, because our reporting currency is the U.S. dollar, a weakening of the U.S. dollar against the euro would increase the amount of debt under our 2024 Notes that would be reportable on our balance sheet, which could have an adverse effect on our liquidity and financial condition.

In the future, we may enter into contractual arrangements designed to hedge a portion of the foreign currency exchange risk associated with any non-U.S. dollar-denominated debt. If these hedging arrangements are unsuccessful, we may experience an adverse effect on our business and results of operations.

The conditional conversion feature of the 2024 Notes, when triggered, may adversely affect our financial condition and operating results.

In the event the conditional conversion feature of the 2024 Notes is triggered, holders of the 2024 Notes will be entitled to convert their 2024 Notes at any time during specified periods at their option. If one or more holders elect to convert their 2024 Notes, unless we elect to satisfy our conversion obligation by delivering solely ADSs (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation in cash, which could adversely affect our liquidity.

In addition, even if holders of 2024 Notes do not elect to convert their 2024 Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the 2024 Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

The accounting method for convertible debt securities that may be settled in cash, such as the 2024 Notes, could have a material effect on our reported financial results.

Under Accounting Standards Codification 470-20, Debt with Conversion and Other Options (“ASC 470-20”), an entity must separately account for the liability and equity components of the convertible debt instruments (such as the 2024 Notes) that may be settled entirely or partially in cash upon conversion in a manner that reflects the issuer’s economic interest cost. The effect of ASC 470-20 on the accounting for the 2024 Notes is that the equity component is required to be included in the additional paid-in capital section of stockholders’ equity on our condensed consolidated balance sheet at the issuance date and the value of the equity component would be treated as debt discount for purposes of accounting for the debt component of the 2024 Notes. As a result, we are required to record a greater amount of non-cash interest expense as a result of the amortization of the discounted carrying value of the 2024 Notes to their face amount over the term of the 2024 Notes. We report larger net losses (or lower net income) in our financial results because ASC 470-20 requires interest to include both the amortization of the debt discount and the instrument’s non-convertible coupon interest rate, which lowers our reported financial results, and could adversely affect the trading price of our ADSs and the trading price of the 2024 Notes.

In addition, under certain circumstances, convertible debt instruments (such as the 2024 Notes) that may be settled entirely or partly in cash may be accounted for utilizing the treasury stock method, the effect of which is that the shares issuable upon conversion of such 2024 Notes are not included in the calculation of diluted earnings per share except to the extent that the conversion value of such 2024 Notes exceeds their principal amount. Under the treasury stock method, for diluted earnings per share purposes, the transaction is accounted for as if the number of shares of common stock that would be necessary to settle such excess, if we elected to settle such excess in shares, are issued. If we are unable or otherwise elect not to use the treasury stock method in accounting for the shares issuable upon conversion of the 2024 Notes, then our diluted earnings per share could be adversely affected.

We have determined that we should use the if-converted method for calculating any potential dilutive effect of the conversion spread on the diluted net income per ordinary share because we expect to settle the principal amount of the outstanding 2024 Notes in a combination of cash and shares.

Conversion of the 2024 Notes will dilute the ownership interest of existing shareholders or may otherwise depress the price of our ADSs.

The conversion of some or all of the 2024 Notes will dilute the ownership interests of existing stockholders to the extent we deliver ADSs upon conversion of any of the 2024 Notes. The 2024 Notes may from time to time in the future be convertible at the option of their holders prior to their scheduled terms under certain circumstances specified in the indenture for the 2024 Notes. Moreover, because our ADSs trade in U.S. dollars but the conversion rate and conversion price set forth in the indenture for the 2024 Notes are set forth in euros, fluctuations in the U.S. dollar-euro exchange rate could cause the 2024 Notes to be convertible and result in dilution to our shareholders even if our ADSs do not significantly appreciate in value or appreciate in value at all. For example, one situation in which the 2024 Notes are convertible is when, during any calendar quarter ending after December 31, 2019, the last reported sale price of our ADS (converted into euros in the manner set forth in the indenture for the 2024 Notes) for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last day of the immediately preceding calendar quarter is greater than 130% of the conversion price of the 2024 Notes on each applicable trading day. As a result, if the U.S. dollar strengthened sufficiently against the euro, that conversion condition could be satisfied even if our ADSs do not appreciate in value.

Any sales in the public market of the ADSs issuable upon any conversion of the 2024 Notes could adversely affect prevailing market prices of our ADSs. In addition, the existence of the 2024 Notes may encourage short selling by market participants because the conversion of the 2024 Notes could be used to satisfy short positions, or anticipated conversion of the 2024 Notes into ADSs could depress the price of our ADSs.

Provisions in the indenture for our 2024 Notes could discourage or make more difficult certain corporate actions.

Provisions in the indenture for our 2024 Notes could discourage or make more difficult certain corporate actions. For example, if a “fundamental change” (as defined in the indenture for the 2024 Notes) occurs prior to the maturity date of the 2024 Notes, holders of the 2024 Notes will have the right, at their option, to require us to repurchase all or a portion of their 2024 Notes. If a “make-whole fundamental change” (as defined in the indenture for the 2024 Notes) occurs prior the maturity date, we will in some cases be required to increase the conversion rate of the 2024 Notes for a holder that elects to convert its 2024 Notes in connection with such make-whole fundamental change. Furthermore, the indenture prohibits us from engaging in certain mergers or acquisitions or sales of assets unless, among other things, the surviving entity assumes our obligations under the 2024 Notes.

Risks Related to Ownership of Our Ordinary Shares and ADSs

The market price for our ADSs has been and may be volatile or may decline.

The stock markets, and securities of technology companies in particular, have experienced extreme price and volume fluctuations that have affected and continue to affect the market prices of equity securities of many technology companies. Stock prices of many technology companies have fluctuated in a manner unrelated or disproportionate to the operating performance of those companies. In the past, shareholders have instituted securities class action litigation following periods of market volatility. If we were to become involved in securities litigation, it could subject us to substantial costs, divert resources and the attention of management from our business and adversely affect our business. Furthermore, the market price of our ADSs has fluctuated and may continue to fluctuate significantly in response to numerous factors, many of which are beyond our control, including:

- Actual or anticipated fluctuations in our revenue and other results of operations;
- The financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- Failure of securities analysts to initiate or maintain coverage of us and our securities, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- Announcements by us or our competitors of significant technical innovations, acquisitions, strategic partnerships, joint ventures or capital commitments;
- Changes in operating performance and stock market valuations of subscription model companies or other technology companies, or those in our industry in particular;

- Lawsuits threatened or filed against us;
- Results of our competitors; and
- Other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

Substantial future sales or perceived potential sales of our ADSs, ordinary shares, or other securities in the public market could cause the price of our ADSs to decline significantly.

The price of our ADSs could decline significantly if there are substantial sales of our ADSs, ordinary shares, or other equity securities in the public market (or the perception that these sales could occur), particularly by our directors, executive officers, and significant shareholders. The shares held by these persons may be sold in the public market in the United States, subject to prior registration in the United States, if required, or reliance upon an exemption from United States registration, including, in the case of shares held by affiliates or control persons, compliance with the volume restrictions of Rule 144. In addition, certain of our executive officers have entered into Rule 10b5-1 trading plans under which they have contracted with a broker to sell shares of our ADSs on a periodic basis.

In addition, a holder of up to 1,612,895 shares of our ordinary shares and ADSs, or 5.2% of our total ordinary shares and ADSs, based on ordinary shares and ADSs outstanding as of December 31, 2019, is entitled to rights with respect to registration of our ordinary shares pursuant to a shareholder agreement. If this holder of our ordinary shares, by exercising their registration rights, sells a large number of ADSs, it could adversely affect the market price for our ADSs. Furthermore, if we file a registration statement for the purposes of selling additional ADSs to raise capital and are required to include ADSs held by these holders pursuant to the exercise of their registration rights, our ability to raise capital may be impaired.

Furthermore, we have reserved a significant number of ADSs (and ordinary shares underlying the ADSs) for issuance in connection with awards issued under our equity incentive plans, employee stock purchase program and upon conversion of the 2024 Notes, the issuance of which will dilute the ownership interests of existing shareholders. Any sales in the public market of the ADSs issuable upon such issuance or conversion could adversely affect prevailing market prices for our ADSs.

We may also issue ordinary shares or securities convertible into our ordinary shares from time to time in connection with a financing, acquisition, investment or otherwise. Any such issuance could result in substantial dilution to our existing holders and could cause the market price of our ADSs to decline significantly.

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

We are a U.S. domestic issuer and are required to file annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxy materials and registration statements on U.S. domestic issuer forms with the SEC. We are required under current SEC rules to prepare our financial statements in accordance with GAAP and our executive officers and directors are also subject to the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. We expect that our status as a publicly traded company subject to U.S. domestic issuer requirements will require significant attention from management and may further strain our resources and cause us to incur additional legal, accounting and other expenses.

Additionally, as a public company in the United States, we have incurred and will continue to incur legal, accounting and other expenses. We are subject to the Exchange Act, including certain of the reporting requirements thereunder, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of the NASDAQ, enhanced legal and regulatory regimes and heightened standards relating to corporate governance and disclosure for public companies, and other applicable securities rules and regulations. Compliance with these rules and regulations increases our legal and financial compliance costs, makes some activities more difficult, time-consuming or costly and increases demand on our systems and resources. Being both a public company in the United States and a French private company also has an impact on disclosure of information and requires compliance with two sets of applicable rules. This could result in uncertainty regarding compliance matters and higher costs necessitated by legal analysis of dual legal regimes.

If we fail to establish or maintain an effective system of internal controls, we may be unable to accurately report our financial results or prevent fraud, and investor confidence and the market price of the ADSs may, therefore, be adversely affected.

As a public company in the United States, we are required to maintain internal control over financial reporting and to report any material weaknesses in such internal control. In addition, we are required to provide a report by management on the effectiveness of our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. This process is time-consuming, costly and complicated. In addition, our independent registered public accounting firm is required to attest to the effectiveness of our internal controls over financial reporting. As described in the subsequent risk factor and Part II, Item 9A of this Annual Report, we have identified a material weakness in our internal control over financial reporting. Any material weakness in our internal control over financial reporting could cause: us to fail to detect errors on a timely basis; our financial statements to be materially misstated; the market price of our ADSs to decline; or subject us to sanctions or investigations by the SEC or other regulatory authorities, which could require additional financial and management resources.

We have identified a material weakness in our internal control over financial reporting that, if not properly remediated, could adversely affect our business, financial condition, and results of operations, and investor confidence and the market price of our ADSs.

As disclosed in Part II, Item 9A of this Annual Report, in connection with our assessment of the effectiveness of internal control over financial reporting as of December 31, 2019, our management identified a material weakness in our internal control over financial reporting relating to ineffective process level controls over assumptions in our stand-alone selling price model used to determine the allocation of the transaction price of our on-premise license arrangements between the software element and the support and maintenance element. This material weakness resulted from an ineffective risk assessment process to identify changes to risks resulting from the adoption of ASC Topic 606 and the design of appropriate controls to address those risks. A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. As a result of such material weakness, we concluded that our disclosure controls and procedures and internal controls over financial reporting were not effective.

As further described in Part II, Item 9A of this Annual Report, we are currently taking actions to design and implement a remediation plan to address the material weakness. If remedial measures are insufficient to address the material weakness, or if additional material weaknesses in internal control are discovered or occur in the future, our consolidated financial statements may contain material misstatements and we could be required to restate our financial results. In addition, the timing of our financial reporting could be adversely affected and we may be unable to maintain compliance with the federal securities laws and NASDAQ listing requirements regarding the timely filing of periodic reports. If we fail to report our results in a timely manner, we could be required to pay additional interest under our convertible notes, which could impact our liquidity and financial condition. Any of the foregoing could cause investors to lose confidence in the reliability of our financial reporting, which could have a negative effect on the trading price of our ADSs and possibly impact our ability to obtain future financing on acceptable terms.

Share ownership is concentrated in the hands of our certain large shareholders and management, who are able to exercise a direct or indirect controlling influence on us.

Our executive officers, directors, current five percent or greater shareholders and affiliated entities together beneficially own a significant percentage of our ordinary shares and ADSs outstanding as of December 31, 2019. As a result, these shareholders, acting together or in parallel, could have a significant influence over all matters that require approval by our shareholders, including the election of directors and approval of significant corporate transactions. Corporate action might be taken even if other shareholders oppose them. This concentration of ownership might also have the effect of delaying or preventing a change of control of our company that other shareholders may view as beneficial.

We have entered into a shareholder agreement, or the Shareholder Agreement, with entities affiliated with Bpifrance Investissement. The Shareholder Agreement contains specific rights, obligations and agreements of Bpifrance Investissement as a holder of our ordinary shares or equity securities representing our ordinary shares (including the ADSs).

In addition, the Shareholder Agreement contains provisions related to the composition of our board of directors. Pursuant to the Shareholder Agreement, entities affiliated with Bpifrance Investissement are entitled to nominate one member of our board of directors. The current director nominated by affiliates of Bpifrance Investissement under the Shareholder Agreement is Thierry Sommelet. As a result, Bpifrance Investissement currently has the ability to elect one of the nine members of our board of directors, and thereby to influence our management and affairs.

Holders of our ADSs do not directly hold our ordinary shares.

As an ADS holder, you are not treated as one of our shareholders and you do not have ordinary shareholder rights. French law governs shareholder rights. The depositary, JPMorgan Chase Bank, N.A., is the holder of the ordinary shares underlying your ADSs. As a holder of ADSs, you have ADS holder rights. The deposit agreement among us, the depositary and you, as an ADS holder, and all other persons directly and indirectly holding ADSs, sets out ADS holder rights, as well as the rights and obligations of the depositary.

You may not be able to exercise your right to vote the ordinary shares underlying your ADSs.

Holders of ADSs may exercise voting rights with respect to the ordinary shares represented by the ADSs only in accordance with the provisions of the deposit agreement and not as a direct shareholder. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our ordinary shares, the depositary will fix a record date for the determination of ADS holders who shall be entitled to give instructions for the exercise of voting rights. Upon timely receipt of notice from us, if we so request, the depositary shall distribute to the holders as of the record date (1) the notice of the meeting or solicitation of consent or proxy sent by us and (2) a statement as to the manner in which instructions may be given by the holders.

You may instruct the depositary to vote the ordinary shares underlying your ADSs. Otherwise, you will not be able to exercise your right to vote, unless you withdraw the ordinary shares underlying the ADSs you hold. However, you may not know about the meeting far enough in advance to withdraw those ordinary shares. If we ask for your instructions, the depositary, upon timely notice from us, will notify you of the upcoming vote and arrange to deliver our voting materials to you. We cannot guarantee you that you will receive the voting materials in time to ensure that you can instruct the depositary to vote your ordinary shares or to withdraw your ordinary shares so that you can vote them yourself. If the depositary does not receive timely voting instructions from you, it may give a proxy to a person designated by us to vote the ordinary shares underlying your ADSs in accordance with the recommendation of our board of directors. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that you may not be able to exercise your right to vote, and there may be nothing you can do if the ordinary shares underlying your ADSs are not voted as you requested.

You may be subject to limitations on the transfer of your ADSs and the withdrawal of the underlying ordinary shares.

Your ADSs, which may be evidenced by American Depositary Receipts, or ADRs, are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of your ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason subject to your right to cancel your ADSs and withdraw the underlying ordinary shares. Temporary delays in the cancellation of your ADSs and withdrawal of the underlying ordinary shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our ordinary shares. In addition, you may not be able to cancel your ADSs and withdraw the underlying ordinary shares when you owe money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities. For example, if changes are made to tax laws, our securities may then be subject to French or other applicable taxes.

Risks Related to Investing in a French Company

Provisions in our By-laws and French corporate law may delay or discourage a takeover attempt.

Provisions contained in our By-laws, and the corporate laws of France, the country in which we are incorporated, could make it more difficult for a third-party to acquire us, even if doing so might be beneficial to our shareholders. In addition, provisions of French law and our By-laws impose various procedural and other requirements, which could make it more difficult for shareholders to effect certain corporate actions. These provisions include the following:

- Provisions of French law allowing the owner of 90% of the share capital or voting rights of a public company to force out the minority shareholders following a tender offer made to all shareholders are only applicable to companies listed on a regulated market in a Member State of the European Union or in another state party to the Agreement on the European Economic Area, including the main French stock exchange and will therefore not be applicable to us, unless we dual-list on such regulated market;
- A merger (i.e., in a French law context, a stock-for-stock exchange after which our company would be dissolved without being liquidated into the acquiring entity and our shareholders would become shareholders of the acquiring entity) of our company into a company incorporated in the European Union would require the approval of our board of directors as well as a two-thirds majority of the votes held by the shareholders present, represented by proxy or voting by mail at the relevant meeting;
- A merger of our company into a company incorporated outside of the European Union would require the unanimous approval of our shareholders;
- Under French law, a cash merger is treated as a share purchase and would require the consent of each participating shareholder;
- Our shareholders have granted and may grant in the future our board of directors' broad authorizations to increase our share capital or to issue additional ordinary shares or other securities (for example, warrants) to our shareholders, the public or qualified investors, including as a possible defense following the launching of a tender offer for our shares;
- Our shareholders have preferential subscription rights proportional to their shareholding in our company on the issuance by us of any additional shares or securities giving the right, immediately or in the future, to new shares for cash or a set-off of cash debts, which rights may only be waived by the extraordinary general meeting (by a two-thirds majority vote) of our shareholders or on an individual basis by each shareholder;
- Our board of directors has the right to appoint directors to fill a vacancy created by the resignation or death of a director, subject to the approval by the shareholders of such appointment at the next shareholders' meeting, which prevents shareholders from having the sole right to fill vacancies on our board of directors;
- Our board of directors can only be convened by its chairman or, when no board meeting has been held for more than two consecutive months, by directors representing at least one-third of the total number of directors;
- Our board of directors' meetings can only be regularly held if at least half of the directors attend either physically or by way of videoconference or teleconference enabling the directors' identification and ensuring their effective participation in the board of directors' decisions;
- Under French law, a non-resident of France as well as any French entity controlled by non-residents of France may have to file a declaration for statistical purposes with the Bank of France (*Banque de France*) within 20 working days following the date of certain direct foreign investments in us, including any purchase of our ADSs. In particular, such filings are required in connection with investments exceeding €15,000,000 that lead to the acquisition of at least 10% of our share capital or voting rights or cross such 10% threshold;
- Under French law, certain investments in a French company relating to certain strategic industries by individuals or entities not residents in a Member State of the European Union are subject to prior authorization of the Ministry of Economy;
- Approval of at least a majority of the votes held by shareholders present, represented by a proxy, or voting by mail at the relevant ordinary shareholders' general meeting is required to remove directors with or without cause;
- Advance notice is required for nominations to the board of directors or for proposing matters to be acted upon at a shareholders' meeting, except that a vote to remove and replace a director can be proposed at any shareholders' meeting without notice;
- Pursuant to French law, our By-laws, including the sections relating to the number of directors and election and removal of a director from office, may only be modified by a resolution adopted by a two-thirds majority vote of our shareholders present, represented by a proxy or voting by mail at the meeting; and

- Our shares take the form of bearer securities or registered securities, if applicable legislation so permits, according to the shareholder's choice. Issued shares are represented by book entries in individual accounts opened with us or an authorized intermediary on our behalf or any authorized intermediary (depending on the form of such shares), in the name of each shareholder and kept according to the terms and conditions laid down by the legal and regulatory provisions and, in the case of an authorized intermediary, contractual provisions.

Your right as a holder of ADSs to participate in any future preferential subscription rights or to elect to receive dividends in shares may be limited, which may cause dilution to your holdings.

According to French law, if we issue additional shares or securities for cash giving right, immediately or in the future, to new shares, current shareholders will have preferential subscription rights for these securities proportionally to their shareholding in our company unless they waive those rights at an extraordinary meeting of our shareholders (by a two-thirds majority vote) or individually by each shareholder. However, our ADS holders in the United States will not be entitled to exercise or sell such rights unless we register the rights and the securities to which the rights relate under the Securities Act or an exemption from the registration requirements is available. In addition, the deposit agreement provides that the depositary will not make rights available to you unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act or exempted from registration under the Securities Act. Further, if we offer holders of our ordinary shares the option to receive dividends in either cash or shares, under the deposit agreement the depositary may require satisfactory assurances from us that extending the offer to holders of ADSs does not require registration of any securities under the Securities Act before making the option available to holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, ADS holders may be unable to participate in our rights offerings or to elect to receive dividends in shares and may experience dilution in their holdings. In addition, if the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case you will receive no value for these rights.

U.S. investors may have difficulty enforcing civil liabilities against our company and directors and the experts named in our annual report.

Certain members of our board of directors and certain of our subsidiaries and certain experts named in our Annual Report on Form 10-K for the fiscal year ended December 31, 2019 filed with the SEC on February 28, 2020, are non-residents of the United States, and all of or a substantial portion of our assets and the assets of such persons are located outside the United States. As a result, it may not be possible to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States.

Additionally, it may be difficult to assert U.S. securities law claims in actions originally instituted outside of the United States. Foreign courts may refuse to hear a U.S. securities law claim because foreign courts may not be the most appropriate forums in which to bring such a claim. Even if a foreign court agrees to hear a claim, it may determine that the law of the jurisdiction in which the foreign court resides, and not U.S. law, is applicable to the claim. Further, if U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process, and certain matters of procedure would still be governed by the law of the jurisdiction in which the foreign court resides. In particular, there is some doubt as to whether French courts would recognize and enforce certain civil liabilities under U.S. securities laws in original actions or judgments of U.S. courts based upon these civil liability provisions. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in France. An award for monetary damages under the U.S. securities laws would be considered punitive if it does not seek to compensate the claimant for loss or damage suffered but is intended to punish the defendant. French law provides that a shareholder, or a group of shareholders, may initiate a legal action to seek indemnification from the directors of a corporation in the corporation's interest if it fails to bring such legal action itself. If so, any damages awarded by the court are paid to the corporation and any legal fees relating to such action are borne by the relevant shareholder or the group of shareholders.

The enforceability of any judgment in France will depend on the particular facts of the case as well as the laws and treaties in effect at the time. The United States and France do not currently have a treaty providing for recognition and

enforcement of judgments (other than arbitration awards) in civil and commercial matters. Therefore, the recognition and enforcement of any such judgment would be subject to French procedural law and a French court may not recognize or enforce any such judgment.

We do not currently intend to pay dividends on our securities, and, consequently, your ability to achieve a return on your investment depends on appreciation in the price of the ADSs. In addition, French law may limit the amount of dividends we are able to distribute.

We have never declared or paid any cash dividends on our ordinary shares and do not currently intend to do so for the foreseeable future. In addition, any future indebtedness may restrict our ability to pay dividends. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your ADSs for the foreseeable future and the success of an investment in ADSs will depend upon any future appreciation in its value. Consequently, investors in our ADSs may need to rely on sales of all or part of their holdings of ADSs after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that the ADSs will appreciate in value or even maintain the price at which our shareholders have purchased the ADSs. Investors seeking cash dividends should not purchase the ADSs.

Further, under French law, the determination of whether we have been sufficiently profitable to pay dividends is made on the basis of our statutory financial statements prepared and presented in accordance with French generally accepted accounting principles. In addition, payment of dividends may subject us to additional taxes under French law. Therefore, we may be more restricted in our ability to declare dividends than companies not based in France.

In addition, exchange rate fluctuations may affect the amount of euros that we are able to distribute, and the amount in U.S. dollars that our shareholders receive upon the payment of cash dividends or other distributions we declare and pay in euros, if any. These factors could harm the value of the ADSs, and, in turn, the U.S. dollar proceeds that holders receive from the sale of the ADSs.

U.S. holders of ADSs may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

A non-U.S. corporation will be considered a passive foreign investment company, or PFIC, for U.S. federal income tax purposes, for any taxable year if either (1) at least 75% of its gross income for such year is passive income or (2) at least 50% of the value of its assets (based on an average of the quarterly values of the assets during such year) is attributable to assets that produce or are held for the production of passive income. Based on the value and composition of our assets, although not free from doubt, we do not believe we were a PFIC for the taxable year ended December 31, 2019, and we do not believe we are a PFIC in the current taxable year or will be in the foreseeable future. Because a separate factual determination as to whether we are or have become a PFIC must be made each year (after the close of such year), we could be or become a PFIC in the current year or any future taxable year. If we are a PFIC for any taxable year during which a U.S. holder holds ADSs, the U.S. holder may be subject to adverse tax consequences, including (1) the treatment of all or a portion of any gain on disposition as ordinary income, (2) the application of an interest charge with respect to such gain and certain dividends and (3) compliance with certain reporting requirements. Each U.S. holder is strongly urged to consult its tax advisor regarding the application of these rules and the availability of any potential elections.

If a United States person is treated as owning at least 10% of our ADSs, such person may be subject to adverse U.S. federal income tax consequences.

If a United States person is treated as owning (directly, indirectly, or constructively) at least 10% of the value or voting power of our ADSs, such person may be treated as a “United States shareholder” with respect to each “controlled foreign corporation” in our group (if any). Because our group includes one or more U.S. subsidiaries, certain of our non-U.S. subsidiaries could be treated as controlled foreign corporations (regardless of whether or not we are treated as a controlled foreign corporation). A United States shareholder of a controlled foreign corporation may be required to report annually and include in its U.S. taxable income its pro rata share of “Subpart F income,” “global intangible low-taxed income,” and investments in U.S. property by controlled foreign corporations, regardless of whether we make any distributions. Failure to comply with such reporting requirements could result in adverse tax effects for United States shareholders and potentially significant monetary penalties. An individual that is a United States shareholder with

respect to a controlled foreign corporation generally would not be allowed certain tax deductions or foreign tax credits that would be allowed to a United States shareholder that is a U.S. corporation. We cannot provide any assurances that we will assist investors in determining whether any of our non-U.S. subsidiaries is treated as a controlled foreign corporation or furnish to any United States shareholders information that may be necessary to comply with the aforementioned obligations. A United States investor should consult its advisors regarding the potential application of these rules to an investment in our ADSs.

The rights of shareholders in companies subject to French corporate law differ in material respects from the rights of shareholders of corporations incorporated in the United States.

We are a French company with limited liability. Our corporate affairs are governed by our By-laws and by the laws governing companies incorporated in France. The rights of shareholders and the responsibilities of members of our board of directors are in many ways different from the rights and obligations of shareholders in companies governed by the laws of U.S. jurisdictions. For example, in the performance of its duties, our board is required by French law to consider the interests of our company, its shareholders, its employees and other stakeholders, rather than solely our shareholders and/or creditors. It is possible that some of these parties will have interests that are different from, or in addition to, your interests as a shareholder.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We lease approximately 50,000 square feet of office space in Redwood City, California for our U.S. headquarters for which the lease expires in 2027. We also lease approximately 18,000 square feet of office space in Suresnes, France for our French headquarters for which the lease expires in 2020. In March 2020, we entered into a lease agreement for approximately 58,000 square feet of office space in Suresnes, France for our future French headquarters, which expires in 2026, subject to our right to continue the lease under its terms until March 31, 2029. We also lease office space around the world for our employees, including elsewhere in the United States, France, China, Germany, the United Kingdom, Japan, India and Singapore.

We regularly monitor the facilities we occupy to ensure that they suit our needs. We anticipate leasing additional office space in the future as we continue to grow and enter new geographies. We do not foresee problems in finding readily available additional space on commercially reasonable terms, but expect to incur additional office lease expenses in connection with our growth.

Item 3. Legal Proceedings

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently a party to any legal proceedings that in the opinion of our management, if determined adversely to us, would have a material adverse effect on our business, financial condition, results of operations or cash flows. 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.

Item 4. Mine Safety Disclosures

None.

PART II

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

Market Information for Ordinary Shares

Our ADSs are listed on the NASDAQ Global Market under the symbol "TLND".

Holders of Record

As of December 31, 2019, there were 20 holders of record of our ordinary shares and 25 holders of record of our ADSs with our depository. Because many of our shares are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock, and we do not currently intend to pay any cash dividends for the foreseeable future, if at all. We currently intend to retain all available funds and any future earnings for use in the operation of our business. Any future determination to pay dividends on our ordinary shares will be at the discretion of our board of directors and will depend upon, among other factors, our financial condition, operating results, current and anticipated cash needs, plans for expansion and other factors that our board of directors may deem relevant.

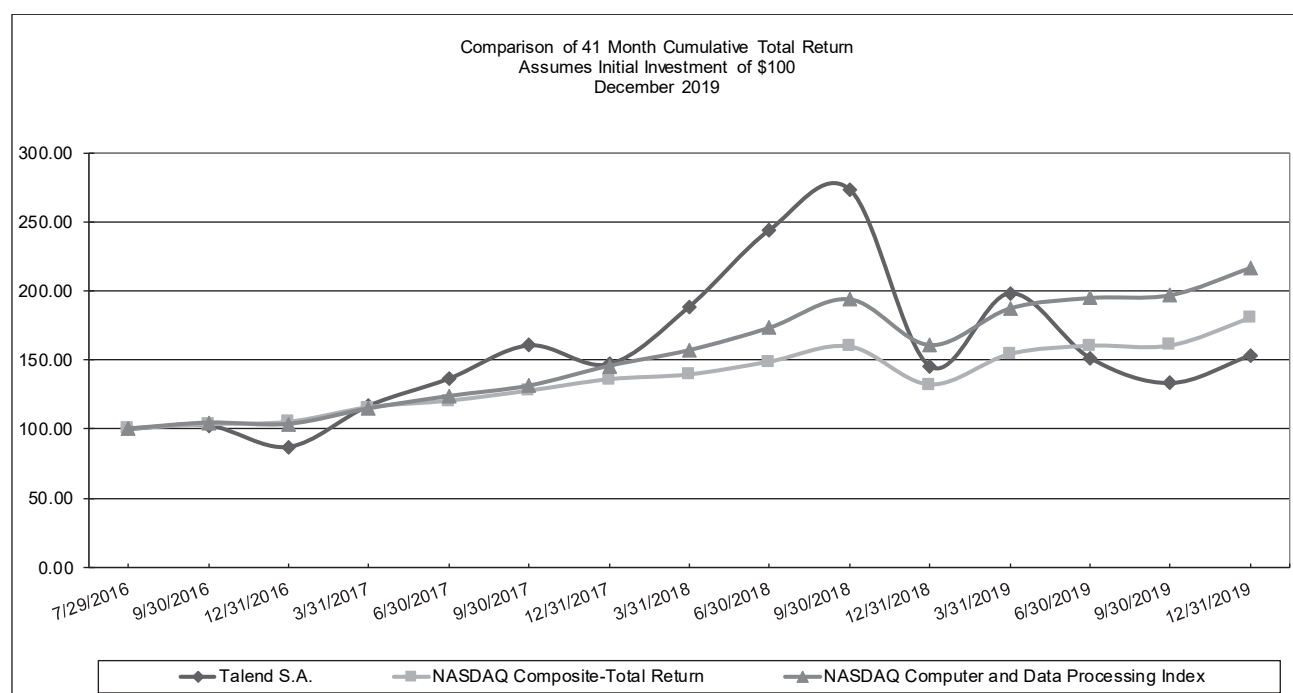
Purchases of Equity Securities by the Issuer

None.

Stock Performance Graph

The following performance graph shall not be deemed “soliciting material” or to be “filed” with the SEC for purposes of Section 18 of the Exchange Act, or otherwise subject to the liabilities under that Section, and shall not be deemed to be incorporated by reference into any of our filings under the Securities Act or the Exchange Act, except to the extent that we specifically incorporate it by reference into such filing.

The graph below compares the cumulative total stockholder return on our ADSs with the cumulative total return on the NASDAQ Composite and NASDAQ Computer and Data Processing Services Index. The graph assumes \$100 was invested at the market close on July 29, 2016 which was our initial trading day, in our ADSs. Data for the NASDAQ Composite Index and the NASDAQ Computer and Data Processing Services Index assume reinvestment of any dividends. Our offering price of our ADSs in our initial public offering (IPO), which had a closing price of \$25.50 per share on July 29, 2016, was \$18.00 per share.



Exchange Controls & Ownership by Non-French Residents

Under current French foreign exchange control regulations there are no limitations on the amount of cash payments that we may remit to residents of foreign countries. Laws and regulations concerning foreign exchange controls do, however, require that all payments or transfers of funds made by a French resident to a non-resident such as dividend payments be handled by an accredited intermediary. All registered banks and substantially all credit institutions in France are accredited intermediaries.

Neither the French Commercial Code nor our By-laws presently impose any restrictions on the right of non-French residents or non-French shareholders to own and vote shares.

However, non-French residents must file a declaration for statistical purposes with the Bank of France (*Banque de France*) within twenty working days following the date of certain direct foreign investments in us, including any purchase of our ADSs. In particular, such filings are required in connection with investments exceeding €15,000,000 that lead to the acquisition of at least 10% of our share capital or voting rights or cross such 10% threshold. Violation of this filing requirement may be sanctioned by five years of imprisonment and a fine of up to twice the amount of the relevant investment. This amount may be increased fivefold if the violation is made by a legal entity.

Certain foreign investments in companies incorporated under French law are subject to the prior authorization from the French Minister of the Economy, where all or part of the target’s business and activity relate to sectors regarding

public order, public security or the interests of national defense, including energy, transportation, public health, telecommunications, data-hosting activities, as well as research and development activities in cybersecurity, artificial intelligence or robotics, for instance.

The concerned investments are (i) the acquisition of control, within the meaning of Article L. 233-3 of the French Commercial Code, of a company that has its registered office in France, (ii) the acquisition of all or part of a line of business of a company that has its registered office in France, or (iii) the acquisition of more than 33.33% of the shares or voting rights of a company that has its registered office in France.

Moreover, the European Union has established, under Regulation No. 2019/452 applicable from October 11, 2020, a framework for the screening of foreign direct investments into the European Union. This regulation provides for cooperation mechanisms in relation to foreign direct investments that are likely to affect security or public order of any member state of the European Union. In such case, member states shall notify the European Commission and other member states of any foreign direct investment in their territory that is undergoing screening (i.e. a procedure allowing to assess, investigate, authorize, condition, prohibit or unwind foreign direct investments) by providing the information referred to in Article 9(2) of this regulation as soon as possible, in particular:

- (a) the ownership structure of the foreign investor and of the undertaking in which the foreign direct investment is planned or has been completed, including information on the ultimate investor and participation in the capital;
- (b) the approximate value of the foreign direct investment;
- (c) the products, services and business operations of the foreign investor and of the undertaking in which the foreign direct investment is planned or has been completed;
- (d) the Member States in which the foreign investor and the undertaking in which the foreign direct investment is planned or has been completed conduct relevant business operations;
- (e) the funding of the investment and its source, on the basis of the best information available to the Member State; and
- (f) the date when the foreign direct investment is planned to be completed or has been completed.

Taxation

Material French Income Tax Considerations

The following describes, as of the date of this Annual Report on Form 10-K, the material French income tax consequences to U.S. holders (as defined below) that (i) hold only equity securities of the company, and (ii) are not related to our company within the meaning of Article 39-12 of the French Tax Code, or “FTC” (*Code général des impôts*) of purchasing, owning and disposing of our ADSs (or the ordinary shares represented by the ADSs).

This discussion does not purport to be a complete analysis or listing of all potential tax effects of the acquisition, ownership or disposition of our ADSs to any particular investor, and does not discuss tax considerations that arise from rules of general application or that are generally assumed to be known by investors. All of the following is subject to change. Such changes could apply retroactively and could affect the consequences described below.

French tax rules applicable to French assets that are held by or in foreign trusts provide inter alia for the inclusion of trust assets in the settlor’s net assets for purpose of assessing the French real estate wealth tax, the French gift and estate tax, the specific tax on value of the French assets, within the scope of the French real estate wealth tax, held in or by foreign trusts not already subject to the French real estate wealth tax, and for a number of French tax reporting and disclosure obligations. The following discussion does not address the French tax consequences applicable to securities (including ADSs), held in trusts. If securities are held in trust, the grantor, trustee and beneficiary are urged to consult their own tax adviser regarding the specific tax consequences of acquiring, owning and disposing of securities.

The description of the French income tax and wealth tax consequences set forth below is based on the Convention Between the Government of the United States of America and the Government of the French Republic for the Avoidance

of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital of August 31, 1994, or the Treaty, which came into force on December 30, 1995 (as amended by any subsequent protocols, including the protocol of January 13, 2009), and the tax guidelines issued by the French tax authorities in force as of the date of this prospectus.

For the purposes of this discussion, a “U.S. holder” is a beneficial owner of securities, that is (or is treated as), for U.S. federal income tax purposes: (1) an individual who is a citizen or resident of the United States; (2) a corporation, or other entity that is treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof, or the District of Columbia; (3) an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or (4) a trust, if a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of the substantial decisions of such trust or has a valid election in effect under applicable U.S. Treasury Regulations to be treated as a United States person.

If a partnership (or any other entity treated as partnership for U.S. federal income tax purposes) holds securities, the tax treatment of the partnership and a partner in such partnership generally will depend on the status of the partner and the activities of the partnership. Such partner or partnership is urged to consult its own tax adviser regarding the specific tax consequences of acquiring, owning and disposing of securities.

This discussion applies only to investors that hold our securities as capital assets that have the U.S. dollar as their functional currency, that are entitled to Treaty benefits under the “Limitation on Benefits” provision contained in the Treaty, and whose ownership of the notes or, as the case may be, ordinary shares and/or ADSs received upon conversion of such notes, is not effectively connected to a permanent establishment or a fixed base in France. Certain U.S. holders (including, but not limited to, U.S. expatriates, partnerships or other entities classified as partnerships for U.S. federal income tax purposes, banks, insurance companies, regulated investment companies, tax-exempt organizations, financial institutions, persons subject to the alternative minimum tax, persons who acquired the securities pursuant to the exercise of employee share options or otherwise as compensation, persons that own (directly, indirectly or by attribution) 5% or more of our voting stock or 5% or more of our outstanding share capital, dealers in securities or currencies, persons that elect to mark their securities to market for U.S. federal income tax purposes and persons holding securities as a position in a synthetic security, straddle or conversion transaction) may be subject to special rules not discussed below.

U.S. holders are urged to consult their own tax advisers regarding the tax consequences of the purchase, ownership and disposition of securities in light of their particular circumstances, especially with regard to the “Limitations on Benefits” provision.

Taxation of Dividends

Dividends paid by a French corporation to non-residents of France are generally subject to French withholding tax at a rate of 12.8% when the recipient is an individual and 28% otherwise (to be progressively decreased down to 25% in 2022). Dividends paid by a French corporation in a non-cooperative jurisdiction, as defined in Article 238-0 A of the FTC with the exception of those mentioned in 2° of 2 bis of this Article, will generally be subject to French withholding tax at a rate of 75%. However, eligible U.S. holders, other than individuals subject to the French withholding tax at a rate of 12.8%, entitled to Treaty benefits under the “Limitation on Benefits” provision contained in the Treaty who are U.S. residents, as defined pursuant to the provisions of the Treaty, may be subject to the withholding tax at a reduced rate (as described below).

- Under the Treaty, the rate of French withholding tax on dividends paid to an eligible U.S. holder which is a U.S. resident as defined pursuant to the provisions of the Treaty and which ownership of the ordinary shares or ADSs is not effectively connected with a permanent establishment or fixed base that such U.S. holder has in France may be capped at 15%, or 5% if such U.S. holder is a corporation and owns directly or indirectly at least 10% of the share capital of the issuer; such U.S. holder may claim a refund from the French tax authorities of the amount withheld in excess of the Treaty rates of 15% or 5%, if any.
- For U.S. holders that are not individuals but are U.S. residents, as defined pursuant to the provisions of the Treaty, the requirements for eligibility for Treaty benefits, including the reduced 5% or 15% withholding tax rates, contained in the “Limitation on Benefits” provision of the Treaty, are complex. U.S. holders are advised to consult their own tax advisers regarding their eligibility for Treaty benefits in light of their own particular circumstances.

Dividends paid to an eligible U.S. holder may immediately be subject to the reduced rates provided that such U.S. holder establishes before the date of payment that it is a U.S. resident under the Treaty by completing and providing the depository with a treaty form (Form 5000). Dividends paid to a U.S. holder, other than individuals subject to the French withholding tax at the rate of 12.8%, that has not filed the Form 5000 before the dividend payment date will be subject to French withholding tax at the rate of 28%, or 75% if paid in a non-cooperative jurisdiction (as defined in Article 238-0 A of the FTC with the exception of those mentioned in 2° of 2 bis of this Article), and then reduced at a later date to 5% or 15%, provided that such holder duly completes and provides the depository with the treaty forms Form 5000 and Form 5001 before December 31 of the second calendar year following the year during which the dividend is paid. Certain qualifying pension funds and certain other tax-exempt entities are subject to the same general filing requirements as other U.S. holders except that they may have to supply additional documentation evidencing their entitlement to these benefits.

Form 5000 and Form 5001, together with instructions, will be provided by the depository to all U.S. holders registered with the depository. The depository will arrange for the filing with the French Tax authorities of all such forms properly completed and executed by U.S. holders of ordinary shares or ADSs and returned to the depository in sufficient time so that they may be filed with the French tax authorities before the distribution in order to obtain immediately a reduced withholding tax rate.

The withholding tax refund, if any, ordinarily occurs within 12 months from filing the applicable French Treasury Form, but not before January 15 of the year following the calendar year in which the related dividend was paid.

Since the withholding tax rate applicable under French domestic law to U.S. holders who are individuals does not exceed the cap provided in the Treaty (i.e. 15%), the 12.8% rate shall apply to dividends paid to those U.S. holders, without any reduction provided under the Treaty.

Tax on Sale or Other Disposition

As a matter of principles, under French tax law, a U.S. holder should not be subject to any French tax on any capital gain from the sale, exchange, repurchase or redemption by us of ordinary shares or ADSs, provided such U.S. holder is not a French tax resident for French tax purposes and has not held more than 25% of our dividend rights, known as “*droits aux bénéfices sociaux*,” at any time during the preceding five years, either directly or indirectly, and, as relates to individuals, alone or with relatives (as an exception, a U.S. holder resident, established or incorporated in certain non-cooperative States or territories as defined in Article 238-0 A of the French tax code (*Code général des impôts*, the “FTC”)) should be subject to a 75% withholding tax in France on any such capital gain, regardless of the fraction of the dividend rights it holds).

Under application of the Treaty, a U.S. holder who is a U.S. resident for purposes of the Treaty and entitled to Treaty benefits will not be subject to French tax on such capital gain unless the ordinary shares or the ADSs form part of the business property of a permanent establishment or fixed base that the U.S. holder has in France. U.S. holders who own ordinary shares or ADSs through U.S. partnerships that are not resident for Treaty purposes are advised to consult their own tax advisor regarding their French tax treatment and their eligibility for Treaty benefits in light of their own particular circumstances. A U.S. holder that is not a U.S. resident for Treaty purposes or is not entitled to Treaty benefits (and in both cases is not resident, established or incorporated in certain non-cooperative States or territories as defined in Article 238-0 A of the FTC) and has held more than 25% of our dividend rights, known as “*droits aux bénéfices sociaux*” at any time during the preceding five years, either directly or indirectly, and, as relates to individuals, alone or with relatives will be subject to a levy in France (i) at the rate of 12.8% for individuals, and (ii) a rate corresponding to the standard corporate income tax rate set forth in Article 219-I of the FTC for legal persons. Special rules apply to U.S. holders who are residents of more than one country.

Estate and Gift Taxes and Transfer Taxes

In general, a transfer of securities by gift or by reason of death of a U.S. holder that would otherwise be subject to French gift or inheritance tax, respectively, will not be subject to such French tax by reason of the Convention between the Government of the United States of America and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Estates, Inheritances and Gifts, dated November 24, 1978 (as amended by the protocol of December 8, 2014), unless the donor or the transferor is domiciled in

France at the time of making the gift or at the time of his or her death, or the securities were used in, or held for use in, the conduct of a business through a permanent establishment or a fixed base in France.

Pursuant to Article 235 ter ZD of the FTC, purchases of equity securities (including ordinary shares and ADSs) of a French company listed on a regulated market of the European Union or an exchange formally acknowledged by the French Financial Market Authority ("AMF") are subject to a 0.3% French tax on financial transactions ("FTT") provided that the issuer's market capitalization exceeds 1 billion euros as of December 1 of the year preceding the taxation year. A list of French relevant companies whose market capitalization exceeds 1 billion euros as of December 1 of the year preceding the taxation year is published annually by the French State.

Pursuant to Regulations BOI-ANX-000467-20191218 issued on December 18, 2019, we are currently not included in such list. Moreover, Nasdaq Global Select Market, on which our ADSs are listed for trading, is not currently acknowledged by the AMF but this may change in the future. Consequently, our securities should not fall within the scope of the FTT and purchasers of our securities in 2020 should not be subject to the FTT. Please note that such list may be updated from time to time, or may not be published anymore in the future. Purchases of Talend's securities may, however, in the future, be subject to the FTT if our market capitalization exceeds €1.0 billion in the year preceding the taxation year and that the Nasdaq Global Select Market is acknowledged by the French AMF.

In the case where the FTT is not applicable, (1) transfers of shares issued by a French company which are listed on a regulated or organized market within the meaning of the *Code monétaire et financier* are subject to uncapped registration duties at the rate of 0.1% if the transfer is evidenced by a written statement (*acte*) executed either in France or outside France, whereas (2) transfers of shares issued by a French company which are not listed on a regulated or organized market within the meaning of the *Code monétaire et financier* are subject to uncapped registration duties at the rate of 0.1% notwithstanding the existence of a written statement (*acte*). As our ordinary shares of Talend are not listed within the meaning of the relevant French law, their transfer is subject to uncapped registration duties at the rate of 0.1% notwithstanding the existence of a written agreement (*acte*).

Although there is no case law or official guidelines published by the French tax authorities are silent on this point, transfer of ADSs should in any event remain outside of the scope of the aforementioned 0.1% registration duties.

Wealth Tax

The French real estate wealth tax (*impôt sur la fortune immobilière*), introduced by French Finance Bill dated December 30th 2017, applies only to individuals who own, directly or indirectly through one or more legal entities, real estate property in France (subject to certain exemptions) and whose net taxable assets amount to at least €1,300,000.

French real estate wealth tax in France may only apply to U.S. holders, with respect to shares, rights, or interest in a company, to the extent that such company holds real estate assets that are not allocated to its operational activity, for the fraction of the value of the shares, rights or interest in the company representing such real estate assets. In any case, pursuant to Article 965, 2° of the FTC, shares of an operating entity holding French real estate assets in which the taxpayer holds, directly and indirectly, less than 10% of the share capital and voting rights are exempt from real estate wealth tax.

U.S. holders are advised to consult their own tax advisor regarding the specific tax consequences which may apply to their particular situation with respect to such French real estate wealth tax (*impôt sur la fortune immobilière*).

Item 6. Selected Financial Data

We derived the selected consolidated statements of operations data for the years ended December 31, 2019, 2018 and 2017 and selected consolidated statements of financial position data as of December 31, 2019 and 2018 from our audited consolidated financial statements included elsewhere in this Annual Report, which have been prepared in accordance with U.S. GAAP. We derived the selected consolidated statements of operations data for the years ended December 31, 2016 and 2015 and the selected consolidated statements of financial position data as of December 31, 2017, 2016 and 2015, from consolidated financial statements and notes thereto, which are not included in this Annual Report. The consolidated statements of operations data for the years ended December 31, 2017, 2016 and 2015 and the selected consolidated statements of financial position data as of December 31, 2017, 2016 and 2015 included in the tables below do not reflect the adoption of ASC 606 and continue to be reported under the standards in effect for those periods. Further, the financial data presented below, except for that of the year ended December 31, 2019, do not reflect the adoption of ASC 842 and continue to be reported under the standards in effect for those periods. See “Item 8. Financial Statements and Supplementary Data,” for more details.

Our historical results presented below (in thousands, except per share amounts) are not necessarily indicative of financial results to be achieved in future periods. You should read the following summary consolidated financial data in conjunction with “Item 7. 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.

Consolidated Statement of Operations Data:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
Operations:					
Total Revenue	\$ 247,861	\$ 205,799	\$ 148,595	\$ 105,984	\$ 75,960
Gross profit	186,981	156,305	114,436	80,416	57,252
Operating expenses	245,505	196,510	143,173	106,408	78,697
Loss from operations	(58,524)	(40,205)	(28,737)	(25,992)	(21,445)
Net loss for the year	(61,469)	(39,027)	(31,208)	(24,243)	(22,006)
Net loss per share attributable to ordinary shareholders:					
Basic and diluted net loss per share	\$ (2.01)	\$ (1.31)	\$ (1.08)	\$ (1.68)	\$ (5.79)
Weighted-average shares outstanding used to compute net loss per share attributable to ordinary shareholders:					
Shares used in basic and diluted net loss per share	30,563	29,841	28,966	14,464	3,803

Consolidated Statement of Financial Position Data:

	Year Ended December 31,				
	2019	2018	2017	2016	2015
Cash and cash equivalents	\$ 177,075	\$ 34,104	\$ 87,024	\$ 91,023	\$ 6,930
Total assets	403,917	217,198	172,798	144,651	48,061
Convertible notes	130,045	—	—	—	—
Other debt	672	884	1,195	149	10,142
Total liabilities	367,965	185,651	173,908	126,626	100,544
Ordinary shares	3,205	3,128	3,059	2,980	2,450
Additional paid-in capital	309,988	244,878	215,390	202,566	99,511
Total shareholders’ equity (deficit)	35,952	31,547	(1,110)	18,025	(52,483)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with our consolidated financial statements, related notes and other financial information included elsewhere in this Annual Report. The following discussion contains forward-looking statements, including, without limitation, our expectations and statements regarding our outlook and future revenue, expenses, results of operations, liquidity, plans, strategies and objectives of management and any assumptions underlying any of the foregoing. Our actual results could differ materially from those discussed in the forward-looking statements. Our forward-looking statements and factors that might cause future actual results to differ materially from our recent results or those projected in the forward-looking statements include, but are not limited to, those discussed in "Special Note Regarding Forward-Looking Statements" and "Item 1A. Risk Factors".

Overview

Our mission is to provide data intelligence for all users by delivering trusted data when and where it is needed. We are a key enabler of the data-driven enterprise where data is a strategic asset powering business. Talend Data Fabric allows customers in any industry to improve business performance by using their data to create new insights and to automate business processes. Our customers rely on our software to better understand their customers, offer new applications and services, and improve operations.

We had 1,219 employees as of December 31, 2019 and we plan to continue to expand our non-U.S. presence to address the needs of our global customers as well as to acquire customers in new geographies. We also plan to continue to invest in new product development.

Our business model combines our open source approach with self-service trials of our commercial software and direct sales. We have been able to rapidly expand awareness and usage of our products through our free open source versions and self-service trials. This enables developers and users to download and try the free and paid version of our products, creating sales leads for our more feature-rich commercial solutions. Users of our open source products often catalyze adoption of our commercial solutions by their organizations, primarily to benefit from enterprise-grade features that include the scaling out of our offering to a larger set of users, among others. Following an initial deployment of our paid subscription products, organizations often purchase more subscriptions or expand usage to additional products from our fully integrated suite after realizing the benefits of additional features or scale. We sell our product offerings as subscriptions based primarily on the number of users of our platform.

We generate the majority of our revenue from subscriptions of our commercial solution Talend Data Fabric. We primarily sell annual contracts billed in advance. Our subscription offering includes enterprise-grade features and capabilities to scale our solutions across production environments and customer infrastructures. These product features and capabilities include scheduling, management and monitoring of data integration flows, collaboration across a team of users and technical support. We also provide professional services to implement our solutions. Our subscription revenue represents a significant portion of our revenue, growing from 85% of our total revenue in the year ended December 31, 2017, to 86% in the year ended December 31, 2018, and 88% in the year ended December 31, 2019.

Our financial results include:

- Total revenue increased from \$148.6 million for 2017 to \$205.8 million for 2018 to \$247.9 million for 2019;
- Subscription revenue increased from \$125.9 million for 2017 to \$176.4 million for 2018 to \$217.0 million for 2019;
- Subscription revenue grew 23% year-over-year for 2019; and
- Net loss was \$61.5 million for 2019, \$39.0 million for 2018 and \$31.2 million for 2017.

We intend to generate profits based on increased sales of our solutions to new and existing customers, including by the continued conversion of free trials into paid users. We currently anticipate that at some point in the future we will be able to increase revenues at a greater rate than increases in our operating expenses. However, there can be no assurance

that we will achieve or maintain profitability on a consistent basis, that we will increase our sales to new and existing customers, or that our operating expenses will increase at a lower rate than our revenue may grow.

Key Factors Affecting Our Performance

Expansion within Existing Customers. Our business model relies on rapidly and efficiently landing new customers and expanding our relationship with these customers over time. We have designed our apps for ease-of-use and with strong integrations between apps to encourage broad adoption within organizations. As customers gain awareness of our solutions and as their data integration and integrity requirements evolve, they may recognize additional use cases for our software and expand their use of our solutions accordingly, and our growth strategy is dependent on our ability to demonstrate the value of these additional apps to our customers. We believe this provides us with substantial operating leverage because the costs of additional sales within existing customers are significantly less than costs of sales to new customers. Our future revenue growth and profitability rely on customers continuing to expand user and app adoption within their organizations.

Adoption of Modern Data Technologies. We believe our cloud and big data integration capabilities are a key competitive differentiator and driver of new customer adoptions. We expect that as organizations adopt and scale out deployments of modern data technologies such as cloud data warehouses, machine learning, and big data processing, they will continue to use Talend to facilitate the integration of these big data technologies within their IT environments. The continued shift to cloud is driving rapid growth in cloud integration. The adoption and usage of Talend Cloud and Talend Stitch Data Loader drives demand for other Talend Data Fabric apps. The continued adoption of big data technologies, and our ability to differentiate between our app offerings and those of our competitors, in both functionality and pricing, is critical to our continued revenue growth.

Average Subscription Contract Duration. We primarily sell annual contracts, although we have some contracts that extend for multiple years. The average contract duration impacts our cash flows because we bill and collect payment for the full term in advance. For the twelve-month periods ended December 31, 2019 and 2018, subscription sales, excluding monthly contracts, each had an average pre-billed duration of 1.1 years.

Open Source Strategy. Our open source strategy consists of fostering a community of users and developers and selling commercial versions of our solutions. Our open source developer community helps lower our research and development costs by contributing components and connectors, testing beta versions of our apps, identifying enhancements and providing free advice to other community members. To evaluate our open source strategy, we periodically review data points such as the volume of downloads of our open source apps, the number of open source users that are members of our open source community and the approximate number of leads that are generated from users of our open source apps. Given that our open source users register with us voluntarily, we do not use a conversion rate to evaluate our strategy. We believe the continued adoption of open source software by organizations as well as the vitality of our open source community is a critical part of our performance.

Investment in Sales and Marketing. We continue to focus on long-term growth and expect to continue to invest aggressively in sales and marketing to grow our customer base and expand within existing customers. We also expect to increase investments in sales and marketing in markets outside of France and the United States. As we continue to focus on new customer acquisition, we will need to devote additional time and effort to the new customer sales cycle, which requires more time, education and effort than expanding our relationship with existing customers. Any investments that we make in sales and marketing will occur in advance of our experiencing benefits from such investments, as new sales hires take time to fully ramp. The success of these efforts will also be affected by our ability to hire and retain sales personnel, and attrition of these employees may slow our efforts. As a result, it may be difficult for us to determine if we are efficiently allocating our resources in these areas. Increasing new customer bookings, particularly among small and medium businesses and large enterprise customers, is key to our growth strategy, and we also anticipate continuing to invest in expanding our international operations and increasing sales of Talend Big Data.

Integration and Talend Cloud. Sales to large enterprise customers have reflected larger deal sizes and have been one of the principal drivers of our revenue growth. However, sales to large enterprise customers involve risks that may not be present with sales to smaller customers, including increased competition from companies that traditionally target larger enterprise customers and a longer sales cycle. These factors result in less visibility and create difficulties in assessing deal cyclicalities for these customers.

Foreign Currency Exchange Risk. A portion of our subscription revenue, professional services revenue and operating expenses are incurred outside the United States and denominated in foreign currencies and are subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the euro. Because our reporting currency is the U.S. dollar, the impact of foreign currency exchange on our business is primarily material to our financial reporting, and less to the ongoing operations of our business, as our cash inflows generally exceed our expenses in a given currency, creating a partial hedge. We believe that as the portion of U.S. business increases relative to our global business, the impact of foreign currency exchange on our financial reporting will be reduced. As our international operations grow, we will continue to reassess our approach to managing the risks relating to fluctuations in currency rates.

Key Business Metrics

We review a number of metrics to evaluate our business, measure our performance, identify trends affecting our business, formulate business plans and make strategic decisions. These key business metrics include the following:

Annual Recurring Revenue

We believe disclosing Annual Recurring Revenue (“ARR”) provides greater clarity into our results given it is not affected by the shift from premise to cloud, accounting changes, or contract duration. ARR represents the annualized recurring value of all active contracts at the end of a reporting period. ARR includes subscriptions for use of premise-based products and SaaS offerings and excludes original equipment manufacturer (“OEM”) sales. Both multi-year contracts and contracts with terms less than one year are annualized by dividing the total committed contract value by the number of months in the subscription term and then multiplied by twelve.

Due to the significant portion of our customers who are invoiced in non-U.S. Dollar denominated currencies, we also calculate our ARR growth rate on a constant currency basis, thereby removing the effect of currency fluctuation.

The following table summarizes ARR and its year over year growth rate on both an actual and constant currency basis as of the end of each reporting period since December 31, 2018. We calculate ARR growth rate on a constant currency basis by applying the spot currency rate from the last day of the comparative period to the corresponding day in the current period.

<u>(Dollars in thousands)</u>	<u>December 31, 2018</u>	<u>March 31, 2019</u>	<u>June 30, 2019</u>	<u>September 30, 2019</u>	<u>December 31, 2019</u>
Total ARR	\$ 198,103	\$ 205,144	\$ 218,021	\$ 224,761	\$ 243,137
Actual FX rates growth rates	33%	28%	28%	24%	23%
Constant Currency growth rate	37%	34%	29%	27%	23%

The year over year growth rate for each quarter was calculated against the corresponding quarter in the prior year. The growth rate as of December 31, 2019 is driven by strong demand for our cloud-based solutions.

Cloud Annual Recurring Revenue

We believe disclosing Cloud Annual Recurring Revenue (“Cloud ARR”) provides greater clarity into the company’s results given it is not affected by accounting changes, or contract duration. Furthermore, the majority of new ARR comes from cloud and providing the metric will enable management and investors to better understand the our progress in our shift to cloud. Cloud ARR represents the annualized recurring value of all active cloud-based subscription contracts at the end of a reporting period. Cloud ARR includes subscriptions for use of SaaS offerings and excludes OEM sales. Both multi-year contracts and contracts with terms less than one year are annualized by dividing the total committed contract value by the number of months in the subscription term and then multiplied by twelve.

Due to the significant portion of our customers who are invoiced in non-U.S. Dollar denominated currencies, we also calculate our Cloud ARR growth rate on a constant currency basis, thereby removing the effect of currency fluctuation.

The following table summarizes Cloud ARR and its year over year growth rate on both an actual and constant currency basis as of the end of each reporting period since December 31, 2018. We calculate Cloud ARR growth rate on

a constant currency basis by applying the spot currency rate from the last day of the comparative period to the corresponding day in the current period.

(Dollars in thousands)	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Cloud ARR	\$ 19,299	\$ 24,428	\$ 32,923	\$ 41,146	\$ 53,895
Actual FX rates growth rates	520%	392%	329%	310%	179%
Constant Currency growth rate	533%	407%	334%	319%	179%

ARR does not have any standardized definition and is therefore unlikely to be comparable to similarly titled measures presented by other companies. ARR should be viewed independently of revenue and deferred revenue and is not intended to be combined with or to replace either of those items. ARR is not a forecast and the active contracts at the end of a reporting period used in calculating ARR may or may not be extended or renewed by our customers.

Subscription Revenue Growth Rate

Subscription revenue is primarily derived from the sale of subscription-based license agreements to our customers. The growth of our subscription revenue reflects our ability to renew subscriptions with our existing customers, expand the sales of existing and new products within our existing customer base and sell our products to new customers. We believe subscription revenue growth is an important performance metric because it reflects the adoption of our software.

Due to the significant portion of our customers who are invoiced in non-U.S. Dollar denominated currencies, we also calculate our subscription revenue growth rate on a constant currency basis, thereby removing the effect of currency fluctuation on our results of operations.

The table below shows our subscription revenue growth rate on both an actual and constant currency basis for each quarter in the years ended December 31, 2019 and December 31, 2018, calculated against the corresponding quarter in the prior year, as well as the years ended December 31, 2019, 2018 and 2017. We calculate revenue on a constant currency basis by applying the average monthly currency rate for each month in the comparative period to the corresponding month in the current period.

	Year Ended December 31,			Three Months Ended (1)							
	2019	2018	2017	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Actual FX rates . . .	23 %	40 %	42 %	45 %	40 %	36 %	40 %	25 %	24 %	23 %	21 %
Constant Currency .	26 %	38 %	42 %	36 %	35 %	37 %	42 %	30 %	28 %	26 %	22 %

(1) The percentages previously disclosed for each of the quarters of the years ended December 31, 2019 and 2018 have been revised to reflect the correction of an immaterial error. See Note 3, *Revision of prior period financial statements*, for more details.

Number of Customers Above a Certain ARR Threshold

We believe our ability to increase the number of customers above a certain threshold is an indicator of our ability to penetrate large enterprise customers. We track and disclose the number of customers that, as of the end of the relevant period, have ARR of \$0.1 million or more. Historically, we had tracked our performance in this area by measuring the number of customers that generate an annualized subscription revenue of \$0.1 million or more, calculated by multiplying the total subscription revenue from a customer in the given quarter by four. However, we believe the ARR-based measure is more useful to management and investors because it is not affected by accounting changes or contract duration and better reflects the state of our customer base on the last day of the reporting period. Therefore, we no longer track or disclose the revenue-based metric and will only present the ARR-based metric.

The following table summarizes the number of customers with ARR above \$0.1 million as of the end of each reporting period since December 31, 2018:

	Three Months Ended							
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Customers count . . .	423	449	475	500	499	531	540	593

As we continue to expand the sales of existing and new products within our existing customer base, over time we expect more of our existing customers will cross the \$0.1 million threshold, driven particularly by cloud customers as we increasingly focus our resources on our cloud offerings and the overall market shifts to cloud. However, this increase may not materialize if we do not successfully renew subscriptions with our existing customers, particularly if our on-premise subscription business growth falls below our expectations.

Dollar-Based Net Expansion Rate

Our ability to generate and increase revenue is dependent on our ability to maintain and grow our relationships with our existing customers. We believe our ability to retain customers and expand their subscription revenue over time is an indicator of the stability of our revenue base and the long-term value of our customer relationships. We track our performance in this area by measuring our dollar-based net expansion rate. Our dollar-based net expansion rate increases when customers expand their number of subscribed users or use additional Talend Data Fabric components. Our dollar-based net expansion rate is reduced when customers reduce their number of subscribed users, use fewer Talend Data Fabric components, or cease to be customers.

We calculate our dollar-based net expansion rate by dividing our recurring customer revenue by our base revenue. We define base revenue as the subscription revenue we recognized from all customers during the four quarters ended one year prior to the date of measurement. We define our recurring customer revenue as the subscription revenue we recognized during the four quarters ended on the date of measurement from the same customer base included in our measure of base revenue, including revenue resulting from additional sales to those customers. This analysis excludes revenue derived from our OEM sales. We expect our dollar-based net expansion rate to potentially decline as we scale our business, particularly as we continue to focus on increasing sales of our cloud-based solutions to new customers and market demand for on-premise solutions continues to slow.

Due to the significant portion of our customers who are invoiced in non-U.S. Dollar denominated currencies, we also calculate our dollar-base net expansion rate on a constant currency basis, thereby removing the effect of currency fluctuation.

The following table summarizes our quarterly dollar-based net expansion rate since January 1, 2018 on both an actual and constant currency basis. We calculate dollar-based net expansion rate on a constant currency basis by applying the average monthly currency rate for each month in the comparative period to the corresponding month in the current period.

	Three Months Ended (1)							
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Dollar-based net expansion rate								
Actual FX rates	125 %	124 %	122 %	122 %	117 %	114 %	110 %	108 %
Constant Currency	122 %	119 %	118 %	120 %	117 %	117 %	113 %	111 %

(1) The numbers previously disclosed for each of the quarters of the years ended December 31, 2019 and 2018 have been revised to reflect the correction of an immaterial error. See Note 3, *Revision of prior period financial statements*, for more details.

Free Cash Flow

To provide additional information regarding our financial results, we use free cash flow, a financial measure not calculated in accordance with GAAP, within this Annual Report. We define free cash flow as net cash (used in) from operating activities less net cash used in investing activities for purchases of property and equipment and intangible assets, except for those acquired as part of a business combination. We have included free cash flow in this Annual Report because it is a key measure used by our management and board of directors to understand and evaluate our core operating performance and trends, to prepare and approve our annual budget and to develop short- and long-term operational plans. We believe that free cash flow provides useful information to investors in understanding and evaluating our results of operations in the same manner as our management and board of directors. Although free cash flow measures are frequently used by investors and securities analysts in their evaluation of companies, free cash flow measures each have limitations as an analytical tool, and you should not consider them in isolation or as a substitute for analysis of our cash flows as reported under GAAP. Free cash flow as defined by us may not be comparable to similar measures used by other companies.

The table below shows our free cash flow for each of the years ended December 31, 2019, 2018 and 2017, and a reconciliation to the most directly comparable GAAP measure for such period.

	Year Ended December 31,		
	2019	2018	2017
Net cash (used in) from operating activities	\$ (14,517)	\$ 3,435	\$ (2,321)
Less: Acquisition of property & equipment	2,191	5,006	2,224
Free Cash Flow	<u>\$ (16,708)</u>	<u>\$ (1,571)</u>	<u>\$ (4,545)</u>

Key Components of Results of Operations

Revenue

We primarily derive our revenue from the sale of subscriptions and professional services engagements.

Subscription revenue. Subscription revenue consists of fees earned from arrangements to provide customers with the right to use our commercial software either in a cloud-based infrastructure that we provide or installed within the customer's own environment. Our subscriptions include unspecified future updates, upgrades and enhancements and technical product support. Subscription fees are based primarily on the number of users of our software and to a lesser extent the processing power required to operate the software. Our subscription-based arrangements generally have a minimum contractual term of one year and are invoiced in advance for the full subscription term. Subscription fees are generally non-refundable regardless of the actual use of the service.

Professional services revenue. Professional services revenue consists of fees earned for consulting engagements related to the deployment and configuration of our product offering, training customers and associated expenses. These engagements are generally provided by our own team of specialized consultants or by third-party consultants to whom we contract on a periodic basis. Consulting engagements consist of time-based arrangements for which the revenue is recognized using a time and material basis. Training revenue results from contracts to provide educational services to customers and partners regarding the use of our technologies and is recognized as delivered. We expect our professional services revenue growth will slow, and may decline, as we work with more systems integrators, who assist our customers with the implementation of our solutions, and as our cloud-based offerings increase because cloud customers typically demand fewer professional services.

Cost of Revenue

Cost of subscription revenue. Cost of subscription revenue consists primarily of employee-related costs, including salaries and bonuses, share-based payment expenses and employee benefit costs associated with our customer support organization. It also includes expenses related to hosting and operating our cloud infrastructure, licensing of third-party intellectual property and related overhead. We use third-party cloud platform providers to provide our cloud solution. We allocate overhead such as information technology infrastructure, rent and occupancy charges in each expense category based on headcount in that category. As such, general overhead expenses are reflected in cost of subscription revenue and operating expense categories.

We intend to continue to invest additional resources in our cloud-based offering and services. We expect that the cost of hosting fees to provide our cloud-based offering will increase over time as we sell more of our cloud integration products. The timing of these expenses will affect our cost of subscription revenue in the affected periods.

Cost of professional services revenue. Cost of professional services revenue consists primarily of personnel costs for employees including salaries and bonuses, share-based payment expenses and employee benefit costs and fees to external consultants associated with our professional service contracts, travel costs and allocated shared costs. We allocate overhead such as information technology infrastructure, rent and occupancy charges in each expense category based on headcount in that category. As such, general overhead expenses are reflected in the cost of professional services revenue and operating expense categories.

Gross Profit and Gross Margin

Gross profit is total revenue less total cost of revenue. Gross margin is gross profit expressed as a percentage of total revenue. We expect that our gross margin may fluctuate from period to period as a result of changes in the mix of our subscription and professional services revenue. Over time, we expect revenue from our cloud integration business to grow as a percentage of our total revenue. As a result, the cost of hosting fees to third-party cloud infrastructure providers, as a percentage of revenue, will increase, which may affect our gross margin.

Operating Expenses

Our operating expenses are classified as sales and marketing, research and development and general and administrative. For each functional category, the largest component is employee and labor-related expenses, which include salaries and bonuses, sales commissions, share-based payment expense, employee benefit costs and contractor costs. We allocate overhead such as information technology infrastructure, rent and occupancy charges in each expense category based on headcount in that category.

Sales and marketing. Sales and marketing expenses consist primarily of salaries, sales commissions and related expenses, including share-based payment expense, for our sales and marketing employees, marketing programs and related overhead. Our sales and marketing employees include quota carrying headcount, sales administration, sales engineering, marketing and management. Marketing programs consist of advertising, promotional events, corporate communications, brand building, product marketing activities such as online lead generation, and developing sales strategies that emphasize particular products or services.

We plan to continue to invest in sales and marketing by expanding our global promotional activities, building brand awareness, attracting new customers and sponsoring additional marketing events. The timing of these events, such as our annual sales kickoff, will affect our sales and marketing costs in a particular quarter. We also plan to invest in training and retention of our sales team.

Research and development. Research and development expenses consist primarily of salaries and related expenses, including share-based payment expense, contractor software development costs and related overhead, as well as amortization of acquired developed technology, less any research and development subsidies. We continue to focus our research and development efforts on building new products, adding new features and services, increasing functionality and enhancing our integration cloud infrastructure.

We expect that research and development expenses will increase in absolute dollars as we invest in building the necessary employee and system infrastructure required to enhance existing and support development of new, technologies and the integration of acquired businesses and technologies.

General and administrative. General and administrative expenses consist of salaries and related expenses, including share-based payment expense for finance, legal, human resources and management information systems personnel, as well as external legal, accounting and other professional fees, other corporate expenses and related overhead.

We will continue to incur additional expenses associated with being a publicly traded company, including higher legal, corporate insurance and accounting costs as well as costs of achieving and maintaining compliance with other public company regulations. We expect that general and administrative expenses will increase as we invest in our infrastructure and we incur additional employee related costs and professional fees related to the growth of our business.

Results of Operations

The following tables summarize our consolidated statements of operations for the fiscal years ended December 31, 2019, 2018 and 2017 (in thousands), and as a percentage of our revenue for those periods. The period-to-period comparison of financial results is not necessarily indicative of financial results to be achieved in future periods.

	Year Ended December 31,		
	2019	2018	2017
Consolidated statements of operations			
Revenue			
Subscriptions	\$ 217,047	\$ 176,363	\$ 125,898
Professional services	30,814	29,436	22,697
Total revenue	<u>247,861</u>	<u>205,799</u>	<u>148,595</u>
Cost of revenue (1)			
Subscriptions	32,256	23,094	16,367
Professional services	28,624	26,400	17,792
Total cost of revenue	<u>60,880</u>	<u>49,494</u>	<u>34,159</u>
Gross profit	186,981	156,305	114,436
Operating expenses (1)			
Sales and marketing	138,015	113,794	86,892
Research and development	63,017	42,359	26,835
General and administrative	44,473	40,357	29,446
Total operating expenses	<u>245,505</u>	<u>196,510</u>	<u>143,173</u>
Loss from operations	(58,524)	(40,205)	(28,737)
Interest income (expense), net	(2,540)	646	409
Other income (expense)	(256)	209	(2,556)
Loss before benefit (provision) for income taxes	(61,320)	(39,350)	(30,884)
Benefit (provision) for income taxes	(149)	323	(324)
Net loss for the period	<u>\$ (61,469)</u>	<u>\$ (39,027)</u>	<u>\$ (31,208)</u>

(1) Amounts include share-based payment and amortization of acquired intangibles expense, as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Cost of revenue - subscriptions	\$ 3,115	\$ 1,432	\$ 315
Cost of revenue - professional services	2,132	1,024	207
Sales and marketing	10,227	7,198	2,271
Research and development	13,997	7,693	1,613
General and administrative	9,616	6,011	2,441
Total share-based payment and amortization of acquired intangibles expense . .	<u>\$ 39,087</u>	<u>\$ 23,358</u>	<u>\$ 6,847</u>

	Year Ended December 31,		
	2019	2018	2017
Revenue			
Subscriptions	88 %	86 %	85 %
Professional services	12 %	14 %	15 %
Total revenue	100 %	100 %	100 %
Total cost of revenue	25 %	24 %	23 %
Gross profit	75 %	76 %	77 %
Operating expenses			
Sales and marketing	56 %	55 %	58 %
Research and development	25 %	21 %	18 %
General and administrative	18 %	20 %	20 %
Total operating expenses	99 %	96 %	96 %
Loss from operations	(24)%	(20)%	(19)%
Interest income (expense), net	(1)	—	—
Other income (expense)	— %	— %	(2)%
Loss before income tax (expense) benefit	(25)%	(20)%	(21)%
Income tax (expense) benefit	— %	— %	— %
Net loss for the year	(25)%	(20)%	(21)%

Revenue

	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
(Dollars in thousands)							
Subscriptions	\$ 217,047	\$ 176,363	\$ 125,898	\$ 40,684	23%	\$ 50,465	40%
Professional services	30,814	29,436	22,697	1,378	5%	6,739	30%
Total revenue	\$ 247,861	\$ 205,799	\$ 148,595	\$ 42,062	20%	\$ 57,204	38%

Revenue – 2019 compared to 2018

Total revenue increased \$42.1 million, or 20%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. Growth in total revenue was attributable to increased demand for our products from both new and existing customers. The growth in total revenue was attributable primarily to the sale of subscriptions and to a lesser extent the growth of professional services revenue.

Subscription revenue increased \$40.7 million, or 23%, for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase in subscription revenue was primarily attributable to greater demand for Talend Cloud and to a lesser extent the acquisition of Stitch.

In the near term, we expect our subscription revenue growth to be negatively impacted by overall economic conditions in Europe, which contributed to a slower sequential increase in ARR as of December 31, 2019 compared to prior periods.

Professional services revenue grew by \$1.4 million, or 5% for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase in professional services revenue was mainly due to increased demand from North American customers.

Revenue – 2018 compared to 2017

Total revenue increased \$57.2 million, or 38%, in the year ended December 31, 2018 compared to the year ended December 31, 2017. Growth in total revenue was attributable to increased demand for our products from both new and existing customers. The growth in total revenue was attributable primarily to the sale of subscriptions and to a lesser extent the growth of professional services revenue.

Subscription revenue increased \$50.5 million, or 40%, for the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase in subscription revenue was primarily attributable to strong demand for Talend Cloud and Talend Big Data Integration. Revenue from Talend Cloud grew by over 100% in the year ended

December 31, 2018 compared to the prior period. The adoption of ASC 606 contributed to the increase in subscription revenue of approximately \$6.0 million, as we recognized the license element of our subscription arrangements upfront, upon delivery of the license key.

Professional services revenue grew by \$6.7 million, or 30% for the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase in professional services revenue was mainly due to increased demand from North American customers.

Subscription revenues by geography were as follows for the years ended December 31, 2019, 2018 and 2017::

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Americas	\$ 100,043	\$ 82,224	\$ 61,273	\$ 17,819	22%	\$ 20,951	34%
EMEA	95,386	80,773	58,739	14,613	18%	22,034	38%
Asia Pacific	21,618	13,366	5,886	8,252	62%	7,480	127%
Total subscription revenue	<u>\$ 217,047</u>	<u>\$ 176,363</u>	<u>\$ 125,898</u>	<u>\$ 40,684</u>	23%	<u>\$ 50,465</u>	40%

Cost of Revenue

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Cost of subscription	\$ 32,256	\$ 23,094	\$ 16,367	\$ 9,162	40%	\$ 6,727	41%
Cost of professional services	28,624	26,400	17,792	2,224	8%	8,608	48%
Total cost of revenue	<u>\$ 60,880</u>	<u>\$ 49,494</u>	<u>\$ 34,159</u>	<u>\$ 11,386</u>	23%	<u>\$ 15,335</u>	45%
Gross Profit	<u>\$ 186,981</u>	<u>\$ 156,305</u>	<u>\$ 114,436</u>	<u>\$ 30,676</u>	20%	<u>\$ 41,869</u>	37%
Gross Margin	75%	76%	77%				

Cost of Revenue – 2019 compared to 2018

Total cost of revenue increased \$11.4 million, or 23%, for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase was primarily as a result of increased cost of subscription revenue and to a lesser extent an increase in cost of professional service revenue.

Cost of subscription revenue increased \$9.2 million, or 40%, for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase was primarily due to an increase in employee-related cost of \$4.9 million resulting from an increase in headcount to support revenue growth, and an increase in IT costs, office costs and other operational costs of \$2.2 million. Talend Cloud hosting support costs also increased \$1.9 million due to an increase in our Talend Cloud bookings.

Cost of professional services revenue increased \$2.2 million, or 8%, for the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase was primarily due to an increase in employee-related cost of \$2.8 million resulting from an increase in headcount and share-based compensation expense, and an increase of \$1.3 million in allocated shared costs, travel and IT costs. These increases were partially offset by a decrease in consulting fees paid to outside parties of \$1.8 million.

Cost of Revenue – 2018 compared to 2017

Total cost of revenue increased \$15.3 million, or 45%, for the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase was primarily as a result of increased cost of subscription revenue and to a lesser extent an increase in cost of professional service revenue.

Cost of subscription revenue increased \$6.7 million, or 41%, for the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase was primarily due to an increase in employee-related cost of \$5.2 million resulting from an increase in headcount to meet the higher demand for support from our customers. The increase

in the cost of subscription revenue was also driven by an increase in third-party licensing fees and hosting costs for our Talend Cloud for a total of \$0.3 million.

Cost of professional services revenue increased \$8.6 million, or 48%, for the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase was primarily due to an increase in employee-related cost of \$5.8 million resulting from an increase in headcount, and an increase of \$2.9 million in consulting fees paid to outside parties and travel and entertainment costs.

Sales and Marketing

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Sales and Marketing	\$ 138,015	\$ 113,794	\$ 86,892	\$ 24,221	21%	\$ 26,902	31%

Sales and Marketing – 2019 compared to 2018

Sales and marketing expenses increased \$24.2 million, or 21%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase was primarily due to a \$17.5 million increase in employee compensation expenses resulting from an increase in headcount and increase in share-based compensation expense related to an adjustment to the estimated forfeiture rate during the period. Allocated shared costs, marketing costs, office and other operational costs also increased \$5.7 million.

Sales and Marketing – 2018 compared to 2017

Sales and marketing expenses increased \$26.9 million, or 31%, in the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase was primarily due to a \$21.2 million increase in employee compensation expenses, related to increased headcount. In addition, to support our continued growth, spending on marketing programs increased by \$2.0 million in the year ended December 31, 2018 compared to the year ended December 31, 2017. Sales and marketing expense was also driven by an increase of \$1.9 million in travel and entertainment costs. These expenses were partially offset by a benefit of \$4.3 million in capitalized commission expenses due to the adoption of ASC 606 in 2018.

Research and Development

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Research and Development	\$ 63,017	\$ 42,359	\$ 26,835	\$ 20,658	49%	\$ 15,524	58%

Research and Development – 2019 compared to 2018

Research and development expenses increased \$20.7 million, or 49%, in the year ended December 31, 2019 compared to the year ended December 31, 2018. The increase was primarily due to a \$13.9 million increase in employee compensation expenses resulting from an increase in headcount and increase in share-based compensation expense related to an adjustment to the estimated forfeiture rate during the period. In addition, allocated shared costs increased \$3.4 million and amortization expense increased \$1.8 million due to the acquisition of Stitch, which happened in November 2018.

Research and Development – 2018 compared to 2017

Research and development expenses increased \$15.5 million, or 58%, in the year ended December 31, 2018 compared to the year ended December 31, 2017. The increase was primarily due to a \$11.7 million increase in employee compensation expenses, related to increased headcount. In addition, research and development expenses increased by \$1.5 million related additional amortization expense from our November 2017 acquisition of Restlet S.A. and our November 2018 acquisition of Stitch Inc.

General and Administrative

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
General and Administrative	\$ 44,473	\$ 40,357	\$ 29,446	\$ 4,116	10%	\$ 10,911	37%

General and Administrative – 2019 compared to 2018

General and administrative expenses increased \$4.1 million, or 10%, in the year ended December 31, 2019, compared to the year ended December 31, 2018. The increase was primarily due to an increase of \$6.8 million in employee compensation expenses resulting from an increase in headcount and increase in share-based compensation expense related to an adjustment to the estimated forfeiture rate during the period. Amortization expense, professional fees, insurance costs and office costs also increased \$3.4 million. These increases were partially offset by a decrease in allocated shared costs of \$6.1 million.

General and Administrative – 2018 compared to 2017

General and administrative expenses increased \$10.9 million, or 37%, in the year ended December 31, 2018, compared to the year ended December 31, 2017. The increase was primarily due to an increase of \$8.5 million in employee compensation expenses. In addition, our professional and outside consulting services increased by \$1.5 million related to our follow-on offering and acquisition of Stitch Inc. Between December 31, 2017 and December 31, 2018, our amortization of intangible assets increased by \$0.4 million.

Interest income (expense), net

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Interest income (expense), net	\$ (2,540)	\$ 646	\$ 409	\$ (3,186)	NM	\$ 237	58%

Interest income (expense), net – 2019 compared to 2018

Interest income (expense), net changed unfavorably by \$3.2 million in the year ended December 31, 2019, compared to the year ended December 31, 2018. The change was primarily due to \$2.3 million of amortization of debt discount and issuance cost and coupon expense from the issuance of our 1.75% Convertible Senior Notes due September 1, 2024, or our 2024 Notes.

Interest income (expense), net – 2018 compared to 2017

Interest income (expense), net changed favorably by \$0.2 million in the year ended December 31, 2018, compared to the year ended December 31, 2017. The change was primarily due to an increase in interest income from our investments in money market securities.

Other income (expense), net

(Dollars in thousands)	Year Ended December 31,			2019 vs 2018 Change		2018 vs 2017 Change	
	2019	2018	2017	\$	%	\$	%
Other income (expense), net	\$ (256)	\$ 209	\$ (2,556)	\$ (465)	NM	\$ 2,765	NM

Other income (expense), net – 2019 compared to 2018

Other income (expense), net changed unfavorably by \$0.5 million in the year ended December 31, 2019, compared to the year ended December 31, 2018. The change is primarily due to fluctuations in foreign exchange rates, which impact our foreign currency denominated monetary assets and liabilities.

Other income (expense), net – 2018 compared to 2017

Other income (expense), net changed favorably by \$2.8 million in the year ended December 31, 2018, compared to the year ended December 31, 2017. The change is primarily due to fluctuations in foreign exchange rates, which impact our foreign currency denominated monetary assets and liabilities.

Liquidity and Capital Resources

(In thousands)	Year Ended December 31,		
	2019	2018	2017
Cash (used in) from operating activities	\$ (14,517)	\$ 3,435	\$ (2,321)
Cash used in investing activities	(2,191)	(64,499)	(11,413)
Cash from financing activities	157,838	8,616	6,519
Net increase (decrease) in cash and cash equivalents	<u>\$ 141,130</u>	<u>\$ (52,448)</u>	<u>\$ (7,215)</u>

Through December 31, 2019, we have financed our operations primarily through cash received from customers for subscriptions of our software and professional services, as well as equity and equity-linked financings. In September 2019, we received net proceeds, after deducting discounts and commission to the initial purchasers and issuance expenses, of \$147.5 million from the issuance of our 2024 Notes. In connection with the issuance of our 2024 Notes, we terminated our secured revolving credit facility. As of December 31, 2019, we had \$177.1 million of cash and cash equivalents. We believe that our current cash and cash equivalents will be sufficient to meet our working capital and capital expenditure requirements for at least the next 12 months.

Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of our spending to support our operating expenses. In the event that additional financing is required from outside sources, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, results of operations and financial condition would be adversely affected.

Operating Activities

During the year ended December 31, 2019, operating activities used \$14.5 million in cash as a result of a net loss of \$61.5 million, offset by non-cash charges of \$45.0 million and a \$2.0 million favorable impact from changes in working capital. The net increase in our working capital was primarily the result of \$19.7 million increase as a result of increased sales of subscriptions which generates increases in deferred revenue and a \$4.5 million net increase in accounts payable and accrued expenses. In addition to the net increase in our operating liabilities, there was a \$13.6 million increase in accounts receivable in the year ended December 31, 2019 due to increased sales of our product offerings and a \$8.5 million increase in other assets.

During the year ended December 31, 2018, operating activities provided \$3.4 million in cash as a result of a net loss of \$39.0 million, offset by non-cash charges of \$25.0 million and a \$17.6 million favorable impact from changes in working capital. The net increase in our working capital was primarily the result of \$24.8 million increase in deferred revenue as a result of increased sales of subscriptions, a \$11.6 million increase in accounts payable and accrued expenses mainly due to increased accruals for paid time off and commissions and bonuses during the year. In addition to the net increase in our operating liabilities, there was a \$12.4 million increase in accounts receivable in the year ended December 31, 2018 due to increased sales of our product offerings and a \$6.4 million increase in other assets.

During the year ended December 31, 2017, operating activities used \$2.3 million in cash as a result of a net loss of \$31.2 million, adjusted by non-cash charges of \$10.1 million and a \$18.4 million favorable impact from changes in working capital. The net decrease in our working capital was primarily the result of \$29.1 million increase in deferred revenue as a result of increased sales of subscriptions, a \$7.6 million increase in accounts payable and accrued expenses mainly due to increased accruals for paid time off and commissions and bonuses during the year. In addition to the net increase in our operating liabilities, there was a \$16.5 million increase in accounts receivable in the year ended December 31, 2017 due to increased sales of our product offerings.

Investing Activities

Cash used in investing activities during the year ended December 31, 2019 was \$2.2 million. Investing activities consisted primarily of capital expenditures to purchase furniture and equipment to support additional office space as well as miscellaneous information technology equipment for our employees.

Cash used in investing activities during the year ended December 31, 2018 was \$64.5 million. Investing activities consisted primarily of cash consideration paid for our acquisition of Stitch Inc.

Cash used in investing activities during the year ended December 31, 2017 was \$11.4 million. Investing activities consisted primarily of cash consideration paid for our acquisition of Restlet SAS.

Financing Activities

Cash from financing activities during the year ended December 31, 2019 was \$157.8 million. Financing proceeds for the year ended December 31, 2019 was primarily driven by \$147.5 million of net proceeds from the issuance of the 2024 Notes, \$5.8 million of proceeds from the exercise of employee stock awards and \$4.7 million of proceeds received from employees as part of the Company's employee stock purchase plan.

Cash from financing activities during the year ended December 31, 2018 was \$8.6 million. Financing proceeds for the year ended December 31, 2018 was driven by \$8.9 million of proceeds from the exercise of employee stock awards and cash received from the employee stock purchase plan.

Cash from financing activities during the year ended December 31, 2017 was \$6.5 million. Financing proceeds for the year ended December 31, 2017 was driven by \$6.7 million of proceeds from the exercise of employee stock awards.

Off-balance Sheet Arrangements

During the periods presented, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to 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.

Tabular Disclosure of Contractual Obligations

Our contractual obligations primarily consist of obligations under our 2024 Notes, operating leases for office space and purchase obligations for IT-related services. We believe that we will be able to fund these obligations through cash generated from operations and from our existing balances of cash and cash equivalents. As of December 31, 2019, our non-cancelable contractual obligations were as follows:

	Payments Due By Period				
	Total	Less than 1 year	1 - 3 Years	3 - 5 Years	More than 5 Years
Debt obligations (1)	\$ 157,388	\$ 227	\$ 310	\$ 156,851	\$ —
Interest obligations (2)	13,613	2,643	5,485	5,485	—
Operating lease obligations (3)	34,508	5,906	10,640	7,760	10,202
Purchase obligations (4)	16,808	5,808	11,000	—	—
Total	\$ 222,317	\$ 14,584	\$ 27,435	\$ 170,096	\$ 10,202

- (1) Debt obligations include the principal balance of the 2024 Notes, reflected in the payment period in the table above based on the contractual maturity assuming no conversion. Debt obligations also include the principal payments of debt assumed by the Company from the Restlet SAS acquisition.
- (2) These amounts represent the estimated aggregate interest obligations for our outstanding 2024 Notes that are payable in cash.
- (3) These amounts represent the future undiscounted non-cancelable minimum lease payments under operating leases for our offices.
- (4) These amounts represent the future minimum payments under non-cancelable purchase commitments of IT-related services.

Critical Accounting Policies and Estimates

We prepare our financial statements in conformity with generally accepted accounting principles in the United States of America, or GAAP. The preparation of the consolidated financial statements in accordance with GAAP requires us to make judgments, estimates and assumptions that affect the reported amounts of assets, liabilities, contingent liabilities, revenues and expenses. We base our judgments and estimates on historical experience and various other factors we believe to be reasonable under the circumstances, and we evaluate these estimates on an ongoing basis. Actual results may differ from these estimates under different assumptions and conditions and may materially affect the financial results or the financial position reported in future periods.

While our significant accounting policies are more fully described in the notes to the consolidated financial statements, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, these are the accounting policies we believe are the most critical to aid in fully understanding and evaluating our financial condition and results of operations.

Revenue Recognition

We primarily derive revenue from two sources: subscription revenue which is comprised of direct or indirect sales of subscription-based license agreements for Talend technologies; and related professional services revenue.

Subscription revenue

Subscriptions for our on-premise licenses include both a right to use the underlying software and a right to receive post-contract customer support during the subscription term. Post-contract customer support comprises maintenance services (including updates and upgrades to the software on a when and if available basis) and support services (including technical product support such as diagnosis and resolution of implementation and customer success services such as case reviews, integration job design and operational performance metrics). We have concluded that the rights to use the software, which is recognized at the outset of the arrangement, and to receive technical support and software fixes and updates, which is recognized over the term of the arrangement, are two separately identifiable performance obligations. We estimate the stand-alone selling price for each performance obligation using the “expected cost plus a margin” approach, as it maximizes the use of observable datapoints including the estimated useful life of the intellectual property and appropriate margins. Based on this approach, the Company generally allocated 16% of the transaction value to the intellectual property performance obligation and generally allocated 84% of the transaction value to the post-contract customer support performance obligation during each of the twelve months periods ended December 31, 2019 and 2018. Subscriptions for our cloud-based offerings represent the right of access to our software as a service for which revenue is recognized ratably over the term of the arrangement. Subscription agreements typically have a contractual term of one to three years and are generally billed annually in advance and non-cancelable.

We sell subscriptions to customers either directly through our internal sales force or indirectly through non-exclusive value-added channel partners and resellers (collectively, “resellers”). Resellers market, sell and provide our products and support services to end-users and we do not have the ability or the contractual right to establish pricing between resellers and end users.

Professional services revenue

We offer professional services which include consulting and training and associated expenses. Consulting services include implementation support to our customers during subscription setup and consist of time-based arrangements for which the revenue is recognized as the services are rendered. Training revenue results from contracts to provide educational services to customers and partners regarding the use of our technologies and is recognized as training is delivered.

Contracts with multiple performance obligations

We may enter into transactions that contain multiple performance obligations where a subscription and consulting and training services are sold together. For these contracts, we account for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis.

We are able to determine reliably the standalone selling price of a consulting or training service component based on historical pricing for the component or a similar component that has been sold on a standalone basis. The transaction price allocated to each performance obligation is recognized as revenue when each performance obligation is satisfied.

Contract acquisition costs

Contract acquisition costs consist of sales commissions earned by our sales force to initially obtain a contract, and upon renewal of such contracts. Sales commissions to initially obtain a contract are considered incremental and recoverable costs and are deferred and then amortized on a straight-line basis over the period of benefit determined to be to be five years. The period of benefit includes the contractual and expected renewal periods and is based on historical patterns of renewals and forecasted life of the Group's licensed technology.

Sales commissions paid upon renewal are not commensurate with and substantially lower than the commissions paid to initially obtain the contract, even though the economic benefits we expect to receive upon renewal are similar to those expected from the initial contract. The commissions paid on renewals are expensed in the period the contract is renewed. The majority of customer contracts are annual in nature and as a result these renewals commissions are paid on an annual basis.

Business Combinations and Goodwill

We allocate the fair value of purchase consideration in a business combination to tangible assets, liabilities assumed and intangible assets acquired based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is allocated to goodwill. The allocation of the purchase consideration requires management to make significant estimates and assumptions, especially with respect to intangible assets. These estimates can include, but are not limited to, future expected cash flows from acquired customers and acquired technology from a market participant perspective, useful lives and discount rates. Management's 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, which is up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill.

We assess goodwill for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. When conducting the annual goodwill impairment assessment, we first assess qualitative factors, to determine whether it is necessary to perform the two-step goodwill impairment test. If determined to be necessary, the two-step impairment test is used to identify potential goodwill impairment and measure the amount of a goodwill impairment loss to be recognized, if any.

Intangible Assets

Intangible assets include acquired customer relationships and acquired developed technology. Intangibles acquired through a business combination are recognized separately from goodwill, initially at fair value on the acquisition date. Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

Share-Based Payments

We recognize share-based payment expense beginning in the period of grant based on the fair value of the award at the grant date, net of estimated forfeitures, over the requisite service period, which is generally the vesting period of the respective award.

The estimation of share awards that will ultimately vest requires judgement, especially awards with non-market performance conditions. Share-based payment expense is recorded based on awards that are ultimately expected to vest, and such expense is reduced for estimated forfeitures. When estimating forfeitures, we considered voluntary termination behaviors as well as trends of the actual forfeitures of share-awards.

Determining the fair value of share-based awards at the grant date requires judgment. We use the Black-Scholes option-pricing model to determine the fair value of share options, employee warrants (BSPCE) and warrants (BSA). The determination of the grant date fair value of options using an option-pricing model is affected by our estimated ordinary share fair value as well as assumptions regarding a number of other complex and subjective variables. These variables include the expected term of the options, our expected share price volatility of our shares, risk-free interest rates and expected dividends. These variables are estimated as follows:

- *Expected term.* We determine the expected term based on the average period the share awards are expected to remain outstanding.
- *Expected volatility.* We consider historical volatility of our share price since the initial public offering and also consider the historical volatility of similar entities following a comparable period in their lives.
- *Risk-free rate.* The risk-free interest rate represents the implied yield currently available on zero-coupon government issued securities over the expected term of the award.
- *Dividend yield.* We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we use an expected dividend yield of zero.

Convertible Notes

We account for the issued 1.75% Convertible Senior Notes due September 1, 2024 (the “2024 Notes”) as separate liability and equity components in accordance with ASC 470, *Debt*. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated conversion feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the par value of the convertible notes as a whole. This difference represents a debt discount that is amortized to interest expense over the term of the 2024 Notes using the effective interest rate method. The equity component is not remeasured as long as it continues to meet the conditions for equity classification. We allocated issuance costs incurred to the liability and equity components. Issuance costs attributable to the liability component are being amortized to expense over the respective term of the 2024 Notes and issuance costs attributable to the equity component were netted with the respective equity component in Additional paid-in capital.

Recent Accounting Pronouncements

See Note 2, *Summary of significant accounting policies*, in the Notes to our Consolidated Financial Statements included elsewhere in this Annual Report for analysis of recent accounting pronouncements that are applicable to our business.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk

Our results of operations and cash flows are subject to fluctuations as a result of changes in foreign currency exchange rates. Our sales contracts are generally denominated in the local currency of the entity with which they are contracted. Our operating expenses are generally denominated in the local currencies of the countries where our operations are located. Most of our expenses are incurred in euros and U.S. dollars. Fluctuations in foreign currencies impact the amount of total assets, liabilities, revenues, operating expenses and cash flows that we report for our foreign subsidiaries upon the translation of these amounts into U.S. dollars. As the U.S. dollar fluctuates against certain international currencies, the amounts of revenue and deferred revenue that we report in U.S. dollars for foreign subsidiaries that transact in international currencies may also fluctuate relative to what we would have reported using a constant currency rate.

For the year ended December 31, 2019, approximately 54% of our revenue and approximately 56% of aggregate cost of sales and operating expenses were generated in currencies other than U.S. dollars. For the year ended December 31, 2018 approximately 57% of our revenue and approximately 58% of aggregate cost of sales and operating expenses were generated in currencies other than U.S. dollars. We have not entered into derivatives or hedging transactions, as our exposure to foreign currency exchange rates has historically been partially hedged as our euro denominated inflows have

covered our euro denominated expenses and our USD denominated inflows have covered our USD denominated expenses. However, we may enter into derivative or hedging transactions in the future if our exposure to foreign currency should become more significant. For the year ended December 31, 2019 and 2018, a hypothetical 10% increase or decrease in the foreign exchange rate of the euro to the U.S. Dollar would have resulted in a corresponding increase or decrease of the consolidated net loss to the Company by approximately \$3.9 million and \$2.9 million, respectively.

Interest Rate Risk

We had cash and cash equivalents of \$177.1 million, \$34.1 million, and \$87.0 million at December 31, 2019, 2018 and 2017, respectively. The carrying amount of our cash equivalents reasonably approximates fair value, as a result of the short maturities of investment instruments used. The primary objective of our investment activities is the preservation of capital, and we do not enter into investments for trading or speculative purposes. Short-term and long-term investments we hold are in the form of term deposits with fixed interest rates, thereby limiting their exposure related to interest rate fluctuations. A hypothetical 10% increase in interest rates would not have had a material impact on our financial statements during either of the years ended December 31, 2019 and 2018.

In September 2019, we issued €139.8 million aggregate principal amount of 1.75% Convertible Senior Notes due September 1, 2024 (the “2024 Notes”). The 2024 Notes have a fixed annual interest rate of 1.75% and, therefore, we do not have economic interest rate exposure on the 2024 Notes. However, the fair value of the 2024 Notes is exposed to interest rate risk. Generally, the fair market value of the fixed interest rate 2024 Notes will increase as interest rates fall and decrease as interest rates rise. In addition, the fair value of the 2024 Notes fluctuates when the market price of our ADSs fluctuate. We carry the 2024 Notes at face value less unamortized discount and issuance costs on our balance sheet, and we present the fair value for required disclosure purposes only.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition, or results of operations.

Item 8. Financial Statements and Supplementary Data

Talend S.A.

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Annual Financial Statements for the Years Ended December 31, 2019, 2018 and 2017:

Report of Independent Registered Public Accounting Firm	80
Consolidated Statements of Financial Position as of December 31, 2019 and 2018	85
Consolidated Statements of Operations for the Years Ended December 31, 2019, 2018 and 2017	86
Consolidated Statements of Comprehensive Loss for the Years Ended December 31, 2019, 2018 and 2017	87
Consolidated Statements of Changes in Equity (Deficit) for the Years Ended December 31, 2019, 2018 and 2017 ..	88
Consolidated Statements of Cash Flows for the Years Ended December 31, 2019, 2018 and 2017	89
Notes to the Consolidated Financial Statements	90

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
Talend S.A.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of Talend S.A. and subsidiaries (the Company) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, changes in equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes and financial statement schedule presented in item 15 (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2019, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 17, 2020 expressed an adverse opinion on the effectiveness of the Company's internal control over financial reporting.

Changes in Accounting Principle

As discussed in Note 2 (t) to the consolidated financial statements, the Company has changed its method of accounting for revenue recognition in 2018, due to the adoption of ASC Topic 606, Revenue from Contracts with Customers, as amended.

As discussed in Notes 2 (t) and 16 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of ASU No. 2016-02 Leases (Topic 842).

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) 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 matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Evaluation of the allocation of transaction price to identified performance obligations for subscriptions to on-premise licenses

As discussed in Note 2(d) to the consolidated financial statements and as reported in the consolidated statement of operations for the year ended December 31, 2019, the Company recognized subscription revenue of \$217 million, which includes revenue from the sale of on-premise licenses to the Company's principally open-source software bundled together with post-contract customer support (PCS). The Company allocates the transaction price in bundled licensing arrangements to the license and the PCS on a relative stand-alone selling price basis.

The Company does not have observable standalone selling prices for its licenses or its PCS because they are not sold separately from each other. Therefore, the Company developed a model to estimate relative stand-alone selling prices for each performance obligation using a cost plus margin approach. The main assumptions used in the model include the estimated useful life of the software intellectual property and appropriate margins for the licenses and the PCS. The Company analyzed the relative allocation that resulted from the Company's estimated standalone selling prices against the relative transaction price allocation of peer companies, including those that also sell, like the Company, software that is principally open-source and those that sell similar software that is proprietary (i.e. not available on an open source basis).

We identified the evaluation of the allocation of the transaction price for subscriptions to on-premise licenses and PCS as a critical audit matter. Specifically, there was a high degree of auditor judgment required to assess the main assumptions used by the Company in its cost-plus margin estimated standalone selling price model.

The primary procedures we performed to address this critical audit matter included the following.

- We involved valuation professionals with specialized skills and knowledge to assist in evaluating the Company's assumptions concerning margin rates and intellectual property useful life used in the cost plus margin model for estimating standalone selling price, and compared the Company's assumptions against ranges that were independently developed by our valuation professionals using publicly available market data.
- We performed sensitivity analyses over the margin rates and useful life assumptions to assess their impact on the Company's allocation of transaction price to licenses and PCS.
- We analyzed the Company's relative allocation of transaction price to licenses and PCS against those of other relevant software companies, including those with a similar open-source software model to the Company and those who sell broadly similar software.

Evaluation of the carrying value of the liability component of convertible senior notes

As discussed in Notes 2(k) and 15 to the consolidated financial statements, in September 2019, the Company issued 1.75% convertible senior notes due September 1, 2024 (the Notes) for net proceeds of €133.8 million. In accounting for the issuance of the Notes, the Company separated the Notes into liability and equity components. The determination of the carrying amount of the liability component was based on the fair value of a similar debt instrument that does not have an associated convertible feature. The difference between the principal amount of the Notes and the carrying amount of the liability component (the debt discount) is amortized to interest expense over the contractual term of the Notes using an effective interest rate based on the interest rate of a similar debt instrument that does not have an associated convertible feature.

We identified the evaluation of the carrying value of the liability component of the Notes as a critical audit matter. A high degree of auditor judgment was required in assessing the interest rate that would be available to the Company for a similar debt instrument that does not have an associated convertible feature. Additionally, minor changes to the interest rate could have a significant effect on the amounts allocated to the liability and equity components and on the amortization of the debt discount.

The primary procedures we performed to address this critical audit matter included the following. We tested certain internal controls over the Company's process to determine the interest rate that would be available to the Company for a similar

debt instrument that does not have an associated convertible feature. We involved valuation professionals with specialized skills and knowledge who assisted in:

- Assessing the methodology used by the third-party specialist engaged by the Company to determine the interest rate that would be available to the Company for a similar debt instrument that does not have an associated convertible feature.
- Evaluating the Company's determination of the interest rate by comparing it against a range that was independently developed using publicly available market data for similar debt instruments of comparable entities.

We have served as the Company's auditor since 2006.

Paris La Défense, France

March 17, 2020

/s/ KPMG S.A.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
Talend S.A.:

Opinion on Internal Control Over Financial Reporting

We have audited Talend S.A. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, because of the effect of the material weakness, described below, on the achievement of the objectives of the control criteria, the Company has not maintained effective internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, changes in equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2019, and the related notes and financial statement schedule presented in Item 15 (collectively, the consolidated financial statements), and our report dated March 17, 2020 expressed an unqualified opinion on those consolidated financial statements.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. A material weakness, related to ineffective process level controls over assumptions in the Company's stand-alone selling price model (SSP) used to determine the allocation of the transaction price of the Company's on-premise license arrangements between the IP element and the post-contract customer support (PCS) element, which resulted from an ineffective risk assessment process to identify changes to risks resulting from the adoption of ASC Topic 606 and design appropriate controls to address those risks, has been identified and included in management's assessment. The material weakness was considered in determining the nature, timing, and extent of audit tests applied in our audit of the 2019 consolidated financial statements, and this report does not affect our report on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying "*Management's Annual Report on Internal Control over Financial Reporting*". Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies

and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Paris La Défense, France

March 17, 2020

/s/ KPMG S.A.

TALEND S.A.
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

(in thousands)

	<u>December 31,</u> <u>2019</u>	<u>December 31,</u> <u>2018</u>
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 177,075	\$ 34,104
Accounts receivable, net of allowance for doubtful accounts of \$1,082 and \$1,882, respectively	80,896	67,531
Contract acquisition costs	10,695	9,469
Other current assets	11,888	9,461
Total current assets	280,554	120,565
Non-current assets:		
Contract acquisition costs	22,050	17,558
Operating lease right-of-use assets	27,821	—
Property and equipment, net	5,348	6,335
Goodwill	49,744	49,659
Intangible assets, net	14,018	19,420
Other non-current assets	4,382	3,661
Total non-current assets	123,363	96,633
Total assets	<u>\$ 403,917</u>	<u>\$ 217,198</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 4,439	\$ 5,760
Accrued expenses and other current liabilities	41,182	36,475
Contract liabilities - deferred revenue, current	142,616	120,329
Operating lease liabilities, current	5,047	—
Short-term debt	227	208
Total current liabilities	193,511	162,772
Non-current liabilities:		
Deferred income taxes	768	469
Other non-current liabilities	1,137	950
Contract liabilities - deferred revenue, non-current	17,807	20,784
Operating lease liabilities, non-current	24,252	—
Long-term debt	130,490	676
Total non-current liabilities	174,454	22,879
Total liabilities	367,965	185,651
Commitments and contingencies (Note 17)		
STOCKHOLDERS' EQUITY		
Ordinary shares, par value €0.08 per share; 31,017,268 and 30,158,374 shares authorized, issued and outstanding, respectively	3,205	3,128
Additional paid-in capital	309,988	244,878
Accumulated other comprehensive income	1,107	404
Other reserves	207	138
Accumulated losses	(278,555)	(217,001)
Total stockholders' equity	35,952	31,547
Total liabilities and stockholders' equity	<u>\$ 403,917</u>	<u>\$ 217,198</u>

The above consolidated statements of financial position should be read in conjunction with the accompanying notes.

TALEND S.A.
CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

	Year Ended December 31,		
	2019	2018	2017
Revenue			
Subscriptions.....	\$ 217,047	\$ 176,363	\$ 125,898
Professional services.....	30,814	29,436	22,697
Total revenue	247,861	205,799	148,595
Cost of revenue			
Subscriptions.....	32,256	23,094	16,367
Professional services.....	28,624	26,400	17,792
Total cost of revenue	60,880	49,494	34,159
Gross profit	186,981	156,305	114,436
Operating expenses			
Sales and marketing	138,015	113,794	86,892
Research and development.....	63,017	42,359	26,835
General and administrative	44,473	40,357	29,446
Total operating expenses	245,505	196,510	143,173
Loss from operations.....	(58,524)	(40,205)	(28,737)
Interest income (expense), net	(2,540)	646	409
Other income (expense), net.....	(256)	209	(2,556)
Loss before benefit (provision) for income taxes	(61,320)	(39,350)	(30,884)
Benefit (provision) for income taxes	(149)	323	(324)
Net loss.....	<u>\$ (61,469)</u>	<u>\$ (39,027)</u>	<u>\$ (31,208)</u>
Net loss per share attributable to ordinary shareholders:			
Basic and diluted net loss per share	\$ (2.01)	\$ (1.31)	\$ (1.08)
Weighted-average shares outstanding used to compute net loss per share			
attributable to ordinary shareholders:	30,563	29,841	28,966

The above consolidated statements of operations should be read in conjunction with the accompanying notes.

TALEND S.A.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Net loss.....	\$ (61,469)	\$ (39,027)	\$ (31,208)
Other comprehensive gain (loss)			
Foreign currency translation adjustment.....	703	(268)	(879)
Total comprehensive loss	<u>\$ (60,766)</u>	<u>\$ (39,295)</u>	<u>\$ (32,087)</u>

The above consolidated statements of comprehensive loss should be read in conjunction with the accompanying notes.

TALEND S.A.
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY (DEFICIT)
(in thousands, except share data)

	Ordinary shares		Additional paid-in capital	Accumulated other comprehensive income	Other reserves	Accumulated loss	Total equity
	Shares	Amount					
Balance as of December 31, 2016	28,557,153	\$ 2,980	\$ 202,566	\$ 1,551	\$ —	\$ (189,072)	\$ 18,025
Net loss for the year	—	—	—	—	—	(31,208)	(31,208)
Other comprehensive loss	—	—	—	(879)	—	—	(879)
Restricted stock units reserve	—	—	(49)	—	49	—	—
Exercise of stock awards	882,614	79	6,593	—	—	—	6,672
Share-based compensation	—	—	6,280	—	—	—	6,280
Balance as of December 31, 2017	29,439,767	3,059	215,390	672	49	(220,280)	(1,110)
Adjustment on initial application of ASC 606, net of tax	—	—	—	—	—	42,306	42,306
Adjusted balance as of January 1, 2018	29,439,767	3,059	215,390	672	49	(177,974)	41,196
Net loss for the period	—	—	—	(268)	—	(39,027)	(39,027)
Other comprehensive loss	—	—	(138)	—	89	—	(49)
Restricted stock units reserve	—	—	(8)	—	—	—	—
Shares issued from restricted stock unit vesting	92,228	8	(8)	—	—	—	7,053
Exercise of stock awards	576,901	57	6,996	—	—	—	1,805
Issuance of ordinary shares in connection with employee stock purchase plan	49,478	4	1,801	—	—	—	20,837
Share-based compensation	—	—	20,837	—	—	—	—
Balance as of December 31, 2018	30,158,374	\$ 3,128	\$ 244,878	\$ 404	138	\$ (217,001)	\$ 31,547
Adjustment on initial application of ASC 842	—	—	—	—	—	(85)	(85)
Adjusted balance as of January 1, 2019	30,158,374	3,128	244,878	404	138	(217,086)	31,462
Net loss for the period	—	—	—	703	—	(61,469)	(61,469)
Other comprehensive gain	—	—	—	—	—	—	703
Equity component of 2024 Notes, net of issuance costs	—	—	20,921	—	—	—	20,921
Restricted stock units reserve	—	—	(69)	—	69	—	—
Shares issued from restricted stock unit vesting	310,132	27	(27)	—	—	—	—
Exercise of stock awards	417,385	38	5,767	—	—	—	5,805
Issuance of ordinary shares in connection with employee stock purchase plan	131,377	12	4,726	—	—	—	4,738
Share-based compensation	—	—	33,792	—	—	—	33,792
Balance as of December 31, 2019	31,017,268	\$ 3,205	\$ 309,988	\$ 1,107	207	\$ (278,555)	\$ 35,952

The above consolidated statements of changes in equity should be read in conjunction with the accompanying notes.

TALEND S.A.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

	Year Ended December 31,		
	2019	2018	2017
Cash flows from operating activities:			
Net loss for the period	\$ (61,469)	\$ (39,027)	\$ (31,208)
Adjustments to reconcile net loss to net cash (used in) from operating activities:			
Depreciation	2,779	2,034	1,527
Amortization of intangible assets	5,295	2,521	567
Amortization of debt discount and issuance costs	1,534	—	—
Unrealized loss foreign exchange	617	134	1,751
Interest accrued	806	—	—
Share-based compensation	33,792	20,837	6,280
Deferred income taxes	—	(327)	—
Income tax for the period	149	(323)	324
Changes in operating assets and liabilities:			
Accounts receivable	(13,623)	(12,387)	(16,533)
Operating leases	(85)	—	—
Other assets	(8,513)	(6,435)	(1,747)
Accounts payable	(1,286)	1,643	727
Accrued expenses and other current liabilities	5,758	9,987	6,902
Contract liabilities - deferred revenue	19,729	24,778	29,089
Net cash (used) from in operating activities	<u>(14,517)</u>	<u>3,435</u>	<u>(2,321)</u>
Cash flows from investing activities:			
Acquisition of property and equipment	(2,191)	(5,006)	(2,224)
Cash consideration for business acquisition, net of cash acquired	—	(59,493)	(9,189)
Net cash used in investing activities	<u>(2,191)</u>	<u>(64,499)</u>	<u>(11,413)</u>
Cash flows from financing activities:			
Proceeds from issuance of convertible senior notes, net of issuance costs	147,498	—	—
Proceeds from issuance of ordinary shares related to exercise of stock awards	5,805	7,053	6,672
Proceeds from issuance of ordinary shares related to employee stock purchase plan	4,738	1,805	—
Repayment of borrowings	(203)	(242)	(153)
Net cash from financing activities	<u>157,838</u>	<u>8,616</u>	<u>6,519</u>
Net increase (decrease) in cash and cash equivalents	141,130	(52,448)	(7,215)
Cash and cash equivalents at beginning of the period	34,104	87,388	91,387
Effect of exchange rate changes on cash and cash equivalents	1,841	(836)	3,216
Cash and cash equivalents at end of the period	\$ 177,075	\$ 34,104	\$ 87,388
Supplemental disclosures			
Cash paid for income taxes	\$ 377	\$ 302	\$ 158

The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and description of business

The Company is incorporated in France and has its registered office located at 9, rue Pages, 92150 Suresnes, France. Talend's software platform, Talend Data Fabric, integrates data and applications in real-time across modern big data and cloud environments, as well as traditional systems, allowing organizations to develop a unified view of their business and customers.

2. Summary of significant accounting policies

The significant accounting policies adopted in the preparation of these consolidated financial statements are set out below. These accounting policies have been consistently applied to all years presented, unless otherwise stated.

(a) Basis of presentation and consolidation

The consolidated financial statements as of and for the year ended December 31, 2019 have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP") and include the accounts of the Company and its wholly owned subsidiaries. All intercompany transactions and balances have been eliminated in consolidation. The financial statements of the subsidiaries are prepared for the same reporting period as the Company, using consistent accounting policies.

The Consolidated Statement of Financial Position as of December 31, 2018 and Consolidated Statements of Cash Flows as of December 31, 2018 and December 31, 2017 have been revised to reflect an immaterial re-classification of restricted cash between cash and cash equivalents and other current assets. The revision, in the amount of \$0.4 million, resulted in an increase in cash and cash equivalents and a corresponding decrease in other current assets, compared to what was previously presented.

(b) Use of estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Significant items subject to such estimates include, but are not limited to, revenue recognition (including allocation of the transaction price for on-premise subscription revenue to separate performance obligations, which requires estimates of main assumptions including useful life of intellectual property and appropriate margins), the amortization period for contract acquisition costs, contract period of leases, fair value of acquired intangible assets and goodwill and share-based compensation expense (including achievement of non-market conditions and forfeiture rate). These estimates and assumptions are based on management's best estimates and judgment. Management regularly evaluates its estimates and assumptions using historical experience and other factors; Actual results, however, could differ significantly from these estimates.

(c) Segment reporting

We operate as a single operating and reportable segment. The Company's chief operating decision maker is its chief executive officer, who reviews financial information presented on a consolidated basis for purposes of making operating decisions, assessing financial performance and allocating resources.

(d) Revenue recognition

The Group primarily derives revenue from contracts with customers from the sale of subscriptions and professional services engagements. The Group determines revenue recognition through the following steps:

- i) **Identification of the contract, or contracts with a customer** – The Group enters into binding agreements with its customers that identify each party's rights regarding the services to be performed and are evidenced by order forms. The Group determines it has a contract with a customer when an order form has been fully executed and uses judgement in determining when collectability of consideration is probable. For this

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

assessment, the Group considers the size of the transaction, the payment history, the nature of services provided and other relevant customer information.

- ii) **Identification of the performance obligations in the contract** – When a contract is identified, the Group considers the terms of its subscription and all other relevant facts, including the economic substance of these transactions. 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 performance obligation is separately identifiable from other promises in the contract and a customer can benefit from it on its own or with other resources that are readily available to the customer. The Group applies judgment to determine whether multiple promised products and services in a contract should be accounted for separately.
- iii) **Determination of the transaction price** – The transaction price is determined based on the consideration that the Group expects to be entitled in exchange for transferring products and services to the customer. The Group has determined that the order amount in the executed order forms constitutes the transaction price of the contract. Executed order forms do not include variable amounts, non-cash considerations or considerations that are paid to the customers. None of the Group's contracts contain a significant financing component.
- iv) **Allocation of the transaction price to the performance obligations in the contract** - If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. For contracts that contain multiple performance obligations, the Group allocates the transaction price to each performance obligation based on a relative standalone selling price ("SSP") basis. The Group determined SSPs using the "expected cost plus a margin" approach as it maximizes the use of available observable inputs.
- v) **Recognition of revenue when, or as, the Company satisfies a performance obligation** - The Group recognizes revenue when control over performance obligations transfers to customers, in amounts that reflect the consideration the Group expects to be entitled to in exchange for those services.

Subscriptions

Subscription revenue consists of fees earned from arrangements to provide customers with the right to use our commercial software either in a cloud-based infrastructure that we provide or installed within the customer's own environment through on-premise licenses. Our subscriptions include unspecified future updates, upgrades and technical product support. Subscription fees are based primarily on the number of users of our software and to a lesser extent the processing power required to operate the software. Our subscription-based arrangements generally have a contractual term of one to three years. We primarily sell annual contracts that are invoiced in advance for the full subscription term. We intend to continue enter to multi-year contracts with annual payment schedules. Subscription fees are generally non-refundable regardless of the actual use of the service. For the fiscal years ended December 31, 2019 and 2018, new subscription sales each had an average pre-billed duration of 1.1 years. The Group sells subscriptions to customers either directly or indirectly through non-exclusive value-added channel partners and resellers (collectively, "resellers"). Resellers market, sell and provide the Group's products and support services to end-users and the Group does not have the ability or the contractual right to establish pricing between resellers and end users.

Additionally, the Group occasionally enters into arrangements to embed its proprietary software or other generated code into a third-party application or service in exchange for sales- or usage-based royalties. As licensees do not generally report and pay royalties owed for sales/usage in any given quarter until after conclusion of that quarter, the Group recognizes royalty revenue based on estimates of licensees' sales/usage in the quarter, with a booking each quarter and a royalty estimate true up recorded in the following quarter as a separate booking.

On-premise

Subscriptions for our on-premise licenses include both a right to use the Group's underlying intellectual property ("IP") and a right to receive post-contract customer support ("PCS") during the subscription term. PCS is comprised of maintenance services (including updates and upgrades to the software on a when-and if available basis) and support services (including technical product support such as diagnosis and resolution of implementation and customer success services such as case reviews, integration job design and operational performance metrics). The IP rights and the rights

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

to receive PCS represent two separate performance obligations as they are not highly interdependent or interrelated and they can be transferred independently.

The Group does not have observable SSP for its licenses or its PCS as they are not sold separately. The Group developed a model to estimate relative SSP for each performance obligation using a “expected cost plus a margin” approach. This model uses observable datapoints to develop the main assumptions including the estimated useful life of the IP and appropriate margins. Based on this approach, the Group generally allocated 16% of the transaction price to the IP performance obligation and generally allocated 84% of the transaction price to the PCS performance obligation during each of the twelve months periods ended December 31, 2019 and 2018. The Group analyzed the relative allocation that resulted from the Group’s estimated SSP against the relative transaction price allocation of peer companies, including those that also sell, like the Group, software that is principally open-source and those that sell similar software that is proprietary (i.e. not available on an open source basis).

Revenue from the rights to use our IP is recognized upon delivery of the license key to the customer. Revenue from the rights to receive post-contract support is recognized ratably over the subscription term. Revenue through resellers follows the same revenue recognition pattern as applied for post-contract support.

Cloud-based

Subscriptions for our cloud-based offerings represent the right of access to our software as a service for which revenue is recognized ratably over the term of the arrangement.

Professional services

Professional services revenue consists of fees earned for consulting engagements related to the deployment and configuration of our product offering, training customers and associated expenses. Consulting engagements include implementation support to our customers during subscription setup and consist of time-based arrangements usually paid in advance, on delivery or at the completion of the contract. Training revenue results from contracts to provide educational services to customers and partners regarding the use of the Group’s technologies. The standalone selling price of a consulting or training service component is based on historical pricing for the component or a similar component that has been sold on a standalone basis.

Revenue from professional services is recognized as services are rendered.

Contracts with multiple performance obligations

The Group may enter into transactions that contain multiple performance obligations where a subscription and consulting and training services are sold together. For these contracts, the Group accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis.

The Group is able to determine reliably the standalone selling price of a consulting or training service component based on historical pricing for the component or a similar component that has been sold on a standalone basis.

Contract acquisition costs

Contract acquisition costs consist of sales commissions earned by our sales force to initially obtain a contract, and upon renewal of such contracts. Sales commissions to initially obtain a contract are considered incremental and recoverable costs and are deferred and then amortized on a straight-line basis over the period of benefit determined to be five years, which includes the contractual and expected renewal periods. The Group recognizes the incremental costs to initially obtain a contract with a customer on the statement of financial position if the Group expects the benefit of those costs to be longer than one year. Amortization expense is included in sales and marketing expenses in the accompanying consolidated statements of operations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Sales commissions paid upon renewal are substantially lower than the commissions paid to initially obtain the contract and are expensed in the period the contract is renewed. The majority of customer contracts are annual and as a result these renewals commissions are paid on an annual basis.

Contract liabilities - deferred revenue

Deferred revenue predominantly consists of the portion of the subscription price allocated to support and maintenance services that will be recognized ratably over the remaining subscription term, and prepaid but unused consulting and training services.

Disclosures Related to our Contracts with Customers

Timing may differ between the satisfaction of performance obligations and the invoicing and collection of amounts related to the Group's contracts with customers. The Group may record assets for amounts related to performance obligations that are satisfied but not yet billed and/or collected. These assets would be recorded as contract assets rather than receivables when receipt of the consideration is conditional on something other than the passage of time.

Liabilities are recorded for amounts that are collected in advance of the satisfaction of performance obligations. These liabilities are classified as current and non-current contract liabilities – deferred revenue in the statement of financial position.

The following table reflects the Group's accounts receivables, contract acquisition costs and contract liabilities – deferred revenue (in thousands):

	As of December 31,	
	2019	2018
Assets		
Accounts receivable, net (1)	\$ 80,896	\$ 67,531
Contract assets - unbilled revenue (2).	2,095	941
Contract acquisition costs - current (3).	10,695	9,469
Contract acquisition costs - non-current (3).	22,050	17,558
Total contract assets	<u>\$ 115,736</u>	<u>\$ 95,498</u>
Liabilities		
Contract liabilities - deferred revenue - current (4)	142,616	120,329
Contract liabilities - deferred revenue - non-current (4)	17,807	20,784
Total contract liabilities	<u>\$ 160,423</u>	<u>\$ 141,113</u>

- (1) Accounts receivable, net represents amounts billed to customers in accordance with contract terms for which payment has not yet been received. It is presented net of the allowance for doubtful accounts as part of current assets.
- (2) Contract assets – are unbilled revenue, represent timing difference between the satisfaction of performance obligations by the Group and the invoicing and collection of related amounts.
- (3) Contract acquisition costs represent deferred sales commissions.
- (4) Contract liabilities – deferred revenue represents amounts received as consideration from the Group's customers in advance of performance on a portion of the contract as of the end of the reporting period.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Significant changes in the contract acquisition costs and the contract liabilities balances during the period are as follows (in thousands):

	Contract assets - unbilled revenue	Contract acquisition costs	Contract liabilities - deferred revenue
Balances at January 1, 2018	\$ 782	\$ 23,390	\$ 140,217
Transferred to accounts receivable from unbilled revenue.	(628)	—	—
Increase due to new unbilled revenue	787	—	—
Additional contract acquisition costs deferred	—	12,944	—
Amortization of deferred contract acquisition costs	—	(9,307)	—
Performance obligations satisfied during the period that were included in the contract liability balance at the beginning of the period	—	—	(117,162)
Increases due to invoicing prior to satisfaction of performance obligations, net of amounts recognized as revenue during the period	—	—	118,058
Balances at December 31, 2018	941	27,027	141,113
Transferred to accounts receivable from unbilled revenue.	(849)	—	—
Increase due to new unbilled revenue	2,003	—	—
Additional contract acquisition costs deferred	—	15,924	—
Amortization of deferred contract acquisition costs	—	(10,206)	—
Performance obligations satisfied during the period that were included in the contract liability balance at the beginning of the period	—	—	(116,534)
Increases due to invoicing prior to satisfaction of performance obligations, net of amounts recognized as revenue during the period	—	—	135,844
Balance at December 31, 2019	<u>\$ 2,095</u>	<u>\$ 32,745</u>	<u>\$ 160,423</u>

As of December 31, 2019, \$10.7 million of the Group's contract acquisition costs are expected to be amortized within the next 12 months and therefore are included in current assets. The remaining amount of Group's contract acquisition costs are included in non-current assets. There were no impairments of assets related to Group's contract acquisition costs during the year-ended December 31, 2019.

Remaining Performance Obligations

The Group's contracts with customers include amounts allocated to performance obligations that will be satisfied at a later date of \$206.9 million and \$173.2 million as of December 31, 2019 and 2018, respectively. As of December 31, 2019, \$155.8 million of deferred revenue and backlog is expected to be recognized from remaining performance obligations over the next 12 months, and approximately \$51.1 million thereafter. Revenue from remaining performance obligations for professional services contracts as of December 31, 2019 was not material.

Disaggregation of Revenues

See Note 8, *Geographical information*, for details regarding disclosures on the disaggregation of revenues.

(e) Business combinations

Business combinations are accounted for using the acquisition method whereby acquired companies are included in the consolidated financial statements from their acquisition date. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition date fair values of the assets transferred to the Group and liabilities assumed by the Group.

If contingent consideration is identified in an acquisition, it is recorded at fair value determined on the acquisition date using a discounted cash flow model. Subsequently, contingent consideration that is classified as equity is not

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

re-measured while other contingent consideration is re-measured to fair value at each reporting period with gains or losses recorded in profit and loss. The Group elects on a transaction-by-transaction basis whether to measure non-controlling interest at its fair value, or at its proportionate share of the recognized amount of the identifiable net assets, at the acquisition date.

Transaction costs, other than those associated with the issue of debt or equity securities, which are incurred by the Group in connection with a business combination are expensed as incurred and recorded in general and administrative expenses.

The Group measures goodwill as the consideration transferred plus the recognized amount of any non-controlling interest in the acquired entity, less the net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed, all measured as of the acquisition date. Management's 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, which is not to exceed one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period, any subsequent adjustments are recorded to earnings. Goodwill is subsequently measured at cost less accumulated impairment losses. If the net of the acquisition date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred plus the amount of any non-controlling interests in the acquired entity, the excess is recognized in the consolidated statements of operations as a bargain purchase gain.

(f) Foreign currency

Functional and presentation currency

The functional currency for the Company is the euro; however, these consolidated financial statements are presented in U.S. dollars, which is the Company's reporting currency. Assets and liabilities that are not denominated in the functional currency are remeasured into the functional currency with any related gain or loss recorded in earnings. The Company translates assets and liabilities of its non-U.S. dollar functional currency foreign operations into the U.S. dollar reporting currency at exchange rates in effect at the balance sheet date. The Company translates income and expense items of such foreign operations into the U.S. dollar reporting currency at average exchange rates for the period. Accumulated translation adjustments are reported in stockholders' equity, as a component of accumulated other comprehensive income (loss).

Foreign currency transactions

Transactions in foreign currencies are initially recorded by the Group entities at their respective functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rate of exchange at the reporting date. Foreign currency differences arising on translation are generally recognized in the consolidated statements of operations.

Long-term monetary assets held by the Company in a foreign subsidiary for which settlement is neither planned or anticipated to occur in the foreseeable future are a part of the entity's net investment in a foreign operation. Accordingly, pursuant to ASC 830, exchange differences on these items are recorded in other comprehensive income until the investment's disposal or disqualification.

Translation from functional to presentation currency

Assets and liabilities of the Company and its subsidiaries are translated from their functional currency into the U.S. dollar presentation currency at the rate of exchange prevailing at the reporting date and their statements of operations are translated at average exchange rates. The average rate is determined by taking the average of the month-end closing rates, unless such method results in a material distortion.

The exchange differences arising on translation to the presentation currency for consolidation are recognized in other comprehensive income (loss) and accumulated in the foreign currency translation reserve.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(g) Financial instruments

Non-derivative financial assets

The Group has the following non-derivative financial assets: deposits, trade receivables and certain other receivables and cash and cash equivalents.

The Group initially recognizes non-derivative financial assets on the date that they are originated.

Loans and receivables

Loans and receivables are comprised of deposits, trade receivables and certain other receivables.

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Such assets are recognized initially at fair value plus any directly attributable transaction costs. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method, less any impairment losses.

A valuation allowance for trade receivables is recognized if the recoverable amount is less than the carrying amount. Amounts deemed uncollectible are recorded to this allowance in the consolidated statements of financial position with an offsetting decrease in related deferred revenue and a charge to general and administrative expense in the consolidated statement of operations. During the year ended December 31, 2019, the Company performed its assessment of the collectability of trade receivables, resulting in a decrease in the allowance for trade receivables of \$1.3 million to reflect current collectability trends.

Cash and cash equivalents

Cash and cash equivalents are comprised of cash at banks, restricted cash and highly liquid deposits with original maturities of less than three months that are readily convertible into a known amount of cash and are subject to insignificant risk of changes in value. Restricted cash is related to letters of credit for facility lease arrangements.

Non-derivative financial liabilities

The Group has the following non-derivative financial liabilities: borrowings and trade and other payables. The Group initially recognizes non-derivative financial liabilities on the date that they are originated. Such financial liabilities are recognized initially at fair value less any directly attributable transaction costs. Subsequent to initial recognition these financial liabilities are measured at amortized cost using the effective interest method.

Advances for research and development projects that were obtained from Bpifrance are reimbursable should the project be successful (see Note 15, *Debt*). These interest free rate advances are initially accounted for a fair value by discounting future cash flows at a market interest rate. Subsequent to initial recognition, they are measured at amortized cost using the effective interest method.

The Group derecognizes a financial liability when its contractual obligations are discharged or cancelled or expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in the consolidated statements of operations.

(h) Concentration of Credit Risk

Financial instruments that potentially expose the Company to a concentration of credit risk consist primarily of cash, cash equivalents and accounts receivable. The Company maintains cash and cash equivalents with financial institutions that management believes are financially sound and have minimal credit risk exposure although the balances will exceed insured limits. The Company generally does not require collateral or other security in support of accounts receivable. Allowances are provided for individual accounts receivable when the Company becomes aware of a

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

customer's inability to meet its financial obligations, such as in the case of bankruptcy, deterioration in the customer's operating results or change in financial position. Actual credit losses may differ from the Company's estimates. As of December 31, 2019, no customer represented 10% or more of the Company's gross accounts receivable. As of December 31, 2019, no customer represented 10% or more of the Company's total revenue.

(i) Property and equipment

Property and equipment are stated at net of accumulated depreciation. Historical cost includes expenditures directly attributable to the acquisition of the assets. Purchased software that is an integral part of the functionality of the related equipment is capitalized as part of that equipment. Depreciation is recognized in the consolidated statements of operations on a straight-line basis over the estimated useful lives of the assets, or in the case of leasehold improvements and certain leased equipment, over the lease term if shorter, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset.

The estimated useful lives for each asset class are as follows:

Computer equipment and software	3 years
Fixtures and fittings.	3 to 5 years
Leasehold improvements	Shorter or lease term or useful life

Property and equipment is reviewed for impairment whenever events or changes in circumstances indicate the carrying amount of an asset may not be recoverable.

(j) Goodwill, intangible assets and impairment assessments

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired and is evaluated annually, in the fourth quarter, for impairment, or more frequently if circumstances exist that indicate that impairment may exist. When conducting the annual goodwill impairment assessment, the Group first assesses qualitative factors, to determine whether it is necessary to perform the two-step goodwill impairment test. If determined to be necessary, the two-step impairment test shall be used to identify potential goodwill impairment and measure the amount of a goodwill impairment loss to be recognized, if any.

Intangible assets include acquired customer relationships and acquired developed technology. Intangibles acquired through a business combination are recognized separately from goodwill, initially at fair value on the acquisition date. Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets acquired separately. Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable.

There were no impairments of goodwill or intangible assets during the years ended December 31, 2019, 2018 or 2017.

The useful lives of intangible assets are assessed to be either finite or indefinite. All of our intangible assets have finite useful lives and amortization is recognized in the consolidated statements of operations on a straight-line basis over the estimated useful lives of intangible assets, from the date that they are available for use, since this most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset. The amortization expense on intangible assets with finite lives is recognized in the consolidated statements of operations in the expense category, consistent with the function of the intangible asset.

The estimated useful lives for each intangible asset class are as follows:

Customer relationships	2 years
Acquired developed technology	5 years

Amortization methods, useful lives and residual values are reviewed at each year end and adjusted if appropriate.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(k) Convertible notes

We account for the issued 1.75% Convertible Senior Notes due September 1, 2024 (the "2024 Notes") as separate liability and equity components in accordance with ASC 470, *Debt*. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated conversion feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the par value of the convertible notes as a whole. This difference represents a debt discount that is amortized to interest expense over the term of the 2024 Notes using the effective interest rate method. The equity component is not remeasured as long as it continues to meet the conditions for equity classification. We allocated issuance costs incurred to the liability and equity components. Issuance costs attributable to the liability component are being amortized to expense over the respective term of the 2024 Notes and issuance costs attributable to the equity component were netted with the respective equity component in Additional paid-in capital.

(l) Employee benefits plans

Defined contribution plan

A defined contribution plan is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution plans are recognized as an employee benefit expense in the consolidated statements of operations in the periods during which services are rendered by employees. For the fiscal years ended December 31, 2019, 2018 and 2017, the Group made contributions of \$3.9 million, \$3.0 million and \$2.2 million to various contribution plans, respectively.

Share-based payments

Employees, executives and board members of the Group receive remuneration in the form of share-based payments, whereby they render services as consideration for equity instruments which are considered equity-settled transactions. The cost of equity-settled transactions are recognized, together with a corresponding increase in equity, by reference to the fair value determined at the grant date of the share-based awards, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the beneficiary becomes fully entitled to the award (the "vesting date"). The cumulative expense recognized for equity-settled transactions at each reporting date until the vesting date reflects the extent to which the vesting period has lapsed and the Group's best estimate of the number of equity instruments that will ultimately vest. Share-based awards are expensed based on a graded vesting method, over the vesting period as the awards vest in tranches over the vesting period.

Determining the fair value of the share-based awards at the grant date requires judgment. The Company calculated the fair value of each option award on the grant date using a Black-Scholes option pricing model. The Black-Scholes model requires the estimation of a number of variables, including, the expected volatility, expected term, risk-free interest rate and dividend yield.

The estimation of share awards that will ultimately vest requires judgment, especially awards with non-market performance conditions, and to the extent actual results or updated estimates differ from current estimates, such amounts will be recorded as a cumulative adjustment in the period the estimates are revised. Actual results, and future changes in estimates, may differ substantially from current estimates. Share-based payment expense is recorded based on awards that are ultimately expected to vest, and such expense is reduced for estimated forfeitures. When estimating forfeitures, we considered voluntary termination behaviors as well as trends of the actual forfeitures of share-awards.

If an equity-settled award is cancelled, as a result of forfeiture when the vesting conditions are not satisfied, it is treated as if it had been forfeited on the date of cancellation, and any expense previously recognized for unvested shares is immediately reversed.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(m) Government assistance

The Research Tax Credit (*Crédit d'Impôt Recherche*, or "CIR") is a French tax incentive to stimulate research and development conducted in France. Entities that demonstrate that their research expenditures meet the required CIR criteria are able to offset the income tax to be paid. If taxes due are not sufficient to cover the full amount of tax credit at the end of the three year period, the difference is repaid in cash to the entity by the authorities. The CIR is calculated based on the claimed volume of eligible research and development expenditures.

(n) Other income and expense

Other income and expense mainly include net foreign exchange gains and losses.

(o) Income tax

Income tax expense is comprised of current income tax and deferred tax. The Company records income taxes using the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns, and for operating losses and tax credit carryforwards. Deferred tax assets and liabilities are measured using the currently enacted tax rates that will be in effect for the years in which those tax assets and liabilities are expected to be realized or settled. The estimation of future tax consequences is based on provisions of the enacted tax law; the effects of future changes in tax laws or rates are not anticipated. Valuation allowances are provided when necessary to reduce deferred tax assets to the amount expected to be realized. All deferred income taxes are classified as long-term in our consolidated balance sheets.

(p) Software development costs

The Group expenses software development costs, including costs to develop software products or the software component of products to be sold, leased, or marketed to external users, before technological feasibility is reached. Technological feasibility is typically reached shortly before the release of such products and as a result, development costs that meet the criteria for capitalization were not material for the periods presented.

The Group may in the future capitalize certain development costs incurred in connection with internal use software. Any costs incurred in the preliminary stages of development would be expensed as incurred. Once an application has reached the development stage, internal and external costs, if direct and incremental, could be capitalized until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. Maintenance costs are expensed as incurred. The Group has assessed the conditions for recognition of an internally generated asset from software development activities and concluded that up to now all criteria were not fulfilled; therefore, no research and development costs have been capitalized.

(q) Research and development costs

Research and development costs are expensed as incurred and consist primarily of salaries and related expenses, including share-based payment expense, contractor software development costs and related overhead, as well as amortization of acquired developed technology, less any research and development subsidies.

(r) Advertising costs

Advertising costs are expensed as incurred and are classified as sales and marketing expense. The Group has incurred advertising expense of \$0.3 million and \$0.1 million during the years ended December 31, 2019 and 2018, respectively, and less than \$0.1 million for the year ended December 31, 2017.

(s) Off-balance sheet arrangements

The Company has no off-balance sheet arrangements other than those disclosed as operating leases in Note 17, *Commitments and Contingencies*.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(t) Recently adopted accounting standards

In March 2014, the Financial Accounting Standards Board (“FASB”) issued ASC 2014-09, *Revenue from Contracts with Customers* (codified in ASC 606), and added ASC 340-40, *Other Assets and Deferred Costs – Contracts with Customers*, to codify the guidance on other assets and deferred costs relating to contracts with customers (collectively, the “standard”), along with consequential amendments to existing standards. The standard was subsequently amended in March, April and May 2016 and supersedes virtually all revenue recognition guidance in US GAAP. The standard’s core principle is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The standard creates a five-step model to achieve its core principle: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the separate performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. In addition, entities must disclose sufficient qualitative and quantitative information to enable users of the financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Qualitative and quantitative disclosures are also required. The Group has adopted the standard on January 1, 2018 on a modified retrospective method and applied the new standard only to contracts that were not completed contracts as of January 1, 2018.

In February 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2016-02, *Leases (Topic 842)*, which requires the recognition of right-of-use assets and lease liabilities for those leases currently classified as operating leases under ASC Topic 840 Leases. Under the standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. In 2018, the FASB issued ASU 2018-10, 2018-11 and 2018-20, providing, among other things, codification improvements, the optional transition method, the treatment of sales and similar taxes as lease cost by policy elections, the requirement to exclude certain variable payments from consideration and the allocation of certain variable payments between lease and non-lease components. The standard is effective for interim and annual reporting periods beginning after December 15, 2018, with early adoption permitted.

The Group has adopted the standard utilizing the modified retrospective transition method, as of the effective date of ASC 842, which for the Group is January 1, 2019, with a cumulative-effect adjustment to equity. As a result, the Group recognized \$27.1 million of operating lease assets and \$27.7 million of operating lease liabilities. This method allows entities to continue to apply the legacy guidance in ASC 840, including disclosure requirements in the comparative periods presented in the year of adoption. Please see Note 16, *Leases*, within these financial statements for the impact of adoption and required disclosures.

In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718), Improvements to Nonemployee Share-based Payments*. This ASU expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from non-employees. The effective date for the standard is for interim periods in fiscal years beginning after December 15, 2018, with early adoption permitted, but no earlier than the adoption date of Topic 606. The new guidance is required to be applied retrospectively with the cumulative effect recognized at the date of initial application. Effective January 1, 2019, the Group adopted the standard and the adoption did not have a material impact on our consolidated financial statements for the year ended December 31, 2019.

(u) Accounting standards issued not yet adopted

In June 2016, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Updated (“ASU”) 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. ASU 2016-13 replaced the incurred loss impairment methodology under current GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. ASU 2016-13 requires use of a forward-looking expected credit loss model for accounts receivables, loans, and other financial instruments. ASU 2016-13 is effective for fiscal years beginning after December 15, 2019, with early adoption permitted. Adoption of the standard requires using a modified retrospective approach through a cumulative-effect adjustment to retained earnings as of the effective date to align existing credit loss methodology with the new standard. In November 2019, the FASB issued ASU 2019-11, *Codification Improvements to*

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Topic 326, Financial Instruments—Credit Losses. ASU 2019-11 requires entities that did not adopt the amendments in ASU 2016-13 as of November 2019 to adopt ASU 2019-11. This ASU contains the same effective dates and transition requirements as ASU 2016-13. The Group will adopt ASU 2016-13 effective January 1, 2020 and does not expect adoption to materially affect our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, *Simplifying the Test for Goodwill Impairment*, which modifies the goodwill impairment test and requires an entity to write down the carrying value of goodwill for the amount by which the carrying amount of a reporting unit exceeds its fair value. The standard is effective for interim and annual reporting periods beginning after December 15, 2019, with early adoption permitted. The Group does not expect this new standard will have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement - Disclosure Framework (Topic 820)*. The updated guidance improves the disclosure requirements on fair value measurements. The updated guidance is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. Further, an entity is permitted to early adopt any removed or modified disclosure requirements, and delay adoption of the additional disclosure. The Group does not expect this new standard will have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 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*. ASU 2018-15 aligns the requirements for capitalizing implementation costs in a cloud computing arrangement service contract with the requirements for capitalizing implementation costs incurred for an internal-use software license. The guidance is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. The Group does not expect this new standard will have a material impact on our consolidated financial statements.

In November 2018, the FASB issued ASU 2018-18, *Collaborative Arrangements (Topic 808): Clarifying the Interaction between Topic 808 and Topic 606*, which clarifies that certain transactions between participants in a collaborative arrangement should be accounted for under ASC 606 when the counterparty is a customer. In addition, ASU 2018-18 precludes an entity from presenting consideration from a transaction in a collaborative arrangement as revenue from contracts with customers if the counterparty is not a customer for that transaction. This guidance will be effective for the Group beginning after December 15, 2019, with early adoption permitted. The Group does not expect this new standard will have a material impact on our consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, *Simplifying the Accounting for Income Taxes*, as part of its Simplification Initiative to reduce the cost and complexity in accounting for income taxes. ASU 2019-12 removes certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period and the recognition of deferred tax liabilities for outside basis differences. ASU 2019-12 also amends other aspects of the guidance to help simplify and promote consistent application of GAAP. The guidance is effective for interim and annual periods beginning after December 15, 2020, with early adoption permitted. The Group is currently evaluating the effect ASU 2019-12 will have on the consolidated financial statements and related disclosures.

There have been no other recent accounting pronouncements or changes in accounting pronouncements that would be significant, or potentially significant, to the Group.

3. Revision of prior period financial statements

The Group identified an error relating to one of the assumptions in its model to estimate relative SSP for IP and PCS for on-premise subscription agreements for purposes of recognizing revenue. The error primarily affects the cumulative impact and related contract balances upon the adoption of Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*.

Based on an analysis of Accounting Standards Codification (“ASC”) 250 – “Accounting Changes and Error Corrections” (“ASC 250”), Staff Accounting Bulletin 99 – “Materiality” (“SAB 99”) and Staff Accounting Bulletin 108 – “Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Statements” (“SAB 108”), the Company determined that previously issued financial statements for the fiscal year ended December 31, 2018 should be revised to reflect the correction of this immaterial error.

The following tables summarize the effects of the revisions on the consolidated financial statements as of and for the year ended December 31, 2018 (in thousands). The balances after adoption of ASC 606 of contract acquisition costs and contract liabilities – deferred revenue as of January 1, 2018 were \$25.2 million and \$128.1 million, respectively. The revised balances after adoption of ASC 606 of contract acquisition costs and contract liabilities – deferred revenue as of January 1, 2018 were \$23.4 million and \$120.5 million, respectively.

Statement of Financial Position

	December 31, 2018		
	As Previously Reported	Adjustment	As Revised
Contract acquisition costs	\$ 28,953	\$ (1,926)	\$ 27,027
Total assets.	219,124	(1,926)	217,198
Contract liabilities - deferred revenue	150,147	(9,034)	141,113
Total liabilities.	194,685	(9,034)	185,651
Accumulated other comprehensive income.	607	(203)	404
Accumulated losses.	(224,312)	7,311	(217,001)
Total stockholders’ equity	24,439	7,108	31,547

Statement of Operations

	Year Ended December 31, 2018		
	As Previously Reported	Adjustment	As Revised
Subscriptions	\$ 174,887	\$ 1,476	\$ 176,363
Total revenue	204,323	1,476	205,799
Sales and marketing	113,650	144	113,794
Total operating expenses	196,366	144	196,510
Loss from operations.	(41,537)	1,332	(40,205)
Loss before income tax expense.	(40,682)	1,332	(39,350)
Net loss for the year	(40,359)	1,332	(39,027)
Basic and diluted net loss per shares	\$ (1.35)	\$ 0.04	\$ (1.31)
Weighted-average shares outstanding	29,841	—	29,841

4. Fair value measurement

The Group reports assets and liabilities recorded at fair value on the Group’s consolidated balance sheets based upon the level of judgment associated with inputs used to measure their fair value. Hierarchical levels that are directly related to the amount of judgement associated with the inputs to the valuation of these assets or liabilities.

- Level 1: observable quoted prices (unadjusted) in active markets for identical financial assets or liabilities.
- Level 2: inputs other than quoted prices (other than level 1) in active markets, that are observable either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3: unobservable inputs that are supported by little or no market data, and may require significant management judgment or estimation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The fair value measurement level within the fair value hierarchy for a particular asset or liability is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of observable inputs and minimize the use of unobservable inputs.

Financial instruments not measured at fair value on the Company's consolidated statement of financial position, but which require disclosure of their fair values include: cash and cash equivalents, accounts receivable and certain other receivables, deposits, accounts payable and certain other payables and debt. The fair values of these financial instruments, other than the 2024 Notes, are deemed to approximate their carrying amount.

The fair values of cash and cash equivalents, accounts receivable and certain other receivables, deposits, accounts payable and certain other payables are categorized as Level 1. The fair value of debt was categorized as Level 2 and was estimated based on a discounted cash flow method using a market interest rate for similar debt. As of December 31, 2019, the fair value of the 2024 Notes was \$133.7 million.

There has been no transfer between levels of the fair value hierarchy during the years ended December 31, 2019 or 2018.

5. Cash and cash equivalents and other assets and liabilities

Cash and cash equivalents

Cash and cash equivalents consisted of the following (in thousands):

	As of December 31,	
	2019	2018
Cash at banks	\$ 120,842	\$ 32,437
Cash equivalents	56,233	1,667
Total cash and cash equivalents	<u>\$ 177,075</u>	<u>\$ 34,104</u>

As of December 31, 2019, cash equivalents consist of money market securities, bank deposits and restricted cash. As of December 31, 2019, the total cash and cash equivalents denominated in currencies other than the U.S. Dollar amount to \$144.8 million, including \$129.5 million denominated in Euros. As of December 31, 2019 and 2018, restricted cash was \$0.5 million and \$0.4 million, respectively.

Other current and non-current assets

Prepaid expenses and other current assets consisted of the following (in thousands):

	As of December 31,	
	2019	2018
Other current assets		
Research tax credit	\$ 581	\$ 612
Unbilled revenue	2,095	941
Prepaid expenses	8,178	6,244
Other assets	1,034	1,664
Other current assets	<u>\$ 11,888</u>	<u>\$ 9,461</u>

Other assets primarily relate to advancements from vendors and various deposits.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Other non-current assets consisted of the following (in thousands):

	As of December 31,	
	2019	2018
Other non-current assets		
Research tax credit	\$ 1,848	\$ 2,214
Deposits	1,169	793
Other non-current assets	1,365	654
Other non-current assets	\$ 4,382	\$ 3,661

Accrued expenses and other liabilities

Accrued expenses and other liabilities consisted of the following (in thousands):

	As of December 31,	
	2019	2018
Accrued expenses and other liabilities		
Accrued compensation and benefits	\$ 24,201	\$ 21,343
VAT payable	6,238	5,051
Other taxes	502	698
Contingent liabilities	578	408
Other current liabilities	9,663	8,975
Accrued expenses and other liabilities	\$ 41,182	\$ 36,475

The contingent liabilities include severance provisions and estimated legal expenses for disputes with former employees. Other current liabilities primarily relate to accrued expenses incurred in the ordinary course of business.

6. Property and equipment

The cost and accumulated depreciation of property and equipment are as follows (in thousands):

	As of December 31,	
	2019	2018
Property and equipment		
Computer equipment and software	\$ 8,997	\$ 6,778
Fixtures and fittings	1,902	1,925
Leasehold improvements	3,858	4,823
Property and equipment, gross	14,757	13,526
Less: accumulated depreciation	(9,409)	(7,191)
Property and equipment, net	\$ 5,348	\$ 6,335

Depreciation expense related to property and equipment during the years ended December 31, 2019, 2018 and 2017 was \$2.8 million, \$2.0 million and \$1.5 million, respectively.

7. Goodwill and intangible assets

Goodwill

Goodwill consisted of the following (in thousands):

	Year Ended December 31,	
	2019	2018
Goodwill, beginning of period	\$ 49,659	\$ 6,196
Additions from acquisitions	—	43,435
Measurement period adjustment	200	—
Effect of change in exchange rates	(115)	28
Goodwill, end of period	\$ 49,744	\$ 49,659

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Intangible assets

Intangible assets as of December 31, 2019 included the following (in thousands):

	<u>December 31, 2019</u>			<u>Weighted Average Remaining Useful Life</u>
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net</u>	
Customer relationships	\$ 4,975	\$ (3,600)	\$ 1,375	1 years
Acquired developed technology	19,555	(6,912)	12,643	4 years
Total	<u>\$ 24,530</u>	<u>\$ (10,512)</u>	<u>\$ 14,018</u>	

Intangible assets as of December 31, 2018, included the following (in thousands):

	<u>December 31, 2018</u>			<u>Weighted Average Remaining Useful Life</u>
	<u>Gross Carrying Amount</u>	<u>Accumulated Amortization</u>	<u>Net</u>	
Customer relationships	\$ 5,009	\$ (1,984)	\$ 3,025	2 years
Acquired developed technology	20,087	(3,692)	16,395	5 years
Total	<u>\$ 25,096</u>	<u>\$ (5,676)</u>	<u>\$ 19,420</u>	

Amortization expense for intangible assets was \$5.3 million, \$2.5 million and \$0.6 million for the years ended December 31, 2019, 2018 and 2017, respectively.

The following table presents the estimated future amortization expense related to intangible assets as of December 31, 2019 (in thousands):

	<u>Amount</u>
2020	\$ 5,023
2021	3,648
2022	3,447
2023	1,900
2024	—
Thereafter	—
Total amortization expense	<u>\$ 14,018</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

8. Geographical information

Disaggregation of Revenue

We sell our subscription contracts and related services in several primary geographical markets. The following table sets forth the Group's total revenue by region for the periods indicated (in thousands). The revenues by geographic region were determined based on the country where the sale took place.

	Year Ended December 31,		
	2019	2018	2017
Americas	\$ 115,736	\$ 93,777	\$ 70,671
EMEA	108,664	97,288	71,015
Asia Pacific	23,461	14,734	6,909
Total revenue	<u>\$ 247,861</u>	<u>\$ 205,799</u>	<u>\$ 148,595</u>

Revenues from the Company's country of domicile, based on sales that took place in France, totaled \$36.3 million, \$33.6 million and \$25.1 million for the years ended December 31, 2019, 2018 and 2017, respectively.

Long-lived assets

The following table sets forth our long-lived assets by geographic area, which consist of property and equipment, net and operating lease right-of-use assets (in thousands):

	As of December 31,	
	2019	2018
France	\$ 6,186	\$ 2,230
United States	19,082	2,728
International	7,901	1,377
Total long-lived assets	<u>\$ 33,169</u>	<u>\$ 6,335</u>

9. Income tax

The following table presents domestic and foreign components loss before income tax expense (in thousands):

	Year Ended December 31,		
	2019	2018	2017
France	\$ (10,042)	\$ (9,502)	\$ (18,811)
International	(51,278)	(29,848)	(12,073)
Loss before income tax expense	<u>\$ (61,320)</u>	<u>\$ (39,350)</u>	<u>\$ (30,884)</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The components of the (provision) benefit for income taxes were as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Current:			
France	\$ —	\$ —	\$ —
International	(20)	(311)	(324)
Total current	(20)	(311)	(324)
Deferred:			
France	—	—	—
International	(129)	634	—
Total deferred	(129)	634	—
Income tax (expense) benefit	<u>\$ (149)</u>	<u>\$ 323</u>	<u>\$ (324)</u>

The following table provides a reconciliation of the income tax expense calculated at the French statutory tax rate to the income tax expense (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Loss before income tax expense	<u>\$ (61,320)</u>	<u>\$ (39,350)</u>	<u>\$ (30,884)</u>
Expected tax benefit at France's statutory income tax rate of 31.00% in fiscal year 2019, 33.33% in fiscal year 2018 and 33.33% plus 1.1% surcharge in fiscal year 2017	19,009	13,116	10,633
Effect of different tax rates of subsidiaries operating in countries other than France	(2,067)	(2,794)	2,154
Non-deductible expenses	(2,443)	(1,714)	231
Effective change in tax rates	(692)	(319)	(13,056)
Share-based compensation	2,543	(851)	1,741
Change in valuation allowance	(17,539)	(7,842)	(2,261)
Other items, net	1,040	727	234
Income tax (expense) benefit	<u>\$ (149)</u>	<u>\$ 323</u>	<u>\$ (324)</u>

The components of deferred tax assets (liabilities) are as follows (in thousands):

	Year Ended December 31,	
	2019	2018
Deferred tax assets:		
Accruals and reserves	\$ 1,101	\$ 1,072
Net operating loss carryforwards	74,278	59,793
Share-based compensation	4,212	2,702
Other	1,718	2,316
Total deferred tax assets	81,309	65,883
Less: valuation allowance	(65,219)	(53,158)
Net deferred tax assets	16,090	12,725
Deferred tax liability:		
Intangibles	(2,186)	(6,032)
Deferred revenue	(1,012)	(132)
Deferred compensation	(7,880)	(7,031)
French Convertible Note Discount	(5,780)	—
Total deferred tax liabilities	(16,858)	(13,195)
Total net deferred tax assets (liabilities)	<u>\$ (768)</u>	<u>\$ (470)</u>

Realization of deferred tax assets is dependent upon the generation of future taxable income, if any, the timing and amount of which are uncertain. Due to the history of losses the Company has generated in the past, the Company

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

believes that it is more likely than not that its France and international deferred tax assets will not be realized as of December 31, 2019. Accordingly, the Company has recorded a valuation allowance on such deferred tax assets. The valuation allowance increased by \$12.1 million for the year ended December 31, 2019, primarily related to the current year net operating losses.

The Company regularly assesses the realizability of its deferred tax assets and establishes a valuation allowance if it is more-likely-than-not that some portion of the deferred tax assets will not be realized. The Company considers all available positive and negative evidence, including earnings history and results of recent operations, scheduled reversals of deferred tax liabilities, projected future taxable income and tax planning strategies. If the Company determines that it would be able to realize its deferred tax assets in the future in excess of their net recorded amount, an adjustment to the deferred tax asset valuation allowance will be made, which would reduce the provision for income taxes.

The Company recognized a deferred tax liability upon the issuance of convertible debt that may be settled in cash upon conversion. The deferred tax liability represents a source of future taxable income and the Company has determined that upon the issuance of the convertible debt instrument it can release a preexisting valuation allowance to offset the deferred tax liability. The release of the valuation allowance is recognized as an adjustment to Additional-Paid-in-Capital.

As of December 31, 2019, the Company had net operating loss carryforwards for French income tax return purposes of approximately \$154.9 million, which can be carried forward indefinitely. The Company had net operating loss carryforwards for U.S. federal income tax return purposes of approximately \$43.1 million, which expire at various dates beginning in the year 2028, if not utilized. The Company also had net operating loss carryforwards for U.S. federal income tax return purposes of approximately \$62 million, which can be carried forward indefinitely. The Company had net operating loss carryforwards of approximately \$31.7 million for California income tax return purposes, which expire at various dates beginning in the year 2028, if not utilized, and approximately \$54.1 million for other U.S. state income tax return purposes which expire at various dates beginning in the year 2022, if not utilized. The Company had net operating loss carryforwards of approximately \$28.4 million for foreign income tax return purposes, which can be carried forward indefinitely and approximately \$2.0 million for foreign income tax return purposes, which expire at various dates beginning in the year 2020, if not utilized.

As of December 31, 2019, the Company had research and development credit carryforwards for U.S. federal income tax return purposes of approximately \$1.9 million, which expire at various dates beginning in the year 2030, if not utilized. The Company had research and development credit carryforwards for U.S. state income tax return purposes of approximately \$1.1 million, which can be carried forward indefinitely.

Utilization of the net operating loss carryforwards and credits may be subject to a substantial annual limitation due to the ownership change limitations provided by Section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization.

As of December 31, 2019, the Company had approximately \$1.9 million in total unrecognized tax benefits. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in thousands):

	Year Ended December 31,	
	2019	2018
Unrecognized tax benefits, beginning of year	\$ 1,084	\$ 566
Gross increase for tax positions of prior year	170	—
Gross decrease for tax positions of prior year	—	—
Gross increase for tax positions of current year	602	518
Settlements	—	—
Gross unrecognized tax benefits, end of year	<u>\$ 1,856</u>	<u>\$ 1,084</u>

If recognized, only \$0.1 million of the \$1.9 million of unrecognized tax benefits as of December 31, 2019 would decrease the effective tax rate in the period in which each of the benefits is recognized. The remainder \$1.8 million

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

have no impact on the effective tax rate as the entire benefit would be offset by the establishment of valuation allowance on the resulting increase in the related deferred tax asset.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. As of December 31, 2019 and 2018, penalties and interest were immaterial.

The Company files income tax returns in the France, the U.S. federal jurisdiction as well, many U.S. states, as well as many foreign jurisdictions. The tax years 2005 to 2019 remain open to examination by the various jurisdictions in which the Company is subject to tax. Fiscal years outside the normal statute of limitation remain open to audit by tax authorities due to tax attributes generated in those early years which have been carried forward and may be audited in subsequent years when utilized.

The Company is subject to the continuous examination of income tax returns by various worldwide taxing authorities. The Company regularly assesses the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of the provision for income taxes. The Company believes that adequate amounts have been reserved for any adjustments that may ultimately result from these examinations and does not anticipate a significant impact to the gross unrecognized tax benefits within the next 12 months related to these years.

The Group identified an error relating to one of the assumptions in its model to estimate relative SSP for IP and PCS for on-premise subscription agreements for purposes of recognizing revenue. The error primarily affects the cumulative impact and related contract balances upon the adoption of Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606). The total tax effect of the adjustments resulting from the error were inconsequential. This is primarily because for current provision purposes the Company remained in losses after the adjustment, and for deferred purposes any movement was offset by valuation allowances.

10. Accounts receivables

The Group's accounts receivables consisted of the following (in thousands):

	As of December 31,	
	2019	2018
Accounts receivables.	\$ 81,978	\$ 69,413
Less: Allowance for doubtful accounts	(1,082)	(1,882)
Accounts receivable, net.	<u>\$ 80,896</u>	<u>\$ 67,531</u>

The movements in the allowance for doubtful accounts of receivables were as follows (in thousands):

	As of December 31,		
	2019	2018	2017
Allowance for doubtful accounts, beginning of period	\$ 1,882	\$ 1,409	\$ 664
Additions/Deductions (1)	(808)	517	674
Write-off of receivable	(8)	—	—
Effect of change in exchange rates.	16	(44)	71
Allowance for doubtful accounts, end of period.	<u>\$ 1,082</u>	<u>\$ 1,882</u>	<u>\$ 1,409</u>

- (1) The net decrease of \$0.8 million in 2019 includes the impact of the updated estimate of the loss from uncollectible receivables resulting from observed collectability trends.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As of December 31, 2019 and 2018, the aging analysis of net trade receivables that were not impaired is as follows (in thousands):

	As of December 31,	
	2019	2018
Neither past due nor impaired	\$ 67,922	\$ 59,951
Past due but not impaired <30 days	7,295	4,829
Past due but not impaired 30 - 90 days	3,427	2,543
Past due but not impaired > 90 days	2,252	208
Total	<u>\$ 80,896</u>	<u>\$ 67,531</u>

As of December 31, 2019 and 2018, the past due balances totaled 16% and 11%, respectively, of the total net trade receivable (net of allowance for doubtful accounts). The related balances are not considered to be impaired.

11. Business combinations

Acquisition of Stitch Inc.

On November 9, 2018, the Talend, Inc., a wholly-owned subsidiary of the Company acquired all of the outstanding shares of Stitch Inc., (“Stitch”), a leading cloud-based service to seamlessly load data to cloud data warehouses, for a cash payment of \$59.5 million. Talend, Inc, also recognized transaction costs of approximately \$0.7 million, which is included in general and administrative expense in its consolidated statements of operations for the year ended December 31, 2018. Stitch’s self-service solution for efficiently moving data from cloud applications into cloud data warehouses and the Group’s frictionless sales strategy further enhances the Group’s alignment with cloud platforms such as Microsoft Azure, Amazon AWS and Snowflake. In addition, the acquisition of Stitch further addresses the growing demand from data engineers and analyst for self-service cloud data integration solutions. The Group has included the financial results of Stitch in its consolidated financial statements from the date of acquisition.

The following table summarizes the fair values of assets acquired and liabilities assumed as of the date of acquisition (in thousands):

	Fair Value
Cash	\$ 1,625
Acquired developed technology	11,400
Customer relationships	3,300
Goodwill	43,635
Other assets, net.	(57)
Deferred revenue	(410)
Total consideration transferred	<u>\$ 59,493</u>

The excess of purchase consideration over the fair value of net tangible and identifiable intangible assets acquired was recorded as goodwill. The goodwill balance is primarily attributed to the assembled workforce and expanded market share within the data integration industry, which is moving towards cloud data warehouses. The goodwill balance is not deductible for income tax purposes. The fair values assigned to tangible assets acquired, liabilities assumed and identifiable intangible assets were based on management’s estimates and assumptions.

During the second quarter of 2019, the Company adjusted the preliminary amount of the acquisition date fair value assigned to goodwill by \$0.2 million to reflect measurement period adjustments related to accrued liabilities. There were no adjustments to the preliminary amounts during the third quarter or fourth quarter of 2019.

The fair value of acquired developed technology was determined using an excess earnings method based on revenue forecasts related to the expected evolution of the technology over time. The fair value of customer relationships was determined using the with-and-without method, whereby the value of existing customer relationships is determined using two different scenarios: (1) net revenues less related costs with the customer relationships and (2) net revenues less related costs without the customer relationships. The incremental difference between the two scenarios was then used to

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

estimate the fair value of the Stitch's existing customer relationships. Both methods used a discounted cash flow method at the discounted rate of 13.5%.

The following table sets forth the components of identifiable intangible assets acquired and their estimated useful lives as of the date of acquisition.

	Fair Value	Useful Life (Years)
Acquired developed technology	\$ 11,400	5
Customer relationships	3,300	2
Total intangible assets subject to amortization	<u>\$ 14,700</u>	

12. Share capital and reserves

(a) Movements in the periods presented

As of December 31, 2019, there were 31,017,268 ordinary shares outstanding, each with a nominal value of €0.08.

On March 16, 2017, the Company closed a follow-on public offering of 3,783,111 ordinary shares sold by existing shareholders, including 493,449 shares sold upon full exercise of the underwriters' option to purchase additional ordinary shares, at a price to the public of \$28.50 per share. The Company did not receive any proceeds from the sale of the ordinary shares. The Company incurred offering expenses of \$0.7 million, which are recorded as general and administrative expenses.

On November 17, 2017, the Company closed a follow-on public offering of 2,750,000 ordinary shares sold by existing shareholders at a price to the public of \$40.00 per share. The Company did not receive any proceeds from the sale of the ordinary shares. The Company incurred offering expenses of \$0.7 million, which are recorded as general and administrative expense.

On March 8, 2018, the Company closed a follow-on public offering of 3,916,474 ordinary shares sold by existing shareholders, at a price to the public of \$48.60 per share. The Company did not receive any proceeds from the sale of these ordinary shares. The Company incurred offering expenses of \$0.3 million, which are recorded as general and administrative expenses.

(b) Ordinary shares

Shares have a nominal value of €0.08. Each ordinary share is entitled to one vote.

(c) Other reserves

The Company's board of directors, acting upon delegation of the shareholders' meetings held to date, has granted restricted stock units or free shares (*actions gratuites*, under French law), to employees and officers of the Group. The Company created a specific restricted reserve account in connection with the issuance of granted restricted stock units or free shares equal to €184,637 as of December 31, 2019. Upon vesting of each of the restricted stock units or free shares pursuant to our free share plans, a new share of the Company will be issued to the relevant beneficiary and, simultaneously, an amount equal to €0.08 will be withdrawn from the above reserve to increase the share capital of the Company.

13. Share-based payment plans

The Company grants all future Restricted Stock Units (RSU) and warrants (BSA) under the 2019 Free Share Plan (the "Free Share Plan"), which was adopted by the Company's board of directors on August 2, 2019, under the delegation approved by its shareholders at a meeting held on June 25, 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table illustrates the number of stock options and warrants outstanding (in thousands):

	Number of stock options	Number of employee BSPCE warrants	Number of BSA warrants
Balance as of December 31, 2018	1,707	229	131
Granted during the year	—	—	79
Exercised during the year	(351)	(66)	—
Forfeited during the year	(141)	(8)	—
Balance as of December 31, 2019	<u>1,215</u>	<u>155</u>	<u>210</u>

As of December 31, 2019, there were 1,639,200 stock options, warrants (BSA) and restricted stock units available for grant under the Company's share pool reserve. As of December 31, 2018, there were 1,721,294 stock options, employee warrants (BSPCE) and warrants (BSA) available for grant under the Company's share pool reserve.

In general, vesting of stock options and employee warrants (BSPCE) occurs over four years, with 25% on the one year anniversary of the grant and 1/16th on a quarterly basis thereafter. Options have a contractual life of ten years. Individuals must continue to provide services to the Group in order to vest. Upon termination, all unvested options are forfeited and vested options must generally be exercised within three months. All expenses related to these plans have been recorded in the consolidated statements of operations in the same line items as the related employee's cash-based compensation.

(a) Stock options

The Company's board of directors has approved Stock Option Plans for the granting of stock options to employees outside of France. The terms of the Stock Option Plans are substantially the same and at this time new share option grants may only be made pursuant to the 2017 Plan. Stock options may be granted to any individual employed by the Group.

In addition, under French law, the maximum number of shares issuable upon exercise of outstanding employee stock options may not exceed one-third of the outstanding share capital on a non-diluted basis as at the date of grant.

A summary of stock option activity and related weighted-average exercise prices ("WAEP") and weighted-average remaining contractual term ("WACT") under all of the plans as of December 31, 2019 are presented in the following table (in thousands, except exercise price per option):

	Number of stock options outstanding	WAEP per share	WACT (in years)	Aggregate intrinsic value
Balance as of December 31, 2018	1,707	\$ 11.95	6.3	\$ 42,769
Granted	—	—		
Exercised	(351)	13.39		
Forfeited	(141)	19.21		
Balance as of December 31, 2019	<u>1,215</u>	<u>\$ 10.36</u>	<u>4.5</u>	<u>\$ 34,944</u>
Vested and expected to vest as of December 31, 2019 ..	<u>1,204</u>	<u>\$ 10.34</u>	<u>4.5</u>	<u>\$ 34,643</u>
Exercisable as of December 31, 2019	<u>1,094</u>	<u>\$ 9.30</u>	<u>4.3</u>	<u>\$ 32,606</u>

The total intrinsic value of stock options exercised during the years ended December 31, 2019, 2018 and 2017 was \$10.3 million, \$12.4 million and \$11.9 million, respectively.

There were no stock option grants during the year ended December 31, 2019. The weighted-average grant date fair value of options granted during the years ended December 31, 2018 and 2017 was \$10.62 and \$11.97 per share, respectively. The total grant date fair value of options vested during years ended December 31, 2019, 2018 and 2017 was \$1.4 million, \$2.5 million and \$2.4 million, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(b) Employee warrants (BSPCE)

The Company's board of directors has been authorized by the shareholders' general meeting to grant BSPCE ("*bons de souscription de parts de créateur d'entreprise*" or "employee warrants (BSPCE)") to employees who are French tax residents as they carry favorable tax and social security treatment for French tax residents. Employee warrants (BSPCE) are a specific type of option to acquire ordinary shares available to qualifying companies in France that meet certain criteria. Otherwise, employee warrants (BSPCE) function in the same manner as share options. The Company no longer grants employee warrants (BSPCE) as they are no longer authorized for grant by the Board.

A summary of employee warrants (BSPCE) activity and related WAEP and WACT under all of the plans as of December 31, 2019 are presented in the following table (in thousands, except exercise price per warrant):

	Number of employee warrants outstanding	WAEP per warrant	WACT (in years)	Aggregate intrinsic value
Balance as of December 31, 2018	229	\$ 15.49	6.7	\$ 4,922
Granted.	—	—		
Exercised	(66)	13.03		
Forfeited.	(8)	26.42		
Balance as of December 31, 2019	155	\$ 15.52	5.7	\$ 3,653
Vested and expected to vest as of December 31, 2019. .	151	\$ 15.65	5.8	\$ 3,547
Exercisable as of December 31, 2019	132	\$ 14.31	5.5	\$ 3,271

The total intrinsic values of employee warrants (BSPCE) exercised during the years ended December 31, 2019, 2018 and 2017 were \$1.9 million, \$3.9 million and \$4.5 million, respectively.

There were no employee warrants (BSPCE) grants during the years ended December 31, 2019 and 2018. The weighted-average grant date fair value of employee warrants (BSPCE) granted during the years ended December 31, 2017 was \$12.59 per share. The total grant date fair value of employee warrants (BSPCE) vested during years ended December 31, 2019, 2018 and 2017 was \$0.2 million, \$0.5 million and \$0.4 million, respectively.

(c) Restricted Stock Units (RSU)

Restricted stock units vest upon either a performance-based or only a service-based criteria.

Performance-based RSUs vest based on the satisfaction of specific non-market performance criteria and a four-year service period. At each vesting date, the holder of the award is issued shares of the Company's ordinary shares. Compensation expense from these awards is equal to the fair market value of the Company's ordinary shares on the date of grant and is recognized over the remaining service period based on the probable outcome of achievement of the financial metrics used in the specific grant's performance criteria. Management's estimate of the number of shares expected to vest is based on the anticipated achievement of the specified non-market performance criteria, which are assessed at each reporting period. Performance-based RSUs are typically granted such that they vest upon the achievement of certain software subscription sales targets, during a specified performance period and the completion of a four year service period.

In general, service-based RSUs vest over a four-year period, with 25% on the one year anniversary of the grant and equal quarterly installments thereafter.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

A summary of performance and service based RSU activity and related weighted-average grant date fair value and weighted-average remaining contractual term (“WACT”) under all of the plans as of December 31, 2019 are presented in the following table (in thousands, except weighted-average grant date fair value):

	Number of service- based RSUs	Number of performance- based RSUs	Weighted-average grant date fair value
Balance as of December 31, 2018	1,210	301	\$ 44.90
Granted.....	1,287	351	44.06
Vested and released.....	(273)	(37)	37.75
Forfeited.....	(300)	(231)	43.75
Balance as of December 31, 2019	1,924	384	\$ 44.96
Expected to vest as of December 31, 2019	1,551	70	\$ 44.87

The tax benefits realized by the Company in connection with vested and released RSUs for the years-ended December 31, 2019 and 2018, was \$13.2 million and \$2.8 million, respectively. The Company realized no tax benefits in connection with vested and released restricted stock units for the year ended December 31, 2017.

The weighted-average grant date fair value of RSUs granted during the years ended December 31, 2019, 2018 and 2017 was \$44.06, \$49.12 and \$36.32 per share, respectively. The total grant date fair value of RSUs vested during years ended December 31, 2019, 2018 and 2017 was \$11.7 million, \$3.1 million and \$0.1 million, respectively.

(d) Warrants (BSA)

The Company's board of directors has granted warrants (otherwise known as “*bons de souscription d'actions*” or “warrants (BSA)”) to Company directors and consultants. In addition to any exercise price payable by a holder upon the exercise of any warrants (BSA), pursuant to the relevant shareholders' delegation to the Company's board of directors, such warrants need to be subscribed for at a price at least equal to 5% of the exercise price which represents the fair market value of the underlying ordinary shares at grant date.

In the second quarter of 2019, the Company's board of directors granted 74,760 warrants (BSA), with an exercise price of \$47.79 and grant date fair value of \$14.98 per warrant.

In the fourth quarter of 2019, the Company's board of directors granted 4,500 warrants (BSA), with an exercise price of \$33.37 and grant date fair value of \$10.08 per warrant.

The warrants (BSA) vest quarterly over a one-year period and as of December 31, 2019, 167,740 of the warrants (BSA) are exercisable.

(e) Restricted shares

The Company entered into agreements with certain current and former executives of the Company, which allowed the executives to purchase ordinary shares at the nominal price of €0.08. The shares are restricted in that the Company has the right to repurchase the shares back from the executives and cancel such shares during a four year vesting period in which the executives have service conditions to meet. The Company is able to repurchase the shares from the executives at the nominal price of €0.08 during a vesting period. The Company's right to repurchase the shares lapses over a four year period, with 25% on the one year anniversary of the grant and either monthly or 1/16th on a quarterly basis thereafter. In June 2015, the Company issued of 110,281 ordinary shares at par value (€0.08 per share) representing a total subscription amount equal to eight thousand euros. As of December 31, 2018, the Company had 13,785 restricted shares outstanding and as of December 31, 2019, the Company had zero restricted shares outstanding.

(f) Employee Stock Purchase Plan

In the fourth quarter of 2017, the Company established the 2017 Employee Stock Purchase Plan, as amended and restated in September 2019 (the “ESPP”), which is intended to qualify under Section 423 of the Internal Revenue Code of 1986. The ESPP allows eligible employee participants to purchase ADSs, with each ADS representing one ordinary

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

share of the Company, at a discount through payroll deductions. The Company's executive officers and all of its other employees will be allowed to participate in the ESPP. A total of 498,522 ADSs of the Company's ordinary shares are available for sale under the ESPP as of December 31, 2019. In addition, with shareholder approval, the ESPP provides for increases by the Company's board of directors in the number of ADSs available for issuance under the ESPP.

Under the ESPP, employees are eligible to purchase ADSs through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The ESPP has two consecutive offering periods of approximately six months in length during the year and the purchase price of the ADSs will be 85% of the lower of the fair value of the Company's ADSs on the first trading day of the offering period or on the last day of the offering period. Under applicable tax rules, an employee may purchase no more than \$25,000 worth of ADSs, valued at the start of the offering period, under the ESPP in any calendar year. As of December 31, 2019, \$2.0 million has been withheld on behalf of employees for a future purchase under the ESPP and is recorded in accrued compensation and benefits.

As of December 31, 2019, 180,855 shares of common stock had been purchased under the ESPP. The Company selected the Black-Scholes option-pricing model as the method for determining the estimated fair value for the Company's ESPP. As of December 31, 2019, total unrecognized compensation cost related to ESPP was \$0.2 million which will be amortized over a weighted-average period of approximately 0.2 years.

(g) Fair value of stock options, warrants and ESPP

Determining the fair value of the share-based payments at the grant date requires judgment. The Company calculated the fair value of each instrument on the grant date using the Black-Scholes option pricing model. The Black-Scholes model requires the input of highly subjective assumptions, including the expected volatility, expected term, risk-free interest rate and dividend yield.

Exercise price

The exercise price of the Company's stock awards is based on the fair market value of our ordinary shares.

Risk-free interest rate

The risk-free interest rate represents the implied yield currently available on zero-coupon government issued securities over the expected term of the option.

Expected term

The Company determines the expected term based on the average period the share options are expected to remain outstanding.

Expected Volatility

The Group considered historical volatility of the Company's share price since the IPO and also considered the historical volatility of similar entities following a comparable period in their lives.

Expected Dividend yield

The Company has never declared or paid any cash dividends and it does not presently plan to pay cash dividends in the foreseeable future. Consequently, the Company uses an expected dividend yield of zero.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The Company estimated the following assumptions for the calculation of the fair value of the share options and warrants:

	Year Ended December 31,		
	2019	2018	2017
Stock options and warrants			
Weighted average fair value of underlying shares	\$ 46.97	\$ 52.65	\$ 27.82
Weighted average expected volatility	42.4 %	42.0 %	50.5 %
Weighted average risk-free interest rate	2.14 %	2.63 %	1.69 %
Weighted average expected term (in years)	2.78	3.23	3.73
Dividend yield	— %	— %	— %
ESPP			
Weighted average fair value of underlying shares	\$ 41.49	\$ 50.39	\$ —
Weighted average expected volatility	40.2 %	41.7 %	— %
Weighted average risk-free interest rate	2.20 %	2.06 %	— %
Weighted average expected term (in years)	0.50	0.50	—
Dividend yield	— %	— %	— %

(h) Compensation expense

Cost of revenue and operating expenses include employee stock-based compensation expense as follows (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Cost of revenue - subscriptions	\$ 3,115	\$ 1,432	\$ 315
Cost of revenue - professional services	2,132	1,024	207
Sales and marketing	10,227	7,198	2,271
Research and development	10,353	5,808	1,263
General and administrative	7,965	5,375	2,224
Total share-based compensation expense	<u>\$ 33,792</u>	<u>\$ 20,837</u>	<u>\$ 6,280</u>

As of December 31, 2019, the Company had \$40.5 million of total unrecognized share-based compensation expense relating to stock options, employee warrants (BSPCE), warrants (BSA) and RSUs, which is expected to be recognized over a weighted average period of 1.8 years.

14. Net loss per share

Basic net income (loss) per share is computed by dividing net income (loss) for the period by the weighted-average number of shares outstanding during the period. In periods of net income, diluted net income per share is computed by dividing net income for the period by the basic weighted-average number of shares plus any dilutive potential ordinary shares outstanding during the period. As the Company was in a loss position for the years ended December 31, 2019, 2018 and 2017, the diluted loss per share is equal to basic loss per share because of the effects of potentially dilutive shares, which include shares from share-based awards and convertible senior notes, were anti-dilutive given the Company's net loss.

In the third quarter of 2019, the Company issued 1.75% Convertible Senior Notes due September 1, 2024 (see Note 15, *Debt*, for more details). Because the Company expects to settle the principal amount of the outstanding 1.75% Convertible Senior Notes due September 1, 2024 in a combination of cash and shares, the Company uses the if-converted method for calculating any potential dilutive effect of the conversion spread on the diluted net income per ordinary share when the average market price of the Company's ordinary shares, each represented by an ADS, for a given period exceeds the conversion price of €51.75 per share. This situation has not occurred as of December 31, 2019.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The net loss and weighted average number of shares used in the calculation of basic and diluted earnings per share are as follows (in thousands, except per share data):

	Year Ended December 31,		
	2019	2018	2017
Numerator (basic and diluted):			
Net loss	\$ (61,469)	\$ (39,027)	(31,208)
Denominator (basic and diluted):			
Weighted-average ordinary shares outstanding	30,563	29,841	28,966
Basic and diluted net loss per share	\$ (2.01)	\$ (1.31)	(1.08)

The following shares subject to outstanding awards were excluded from the computation of diluted net loss per share for the periods presented as their effect would have been antidilutive (in thousands):

	Year Ended December 31,		
	2019	2018	2017
Stock options to purchase ordinary shares	1,215	1,707	2,282
Employee warrants (BSPCE) to purchase ordinary shares	155	229	343
Warrants (BSA) to purchase ordinary shares	210	130	88
Restricted stock units	2,308	1,511	509
Employee stock purchase plan	83	53	—
Convertible senior notes	2,700	—	—

15. Debt

The principal balances of convertible senior notes and outstanding borrowings under lines of credit with banks and financial institutions were as follows (in thousands):

	As of December 31,	
	2019	2018
Convertible notes	\$ 130,045	\$ —
BPIfrance	\$ 665	\$ 877
Other	7	7
Total	<u>\$ 130,717</u>	<u>\$ 884</u>
Short-term debt	\$ 227	\$ 208
Long-term debt	\$ 130,490	\$ 676

As part of the Restlet SAS acquisition in 2016, the Company assumed debt totaling \$1.2 million related to advances for research and development projects from Bpifrance to Restlet SAS. As of December 31, 2019, the debt had a carrying value of \$0.7 million, of which \$0.2 million is due within twelve months. The debt balance as of December 31, 2018 was \$0.9 million, of which \$0.2 million was due within twelve months.

Line of credit

On February 14, 2019, Talend, Inc., Talend USA, Inc. and Stitch Inc. (the “Borrowers”), all wholly-owned subsidiaries of the Company, entered into a secured revolving credit facility with Square 1 Bank, a division of Pacific Western Bank (“PWB”) (the “Loan Agreement”).

In September 2019, in connection with the issuance of the 1.75% Convertible Senior Notes due September 1, 2024 (the “2024 Notes”), the Company terminated the Loan Agreement. Prior to the termination date, no amounts had been drawn on the credit facility under the Loan Agreement.

Convertible Senior Notes due in 2024

In September 2019, the Company issued an aggregate principal amount of €125.0 million of the 2024 Notes and an additional 12% or €14.8 million, pursuant to the partial exercise of the option to purchase additional 2024 Notes granted to the initial purchasers, in a private placement, pursuant to an exemption from the registration requirements afforded by

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Section 4(a)(2) of the Securities Act of 1933, as amended (the “Securities Act”), to qualified institutional buyers (as defined in Rule 144A promulgated under the Securities Act). The net proceeds from the issuance, after deducting initial purchaser discounts and debt issuance costs of €6.0 million, were €133.8 million.

The 2024 Notes mature on September 1, 2024, unless earlier repurchased, redeemed or converted, and bear interest at a fixed rate of 1.75% per year payable semi-annually on March 1 and September 1 of each year, beginning on March 1, 2020.

Each €1,000 of principal amount of the 2024 Notes will initially be convertible, subject to adjustment upon the occurrence of specified events, into 19.3234 ADSs, corresponding to 19.3234 of the Company’s ordinary shares per €1,000 principal amount of the 2024 Notes as of the date hereof, which initial conversion rate is equivalent to an initial conversion price of approximately €51.75 per ADS calculated on the basis of the closing price of the Company’s ADSs of \$38.72 and an euro to U.S. Dollar exchange rate of €1 to \$1.1036 on the pricing date of the 2024 Notes. The conversion rate for the 2024 Notes will be subject to adjustment in some events, but will not be adjusted for any accrued and unpaid interest. In addition, following certain corporate events set forth in the indenture for the 2024 Notes that occur prior to maturity or if the Company calls any 2024 Notes for redemption, the Company will increase the conversion rate of the 2024 Notes for a holder who elects to convert its 2024 Notes in connection with such a corporate event or during the related redemption period in certain circumstances under the indenture for the 2024 Notes. Holders may convert all or any portion of their 2024 Notes at their option at any time on or after 9:00 a.m. (New York City time) on the business day immediately preceding June 1, 2024 until 9:00 a.m. (New York City time) on the second business day immediately preceding the maturity date of the 2024 Notes. Further, holders may convert their 2024 Notes at their option prior to 9:00 a.m. (New York City time) on the business day immediately preceding June 1, 2024, only under the following circumstances:

- During, but prior to 9:00 a.m. (New York City time) on the last business day of, any calendar quarter commencing after the calendar quarter ending on December 31, 2019 (and only during such calendar quarter), if the last reported sale price of the ADSs (converted into euros in the manner specified in the indenture for the 2024 Notes) for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price for the 2024 Notes on each applicable trading day;
- During the six business day period prior to 9:00 a.m. (New York City time) on the last business day of such period after any five consecutive trading day period (the “measurement period”) in which the trading price per €1,000 principal amount of the 2024 Notes, for each trading day of the measurement period, was less than 98% of the product of the last reported sale price of our ADSs (converted into euros at 4:00 p.m. New York City time on such trading day) and the conversion rate for the 2024 Notes on each such trading day;
- If the Company calls any or all of the 2024 Notes for redemption, at any time prior to 9:00 a.m. (New York City time) on the second business day immediately preceding the redemption date; and
- upon the occurrence of certain specified corporate events.

Upon conversion, the Company will pay or deliver, as the case may be, a cash amount in euros, ADSs or a combination of a cash amount in euros and ADSs, at the Company’s election, to the holder. If the Company satisfies its conversion obligation solely in cash or through payment and delivery, as the case may be, of a combination of cash and ADSs, the amount of cash and ADSs, if any, due upon conversion will be based on a settlement amount equal to the sum of the daily conversion values for each of the 40 consecutive trading days during the related observation period (in the manner set forth in the indenture for the 2024 Notes).

The Company may redeem for cash all, but not less than all, of the 2024 Notes at its option upon certain changes in the tax law of any relevant taxing jurisdiction at a redemption price equal to 100% of the principal amount of 2024 Notes to be redeemed, plus accrued and unpaid interest, including any additional amounts, to, but excluding, the redemption date.

Other than in connection with a tax redemption, the Company may not redeem the 2024 Notes prior to September 6, 2022. The Company may redeem for cash all or any portion of the 2024 Notes, at its option, on or after September 6, 2022 if the last reported sale price of its ADSs (converted into euros in the manner specified in the indenture for the 2024 Notes) has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

consecutive) during any 30 consecutive trading day period (including the last trading day of such period) ending on and including the trading day immediately preceding the date on which the Company provides notice of redemption at a redemption price equal to 100% of the principal amount of the 2024 Notes to be redeemed, plus any accrued and unpaid interest to, but excluding, the redemption date.

If the Company undergoes a “fundamental change” (as defined in the indenture for the 2024 Notes) prior to the maturity date, holders may require the Company to repurchase for cash all or any portion of their 2024 Notes at a fundamental change repurchase price equal to 100% of the principal amount of the 2024 Notes to be repurchased, plus accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The 2024 Notes are senior unsecured obligations and rank senior in right of payment to any of the Company’s indebtedness that is expressly subordinated in right of payment to the 2024 Notes, and equal in right of payment to any of the Company’s existing and future liabilities that are not so subordinated. The 2024 Notes are effectively junior in right of payment to any of the Company’s secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of the Company’s current or future subsidiaries.

In accounting for the issuance of the 2024 Notes, the Company separated the 2024 Notes into liability and equity components. The carrying amount of the liability component was calculated by measuring the fair value of a similar debt instrument that does not have an associated convertible feature. The carrying amount of the equity component representing the conversion option was determined by deducting the fair value of the liability component from the par value of the 2024 Notes as a whole. The difference between the principal amount of the 2024 Notes and the liability component, equal to \$21.7 million (the “debt discount”), was initially recorded in Additional paid-in capital. The equity component will not be remeasured as long as it continues to meet the conditions for equity classification. The debt discount is amortized to interest expense at an effective interest rate of 5.00% over the contractual term of the 2024 Notes. The interest rate was based on the interest rates of similar debt instrument that does not have an associated convertible feature and was determined with the assistance of a third party valuation specialist.

The Company allocated \$0.9 million of debt issuance costs to the equity component and the remaining debt issuance costs of \$5.7 million are amortized to interest expense under the effective interest rate method over the contractual term of the 2024 Notes.

The net carrying amount of the 2024 Notes was as follows as of December 31, 2019 (in thousands):

	<u>Principal Balance</u>	<u>Unamortized debt discount</u>	<u>Unamortized debt issuance costs</u>	<u>Net Carrying Amount</u>
Liability Component	\$ 156,716	\$ (21,227)	\$ (5,443)	\$ 130,046

The net carrying amount of the equity component of the 2024 Notes was as follows as of December 31, 2019 (in thousands):

	<u>Gross Amount</u>	<u>Allocated debt issuance costs</u>	<u>Net Carrying Amount</u>
Equity Component	\$ 21,866	\$ (945)	\$ 20,921

During the year ended December 31, 2019, the Company recognized \$2.3 million of interest expense of which \$1.5 million relate to the amortization of debt discount and issuance costs and \$0.8 million relate to the accrual of coupon expense.

16. Leases

The Group has adopted ASC 842 utilizing the optional modified retrospective transition method, as of the effective date of ASC 842, which for the Group is January 1, 2019, with a cumulative-effect adjustment to equity.

The Group determines if an arrangement is a lease at inception. Operating leases are included in operating lease right-of-use (“ROU”) assets and operating lease liabilities in the Company’s consolidated statement of financial position.

ROU assets represent the Group’s right to use an underlying asset for the lease term and lease liabilities represent the Group’s obligation to make lease payments arising from the lease. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term. As the Group’s leases do not provide an implicit rate, the Group uses an incremental borrowing rate based on the information available

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

at commencement date in determining the present value of lease payments. The operating lease ROU asset also includes any lease payments made and excludes lease incentives. The Group's lease terms may include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for lease payments is recognized on a straight-line basis over the lease term. The Group has lease agreements with lease and non-lease components, which are generally accounted for separately, but the Group has made an accounting policy decision to account for the lease and non-lease components as a single lease component. The Group also made an accounting policy decision not to record ROU assets or lease liabilities for leases with terms of 12 months or less. The Group has operating leases for corporate offices, none of which have variable lease payments.

The components of lease expense for the year ended December 31, 2019 were as follows (in thousands):

	<u>Amount</u>
Operating lease cost	\$ 5,856

The balances for our operating leases are presented within our consolidated balance sheet as follows (in thousands):

	<u>December 31, 2019</u>
Operating lease right-of-use assets	\$ 27,821
Operating lease liabilities	\$ 29,299

Other information related to our operating leases is as follows (dollars in thousands):

	<u>Year Ended December 31, 2019</u>
Cash paid for amounts included in the measurement of lease liabilities	\$ 5,066
Right-of-use assets obtained in exchange for lease obligations	2,749
Weighted average remaining lease term for operating leases	6.3 years
Weighted average discount rate	5.4%

Maturities of lease liabilities as of December 31, 2019 were as follows (in thousands):

	<u>Amount</u>
2020	\$ 5,906
2021	5,536
2022	5,104
2023	3,936
2024	3,824
Thereafter	10,202
Total lease payments	34,508
Less imputed interest	(5,209)
Total	<u>\$ 29,299</u>

Future minimum undiscounted lease payments as of December 31, 2018 accounted for under guidance ASC 840 were as follows (in thousands):

	<u>Amount</u>
2019	\$ 5,286
2020	5,757
2021	5,591
2022	5,320
2023	4,014
Thereafter	14,832
Total future minimum lease payments	<u>\$ 40,800</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

17. Commitments and contingencies

Capital commitments

As of December 31, 2019, the Company had no capital commitments to acquire fixed or other long-lived assets.

Contingencies

From time to time, the Group has been, and may become, involved in claims or legal proceedings which arise in the ordinary course of its business. The Group provides for a reserve against such third-party contingent liabilities when a loss is probable and can be reasonably estimated. The Group currently believes that resolving the claims and legal proceedings pending as of December 31, 2019, will neither individually nor in the aggregate have a material adverse effect on the results of operations, cash flow or the financial position of the Group.

Purchase obligations

As of December 31, 2019, the Company had purchase obligations related to purchase commitments of IT-related services totaling \$16.8 million.

Guarantees

As of December 31, 2019, the Company had agreed to guarantee several business contract obligations totaling \$2.1 million.

18. Related party transactions

There is no single investor who has the ability to control the Company.

As part of the Restlet SAS acquisition, the Company assumed debt totaling \$1.2 million related to advances for research and development projects from Bpifrance to Restlet SAS. As of December 31, 2019, the debt had a carrying value of \$0.7 million, see Note 15, *Debt*. There are no other material related party transactions that require disclosures.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

19. Selected quarterly results of operations (Unaudited)

The following table sets forth selected unaudited quarterly results of operations data for each of the eight quarters ended December 31, 2019 (in thousands, except per share data). The quarterly results of operations have been revised to reflect the correction of the immaterial error relating to one of the assumptions in the Company's model to estimate relative SSPs for IP and PCS for on-premise subscription agreements for purposes of recognizing revenue. See Note 3, *Revision of prior period financial statements*, for more details.

As previously reported	Three Months Ended							
	March 31, 2018	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019	June 30, 2019	September 30, 2019	December 31, 2019
Total Revenue	\$ 46,813	\$ 49,755	\$ 52,065	\$ 55,690	\$ 57,838	\$ 60,591	\$ 62,625	\$ 66,925
Gross profit	\$ 35,564	\$ 37,882	\$ 39,072	\$ 42,311	\$ 42,638	\$ 44,832	\$ 47,877	\$ 51,752
Operating expenses	\$ 45,745	\$ 46,712	\$ 48,474	\$ 55,435	\$ 59,996	\$ 62,772	\$ 60,992	\$ 61,879
Loss from operations	\$ (10,181)	\$ (8,830)	\$ (9,402)	\$ (13,124)	\$ (17,358)	\$ (17,940)	\$ (13,115)	\$ (10,127)
Net loss for the period	\$ (10,115)	\$ (8,739)	\$ (9,249)	\$ (12,256)	\$ (17,638)	\$ (18,290)	\$ (13,359)	\$ (12,198)
Net loss per share attributable to ordinary shareholders:								
Basic and diluted net loss per share	\$ (0.34)	\$ (0.29)	\$ (0.31)	\$ (0.41)	\$ (0.58)	\$ (0.60)	\$ (0.44)	\$ (0.39)
Adjustments								
Total Revenue	\$ 239	\$ 344	\$ 164	\$ 729	\$ (172)	\$ (286)	\$ (189)	\$ 529
Gross profit	\$ 240	\$ 344	\$ 164	\$ 728	\$ (172)	\$ (285)	\$ (189)	\$ 528
Operating expenses	\$ (27)	\$ (9)	\$ 31	\$ 149	\$ (66)	\$ (51)	\$ (37)	\$ 20
Loss from operations	\$ 267	\$ 353	\$ 134	\$ 578	\$ (107)	\$ (234)	\$ (152)	\$ 509
Net loss for the period	\$ 266	\$ 353	\$ 133	\$ 580	\$ (107)	\$ (235)	\$ (151)	\$ 509
Net loss per share attributable to ordinary shareholders:								
Basic and diluted net loss per share	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.02	\$ (0.01)	\$ (0.01)	\$ —	\$ 0.01
As Revised								
Total Revenue	\$ 47,052	\$ 50,099	\$ 52,229	\$ 56,419	\$ 57,666	\$ 60,305	\$ 62,436	\$ 67,454
Gross profit	\$ 35,804	\$ 38,226	\$ 39,236	\$ 43,039	\$ 42,466	\$ 44,547	\$ 47,688	\$ 52,280
Operating expenses	\$ 45,718	\$ 46,703	\$ 48,505	\$ 55,584	\$ 59,930	\$ 62,721	\$ 60,955	\$ 61,899
Loss from operations	\$ (9,914)	\$ (8,477)	\$ (9,268)	\$ (12,546)	\$ (17,465)	\$ (18,174)	\$ (13,267)	\$ (9,618)
Net loss for the period	\$ (9,849)	\$ (8,386)	\$ (9,116)	\$ (11,676)	\$ (17,745)	\$ (18,525)	\$ (13,510)	\$ (11,689)
Net loss per share attributable to ordinary shareholders:								
Basic and diluted net loss per share	\$ (0.33)	\$ (0.28)	\$ (0.30)	\$ (0.39)	\$ (0.59)	\$ (0.61)	\$ (0.44)	\$ (0.38)

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

20. Subsequent event

In March 2020, the Company entered into a lease agreement for approximately 58,000 square feet of office space in Suresnes, France. The lease commences on April 1, 2020 and expires on March 31, 2026, subject to the Company's right to continue the Lease under its terms until March 31, 2029. The Lease requires the Company to make a security deposit in the amount of €341,460 at signing and establishes an initial annual rent of €1,365,840, subject to an abatement of the first fourteen months worth of rent.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

Not applicable.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

Our management, with the participation of our Principal Executive Officer and Principal Financial & Accounting Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)), as of the end of the period covered by this Annual Report on Form 10-K. The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure 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 ensure 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 the company’s management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure.

Based on this evaluation of our disclosure controls and procedures, our Principal Executive Officer and Principal Financial & Accounting Officer have concluded that, as of December 31, 2019, due to a material weakness in our internal control over financial reporting, as described below, our disclosure controls and procedures are not effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. 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, and 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 our assets; (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 our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our 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.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2019, using the criteria set forth in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission’s 2013 framework. Based on this assessment and those criteria, management concluded that our internal control over financial reporting was not effective as of December 31, 2019 due to the material weakness described below.

The Company had ineffective process level controls over assumptions in its stand-alone selling price (SSP) model used to determine the allocation of the transaction price of our on-premise license arrangements between the IP element and the PCS element. This material weakness resulted from an ineffective risk assessment process to identify changes to risks resulting from the adoption of ASC Topic 606 and design appropriate controls to address those risks.

This material weakness resulted in errors in our previously issued financial statements for fiscal year 2018. Although the errors were not material to those financial statements, we concluded that the control deficiency represented a material weakness in our internal controls over financial reporting as of December 31, 2019.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Our management's assessment of the effectiveness of our internal control over financial reporting has been audited by KPMG S.A., an independent registered public accounting firm, as stated in their report, which appears in Part II, Item 8 of this Form 10-K.

Remediation Plan

Our management and Board of Directors are committed to the continued improvement of our overall system of internal control over financial reporting. Upon identification of the material weakness noted above, we began an evaluation of the related control environment, developed a remediation plan, and began to implement the internal control changes that were identified as part of that plan. This plan includes enhancing our review process over the assumptions that support the IP and PCS transaction price allocation by (i) maximizing the use of observable inputs in our SSP model through external benchmarks, (ii) engaging third party valuation specialist to the extent considered necessary, and (iii) improving the documentation around the review of key assumptions incorporated in the model. The revised SSP model will continuously be reassessed and revisited by us as part of our review control process. We believe our actions will be effective in remediating the material weakness after a sufficient period of time. Management will continuously evaluate the operating effectiveness of the review of the SSP model. In addition we will enhance our risk assessment process to identify changes to risks resulting from the adoption of new accounting standards and design appropriate controls to address those risks.

Changes in Internal Control Over Financial Reporting

During the year ended December 31, 2019, there were no changes in our internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations of Internal Controls

Our management, including our Principal Executive Officer and Principal Financial & Accounting Officer, does not expect that our disclosure controls and procedures or our internal controls 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. 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, within the Company 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 the 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

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Information required by this Item will appear in our definitive proxy statement with respect to our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated herein by reference.

Item 11. Executive Compensation

Information required by this Item will appear in our definitive proxy statement with respect to our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Information required by this Item will appear in our definitive proxy statement with respect to our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence

Information required by this Item will appear in our definitive proxy statement with respect to our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated herein by reference.

Item 14. Principal Accountant Fees and Services

Information required by this Item will appear in our definitive proxy statement with respect to our 2020 Annual Meeting of Stockholders to be filed with the SEC within 120 days after the end of the fiscal year covered by this Annual Report, and is incorporated herein by reference.

PART IV

Item 15. Exhibits and Financial Statement Schedules

The following documents are filed as a part of this Annual Report on Form 10-K:

(a) Financial Statements

The information concerning our financial statements, and Report of Independent Registered Public Accounting Firm required by this Item is incorporated by reference herein to the section of this Annual Report on Form 10-K in Item 8, entitled “Consolidated Financial Statements and Supplementary Data.”

(b) Financial Statement Schedules

Talend S.A. Schedule II Valuation and Qualifying Accounts and Reserves (in thousands)

	Deferred tax asset valuation allowance				
	Balance at Beginning of Year	Additions - Charged to Cost and Expenses	Additions - Charged to Other Accounts	Deductions	Balance at End of Year
Year Ended December 31, 2019.....	\$ 53,158	\$ 17,841	\$ (5,780)	\$ —	\$ 65,219
Year Ended December 31, 2018.....	54,796	5,222	2,311	(9,171)	53,158
Year Ended December 31, 2017.....	49,959	4,837	—	—	54,796

All other schedules have been omitted because the required information is not present or not present in amounts sufficient to require submission of the schedules, or because the information required is included in Item 8, entitled the “Consolidated Financial Statements and Supplementary Data.”

(c) Exhibits

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated By-laws (statuts) of Talend S.A. (English translation) dated as of February 20, 2020.	8-K	001-37825	3.1	2/26/2020	
4.1	Description of Securities of the Registrant.					X
4.2	Form of Deposit Agreement between Talend S.A. and JPMorgan Chase Bank, N.A., as depositary, and Owners and Holders of the American Depositary Shares.	F-1/A	333-212279	4.1	7/11/2016	
4.3	Form of American Depositary Receipt evidencing American Depositary Shares (included in Exhibit 4.2).	F-1/A	333-212279	4.2	7/11/2016	

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
4.4	Restricted Issuance Agreement dated September 13, 2019, among Talend S.A., JPMorgan Chase Bank, N.A., as depositary and holders of restricted American Depositary Receipts issued thereunder.	8-K	001-37825	4.3	9/17/2019	
4.5	Form of Restricted American Depositary Receipt evidencing Restricted American Depositary Shares (included in Exhibit 4.4).	8-K	001-37825	4.3	9/17/2019	
4.6	Indenture, dated September 13, 2019, between Talend S.A., U.S. Bank National Association and Elavon Financial Services DAC.	8-K	001-37825	4.1	9/17/2019	
4.7	Form of 1.75% Convertible Senior Note due 2024 (included in Exhibit 4.6).	8-K	001-37825	4.2	9/17/2019	
10.1+	Stock Option Plans—2016, 2015, 2014, 2013, 2012, 2011 and 2010.	F-1/A	333-212279	10.22	7/19/2016	
10.2+	Form of BSA Grant Document (English translation).	F-1/A	333-212279	10.23	7/27/2016	
10.3+	Form of Stock Option Grant Document.	F-1	333-212279	10.25	6/28/2016	
10.4	Lease Agreement, dated as of April 11, 2014, by and between Westport Office Park, LLC and Talend, Inc.	F-1	333-212279	10.3	6/28/2016	
10.5	First Amendment to Lease Agreement, dated as of December 16, 2014, by and between Westport Office Park, LLC and Talend, Inc.	F-1	333-212279	10.4	6/28/2016	

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
10.6	Second Amendment to Lease Agreement, dated as of April 20, 2015, by and between Westport Office Park, LLC and Talend, Inc.	F-1	333-212279	10.5	6/28/2016	
10.7	Third Amendment to Lease Agreement, dated as of February 15, 2018, by and between Westport Office Park, LLC and Talend, Inc.	20-F	001-37825	4.6	3/5/2018	
10.8	English Summary of the Commercial Lease Agreement, dated as of February 7, 2014, by and between Foncière Medicale N°1 and Talend S.A.	F-1	333-212279	10.6	6/28/2016	
10.9	English Summary of the First Amendment to Commercial Lease Agreement, dated as of April 14, 2014, by and between Foncière Medicale N°1 and Talend S.A.	F-1	333-212279	10.7	6/28/2016	
10.10	English Summary of the Second Amendment to Commercial Lease Agreement, dated as of September 11, 2015, by and between Foncière Medicale N°1 and Talend S.A.	F-1	333-212279	10.8	6/28/2016	
10.11	English Summary of the Third Amendment to Commercial Lease Agreement, dated as of January 20, 2016, by and between Foncière Medicale N°1 and Talend S.A.	F-1	333-212279	10.9	6/28/2016	

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
10.12	English Summary of the Fourth Amendment to Commercial Lease Agreement, dated as of April 26, 2016, by and between Foncière Medicale N°1 and Talend S.A.	F-1	333-212279	10.10	6/28/2016	
10.13	English Summary of the Fifth Amendment to Commercial Lease Agreement, dated as of April 24, 2017, by and between Foncière Medicale N°1 and Talend S.A.	20-F	001-37825	4.12	3/5/2018	
10.14	English Summary of the Sixth Amendment to Commercial Lease Agreement, dated as of October 12, 2017, by and between Foncière Medicale N°1 and Talend S.A.					X
10.15	English Summary of the Seventh Amendment to Commercial Lease Agreement, dated as of March 4, 2018, by and between Foncière Medicale N°1 and Talend S.A.					X
10.16	Form of Indemnification Agreement between Talend S.A. and each of its executive officers and directors.	F-1	333-212279	10.21	6/28/2016	
10.17+	Separation Agreement and Release with Michael Tuchen, dated as of January 8, 2020.					X
10.18+	Offer letter, dated as of January 7, 2020, by and between Talend, Inc. and Christal Bemont.					X

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
10.19+	Offer Letter, dated as of August 14, 2018, by and between Talend, Inc. and Adam Meister.	10-K	001-37825	10.19		
10.20+	Employment Agreement, dated as of July 3, 2014, by and between Talend S.A. and Laurent Bride (English translation).	F-1	333-212279	10.33	6/28/2016	
10.21+	Expatriation Agreement, dated as of June 22, 2015, by and between Talend S.A., Talend, Inc. and Laurent Bride (English translation).	F-1	333-212279	10.34	6/28/2016	
10.22+	Amendment, dated as of May 15, 2018, to Laurent Bride Expatriation Agreement (English translation).	10-Q	001-37825	10.6	5/10/2019	
10.23+	Offer Letter, dated as of December 18, 2019, by and between Talend, Inc. and Ann-Christel Graham.					X
10.24+	Form of Amended and Restated Change of Control and Severance Agreement.					X
10.25	Shareholder Agreement, dated as of June 24, 2016, by and among Talend S.A. and certain shareholders.	F-1	333-212279	10.35	6/28/2016	
10.26+	2016 Free Share Plan (English translation).	S-8	333-219761	4.1	8/7/2017	
10.27+	Form of 2016 Time-Based Free Share Grant Letter.	S-8	333-219761	4.2	8/7/2017	
10.28+	Form of 2016 Performance-Based Free Share Grant Letter.	S-8	333-219761	4.3	8/7/2017	
10.29+	2017 Free Share Plan (English translation).	S-8	333-219761	4.4	8/7/2017	

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
10.30+	Form of 2017 Time-Based Free Share Grant Letter.	S-8	333-219761	4.5	8/7/2017	
10.31+	Form of 2017 Performance-Based Free Share Grant Letter.	S-8	333-219761	4.6	8/7/2017	
10.32+	2017-02 Free Share Plan (English translation).	6-K	001-37825	10.1	5/10/2018	
10.33+	Form of 2017-02 Time-Based Free Share Grant Letter.	6-K	001-37825	10.2	5/10/2018	
10.34+	Form of 2017-02 Performance-Based Free Share Grant Letter.	6-K	001-37825	10.3	5/10/2018	
10.35+	Talend S.A. 2017 Stock Option Plan.	S-8	333-219761	4.7	8/7/2017	
10.36+	Talend S.A. 2018 Free Share Plan (English translation).	S-8	333-227200	4.2	9/5/2018	
10.37+	Form of 2018 Time-Based Free Share Grant Letter (included in Exhibit 10.36).	S-8	333-227200	4.2	9/5/2018	
10.38+	Form of 2018 Performance-Based Free Share Grant Letter (included in Exhibit 10.36).	S-8	333-227200	4.2	9/5/2018	
10.39+	Talend S.A. 2019 Free Share Plan (English translation).	8-K	001-37825	10.1	8/8/2019	
10.40+	Form of 2019 Time-Based Free Share Grant Letter.	8-K	001-37825	10.2	8/8/2019	
10.41+	Form of 2019 Performance-Based Free Share Grant Letter.	8-K	001-37825	10.3	8/8/2019	
10.42+	Amended and Restated Talend S.A. 2017 Employee Stock Purchase Plan.	8-K	001-37825	10.1	8/22/2019	

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
10.43+	U.S Offering Document to the Amended and Restated Talend S.A. 2017 Employee Stock Purchase Plan.	10-Q	001-37825	10.5	11/8/2019	
10.44+	Non-U.S. Offering Document to the Amended and Restated Talend S.A. 2017 Employee Stock Purchase Plan.	10-Q	001-37825	10.6	11/8/2019	
21.1	List of Subsidiaries of Talend S.A.					X
23.1	Consent of KPMG S.A., Independent Registered Public Accounting Firm.					X
31.1	Certificate of Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certificate of Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certificate of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002.					X

Exhibit Number	Exhibit Description	Form	File No.	Exhibit	Filing Date	Filed Herewith
101.INS	XBRL Instance Document – the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.					X
101.CAL	Inline XBRL Extension Calculation Linkbase Document.					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	Inline XBRL Taxonomy Presentation Linkbase Document.					X
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101).					X

+ Indicates management contract or compensatory plan.

* The certifications attached as Exhibit 32.1 hereto accompany this Annual Report on Form 10-K pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, and shall not be deemed “filed” by the Registrant for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and are not to be incorporated by reference into any of the Registrant’s filings under the Securities Act, irrespective of any general incorporation language contained in any such filing.

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this Annual Report on Form 10-K to be signed on its behalf by the undersigned, thereunto duly authorized, in Redwood City, State of California, on this 17th day of March, 2020.

TALEND S.A.
By: /s/ Christal Bemont

Christal Bemont
Chief Executive Officer
(Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that each individual whose signature appears below constitutes and appoints Christal Bemont and Adam Meister, and each of them, as his or her true and lawful attorneys-in-fact, proxies, and agents, each with full power of substitution, for him or her in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact, proxies, and agents 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 attorneys-in-fact, proxies, and agents, or their or his or her substitute or substitutes, 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 below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signatures</u>	<u>Title</u>	<u>Date</u>
_____ /s/ Christal Bemont Christal Bemont	Chief Executive Officer and Director (Principal Executive Officer)	March 17, 2020
_____ /s/ Adam Meister Adam Meister	Chief Financial Officer (Principal Financial and Accounting Officer)	March 17, 2020
_____ /s/ S. Steven Singh S. Steven Singh	Chairman of the Board	March 17, 2020
_____ /s/ Nora Denzel Nora Denzel	Director	March 17, 2020
_____ /s/ Elizabeth Fetter Elizabeth Fetter	Director	March 17, 2020
_____ /s/ Patrick S. Jones Patrick S. Jones	Director	March 17, 2020
_____ /s/ Brian Lillie Brian Lillie	Director	March 17, 2020
_____ /s/ Mark Nelson Mark Nelson	Director	March 17, 2020
_____ /s/ Thierry Sommelet Thierry Sommelet	Director	March 17, 2020
_____ /s/ Michael Tuchen Michael Tuchen	Director	March 17, 2020