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 January 31, 2020

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: 001-38933

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

Delaware	**45-3788918**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

150 Mathilda Place, Suite 300, Sunnyvale, California 94086
(Address of principal executive offices)

Registrant's telephone number, including area code: (888) 512-8906

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

Title of each class of securities	Trading symbol(s)	Name of each national exchange and principal U.S. market for the securities
Class A common stock, par value $0.0005 per share	CRWD	The Nasdaq Stock Market LLC (Nasdaq Global Select Market)

Securities registered pursuant to Section 12(g) of the Act:
None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933, as amended. Yes ☐ No ☑

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

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

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

Large Accelerated Filer	☐	Accelerated Filer	☐
Non-accelerated Filer	☑	Smaller reporting company	☐
(Do not check if a smaller reporting company)		Emerging growth company	☑

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

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

The aggregate market value of the common stock held by non-affiliates of the registrant, based on the closing price of a share of the registrant's common stock on July 31, 2019 (the last business day of the registrant's most recently completed second fiscal quarter) as reported by the Nasdaq Global Select Market on such date was approximately $6.15 billion.

As of February 29, 2020, the number of shares of the registrant's Class A common stock outstanding was 114,945,286, and the number of shares of the registrant's Class B common stock outstanding was 98,267,729.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2020 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K where indicated. Such Proxy Statement will be filed with the United States Securities and Exchange Commission within 120 days after the end of the fiscal year to which this Annual Report on Form 10-K relates.

CROWDSTRIKE HOLDINGS, INC.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this Annual Report on Form 10-K other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans and our objectives for future operations, are forward-looking statements. The words “believe,” “may,” “will,” “potentially,” “estimate,” “continue,” “anticipate,” “intend,” “could,” “would,” “project,” “plan,” “expect” and similar expressions that convey uncertainty of future events or outcomes are intended to identify forward-looking statements.

These forward-looking statements include, but are not limited to, statements concerning the following:

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

These statements are based on our current plans, estimates and projections in light of information currently available to us. These forward-looking statements may be affected by risks, uncertainties and other factors discussed elsewhere in this Annual Report on Form 10-K, including under “Risk Factors.” Furthermore, new risks and uncertainties emerge from time to time, and it is impossible for us to predict all risks and uncertainties or how they may affect us. If any of these risks or uncertainties occurs, our business, revenue and financial results could be harmed, and the trading price of our Class A common stock could decline. Forward-looking statements made in this Annual Report on Form 10-K speak only as of the date on which such statements are made, and we undertake no obligation to update them in light of new information or future events, except as required by law.

We intend to announce material information to the public through the CrowdStrike Investor Relations website ir.crowdstrike.com, SEC filings, press releases, public conference calls, and public webcasts. We use these channels, as well as social media and our blog, to communicate with our investors, customers, and the public about our company, our offerings, and other issues. It is possible that the information we post on social media and our blog could be deemed to be material information. As such, we encourage investors, the media, and others to follow the channels listed above, including the social media channels listed on our investor relations website, and to review the information disclosed through such channels. Any updates to the list of disclosure channels through which we will announce information will be posted on the investor relations page on our website.

PART I

Item 1. Business

Overview

We founded CrowdStrike in 2011 to reinvent security for the cloud era. When we started the company, cyberattackers had a decided, asymmetric advantage over existing security products. We turned the tables on the adversaries by taking a fundamentally new approach that leverages the network effects of crowdsourced data applied to modern technologies such as AI, cloud computing, and graph databases. Realizing that the nature of cybersecurity problems had changed but the solutions had not, we built our CrowdStrike Falcon platform to detect threats and stop breaches.

We believe we are defining a new category called the Security Cloud, with the power to transform the security industry much the same way the cloud has transformed the CRM, HR, and service management industries. With our Falcon platform, we created the first multi-tenant, cloud native, intelligent security solution capable of protecting workloads across on-premise, virtualized, and cloud-based environments running on a variety of endpoints such as laptops, desktops, servers, virtual machines, and IoT devices. We deliver comprehensive breach protection even against today's most sophisticated attacks on the endpoint, where the most valuable corporate data resides. Our Falcon platform is composed of two tightly integrated proprietary technologies: our easily deployed intelligent lightweight agent and our cloud-based, dynamic graph database called Threat Graph. Our solution benefits from crowdsourcing and economies of scale, which we believe enables our AI algorithms to be uniquely effective. We call this cloud-scale AI. Our single lightweight agent is installed on each endpoint and provides local detection and prevention capabilities while also intelligently collecting and streaming high fidelity data to our platform for real-time decision-making. Our Threat Graph processes, correlates, and analyzes this data in the cloud using a combination of AI and behavioral pattern-matching techniques. By analyzing and correlating information across our massive, crowdsourced dataset, we are able to deploy our AI algorithms at cloud-scale and build a more intelligent, effective solution to detect threats and stop breaches that on-premise or single instance cloud products cannot match. Today, we offer 11 cloud modules on our Falcon platform via a SaaS subscription-based model that spans multiple large security markets, including endpoint security, security and IT operations (including vulnerability management), and threat intelligence.

Organizations everywhere are becoming more distributed as they adopt the cloud, increase workforce mobility, and grow their number of connected devices. They are adding more workloads to a myriad of different endpoints beyond the traditional security perimeter, exposing an increasingly broad attack surface to adversaries. In addition, the sophistication of cyberattacks has increased, often coming from nation-states, well-funded criminal organizations, and hackers using advanced, easily obtained methods of attack. On a number of occasions, adversaries have launched devastating, destructive attacks that have caused significant business disruption and billions of dollars in cumulative losses. The architectural limitations of legacy security products, coupled with a dynamic and intensifying threat landscape, are creating the need for a fundamentally new approach to security.

Our unique approach starts with our single intelligent lightweight agent that enables frictionless deployment of our platform at scale. Our customers can rapidly adopt our technology across any type of workload running on a variety of endpoints. Our lightweight agent offloads computationally intensive tasks to the cloud, while retaining local detection and prevention capabilities that are necessary on the endpoint. The agent is nonintrusive to the end user and continues to protect the endpoint and track activity even when offline. The agent recommences transmitting data to our Falcon platform when the connection to the cloud has been reestablished. By utilizing a single agent, customers are able to leverage all the capabilities of our platform without burdening the endpoint with multiple agents.

Our lightweight agent intelligently streams high fidelity endpoint data to the cloud where Threat Graph provides a simple, flexible, and scalable way to model highly interconnected data sets. Threat Graph processes, correlates, and analyzes over three trillion endpoint-related events per week in real time and maintains an index of these events for future use. Threat Graph continuously looks for malicious activity by applying graph analytics and AI algorithms to the data streamed from the endpoints. Our multi-tenant architecture allows us to collect a broad array of high fidelity data about both potential attacks and benign behavioral patterns across our entire customer base, continuously enhancing our AI algorithms. This significantly increases the efficacy of our solution to stop breaches while reducing false positives.

We founded our company on the principle that the future of security would be driven by AI and that a cloud-native architecture would enable the collection of high fidelity data and scalability necessary for an effective solution. We call this cloud-scale AI. From the beginning, our strategy was focused on collecting data at scale, centrally storing such data in a singular model, and training our algorithms on these vast amounts of high fidelity data, which we believe is a fundamental differentiator from our competitors. Our cloud-scale AI means that the more data that is fed into our Falcon platform, the more intelligent Threat Graph becomes and the more our customers benefit, creating a powerful network effect that increases the overall value we provide. AI is revolutionizing many technology fields, including security solutions. To be truly effective, algorithms that enable AI depend on the quality and volume of data that trains them and the selection of the right differentiating features from that data. Our proprietary algorithms in Threat Graph identify events that may or may not be directly related, but together could indicate a threat that could otherwise remain undetected. Our cloud-scale algorithms make over 134 million indicator of attack decisions per minute. We are uniquely effective because we have more high fidelity data to train our AI models and more security expertise to guide our feature selection—all resulting in industry-leading efficacy and low false positives. Our rich set of continuously collected high fidelity endpoint data feeding our algorithms also enables us to use an active learning approach, where the models are continuously updated to fill in gaps identified in initial models and their performance is validated with this data prior to production use.

By leveraging a multi-tenant, cloud native solution, the data we analyze to stop breaches is both larger and more meaningful than the data from on-premise or single instance private cloud products. If Threat Graph discovers something in one customer environment, all customers benefit automatically and in real time. Taken together, our platform enables intelligent, dynamic automation at scale to detect threats and stop breaches.

We designed our Falcon platform with an open, interoperable, and highly extensible architecture. Because of our single data model, we only need to collect high fidelity endpoint data once from our agent, which we can use repeatedly for multiple use cases. Therefore, we can rapidly innovate, build, and deploy highly integrated modules to access additional market opportunities. We launched CrowdStrike Store, the first open cloud-based application platform for endpoint security and the industry's first unified security cloud ecosystem of trusted third-party applications. We also built a rich set of APIs that allows us to ingest third-party data into our Falcon platform and allows our customers to expand the functionality of their existing security systems by writing their own programs and accessing the data on our platform.

Our Falcon platform includes our OverWatch threat hunting cloud module that combines the human intelligence of our elite security experts with the power of Threat Graph. Because our world class team can see potential attacks across our entire customer base, their expertise is enhanced by their constant visibility into the threat landscape. We are able to keep this team extremely small and scalable by leveraging automation and our Threat Graph. OverWatch is a force multiplier that extends the capabilities and improves the productivity of our customers' security teams.

We offer our customers compelling business value that includes ease of adoption, rapid time-to-value, superior efficacy rates in detecting threats and preventing breaches, and reduced total cost of ownership by consolidating legacy, siloed security products in a single solution. We also allow thinly-stretched security organizations to automate previously manual tasks, freeing them to focus on their most important objectives. With the Falcon platform, organizations can transform how they combat threats, from slow, manual, and reactionary to fast, automated, and predictive, providing visibility across the entire threat lifecycle.

We primarily sell our platform and cloud modules through our direct sales team that leverages our network of channel partners to maximize effectiveness and scale. We amplify our sales presence by leveraging our technology alliance partners that can deliver, embed, or build applications with data and analytics from our Falcon platform. We are also enhancing our go-to-market strategy using a low-touch, trial-to-pay approach. In December 2017, we began to employ a trial-to-pay model in which we offer 15-day free trial access to Falcon Prevent, our next-generation antivirus module, to prospective customers directly from our website. In May 2018, we announced that Falcon Prevent was available for trial and purchase from the AWS Marketplace. We believe this approach enables a higher velocity of new customer acquisition and expansion, and extends our reach to customers of all sizes.

We have a low friction land-and-expand sales strategy. When customers deploy our Falcon platform, they can start with any number of cloud modules and we can activate additional cloud modules in real time on the same agent already deployed on the endpoint. Once customers experience the benefits of our Falcon platform, they often expand their adoption over time by adding more endpoints or purchasing additional modules. As of January 31, 2020, one-third of our customer base had adopted five or more modules. Our dollar-based net retention rate, which measures expansion in existing customers' subscriptions over a 12 month period, was 124% as of January 31, 2020, demonstrating the power of our land-and-expand strategy.

Some of the world's largest enterprises, government organizations, and high profile brands trust us to protect their business. As of January 31, 2020, we had 5,431 subscription customers worldwide, including 49 of the Fortune 100, 40 of the top 100 global companies, and 11 of the top 20 major banks. We began as a large enterprise solution, but the flexibility and scalability of our Falcon platform and enhanced go-to-market approach enable us to protect customers of any size—from hundreds of thousands of endpoints to as few as one. We have been recognized by numerous independent third-party analysts, including Gartner[2][3], Forrester, and IDC.

We have experienced significant growth, with total revenue increasing from $118.8 million for fiscal 2018 to $249.8 million for fiscal 2019, representing year-over-year growth of 110% and from $249.8 million for fiscal 2019 to $481.4 million for fiscal 2020, representing year-over-year growth of 93%. Subscription revenue grew from $92.6 million for fiscal 2018 to $219.4 million for fiscal 2019, a 137% increase, and from $219.4 million for fiscal 2019 to $436.3 million for fiscal 2020, a 99% increase. Our annual recurring revenue, or ARR, has grown from $141.3 million as of January 31, 2018, to $312.7 million as of January 31, 2019, a 121% increase, and from $312.7 million as of January 31, 2019 to $600.5 million as of January 31, 2020, a 92% increase. Our net loss increased from $135.5 million for fiscal 2018 to $140.1 million for fiscal 2019, to $141.8 million for fiscal 2020. We expect to continue to incur net losses for the foreseeable future as we continue to invest in our business, and our sales capabilities in particular, to address our large market opportunity.

Industry Background

There are a number of key trends that are driving the need for a new approach to security.

Cybersecurity Threats are Greater than Ever

Today's cybersecurity threat landscape is more dangerous than ever. Breaches are complex and often executed over multiple steps known in the industry as the threat lifecycle. The typical threat lifecycle starts with an initial exploit to enter a system, historically using malware, but increasingly using malware-free or fileless methods, to penetrate endpoints and establish a beachhead inside the corporate perimeter. Once inside, adversaries move laterally across the corporate environment where they collect credentials and escalate privileges enabling the typical adversary to download a larger, more destructive malware program or connect with an external control source. At this stage in the threat lifecycle, the adversary is able to encrypt, destroy, or silently exfiltrate sensitive data.

Increasingly, adversaries are well-trained, possess significant technological and human resources, and are highly deliberate and targeted in their attacks. Adversaries today range from militaries and intelligence services of well-funded nation-states to sophisticated criminal organizations who are motivated by financial gains to hackers leveraging readily available advanced techniques. These groups and individuals are responsible for many breaches that involve theft or holding hostage financial data, intellectual property, and trade secrets. These attacks are pervasive, targeting a broad range of industries including technology, transportation, healthcare, financial services, governments and political organizations, utility, retail, and public infrastructure. On a number of occasions, adversaries have launched devastating, destructive attacks that have caused significant business disruption and billions of dollars in cumulative losses. For example, cyber risk modeling firm Cyence Inc. estimated that the overall global economic costs incurred from the 2017 WannaCry attack were between $4 billion and $8 billion.

Proliferation of Workloads Expanding the Attack Surface

The rise of cloud computing, workforce mobility, and growth in connected devices has created a rapid expansion of workloads across endpoints and industries. According to a 2019 Cisco white paper, the number of connected devices is expected to be 28.5 billion by 2022, up from 18 billion in 2017. As a result, devices, applications, and data are highly distributed and diverse, challenging organizations to monitor and protect all of their workloads running on various endpoints. The adoption of many of these technologies and the resulting disappearance of the corporate perimeter have expanded the attack surface and left many organizations increasingly vulnerable to breach. Today, workloads running on endpoints, such as laptops and servers, are the primary targets in a security attack since they are vulnerable and frequently are repositories of valuable and sensitive data, including intellectual property, authentication credentials, personally identifiable information, financial information, and other digital assets. As new workloads are provisioned on emerging mobile and IoT devices, oftentimes residing outside of the corporate perimeter, increasingly more sensitive and mission critical data will be generated and stored on these endpoints as well. Attacks such as Shamoon, WannaCry and NotPetya have shown that destroying or locking data on a large portion of an enterprise's endpoints can cause widespread business disruption.

On-Premise Security Architectures are Constrained

On-premise products are siloed, lack integration, and have limited ability to collect, process, and analyze vast amounts of data—attributes that are required to be effective in today's increasingly dynamic threat landscape. Legacy vendors often deploy more agents to the endpoint as they layer on a patchwork of additional point product capabilities. This approach burdens endpoints by consuming additional storage space, memory, and processor capacity, degrading end user experience without providing effective security. In addition, integrating and maintaining numerous products, data repositories, and infrastructures across highly distributed enterprise environments is a costly and resource-intensive process for already thinly-staffed security teams.

Other Existing Security Products have Limitations

Legacy Signature-based Products. Signature-based products are designed to detect attacks that are already catalogued in a repository of previously identified threats but are not capable of preventing unknown threats or stopping associated breaches. These signatures, known as Indicators of Compromise, or IOCs, represent a reactive method of tracking cyberattacks. By the time IOCs are located, all they provide is evidence of compromise or breach that may have already resulted in substantial losses to the victim. If an attack vector is even slightly modified, a signature-based approach will no longer detect the attack and will fail to stop the breach. Many significant breaches seen in the last two decades have involved the failure of a legacy signature-based antivirus product to detect a previously unknown or modified version of a previously known attack.

Malware-focused Machine Learning Products. Traditionally, organizations have focused on protecting their networks and endpoints against malware-based attacks. These attacks involve malware built for the specific purpose of performing malicious activities, stealing data, or destroying systems. A malware-centric defensive approach will leave the organization vulnerable to attacks that do not leverage malware. According to data from our customer base indexed by Threat Graph, 51% of detections for the calendar year ended 2019 were not malware-based, but instead leveraged legitimate tools built into modern operating systems enabling attackers to accomplish their objectives without writing files to the endpoint, making them more difficult for a traditional antivirus product to detect.

Application Whitelisting Products. Application whitelisting products resort to an "always allow" or "always block" policy on an endpoint in order to allow or prevent processes from executing. Whitelisting relies in part on manually creating and maintaining a complex list of rules, burdening end users and IT organizations. In order to avoid these management challenges, IT organizations often create special exceptions to the whitelist that attackers leverage to compromise endpoints. Furthermore, fileless attacks can exploit legitimate whitelisted applications, compromising the integrity of the whitelisting product.

Network-centric Security Products. Traditional network security vendors have focused their products on perimeter-based protection. However, these approaches have decreased in relevance and effectiveness as employees and workplace devices have expanded beyond the firewall and the use of encrypted traffic has increased creating blind spots and vulnerabilities that attackers are able to exploit. As the number of endpoints proliferates, this layer of defense cannot adequately protect information-rich endpoints and workloads that are outside the corporate perimeter.

Bolt-on Cloud Products. Many on-premise vendors have introduced cloud offerings by putting their on-premise products in the cloud. Such single-tenant products were not designed to run in the cloud and therefore continue to be siloed, lack integration, and possess limited scalability to identify threats across their customer base in real time. In addition, such products are complex to deploy, difficult to scale, brittle to maintain, costly to own, and can be ineffective in stopping breaches. Any product that was originally designed for on-premise deployments and migrated to the cloud cannot by definition be a cloud native solution.

Creation of the Security Cloud

Over the last 15 years, cloud computing has revolutionized many industries in enterprise software and created significant shifts in market share away from incumbents with on-premise or single instance cloud offerings. The cloud has enabled organizations to cost-efficiently scale their compute and storage resources, accelerate innovation, eliminate ongoing maintenance and administrative costs, and consolidate previously disparate and siloed products. During this period, new data technologies also emerged leveraging the cloud to enable more data collection, improve data analysis, and share key insights to drive better business outcomes and make more informed decisions.

The purpose-built, cloud native leaders that began from scratch with multi-tenant architectures, single data models, and SaaS business models have defined entirely new categories such as CRM Cloud, HR Cloud, and Service Management Cloud. We believe we are doing the same for security.

An effective solution to address the modern cybersecurity threat landscape should combine multiple methods into an integrated, data-driven, and automated cloud-based platform in order to provide comprehensive breach protection across the entire threat lifecycle. Such a platform requires collecting, processing, analyzing, and correlating vast amounts of high fidelity endpoint events in the cloud. This platform needs to operate at web-scale, process events in real time, and benefit from the network effects of crowdsourced data to understand attacks that happen across millions of endpoints. We believe only a cloud native approach can address today's threat landscape.

We believe we are defining a new category called the Security Cloud.

Our Solution

With our Falcon platform, we created the first multi-tenant, cloud native, open, intelligent security solution capable of protecting workloads across on-premise, virtualized, and cloud-based environments running on a variety of endpoints such as laptops, desktops, servers, virtual machines, and IoT devices. Our solution consists of our single intelligent lightweight agent and our powerful and dynamic cloud-based database Threat Graph. These two tightly integrated proprietary technologies continually collect, process, analyze and correlate vast amounts of high fidelity data across the entire threat lifecycle using a combination of AI and behavioral pattern-matching techniques to stop breaches. We implement this approach by crowdsourcing data across our entire customer base and taking advantage of economies of scale, which we believe enables our AI algorithms to be uniquely effective. Our cloud-based AI is also automatically shared with every customer in our community in real time. We combine multiple methods of detection, prevention, and response to known and unknown threats as well as malware and malware-free techniques across the threat lifecycle.

Our Falcon platform integrates 11 cloud modules via a SaaS subscription-based model that spans multiple large security markets, including endpoint security, security and IT operations (including vulnerability management), and threat intelligence to deliver comprehensive breach protection even against today's most sophisticated attacks. Our single data model and open cloud architecture enable us and third-party partners to rapidly innovate, build, and deploy new cloud modules to provide our customers with additional functionality across a myriad of use cases.

We designed our platform to be rapidly deployable, easy to use, and extensible, with the ability to consolidate point security products that have historically led to data siloes and agent sprawl, into one comprehensive and integrated solution. Our platform allows our customers' thinly-staffed security organizations to spend less time and fewer resources provisioning hardware, configuring supporting software systems, and performing ongoing maintenance work, freeing them to focus on their most important objectives. We aim to transform how organizations combat threats from slow, manual, and reactionary to fast, automated, and predictive.

Our cloud modules currently span the following categories:

- **Endpoint Security:** Our next-generation antivirus, EDR, device control, and firewall management modules combine machine learning and advanced behavioral techniques to defend against malware and malware-free attacks, allow for continuous and comprehensive visibility and analysis of endpoint activity, and provide administrators with visibility and granular control across USB peripheral devices and host firewall policies.

- **Security and IT Operations:** We offer modules addressing IT hygiene, scan-less vulnerability management, a turnkey response and remediation solution, as well as a threat hunting solution that is powered by a team of elite security experts leveraging Threat Graph.

- **Threat Intelligence:** Our threat research, malware search engine, and malware analysis modules provide automated assistance to review detected threats, conduct malware research and detonate suspicious files securely.

We launched the CrowdStrike Store, which is the first open cloud-based application Platform as a Service, or PaaS, for cybersecurity. The CrowdStrike Store introduces a unified Security Cloud ecosystem of trusted partners and applications to our customers. The CrowdStrike Store allows customers to rapidly and easily discover, try, and purchase applications from both trusted partners and CrowdStrike without needing to deploy and manage additional agents and infrastructures or go through lengthy sales, integration, or implementation processes. The CrowdStrike Store allows partners to bring new security applications to the market and efficiently target our customer base. Leveraging our Falcon platform, partners can develop applications that address our customers' needs without having to develop and support their own agents, invest in underlying infrastructure, or hire additional sales personnel. We believe the CrowdStrike Store will cultivate a rich, innovative, and trusted ecosystem between our partners and customers, increasing the overall value of our Falcon platform.

Key Benefits of Our Solution

- ***The Power of the Crowd.*** Our crowdsourced data enables all of our customers to benefit from contributing to Threat Graph. As more high fidelity data is fed into our Falcon platform, there is more data to train our AI models with, increasing the overall efficacy of our Falcon platform. This benefits our customers and supports our efforts to gain more customers, creating a powerful network effect. Threat Graph can then learn and identify warning signs once and rapidly deliver protection to every customer in our community. Further, our AI algorithms are more effective because they are trained on such a broad and representative set of data that captures information about potential attacks throughout the entire threat lifecycle across our customer base.

- ***High Efficacy with Low False Positives.*** Our Falcon platform collects, processes, correlates, and analyzes high fidelity data on both real-world attacks and benign behavioral patterns to continually train and enhance our algorithms resulting in industry-leading threat detection and low false positive rates.

- ***Consolidation of Siloed Products.*** Integrating and maintaining numerous products, data and infrastructures across highly distributed enterprise environments leaves blind spots that hackers can exploit and is a costly and resource-intensive process. Our integrated platform unifies cloud modules addressing next-generation antivirus, EDR, device control, host firewall management, vulnerability management, IT hygiene, threat hunting, and automated threat intelligence. Our platform enables our customers to reduce or streamline their siloed and layered security products, simplifying operations while providing a comprehensive solution.

- ***Consolidation of Agents.*** We provide robust and diverse functionality through a single intelligent lightweight agent. Legacy vendors' agents were designed to be single purpose, thus they often deploy multiple agents to the endpoint as they layer additional point product capabilities on top of their initial offering. This legacy approach burdens endpoints by consuming additional storage space, memory, and processor capacity, degrading the end user experience. All of our cloud modules are powered by a single intelligent agent, allowing customers to consolidate and remove numerous agents from their infrastructure and restore endpoint performance. Because we collect data once from our agent and use it across multiple use cases, the Falcon platform can offer a wide range of functionality without burdening the endpoint.

- ***Rapid Time to Value.*** On-premise security solutions take time to install, configure, deploy, and maintain. We streamline the deployment process by providing cloud-delivered security with protection policies that work from day one, eliminating lengthy implementation periods and professional services engagements. Moreover, once a customer deploys our lightweight agent on their endpoints, we can activate additional cloud modules in real time.

- ***Constant Protection Anywhere.*** Our cloud-based model allows us to secure any type of workload across a variety of customer endpoints such as laptops, desktops, servers, virtual machines, and IoT devices. In addition, once our agent is deployed on an endpoint it continues to protect the endpoint and track activity even when offline.

- ***Elite Security Team as a Force Multiplier.*** Our OverWatch threat hunting cloud module combines world class human intelligence from our elite security experts with the power of Threat Graph. OverWatch is a force multiplier that extends the capabilities and improves the productivity of our customers' security teams. Because our world class team can see attacks across our entire customer base, their expertise is enhanced by their constant visibility into the threat landscape.

- ***Bridging the Security Skills Gap through Automation.*** Our solution automates certain previously manual tasks, freeing up personnel to focus on their most important objectives. Our Falcon Complete module provides a turnkey solution that combines endpoint security with remediation and response capabilities.

- ***Lowering Total Cost of Ownership.*** Our cloud-based platform eliminates our customers' need for initial or ongoing purchases of hardware and does not require their personnel to configure, implement or integrate disparate point products. Additionally, our comprehensive platform reduces overall personnel costs associated with ongoing maintenance, as well as the need for software patches and upgrades for separate products.

In addition to developing the first multi-tenant, cloud native security platform protecting workloads running on any endpoint, we have been recognized by multiple third-party industry analysts:

- CrowdStrike has an overall rating of 4.9 out of 5, the highest rating of all among vendors named a November 2019 Gartner Customer's Choice for the endpoint protection platforms market, based on 188 reviews, as of 31 October 2019.[1]

- CrowdStrike Positioned as a Leader in the 2019 Gartner Magic Quadrant for Endpoint Protection Platforms and Furthest for Completeness of Vision in Entire Magic Quadrant.[2]

- CrowdStrike Receives Highest Score for "Lean Forward" Organizations (Type A Use Cases) in Gartner's 2019 Critical Capabilities for Endpoint Protection Platforms Report.[3]

- CrowdStrike Named a Leader in the 2019 Forrester Waves for Endpoint Security Suites.[4]

- Forrester Names CrowdStrike a Leader in the 2019 Wave for Cybersecurity Incident Response Services.[5]

Growth Strategy

Key elements of our growth strategy include:

- ***Grow Our Customer Base by Replacing Legacy and Other Endpoint Security Products.*** Given the limitations of existing legacy and other endpoint security products, many organizations are replacing their existing legacy and other endpoint security products with our Falcon platform. We grew our subscription customer base by 2,915 customers from 2,516 at January 31, 2019, to 5,431 at January 31, 2020, representing a 116% increase. We will continue to invest in customer acquisition programs, including our channel partnerships and new programs, like our free trial program of Falcon Prevent that is easily downloaded from our website and AWS Marketplace.

- ***Further Penetrate Existing Customers.*** Our growth will depend in part on our ability to continue to expand our relationships with our customers by deploying on additional endpoints in their environment and cross selling more cloud modules. When customers deploy our lightweight agent, they can easily add additional cloud modules. We also offer in-application trial usage of additional modules to cross-sell to existing customers. While some new customers initially deploy our Falcon platform broadly across the organization, others elect to deploy only in selected business units and later deploy on additional endpoints and subscribe to additional modules. Over time, we seek to deploy our solution enterprise wide for all customers. The power of our land-and-expand strategy is evidenced by our 124% dollar-based net retention rate as of January 31, 2020.

- ***Leverage our Falcon Platform to Enter New Markets.*** Because we leverage a single data model and open cloud architecture, we are uniquely positioned to continue innovating and rapidly deploying new cloud modules on our platform. For example, since 2016, we have launched eight new cloud modules on our platform. One of these new cloud modules is Falcon Discover, which includes use cases outside of security, such as application license management, AWS spend analysis, and asset inventory. Because our lightweight agent collects diverse endpoint data once for repeated use, we can expand our addressable market by rapidly adding new cloud modules that leverage this data. We intend to continue to develop new cloud modules for broader endpoint use cases.

---

(1) Gartner Peer Insights 'Voice of the Customer': Endpoint Protection Platforms (Peer Contributors, Published 10 December 2019).
(2) Gartner Magic Quadrant for Endpoint Protection Platforms (Peter Firstbrook, Dionisio Zumerle, et al., Published 20 August 2019).
(3) Gartner Critical Capabilities for Endpoint Protection Platforms (Peter Firstbrook, Dionisio Zumerle, et al., Published 17 October 2019).
(4) The Forrester Wave™: Endpoint Security Suites, Q3 2019 [forrester.com]
(5) The Forrester Wave™: Cybersecurity Incident Response Services, Q1 2019 [forrester.com]

- ***Broaden Reach into New Customer Segments.*** While we initially targeted large sophisticated enterprises, we have expanded our go-to-market efforts to include customers of all sizes with a dedicated inside sales team focused on smaller organizations. We also released Falcon Complete in 2018, our turnkey solution that combines the most popular cloud modules of our Falcon platform with our remediation and response capabilities, to create a solution for customers with limited or no internal security expertise. As a result, we can sell our Falcon platform to the largest enterprises or smallest businesses with any level of security sophistication and budget. We continue to look for new ways to broaden our reach into new customer segments.

- ***Extend our Falcon Platform and Ecosystem.*** We designed our architecture to be open, interoperable, and highly extensible. We launched the CrowdStrike Store, the first open cloud-based application PaaS for cybersecurity, which provides an ecosystem of trusted partners and applications for our customers. In the future we plan to continue investing in the CrowdStrike Store to empower our partners by making it easier to build applications and to enable our customers to more easily discover, try, and purchase additional cloud modules from both trusted partners and us.

- ***Broaden Reach into the U.S. Federal Government Vertical.*** We are investing in the acquisition of customers in the U.S. federal government vertical. Our platform is authorized by several federal agencies via the Federal Risk and Authorization Management Program (“FedRAMP”). To further meet the compliance demands of the federal government, customers can elect to deploy the Falcon platform in the AWS GovCloud. We have also successfully been embedded into several strategic government-wide cybersecurity programs and contracts, such as the Department of Homeland Security’s Continuous Diagnostics and Mitigation Approved Products List, which serves to provide federal agencies with innovative security tools.

- ***Expand Our International Footprint.*** We are expanding our international operations and intend to invest globally to broaden our international footprint. We grew our international revenue from $57.8 million for fiscal 2019, to $124.9 million for fiscal 2020, representing an increase of 116%. We intend to grow our international customer base by increasing our investments in our overseas operations, including adding headcount in Europe, the Middle East, Asia-Pacific, and Japan and establishing overseas data centers.

Falcon Platform

Our Falcon platform is composed of two tightly integrated proprietary technologies: our lightweight agent and Threat Graph. The Falcon platform offers a unified set of cloud-delivered technologies that power a wide range of products including next-generation antivirus, EDR, device control, host firewall management, managed threat hunting, IT hygiene, vulnerability management, and threat intelligence. We can rapidly and cost effectively develop and deliver additional cloud modules on our Falcon platform, and are expanding options for our new customers to test modules on a trial basis and in-application trials for existing customers. Our expanding set of open APIs allows customers and partners to build their own capabilities on top of the Falcon platform. With our Falcon platform, we can crowdsource data and deliver a variety of cloud modules to detect and stop breaches.

Our Cloud Modules

Our cloud modules integrate seamlessly with the Falcon platform to provide functionality in the endpoint security, security and IT operations (including vulnerability management), and threat intelligence markets. Today, our cloud modules include:

Endpoint Security

Falcon Prevent—Next-Generation Antivirus. Falcon Prevent provides next-generation antivirus capabilities to customers, delivering comprehensive protection to defend customers against both malware and fileless attacks. Falcon Prevent incorporates identification of known malware, machine learning for unknown malware, exploit blocking and advanced behavioral techniques to allow organizations to replace their existing legacy antivirus products.

Falcon Insight—Endpoint Detection and Response. Falcon Insight provides EDR capabilities to customers, allowing for continuous and comprehensive visibility to notify our customers what is happening on their endpoints in real time. Falcon Insight records and automatically analyzes activity on the endpoint to provide deep visibility, fast and powerful search capabilities, and comprehensive context and data needed to enable proactive threat hunting and forensic analysis.

Falcon Device Control. Falcon Device Control provides administrators with a high degree of visibility and granular control of USB peripheral devices.

Falcon Firewall Management. Falcon Firewall Management provides centralized management of the firewall capabilities native to the host operating system, allowing customers to create, enforce, and maintain host firewall policies.

Security and IT Operations

Falcon OverWatch—Threat Hunting. Falcon OverWatch is a threat hunting solution that consists of an elite team of dedicated security experts who work with the power of Threat Graph to proactively identify threats for our customers. The global Falcon OverWatch team seamlessly augments customers' in-house security resources to identify and investigate suspicious and malicious activities.

Falcon Discover—IT Hygiene. Falcon Discover identifies rogue systems and applications in our customers' networks, and monitors the use of privileged user accounts anywhere in a customer's environments. The module also enables use cases outside of security, such as application license management, AWS spend analysis, and asset inventory.

Falcon Complete—Turnkey Security Solution. Falcon Complete provides comprehensive monitoring, management, response, and remediation solution to our customers. It is backed by an underwritten limited warranty policy for breaches. Falcon Complete is designed to bring enterprise level security to companies that may lack enterprise level resources.

Falcon Spotlight—Vulnerability Management. Falcon Spotlight identifies vulnerabilities in real time that exist across our customer endpoints. The module does not depend on scanning systems for vulnerabilities, a process that can often take days or weeks for an enterprise, and instead leverages data already collected by our agent to provide instant and accurate real-time visibility into an enterprise's vulnerability exposure.

Threat Intelligence

Falcon X—Threat Intelligence. Falcon X integrates threat intelligence into endpoint protection. It provides automated analysis of detected threats to provide insight into the capabilities, motivation and attribution of attacks. It also extends protection against detected threats and their variants into other security solutions deployed within the organization for defense-in-depth coverage by delivering actionable intelligence and custom IOCs. In addition to the standard Falcon X offering, we also offer premium options that include global threat research and reporting from our team of intelligence analysts.

Falcon Search Engine—Malware Search. Falcon Search Engine enables customers to search in real time across approximately 800 terabytes of malware collected in our Falcon platform and indexed by our proprietary binary data indexing technology. Results are enriched with threat intelligence, enabling rapid analysis and giving security analysts and threat researchers the advantage they need to stay ahead of the adversary.

Falcon Sandbox—Malware Analysis. Falcon Sandbox allows our customers to analyze unknown files for malicious behavior by detonating them safely in virtual machines. Sandbox provides visibility into malware behavior, automating in-depth file and memory analysis for faster threat protection and response.

Technology

We have designed an innovative architecture from the ground up to overcome the limitations of existing security products and deliver cloud-based solutions. The key design principles of our Falcon platform include:

Cloud Native Architecture. We built the Falcon platform entirely in and for the cloud, enabling collection and analysis of a massive, crowdsourced dataset from all of our customers to stop breaches. Our platform is designed to be redundant, resilient, and high performing. Delivering security from the cloud enables agility, ease of use, and protection for workloads on a variety of endpoints wherever they are located. As customer adoption grows, the network effect of each additional endpoint added to the Falcon platform will amplify the breadth and depth of our dataset and intelligence.

Falcon Agent. We designed an intelligent lightweight agent that is installed on each endpoint. These agents incorporate identification and prevention of known malware, machine learning for unknown malware, exploit blocking and advanced behavioral techniques, to protect workloads across all endpoints while capturing and recording high fidelity endpoint data. Our agents continue to protect workloads running on endpoints even when offline. The agent recommences transmitting data to our Falcon platform when the connection to the cloud has been re-established. Our lightweight agent occupies less than 35 megabytes of storage space on the endpoint and is built to support Windows, Mac and Linux operating systems. The agent is hardened against attacks and uses a combination of kernel and user-mode modules to collect high fidelity endpoint events as they take place on a system. It correlates these events with a local situational model on the endpoint, analyzes via agent-based machine learning models and is capable of taking a variety of preventative and responsive actions on the endpoint, either automatically or via human control. Events are streamed by the agent to the cloud in real time in order to be further analyzed in the Threat Graph, where additional correlation and AI algorithms can be applied. The agent is also capable of being remotely reconfigured in real time based on analytics in our cloud platform in order to collect and analyze different events or take other actions.

Threat Graph. Threat Graph is a proprietary, powerful, and dynamic graph database. Threat Graph continually looks for malicious activity by combining AI with behavioral pattern-matching techniques to look beyond file features and track the behaviors of every software program executed on an endpoint in a customer's network environment. By applying powerful graph analytics and AI algorithms to cybersecurity, we enrich the data collected with our proprietary and third-party threat intelligence, such as adversary capabilities, motivations, attributions, and threat indicators. Threat Graph processes, correlates, and analyzes over three trillion endpoint-related events across our global customer community per week in real time, making 134 million indicator of attack decisions per minute, and indexing petabytes of historical data for exploration and search. The graph data model allows the AI algorithms to identify relationships between events that are not directly related but which could indicate an attack that would otherwise remain undetected. We believe that our AI algorithms are advantaged by the rich dataset that we have to train them. Threat Graph provides customers with complete real time and historical visibility and insight into events occurring on their endpoints for hunting and searching.

Threat Graph also provides query and hunting capability over the full set of high fidelity events collected in the graph. This correlated data, natively represented in a graph structure, enables new products and cloud modules to be created rapidly since the platform provides the visibility, collection, correlation and actions over data as reusable building blocks. This collect-once, use repeatedly approach is the reason why we have been able to deliver new cloud modules covering IT hygiene and vulnerability management quickly and enables us to continue expanding the Falcon platform rapidly in the future.

High Fidelity Data and Smart Filtering. Absent an intelligent agent, a typical endpoint generates approximately 100 gigabytes of unfiltered system event data per day. After this data is compressed, or data shaped, a typical enterprise organization with 100,000 endpoints would generate over one petabyte of endpoint events daily. The presence of a local graph model in our agent enables it to track the state of the machine in real time, perform rapid machine learning and behavioral analysis, and provide efficient event streaming to the cloud. We call this "smart filtering." This allows us to keep overhead on the endpoint to a minimum, dramatically reduce the bandwidth required for agent-cloud communication, efficiently process large volumes of data, and separate the signal from the noise. The Falcon agent collects and analyzes unfiltered data with local machine learning and behavioral algorithms on the endpoint but only streams high fidelity endpoint events to the cloud to only send what is necessary for detection, prevention and investigation of attacks. This smart filtering architecture allows us to reduce network load for customers to approximately five megabytes per endpoint per day. The Falcon platform collects an array of high fidelity endpoint events, such as code execution, network, file system and user activity. This information can be used for a variety of use cases beyond security, such as IT operations and vulnerability management.

Management Interface. The Falcon platform management interface gives customers an intuitive and informative view of their complete environment, with timely alerts and detailed search capabilities. We provide real-time endpoint visibility to allow customers to review details and respond to threats instantly and effectively, from anywhere, and maintain an index of these events for future use. We also provide access to Falcon X, streamlining and simplifying the forensics analysis process.

APIs and Integrations. Our Falcon platform and architecture is built around a rich set of APIs that efficiently and effectively complement and expand a customer's existing security infrastructure, such as security information event management, or SIEMs, and intrusion prevention systems and intrusion detection systems. The platform includes streaming, query and batch APIs allowing customers and partners to integrate a variety of solutions seamlessly. It also includes rich management and control APIs. The platform allows third parties to develop additional cloud modules and features, furthering the power of the Falcon platform. By connecting existing security systems to the Falcon platform, we allow our customers to further leverage their security investments. For example, our strategic partner, Zscaler, used our APIs to develop a joint solution that allows our common customers to leverage Threat Graph and automated policy enforcement to improve security across networks and endpoints.

Data Center Operations

We have data center co-location facilities throughout the United States and in Germany, and we also utilize AWS data centers located in the United States for our storage needs and to help deliver our solution. Our technology infrastructure, combined with select use of AWS resources, provides us with a distributed and scalable architecture on a global scale.

Professional Services

In addition to our Falcon platform and cloud modules, we also offer incident response services and proactive services to organizations that have experienced a breach or are assessing their security posture.

- *Incident Response Services.* Our incident response services typically begin by deploying our lightweight agent to a customer's endpoints to provide comprehensive visibility and determine if an attacker is currently in the environment, what assets have been compromised, and how much damage has been done. We also provide customized remediation planning by providing a strategy to eject attackers out of the network, lock down credentials from further use, and ensure adversaries stay out. In addition to providing valuable breach remediation to our customers, our incident response services also act as a strong lead generation engine for our Falcon platform and cloud modules. After experiencing the benefits of our platform firsthand, many of our incident response customers become subscription customers. Among organizations who first became a customer after February 1, 2017, for each $1.00 spent by those customers on their initial engagement for our incident response or proactive services, as of January 31, 2020, we derived an average of $3.73 in ARR from those subscription contracts.

- *Proactive Services.* Our proactive security services include cybersecurity maturity assessment, penetration testing, and other customized offerings that leverage our Falcon platform and cloud modules. These services are designed to evaluate our customers' security profile so they can identify areas of vulnerability, secure their network and improve their response if their defenses are breached.

Customers

Some of the world's largest enterprises, government organizations, and high profile brands trust us to protect their business. As of January 31, 2020, we had 5,431 subscription customers worldwide, including 49 of the Fortune 100, 40 of the top 100 global companies, and 11 of the top 20 major banks. Historically, we and our channel partners have primarily sold to large organizations, but have increasingly focused on selling to small and medium-sized businesses, particularly through our trial-to-pay model. We engage our customers through our global customer and technical advisory boards in which we solicit feedback from our customers on a regular basis allowing us to understand their evolving needs. We have used this feedback to develop new cloud modules, such as Falcon Insight, and we intend to continue to develop new cloud modules based on our customer's feedback. Our business is not dependent on any particular end customer.

Sales and Marketing

Our sales and marketing organizations work together closely to drive market awareness, build a strong sales pipeline and cultivate customer relationships to drive revenue growth.

Sales

We primarily sell subscriptions to our Falcon platform and cloud modules through our direct sales team, which is comprised of field sales and inside sales professionals who are segmented by a customer's number of endpoints. Our sales team also leverages our network of channel partners. We also use our sales team to identify current customers who may be interested in free trials of additional cloud modules, which serves as a powerful driver of our land and expand model. By segmenting our sales teams, we can deploy a low-touch sales model that efficiently identifies prospective customers.

Marketing

Our marketing organization is focused on building our brand reputation, increasing the awareness and reputation of our platform, and driving customer demand. As part of these efforts, we deliver targeted content to demonstrate thought leadership in the security industry, including speaking engagements with the security industry's foremost organizations to provide expert advice, issuing regular reports on the state of the industry, educating the public about the cybersecurity threats, and identifying and naming adversary groups. We also engage in paid media, web marketing, industry and trade conferences, including our annual Fal.Con conference, analyst engagements, producing whitepapers, demand generation via digital and web, and targeted displacement campaigns. We employ a wide range of digital programs, including search engine marketing, online and social media initiatives, and content syndication to increase traffic to our website and encourage new customers to sign up for a 15-day free trial of the Falcon platform. Additionally, we engage in joint marketing activities with our channel and technology alliance partners. In December 2017, we began to employ a trial-to-pay model in which we offer 15-day free trial access to Falcon Prevent to prospective customers directly from our website. In May 2018, we announced that Falcon Prevent was available for trial and purchase from the AWS Marketplace.

Partnership Ecosystem

We work with a number of technology alliance partners to design go-to-market strategies that combine our platform with products or services provided by our technology alliance partners. These partner integrations deliver more secure solutions and an improved end user experience to their customers. Our technology alliance partnerships focus on security analytics, network and infrastructure security, threat platforms and orchestration, and automation. We launched the CrowdStrike Store, the first open cloud-based application PaaS for cybersecurity and the industry's first unified security cloud ecosystem of trusted third-party applications. In addition, we recently announced the launch of Falcon for Amazon Web Services (AWS). Available in the AWS Marketplace, Falcon for AWS allows customers to easily purchase and take advantage of the metered billing (pay-as-you-go) pricing option to scale their consumption as their business needs change.

Research and Development

Our research and development organization is responsible for the design, architecture, operation and quality of our cloud native Falcon platform. In addition to improving on our features, functionality and scalability, this organization works closely with our cloud operations team to ensure that our platform is available, reliable, and stable.

Our success is a result of our continuous drive for innovation. Our internal team of security experts, researchers, intelligence analysts, and threat hunters continuously analyzes the evolving global threat landscape to develop products that defend against today's most sophisticated and stealthy attacks and reports on emerging security issues. We invest substantial resources in research and development to enhance our Falcon platform, and develop new cloud modules, features and functionality. We believe timely development of new, and enhancement of our, products, services, and features is essential to maintaining our competitive position. We work closely with our customers and channel partners to gain valuable insight into their security management practices to assist us in designing new cloud modules and features that extend the capability of our platform. Our technical staff monitors and tests our software on a regular basis, and we also make our Falcon platform available for third-party validation. We also maintain a regular release process to update and enhance our existing solutions. In addition, we engage security consulting firms to perform periodic vulnerability analysis of our solutions.

Our research and development leadership team is located in Seattle, Washington and Sunnyvale, California, and we also maintain research and development center in Irvine, California. We plan to continue to dedicate significant resources to research and development.

Competition

The market for our services is intensely competitive and characterized by rapid changes in technology, customer requirements, and industry standards and by frequent new product and service offerings and improvements. We compete with an array of established and emerging security solution vendors. Conditions in our market could change rapidly and significantly as a result of technological advancements, partnerships, or acquisitions by our competitors or continuing market consolidation. With the introduction of new technologies and market entrants, we expect the competitive environment to remain intense. Our competitors include the following by general category:

- legacy antivirus product providers, such as McAfee, LLC., Broadcom Inc.'s Symantec Enterprise division, and Microsoft Corporation, who offer a broad range of approaches and solutions with traditional antivirus and signature-based protection;
- alternative endpoint security providers, such as BlackBerry Cylance and VMware Carbon Black, who offer point products based on malware-only or application whitelisting techniques; and
- network security vendors, such as Palo Alto Networks, Inc. and FireEye, Inc., who are supplementing their core perimeter-based offerings with endpoint security solutions.

We compete on the basis of a number of factors, including but not limited to our:

- ability to identify security threats and prevent security breaches;
- ability to integrate with other participants in the security ecosystem;
- time to value, price, and total cost of ownership;
- brand awareness, reputation, and trust in the provider's services;
- strength of sales, marketing, and channel partner relationships; and
- customer support, incident response, and proactive services.

Although certain of our competitors enjoy greater resources, recognition, deeper customer relationships, larger existing customer bases, or more mature intellectual property portfolios, we believe that we compete favorably with respect to these factors and that we are well positioned as a leading provider of endpoint security solutions.

Intellectual Property

We believe that our intellectual property rights are valuable and important to our business. We rely on trademarks, patents, copyrights, trade secrets, license agreements, intellectual property assignment agreements, confidentiality procedures, non-disclosure agreements, and employee non-disclosure and invention assignment agreements to establish and protect our proprietary rights. Though we rely in part upon these legal and contractual protections, we believe that factors such as the skills and ingenuity of our employees and the functionality and frequent enhancements to our solutions are larger contributors to our success in the marketplace.

As of January 31, 2020, we had 26 issued patents in the United States, 15 issued patents in a number of international jurisdictions, 41 patent applications (including three provisional applications and five continuation/divisional applications) pending in the United States and 46 patent applications pending internationally. Our issued patents expire between 2032 and 2037, and seven of our pending patent applications have been allowed. These patents and patent applications seek to protect our proprietary inventions relevant to our business. We intend to pursue additional intellectual property protection to the extent we believe it would be beneficial and cost-effective. Despite our efforts to protect our intellectual property rights, they may not be respected in the future or may be invalidated, circumvented, or challenged. Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation based on allegations of patent infringement or other violations of intellectual property rights. We believe that competitors will try to develop products that are similar to ours and that may infringe our intellectual property rights. Our competitors or other third-parties may also claim that our security platform and other solutions infringe their intellectual property rights. In particular, some companies in our industry have extensive patent portfolios. From time to time, third parties have in the past and may in the future assert claims of infringement, misappropriation and other violations of intellectual property rights against us or our customers, with whom our agreements may obligate us to indemnify against these claims. Successful claims of infringement by a third party could prevent us from offering certain products or features, require us to develop alternate, non-infringing technology, which could require significant time and during which we could be unable to continue to offer our affected products or solutions, require us to obtain a license, which may not be available on reasonable terms or at all, or force us to pay substantial damages, royalties, or other fees. For additional information, see the section titled “Risk Factors—Risks Related to Our Business—The success of our business depends in part on our ability to protect and enforce our intellectual property rights.”

Backlog

We enter into both single and multi-year subscription contracts for our solutions. We generally invoice the entire amount at contract signing prior to commencement of subscription period. Until such time as these amounts are invoiced, they are not recorded in deferred revenue or elsewhere in our consolidated financial statements, and are considered by us to be backlog. As of January 31, 2020 and January 31, 2019, we had backlog of approximately $192.8 million and $55.6 million, respectively. Of the backlog of $192.8 million as of January 31, 2020, approximately $56.6 million is not reasonably expected to be billed in fiscal 2021. We expect backlog will change from period to period for several reasons, including the timing and duration of customer agreements, varying billing cycles of subscription agreements, and the timing and duration of customer renewals. Because revenue for any period is a function of revenue recognized from deferred revenue under contracts in existence at the beginning of the period, as well as contract renewals and new customer contracts during the period, backlog at the beginning of any period is not necessarily indicative of future revenue performance. We do not utilize backlog as a key management metric internally.

Seasonality

Given the annual budget approval process of many of our customers, we see seasonal patterns in our business. We expect these seasonal variations to become more pronounced in future periods, with net new ARR generation being greater in the second half of the year, particularly in the fourth quarter, as compared to the first half of the year. In addition, we also experience seasonality in our operating margin, with a lower margin in the first half of our fiscal year due to a step up in costs for payroll taxes, new hires, and annual sales and marketing events. This also impacts the timing of operating cash flow and free cash flow.

Employees

As of January 31, 2020, we had 2,309 full-time employees. We also engage temporary employees and consultants as needed to support our operations. None of our employees in the United States are represented by a labor union or subject to a collective bargaining agreement. In certain countries in which we operate, we are subject to, and comply with, local labor law requirements which may automatically make our employees subject to industry-wide collective bargaining agreements. We may be required to comply with the terms of these collective bargaining agreements. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Corporate Information

CrowdStrike, Inc. was incorporated in the state of Delaware in August 2011. We then incorporated CrowdStrike Holdings, Inc. in the state of Delaware in November 2011, which acquired all shares of CrowdStrike, Inc. held by Warburg Pincus Private Equity X, L.P. and Warburg Pincus X Partners, L.P., or Warburg Pincus, such that CrowdStrike, Inc. became our wholly-owned subsidiary. Our principal executive offices are located at 150 Mathilda Place, Suite 300, Sunnyvale, California 94086, and our telephone number is (888) 512-8906. Our website address is www.crowdstrike.com. Information contained on, or that can be accessed through, our website does not constitute part of this Annual Report on Form 10-K.

Item 1A. Risk Factors

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

Risks Related to Our Business and Industry

We have experienced rapid growth in recent periods, and if we do not manage our future growth, our business and results of operations will be adversely affected.

We have experienced rapid revenue growth in recent periods and we expect to continue to invest broadly across our organization to support our growth. For example, our headcount grew from 324 employees as of January 31, 2016 to 2,309 employees as of January 31, 2020. Although we have experienced rapid growth historically, we may not sustain our current growth rates, nor can we assure you that our investments to support our growth will be successful. The growth and expansion of our business will require us to invest significant financial and operational resources and the continuous dedication of our management team. We have encountered and will continue to encounter risks and difficulties frequently experienced by rapidly growing companies in evolving industries, including market acceptance of our Falcon platform, adding new customers, intense competition, and our ability to manage our costs and operating expenses. Our future success will depend in part on our ability to manage our growth effectively, which will require us to, among other things:

- effectively attract, integrate, and retain a large number of new employees, particularly members of our sales and marketing and research and development teams;
- further improve our Falcon platform, including our cloud modules, and IT infrastructure, including expanding and optimizing our data centers, to support our business needs;
- enhance our information and communication systems to ensure that our employees and offices around the world are well coordinated and can effectively communicate with each other and our growing base of channel partners and customers; and
- improve our financial, management, and compliance systems and controls.

If we fail to achieve these objectives effectively, our ability to manage our expected growth, ensure uninterrupted operation of our Falcon platform and key business systems, and comply with the rules and regulations applicable to our business could be impaired. Additionally, the quality of our platform and services could suffer and we may not be able to adequately address competitive challenges. Any of the foregoing could adversely affect our business, results of operations, and financial condition.

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

We have incurred net losses in all periods since our inception, and we may not achieve or maintain profitability in the future. We experienced net losses of $135.5 million, $140.1 million, and $141.8 million for fiscal 2018, fiscal 2019, and fiscal 2020, respectively. As of January 31, 2020, we had an accumulated deficit of $637.5 million. While we have experienced significant growth in revenue in recent periods, we cannot assure you when or whether we will reach or maintain profitability. We also expect our operating expenses to increase in the future as we continue to invest for our future growth, which will negatively affect our results of operations if our total revenue does not increase. We cannot assure you that these investments will result in substantial increases in our total revenue or improvements in our results of operations. In addition to the anticipated costs to grow our business, we also expect to incur significant additional legal, accounting, and other expenses as a newly public company. Any failure to increase our revenue as we invest in our business or to manage our costs could prevent us from achieving or maintaining profitability or positive cash flow.

Our limited operating history makes it difficult to evaluate our current business and future prospects, and may increase the risk of your investment.

We were founded in November 2011 and launched our first endpoint security solution in 2013. Our limited operating history makes it difficult to evaluate our current business, future prospects, and other trends, including our ability to plan for and model future growth. We have encountered and will continue to encounter risks, uncertainties, and difficulties frequently experienced by rapidly growing companies in evolving industries, including our ability to achieve broad market acceptance of cloud-based, SaaS-delivered endpoint security solutions and our Falcon platform, attract additional customers, grow partnerships, compete effectively, build and maintain effective compliance programs, and manage increasing expenses as we continue to invest in our business. If we do not address these risks, uncertainties, and difficulties successfully, our business, and results of operations will be harmed. Further, we have limited historical financial data, and we operate in a rapidly evolving market. As a result, 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.

If organizations do not adopt cloud-based SaaS-delivered endpoint security solutions, our ability to grow our business and results of operations may be adversely affected.

We believe our future success will depend in large part on the growth, if any, in the market for cloud-based SaaS-delivered endpoint security solutions. The use of SaaS solutions to manage and automate security and IT operations is at an early stage and rapidly evolving. As such, it is difficult to predict its potential growth, if any, customer adoption and retention rates, customer demand for our solutions, or the success of existing competitive products. Any expansion in our market depends on a number of factors, including the cost, performance, and perceived value associated with our solutions and those of our competitors. If our solutions do not achieve widespread adoption or there is a reduction in demand for our solutions due to a lack of customer acceptance, technological challenges, competing products, privacy concerns, decreases in corporate spending, weakening economic conditions or otherwise, it could result in early terminations, reduced customer retention rates, or decreased revenue, any of which would adversely affect our business, results of operations, and financial results. We do not know whether the trend in adoption of cloud-based SaaS-delivered endpoint security solutions we have experienced in the past will continue in the future. Furthermore, if we or other SaaS security providers experience security incidents, loss or disclosure of customer data, disruptions in delivery, or other problems, the market for SaaS solutions as a whole, including our security solutions, will be negatively affected. You should consider our business and prospects in light of the risks and difficulties we encounter in this new and evolving market.

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

To expand our customer base, we need to convince potential customers to allocate a portion of their discretionary budgets to purchase our Falcon platform. Our sales efforts often involve educating our prospective customers about the uses and benefits of our Falcon platform. Enterprises and governments that use legacy security products, such as signature-based or malware-based products, firewalls, intrusion prevention systems, and antivirus, for their IT security may be hesitant to purchase our Falcon platform if they believe that these products are more cost effective, provide substantially the same functionality as our Falcon platform or provide a level of IT security that is sufficient to meet their needs. We may have difficulty convincing prospective customers of the value of adopting our solution. Even if we are successful in convincing prospective customers that a cloud native platform like ours is critical to protect against cyberattacks, they may not decide to purchase our Falcon platform for a variety of reasons some of which are out of our control. For example, any deterioration in general economic conditions, including a downturn due to the outbreak of diseases such as the novel coronavirus, or COVID-19, may cause our customers to cut their overall security and IT operations spending, and such cuts may fall disproportionately on cloud-based security solutions like ours. Economic weakness, customer financial difficulties, and constrained spending on security and IT operations may result in decreased revenue, reduced sales, lengthened sales cycles, increased churn, lower demand for our products, and adversely affect our results of operations and financial conditions. Additionally, if the incidence of cyberattacks were to decline or be perceived to decline, or if organizations adopt endpoints that use operating systems we do not adequately support, our ability to attract new customers and expand sales of our solutions to existing customers could be adversely affected. If organizations do not continue to adopt our Falcon platform, our sales will not grow as quickly as anticipated, or at all, and our business, results of operations, and financial condition would be harmed.

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

In order for us to maintain or improve our results of operations, it is important that our customers renew their subscriptions for our Falcon platform when existing contract terms expire, and that we expand our commercial relationships with our existing customers by selling additional cloud modules and by deploying to more endpoints in their environments. Our customers have no obligation to renew their subscription for our Falcon platform after the expiration of their contractual subscription period, which is generally one year, and in the normal course of business, some customers have elected not to renew. In addition, our customers may renew for shorter contract subscription lengths or cease using certain cloud modules. Our customer retention and expansion may decline or fluctuate as a result of a number of factors, including our customers' satisfaction with our services, our pricing, customer security and networking issues and requirements, our customers' spending levels, decreases in the number of endpoints to which our customers deploy our solutions, mergers and acquisitions involving our customers, industry developments, competition and general economic conditions. If our efforts to maintain and expand our relationships with our existing customers are not successful, our business, results of operations, and financial condition may materially suffer.

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

The market for security and IT operations solutions is intensely competitive, fragmented, and characterized by rapid changes in technology, customer requirements, industry standards, increasingly sophisticated attackers, and by frequent introductions of new or improved products to combat security threats. We expect to continue to face intense competition from current competitors, as well as from new entrants into the market. If we are unable to anticipate or react to these challenges, our competitive position could weaken, and we could experience a decline in revenue or reduced revenue growth, and loss of market share that would adversely affect our business, financial condition, and results of operations. Our ability to compete effectively depends upon numerous factors, many of which are beyond our control, including, but not limited to:

- product capabilities, including performance and reliability, of our Falcon platform, including our cloud modules, services, and features compared to those of our competitors;
- our ability, and the ability of our competitors, to improve existing products, services, and features, or to develop new ones to address evolving customer needs;
- our ability to attract, retain, and motivate talented employees;
- our ability to establish and maintain relationships with channel partners;
- the strength of our sales and marketing efforts; and
- acquisitions or consolidation within our industry, which may result in more formidable competitors.

Our competitors include the following by general category:

- legacy antivirus product providers, such as McAfee, Inc., Broadcom Inc. (Symantec), and Microsoft Corporation, who offer a broad range of approaches and solutions including traditional antivirus and signature-based protection;
- alternative endpoint security providers, such as Blackberry Cylance and VMWare, Inc. (Carbon Black), who offer point products based on malware-only or application whitelisting techniques; and
- network security vendors, such as Palo Alto Networks, Inc. and FireEye, Inc., who are supplementing their core perimeter-based offerings with endpoint security solutions.

Many of these competitors have greater financial, technical, marketing, sales, and other resources, greater name recognition, longer operating histories, and a larger base of customers than we do. They may be able to devote greater resources to the development, promotion, and sale of services than we can, and they may offer lower pricing than we do. Further, they may have greater resources for research and development of new technologies, the provision of customer support, and the pursuit of acquisitions, or they may have other financial, technical, or other resource advantages. Our larger competitors have substantially broader and more diverse product and services offerings as well as routes to market, which allows them to leverage their relationships based on other products or incorporate functionality into existing products to gain business in a manner that discourages users from purchasing our platform, including our cloud modules. Conditions in our market could change rapidly and significantly as a result of technological advancements, partnering or acquisitions by our competitors or continuing market consolidation. Some of our competitors have recently made acquisitions of businesses or have established cooperative relationships that may allow them to offer more directly competitive and comprehensive solutions than were previously offered and adapt more quickly to new technologies and customer needs. These competitive pressures in our market or our failure to compete effectively may result in price reductions, fewer orders, reduced revenue and gross margins, increased net losses and loss of market share. Further, many competitors that specialize in providing protection from a single type of security threat may be able to deliver these targeted security products to the market quicker than we can or convince organizations that these limited products meet their needs. Even if there is significant demand for cloud-based security solutions like ours, if our competitors include functionality that is, or is perceived to be, equivalent to or better than ours in legacy products that are already generally accepted as necessary components of an organization’s IT security architecture, we may have difficulty increasing the market penetration of our platform. Furthermore, even if the functionality offered by other security and IT operations providers is different and more limited than the functionality of our platform, organizations may elect to accept such limited functionality in lieu of adding products from additional vendors like us. If we are unable to compete successfully, or if competing successfully requires us to take aggressive pricing or other actions, our business, financial condition, and results of operations would be adversely affected.

Competitive pricing pressure may reduce our gross profits and adversely affect our financial results.

If we are unable to maintain our pricing due to competitive pressures or other factors, our margins will be reduced and our gross profits, business, results of operations, and financial condition would be adversely affected. The subscription prices for our Falcon platform, cloud modules, and professional services may decline for a variety of reasons, including competitive pricing pressures, discounts, anticipation of the introduction of new solutions by our competitors, or promotional programs offered by us or our competitors. Competition continues to increase in the market segments in which we operate, and we expect competition to further increase in the future. Larger competitors with more diverse product and service offerings may reduce the price of products or subscriptions that compete with ours or may bundle them with other products and subscriptions.

If our solutions fail or are perceived to fail to detect or prevent incidents or have or are perceived to have defects, errors, or vulnerabilities, our brand and reputation would be harmed, which would adversely affect our business and results of operations.

Real or perceived defects, errors or vulnerabilities in our Falcon platform and cloud modules, the failure of our platform to detect or prevent incidents, including advanced and newly developed attacks, misconfiguration of our solutions, or the failure of customers to take action on attacks identified by our platform could harm our reputation and adversely affect our business, financial position and results of operations. Because our cloud native security platform is complex, it may contain defects or errors that are not detected until after deployment. We cannot assure you that our products will detect all cyberattacks, especially in light of the rapidly changing security threat landscape that our solution seeks to address. Due to a variety of both internal and external factors, including, without limitation, defects or misconfigurations of our solutions, our solutions could become vulnerable to security incidents (both from intentional attacks and accidental causes) that cause them to fail to secure endpoints and detect and block attacks. In addition, because the techniques used by computer hackers to access or sabotage networks and endpoints change frequently and generally are not recognized until launched against a target, there is a risk that an advanced attack could emerge that our cloud native security platform is unable to detect or prevent until after some of our customers are affected. Additionally, our Falcon platform may falsely indicate a cyberattack or threat that does not actually exist, which may lessen customers’ trust in our solutions.

Moreover, as our cloud native security platform is adopted by an increasing number of enterprises and governments, it is possible that the individuals and organizations behind advanced cyberattacks will begin to focus on finding ways to defeat our security platform. If this happens, our systems and subscription customers could be specifically targeted by attackers and could result in vulnerabilities in our platform or undermine the market acceptance of our Falcon platform and could adversely affect our reputation as a provider of security solutions. Because we host customer data on our cloud platform, which in some cases may contain personally-identifiable information or potentially confidential information, a security compromise, or an accidental or intentional misconfiguration or malfunction of our platform could result in personally-identifiable information and other customer data being accessible such as to attackers or to other customers. Further, if a high profile security breach occurs with respect to another next-generation or cloud-based security system, our customers and potential customers may lose trust in cloud solutions generally, and cloud-based security solutions such as ours in particular.

Organizations are increasingly subject to a wide variety of attacks on their networks, systems, and endpoints. No security solution, including our Falcon platform, can address all possible security threats or block all methods of penetrating a network or otherwise perpetrating a security incident. If any of our customers experiences a successful cyberattack while using our solutions or services, such customer could be disappointed with our Falcon platform, regardless of whether our solutions or services blocked the theft of any of such customer's data or were implicated in failing to block such attack. Similarly, if our solutions detect attacks against a customer but the customer does not address the vulnerability, customers and the public may erroneously believe that our solutions were not effective. Security breaches against customers that use our solutions may result in customers and the public believing that our solutions failed. Our Falcon platform may fail to detect or prevent malware, viruses, worms or similar threats for any number of reasons, including our failure to enhance and expand our Falcon platform to reflect the increasing sophistication of malware, viruses and other threats. Real or perceived security breaches of our customers' networks could cause disruption or damage to their networks or other negative consequences and could result in negative publicity to us, damage to our reputation, and other customer relations issues, and may adversely affect our revenue and results of operations.

As a cybersecurity provider, we have been, and expect to continue to be, a target of cyberattacks. If our internal networks, systems, or data are or are perceived to have been compromised, our reputation may be damaged and our financial results may be negatively affected.

As a provider of security solutions, we have in the past been, and may in the future be, specifically targeted by bad actors for attacks intended to circumvent our security capabilities or to exploit our Falcon platform as an entry point into customers' endpoints, networks, or systems. In particular, because we have been involved in the identification of organized cybercriminals and nation-state actors, we have been the subject of intense efforts by sophisticated cyber adversaries who seek to compromise our systems. We are also susceptible to inadvertent compromises of our systems and data, including those arising from process, coding, or human errors. A successful attack or other incident that compromises our or our customers' data or results in an interruption of service could have a significant negative effect on our operations, reputation, financial resources, and the value of our intellectual property. We cannot assure you that any of our efforts to manage this risk, including adoption of a comprehensive incident response plan and process for detecting, mitigating, and investigating security incidents that we regularly test through table-top exercises, testing of our security protocols through additional techniques, such as penetration testing, debriefing after security incidents, to improve our security and responses, and regular briefing of our directors and officers on our cybersecurity risks, preparedness, and management, will be effective in protecting us from such attacks.

It is virtually impossible for us to entirely eliminate the risk of such compromises, interruptions in service, or other security incidents affecting our internal systems or data, or that of our third-party service providers and vendors. Organizations are subject to a wide variety of attacks on their supply chain, networks, systems, and endpoints, and techniques used to sabotage or to obtain unauthorized access to networks in which data is stored or through which data is transmitted change frequently. Furthermore, employee error or malicious activity could compromise our systems. As a result, we may be unable to anticipate these techniques or implement adequate measures to prevent an intrusion into our networks, which could result in unauthorized access to customer data, intellectual property including access to our source code, and information about vulnerabilities in our product, which in turn, could reduce the effectiveness of our solutions, or lead to cyberattacks or other intrusions of our customers' networks, litigation, governmental audits and investigations and significant legal fees, and or all of which could damage our relationships with our existing customers and could have a negative effect on our ability to attract and retain new customers. We have expended, and anticipate continuing to expend, significant amounts and resources in an effort to prevent security breaches and other security incidents impacting our systems and data. Since our business is focused on providing reliable security services to our customers, we believe that an actual or perceived security incident affecting, our internal systems or data or data of our customers would be especially detrimental to our reputation, customer confidence in our solution, and our business.

In addition, while we maintain insurance policies that may cover certain liabilities in connection with a cybersecurity incident, we cannot be certain that our insurance coverage will be adequate for liabilities actually incurred, that insurance will continue to be available to us on commercially reasonable terms, or at all, or that any insurer will not deny coverage as to any future claim. The successful assertion of one or more large claims against us that exceed available insurance coverage, or the occurrence of changes in our insurance policies, including premium increases or the imposition of large deductible or co-insurance requirements, could have a material adverse effect on our business, including our financial condition, results of operations and reputation.

We rely on third-party data centers, such as Amazon Web Services, and our own colocation data centers to host and operate our Falcon platform, and any disruption of or interference with our use of these facilities may negatively affect our ability to maintain the performance and reliability of our Falcon platform which could cause our business to suffer.

Our customers depend on the continuous availability of our Falcon platform. We currently host our Falcon platform and serve our customers using a mix of third-party data centers, primarily Amazon Web Services, Inc., or AWS, and our data centers, hosted in colocation facilities. Consequently, we may be subject to service disruptions as well as failures to provide adequate support for reasons that are outside of our direct control. We have experienced, and expect that in the future we may experience interruptions, delays and outages in service and availability from time to time due to a variety of factors, including infrastructure changes, human or software errors, website hosting disruptions and capacity constraints.

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

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

The adverse effects of any service interruptions on our reputation, results of operations, and financial condition may be disproportionately heightened due to the nature of our business and the fact that our customers have a low tolerance for interruptions of any duration. Interruptions or failures in our service delivery could result in a cyberattack or other security threat to one of our customers during such periods of interruption or failure. Additionally, interruptions or failures in our service could cause customers to terminate their subscriptions with us, adversely affect our renewal rates, and harm our ability to attract new customers. Our business would also be harmed if our customers believe that a cloud-based SaaS-delivered endpoint security solution is unreliable. While we do not consider them to have been material, we have experienced, and may in the future experience, service interruptions and other performance problems due to a variety of factors. The occurrence of any of these factors, or if we are unable to rapidly and cost-effectively fix such errors or other problems that may be identified, could damage our reputation, negatively affect our relationship with our customers or otherwise harm our business, results of operations and financial condition.

If we do not effectively expand and train our direct 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 depend on our direct sales force to obtain new customers and increase sales with existing customers. 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, particularly in international markets. We have expanded our sales organization significantly in recent periods and expect to continue to add additional sales capabilities in the near term. There is significant competition for sales personnel with the skills and technical knowledge that we require. New hires require significant training and may take significant time before they achieve full productivity, and this delay is accentuated by our long sales cycles. 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, a large percentage of our sales force is new to our company and selling our solutions, and therefore this team may be less effective than our more seasoned sales personnel. Furthermore, hiring sales personnel in new countries, or expanding our existing presence, requires upfront and ongoing expenditures that we may not recover if the sales personnel fail to achieve full productivity. We cannot predict whether, or to what extent, our sales will increase as we expand our sales force or how long it will take for sales personnel to become productive. If we are unable to hire and train a sufficient number of effective sales personnel, or the sales personnel we hire are not successful in obtaining new customers or increasing sales to our existing customer base, our business and results of operations will be adversely affected.

Because we recognize revenue from subscriptions to our platform over the term of the subscription, downturns or upturns in new business will not be immediately reflected in our results of operations.

We generally recognize revenue from customers ratably over the terms of their subscription, which is generally one year. As a result, a substantial portion of the revenue we report in each period is attributable to the recognition of deferred revenue relating to agreements that we entered into during previous periods. Consequently, any increase or decline in new sales or renewals in any one period will not be immediately reflected in our revenue for that period. Any such change, however, would affect our revenue in future periods. Accordingly, the effect of downturns or upturns in new sales and potential changes in our rate of renewals may not be fully reflected in our results of operations until future periods. We may also be unable to timely reduce our cost structure in line with a significant deterioration in sales or renewals that would adversely affect our results of operations and financial condition.

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

Our results of operations may vary significantly from period to period, which could adversely affect our business, financial condition and results of operations. Our results of operations have varied significantly from period to period, and we expect that our results of operations will continue to vary as a result of a number of factors, many of which are outside of our control and may be difficult to predict, including:

- our ability to attract new and retain existing customers;
- the budgeting cycles, seasonal buying patterns, and purchasing practices of customers;
- the timing and length of our sales cycles;
- changes in customer or channel partner requirements or market needs;

- changes in the growth rate of the cloud-based SaaS-delivered endpoint security solutions market;
- the timing and success of new product and service introductions by us or our competitors or any other competitive developments, including consolidation among our customers or competitors;
- the level of awareness of cybersecurity threats, particularly advanced cyberattacks, and the market adoption of our Falcon platform;
- our ability to successfully expand our business domestically and internationally;
- decisions by organizations to purchase security solutions from larger, more established security vendors or from their primary IT equipment vendors;
- changes in our pricing policies or those of our competitors;
- any disruption in our relationship with channel partners;
- insolvency or credit difficulties confronting our customers, affecting their ability to purchase or pay for our solutions;
- significant security breaches of, technical difficulties with or interruptions to, the use of our Falcon platform;
- extraordinary expenses such as litigation or other dispute-related settlement payments or outcomes;
- general economic conditions, both domestic and in our foreign markets;
- future accounting pronouncements or changes in our accounting policies or practices;
- negative media coverage or publicity;
- political events;
- the amount and timing of operating costs and capital expenditures related to the expansion of our business; and
- increases or decreases in our expenses caused by fluctuations in foreign currency exchange rates.

In addition, we experience seasonal fluctuations in our financial results as we typically receive a higher percentage of our annual orders from new customers, as well as renewal orders from existing customers, in the second half of the fiscal year as compared to the first half of the year due to the annual budget approval process of many of our customers. In addition, we also experience seasonality in our operating margin, with a lower margin in the first half of our fiscal year. Any of the above factors, individually or in the aggregate, may result in significant fluctuations in our financial and other results of operations from period to period. As a result of this variability, our historical results of operations should not be relied upon as an indication of future performance. Moreover, this variability and unpredictability could result in our failure to meet our operating plan or the expectations of investors or analysts for any period. If we fail to meet such expectations for these or other reasons, our stock price could fall substantially, and we could face costly lawsuits, including securities class action suits.

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

Our revenue recognition is difficult to predict because of the length and unpredictability of the sales cycle for our Falcon platform, particularly with respect to large organizations and government entities. Customers often view the subscription to our Falcon platform as a significant strategic decision and, as a result, frequently require considerable time to evaluate, test and qualify our Falcon platform prior to entering into or expanding a relationship with us. Large enterprises and government entities in particular often undertake a significant evaluation process that further lengthens our sales cycle.

Our direct sales team develops relationships with our customers, and works with our channel partners on account penetration, account coordination, sales and overall market development. We spend substantial time and resources on our sales efforts without any assurance that our efforts will produce a sale. Security solution purchases are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. As a result, it is difficult to predict whether and when a sale will be completed. The failure of our efforts to secure sales after investing resources in a lengthy sales process could adversely affect our business and results of operations.

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

Our future success is substantially dependent on our ability to attract, retain, and motivate the members of our management team and other key employees throughout our organization. In particular, we are highly dependent on the services of George Kurtz, our Chief Executive Officer, who is critical to our future vision and strategic direction. We rely on our leadership team in the areas of operations, security, research and development, marketing, sales, support and general and administrative functions. Although we have entered into employment agreements with our key personnel, our employees, including our executive officers, work for us on an “at-will” basis, which means they may terminate their employment with us at any time. If Mr. Kurtz, or one or more of our key employees, or members of our management team resigns or otherwise ceases to provide us with their service, our business could be harmed.

If we are unable to attract and retain qualified personnel, our business could be harmed.

There is also significant competition for personnel with the skills and technical knowledge that we require across our technology, cyber, sales, professional services, and administrative support functions. Competition for these personnel in the San Francisco Bay Area, where our headquarters are located, and in other locations where we maintain offices, is intense, especially for experienced sales professionals and for engineers experienced in designing and developing cloud applications and security software. We have from time to time experienced, and we expect to continue to experience, difficulty in hiring and retaining employees with appropriate qualifications. For example, in recent years, recruiting, hiring and retaining employees with expertise in the cybersecurity industry has become increasingly difficult as the demand for cybersecurity professionals has increased as a result of the recent cybersecurity attacks on global corporations and governments. Additionally, our incident response and proactive services team is small and comprised of personnel with highly technical skills and experience, who are in high demand, and who would be difficult to replace. Many of the companies with which we compete for experienced personnel have greater resources than we have. Our competitors also may be successful in recruiting and hiring members of our management team or other key employees, and it may be difficult for us to find suitable replacements on a timely basis, on competitive terms, or at all. We have in the past, and may in the future, be subject to allegations that employees we hire have been improperly solicited, or that they have divulged proprietary or other confidential information or that their former employers own such employees’ inventions or other work product, or that they have been hired in violation of non-compete provisions or non-solicitation provisions.

In addition, job candidates and existing employees often consider the value of the equity awards they receive in connection with their employment. Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. Also, many of our employees have become, or will soon become, vested in a substantial amount of equity awards, which may give them a substantial amount of personal wealth. This may make it more difficult for us to retain and motivate these employees, and this wealth could affect their decision about whether or not they continue to work for us. Any failure to successfully attract, integrate or retain qualified personnel to fulfill our current or future needs could adversely affect our business, results of operations and financial condition.

If we are not able to maintain and enhance our CrowdStrike and Falcon brand and our reputation as a provider of high-efficacy security solutions, our business and results of operations may be adversely affected.

We believe that maintaining and enhancing our CrowdStrike and Falcon brand and our reputation as a provider of high-efficacy security solutions is critical to our relationship with our existing customers, channel partners, and technology alliance partners and our ability to attract new customers and partners. The successful promotion of our CrowdStrike and Falcon brand will depend on a number of factors, including our marketing efforts, our ability to continue to develop additional cloud modules and features for our Falcon platform, our ability to successfully differentiate our Falcon platform from competitive cloud-based or legacy security solutions and, ultimately, our ability to detect and stop breaches. Although we believe it is important for our growth, our brand promotion activities may not be successful or yield increased revenue.

In addition, independent industry or financial analysts and research firms often test our solutions and provide reviews of our Falcon platform, as well as the products of our competitors, and perception of our Falcon platform in the marketplace may be significantly influenced by these reviews. If these reviews are negative, or less positive as compared to those of our competitors' products, our brand may be adversely affected. Our solutions may fail to detect or prevent threats in any particular test for a number of reasons that may or may not be related to the efficacy of our solutions in real world environments. To the extent potential customers, industry analysts or testing firms believe that the occurrence of a failure to detect or prevent any particular threat is a flaw or indicates that our solutions or services do not provide significant value, we may lose customers, and our reputation, financial condition and business would be harmed. Additionally, the performance of our channel partners and technology alliance partners may affect our brand and reputation if customers do not have a positive experience with these partners. In addition, we have in the past worked, and continue to work, with high profile customers as well as assist in analyzing and remediating high profile cyberattacks. Our work with such customers has exposed us to publicity and media coverage. Negative publicity about us, including about our management, the efficacy and reliability of our Falcon platform, our products offerings, our professional services, and the customers we work with, even if inaccurate, could adversely affect our reputation and brand.

If we are unable to maintain successful relationships with our channel partners and technology alliance partners, or if our channel partners or technology alliance partners fail to perform, our ability to market, sell and distribute our Falcon platform will be limited, and our business, financial position and results of operations will be harmed.

In addition to our direct sales force, we rely on our channel partners to sell and support our Falcon platform. A vast majority of sales of our Falcon platform flow through our channel partners, and we expect this to continue for the foreseeable future. Additionally, we have entered, and intend to continue to enter, into technology alliance partnerships with third parties to support our future growth plans. The loss of a substantial number of our channel partners or technology alliance partners, or the failure to recruit additional partners, could adversely affect 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 channel partners and in training our channel partners to independently sell and deploy our Falcon platform. If we fail to effectively manage our existing sales channels, or if our channel partners are unsuccessful in fulfilling the orders for our solutions, 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 solutions and keep them motivated to sell our products, our ability to sell our products and results of operations will be harmed.

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

Our future growth depends, in part, on increasing sales to government organizations. Demand from government organizations is often unpredictable, subject to budgetary uncertainty and typically involves long sales cycles. We have made significant investment to address the government sector, but we cannot assure you that these investments will be successful, or that we will be able to maintain or grow our revenue from the government sector. Although we anticipate that they may increase in the future, sales to U.S. federal, state, and local governmental agencies have not accounted for, and may never account for, a significant portion of our revenue. U.S. federal, state and local government sales are subject to a number of challenges and risks that may adversely impact our business. Sales to such government entities include the following risks:

- selling to governmental agencies can be highly competitive, expensive and time consuming, often requiring significant upfront time and expense without any assurance that such efforts will generate a sale;
- government certification requirements applicable to our products may change and, in doing so, restrict our ability to sell into the U.S. federal government sector until we have attained the revised certification. For example, although we are currently certified under the Federal Risk and Authorization Management Program, or FedRAMP, such certification is costly to maintain and if we lost our certification in the future it would restrict our ability to sell to government customers;
- government demand and payment for our Falcon platform may be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our Falcon platform;
- governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our Falcon platform, which would adversely impact our revenue and results of operations, or institute fines or civil or criminal liability if the audit were to uncover improper or illegal activities; and

- governments may require certain products to be manufactured, hosted, or accessed solely in their country or in other relatively high-cost manufacturing locations, and we may not manufacture all products in locations that meet these requirements, affecting our ability to sell these products to governmental agencies.

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

We may not timely and cost-effectively scale and adapt our existing technology to meet our customers' performance and other requirements.

Our future growth is dependent upon our ability to continue to meet the needs of new customers and the expanding needs of our existing customers as their use of our solutions grow. As our customers gain more experience with our solutions, the number of endpoints and events, the amount of data transferred, processed and stored by us, the number of locations where our platform and services are being accessed, have in the past, and may in the future, expand rapidly. In order to meet the performance and other requirements of our customers, we intend to continue to make significant investments to increase capacity and to develop and implement new technologies in our service and cloud infrastructure operations. These technologies, which include databases, applications and server optimizations, network and hosting strategies, and automation, are often advanced, complex, new and untested. We may not be successful in developing or implementing these technologies. In addition, it takes a significant amount of time to plan, develop and test improvements to our technologies and infrastructure, and we may not be able to accurately forecast demand or predict the results we will realize from such improvements. To the extent that we do not effectively scale our operations to meet the needs of our growing customer base and to maintain performance as our customers expand their use of our solutions, we may not be able to grow as quickly as we anticipate, our customers may reduce or cancel use of our solutions and we may be unable to compete as effectively and our business and results of operations may be harmed.

Additionally, we have and will continue to make substantial investments to support growth at our data centers and improve the profitability of our cloud platform. For example, because of the importance of AWS' services to our business and AWS' position in the cloud-based server industry, any renegotiation or renewal of our agreement with AWS may be on terms that are significantly less favorable to us than our current agreement. If our cloud-based server costs were to increase, our business, results of operations and financial condition may be adversely affected. Although we expect that we could receive similar services from other third parties, if any of our arrangements with AWS are terminated, we could experience interruptions on our Falcon platform and in our ability to make our solutions available to customers, as well as delays and additional expenses in arranging alternative cloud infrastructure services. Ongoing improvements to cloud infrastructure may be more expensive than we anticipate, and may not yield the expected savings in operating costs or the expected performance benefits. In addition, we may be required to re-invest any cost savings achieved from prior cloud infrastructure improvements in future infrastructure projects to maintain the levels of service required by our customers. We may not be able to maintain or achieve cost savings from our investments, which could harm our financial results.

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

We believe our intellectual property is an essential asset of our business, and our success and ability to compete depend in part upon protection of our intellectual property rights. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality procedures and contractual provisions, to establish and protect our intellectual property rights in the United States and abroad, all of which provide only limited protection. The efforts we have taken to protect our intellectual property may not be sufficient or effective, and our trademarks, copyrights and patents may be held invalid or unenforceable. Moreover, we cannot assure you that any patents will be issued with respect to our currently pending patent applications in a manner that gives us adequate defensive protection or competitive advantages, or that any patents issued to us will not be challenged, invalidated or circumvented. We have filed for patents in the United States and in certain non-U.S. jurisdictions, but such protections may not be available in all countries in which we operate or in which we seek to enforce our intellectual property rights, or may be difficult to enforce in practice. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. In addition, many countries limit the enforceability of patents against certain third parties, including government agencies or government contractors. In these countries, patents may provide limited or no benefit. Moreover, we may need to expend additional resources to defend our intellectual property rights in these countries, and our inability to do so could impair our business or adversely affect our international expansion. Our currently issued patents and any patents that may be issued in the future with respect to pending or future patent applications may not provide sufficiently broad protection or they may not prove to be enforceable in actions against alleged infringers.

We may not be effective in policing unauthorized use of our intellectual property, and even if we do detect violations, litigation or technical changes to our products may be necessary to enforce our intellectual property rights. Protecting against the unauthorized use of our intellectual property rights, technology and other proprietary rights is expensive and difficult, particularly outside of the United States. Any enforcement efforts we undertake, including litigation, could be time-consuming and expensive and could divert management's attention, which could harm our business and results of operations. Further, attempts to enforce our rights against third parties could also provoke these third parties to assert their own intellectual property or other rights against us, or result in a holding that invalidates or narrows the scope of our rights, in whole or in part. The inability to adequately protect and enforce our intellectual property and other proprietary rights could seriously harm our business, results of operations and financial condition. Even if we are able to secure our intellectual property rights, we cannot assure you that such rights will provide us with competitive advantages or distinguish our services from those of our competitors or that our competitors will not independently develop similar technology, duplicate any of our technology, or design around our patents.

Claims by others that we infringe their proprietary technology or other intellectual property rights could result in significant costs and substantially harm our business, financial condition, results of operations, and prospects.

Claims by others that we infringe their proprietary technology or other intellectual property rights could harm our business. A number of companies in our industry hold a large number of patents and also protect their copyright, trade secret and other intellectual property rights, and companies in the networking and security industry frequently enter into litigation based on allegations of patent infringement or other violations of intellectual property rights. As we face increasing competition and grow, the possibility of intellectual property rights claims against us also grows. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that such personnel have divulged proprietary or other confidential information to us. From time to time, third parties have in the past and may in the future assert claims of infringement of intellectual property rights against us. For example, we are currently involved in proceedings before the Trademark Trial and Appeal Board at the U.S. Patent and Trademark Office regarding our U.S. trademark registrations for CrowdStrike Falcon and our U.S. application to register our Falcon OverWatch trademark. Fair Isaac Corporation, or FICO, petitioned to cancel our trademark registrations and opposed our application. If the appeal board were to find against us, it would cancel our trademark registrations for CrowdStrike Falcon and reject our application to register Falcon OverWatch. If FICO were to file an infringement action in court and if we do not prevail in that action, we could ultimately be required to change the names of our solutions, which would force us to incur significant marketing expense in establishing an alternative brand to our existing Falcon brand. We cannot assure you that we will be successful in these rebranding efforts.

Third parties may in the future also assert claims against our customers or channel partners, whom our standard license and other agreements obligate us to indemnify against claims that our solutions infringe the intellectual property rights of third parties. As the number of products and competitors in the security and IT operations market increases and overlaps occur, claims of infringement, misappropriation, and other violations of intellectual property rights may increase. While we intend to increase the size of our patent portfolio, many of our competitors and others may now and in the future have significantly larger and more mature patent portfolios than we have. In addition, future litigation may involve non-practicing entities, companies or other patent owners who have no relevant product offerings or revenue and against whom our own patents may therefore provide little or no deterrence or protection. Any claim of intellectual property infringement by a third party, even a claim without merit, could cause us to incur substantial costs defending against such claim, could distract our management from our business and could require us to cease use of such intellectual property.

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

Although third parties may offer a license to their technology or other intellectual property, the terms of any offered license may not be acceptable, and the failure to obtain a license or the costs associated with any license could cause our business, financial condition and results of operations to be adversely affected. In addition, some licenses may be nonexclusive, and therefore our competitors may have access to the same technology licensed to us. If a third party does not offer us a license to its technology or other intellectual property on reasonable terms, or at all, we could be enjoined from continued use of such intellectual property. As a result, we may be required to develop alternative, non-infringing technology, which could require significant time, during which we could be unable to continue to offer our affected products, subscriptions or services, effort, and expense and may ultimately not be successful. Furthermore, a successful claimant could secure a judgment or we may agree to a settlement that prevents us from distributing certain products, providing certain subscriptions or performing certain services or that requires us to pay substantial damages, royalties or other fees. Any of these events could harm our business, financial condition and results of operations.

We license technology from third parties, and our inability to maintain those licenses could harm our business.

We currently incorporate, and will in the future incorporate, technology that we license from third parties, including software, into our solutions. We cannot be certain that our licensors do not or will not infringe on the intellectual property rights of third parties or that our licensors have or will have sufficient rights to the licensed intellectual property in all jurisdictions in which we may sell our Falcon platform. Some of our agreements with our licensors may be terminated by them for convenience, or otherwise provide for a limited term. If we are unable to continue to license technology because of intellectual property infringement claims brought by third parties against our licensors or against us, or if we are unable to continue our license agreements or enter into new licenses on commercially reasonable terms, our ability to develop and sell solutions and services containing or dependent on that technology would be limited, and our business could be harmed. Additionally, if we are unable to license technology from third parties, we may be forced to acquire or develop alternative technology, which we may be unable to do in a commercially feasible manner or at all, and may require us to use alternative technology of lower quality or performance standards. This could limit or delay our ability to offer new or competitive solutions and increase our costs. As a result, our margins, market share, and results of operations could be significantly harmed.

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

Personal privacy, data protection, information security, telecommunications regulations, and other laws applicable to specific categories of information are significant issues in the United States, Europe and in other jurisdictions where we offer our solutions. The data that we collect, analyze, and store is subject to a variety of laws and regulations, including regulation by various government agencies. The U.S. federal government, and various state and foreign governments, have adopted or proposed limitations on the collection, distribution, use, and storage of certain categories of information, such as personally identifiable information of individuals, health information, and other sector-specific types of data, including the Federal Trade Commission, the Electronic Communication Privacy Act, Computer Fraud and Abuse Act, HIPAA, and the Gramm Leach Bliley Act. Laws and regulations outside the United States, and particularly in Europe, often are more restrictive than those in the United States. Such laws and regulations may require companies to implement privacy and security policies, permit customers to access, correct, and delete personal information stored or maintained by such companies, inform individuals of security breaches that affect their personal information, and, in some cases, obtain individuals' consent to use personally identifiable information for certain purposes. In addition, some foreign governments require that any information of certain categories, such as financial or personally identifiable information collected in a country not be disseminated outside of of that country. We also may find it necessary or desirable to join industry or other self-regulatory bodies or other information security or data protection-related organizations that require compliance with their rules pertaining to information security and data protection. We also may be bound by additional, more stringent contractual obligations relating to our collection, use and disclosure of personal, financial, and other data.

We also expect that there will continue to be new proposed laws, regulations, and industry standards concerning privacy, data protection, information security, specific categories of data, electronic, and telecommunications services in the United States, the European Union and other jurisdictions in which we operate or may operate, and we cannot yet determine the impact such future laws, regulations, standards, or perception of their requirements may have on our business. For example, the European Commission recently adopted the European General Data Protection Regulation, or GDPR, that became fully effective in May 2018, and applies to the processing (which includes the collection and use) of certain personal data. As compared to previously-effective data protection law in the European Union, 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 amount up to 20 million Euros or four percent of our worldwide annual revenue for the prior fiscal year, whichever is higher. We have incurred substantial expense in complying with the obligations imposed by the GDPR and we may be required to do so in the future, potentially making significant changes in our business operations, which may adversely affect our revenue and our business overall. Additionally, because there have been very few GDPR actions enforced against companies, we are unable to predict how they will be applied to us or our customers. 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 subject to the GDPR 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 European Economic Area, or EEA, to the United States and other jurisdictions based on our understanding of current regulatory obligations and the guidance of data protection authorities. Despite this, we may be unsuccessful in establishing or maintaining conforming means of transferring such data from the EEA, in particular as a result of continued legal and legislative activity within the European Union that has challenged or called into question the legal basis for existing means of data transfers to countries that have not been found to provide adequate protection for personal data.

The implementation of the GDPR has led other jurisdictions to either amend, or propose legislation to amend their existing data privacy and cybersecurity laws to resemble all or a portion of the requirements of the GDPR (e.g., for purposes of having an adequate level of data protection to facilitate data transfers from the EU) or enact new laws to do the same. Accordingly, the challenges we face in the EU will likely also apply to other jurisdictions outside the EU that adopt laws similar in construction to the GDPR or regulatory frameworks of equivalent complexity. For example, on June 28, 2018, California adopted the California Consumer Privacy Act of 2018, or CCPA, which went into effect on January 1, 2020. The CCPA has been characterized as the first “GDPR-like” privacy statute to be enacted in the United States because it contains a number of provisions similar to certain provisions of the GDPR. Although the law has gone into effect, final Attorney General guidance remains forthcoming, and we are unable to predict how CCPA enforcement may be applied to our customers or us.

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 technology alliance partnerships that may involve the sharing of data. Even the perception of privacy concerns, whether or not valid, may harm our reputation, inhibit adoption of our products by current and future customers, or adversely impact our ability to attract and retain workforce talent. In addition, changes in laws or regulations that adversely affect the use of the internet, including laws impacting net neutrality, could impact our business. We expect that existing laws, regulations and standards may be interpreted in new manners in the future. Future laws, regulations, standards and other obligations, and changes in the interpretation of existing laws, regulations, standards and other obligations could require us to modify our solutions, restrict our business operations, increase our costs and impair our ability to maintain and grow our customer base and increase our revenue.

Beyond broader data processing regulations affecting our business, the cybersecurity industry may face direct regulation. In 2018, Singapore introduced what is believed to be the world’s first cybersecurity licensing requirement, mandating that providers of specific types of incident response services receive a government license before providing such services. License requirements such as these may impose upon CrowdStrike significant organizational costs and high barriers of entry into new markets.

Although we work to comply with applicable laws and regulations, certain applicable industry standards with which we represent compliance, and our contractual obligations and other legal obligations, those laws, regulations, standards and obligations are evolving and may be modified, interpreted and applied in an inconsistent manner from one jurisdiction to another, and may conflict with one another. In addition, they may conflict with other requirements or legal obligations that apply to our business or the security features and services that our customers expect from our solutions. As such, we cannot assure ongoing compliance with all such laws, regulations, standards and obligations. Any failure or perceived failure by us or our employees, representatives, contractors, channel partners, agents, intermediaries, or other third parties to comply with applicable laws and regulations, or applicable industry standards that we represent compliance with or that may be asserted to apply to us, or to comply with employee, customer, partner, and other data privacy and data security requirements pursuant to contract and our stated notices or policies, could result in enforcement actions against us, including fines, imprisonment of company officials and public censure, claims for damages by customers and other affected individuals, damage to our reputation and loss of goodwill (both in relation to existing customers and prospective customers), any of which could have a material adverse effect on our operations, financial performance and business. Any inability of us or our employees, representatives, contractors, channel partners, agents, intermediaries, or other third parties to adequately address privacy and security concerns, even if unfounded, or comply with applicable laws, regulations, standards and obligations, could result in additional cost and liability to us, damage our reputation, inhibit sales, and adversely affect our business and results of operations.

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

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

- investigations, enforcement actions and sanctions;
- mandatory changes to our Falcon platform;
- disgorgement of profits, fines and damages;
- civil and criminal penalties or injunctions;
- claims for damages by our customers or channel partners;
- termination of contracts;
- loss of intellectual property rights;
- loss of our license to do business in the jurisdictions in which we operate; and
- temporary or permanent debarment from sales to government organizations.

If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be adversely affected. In addition, responding to any action will likely result in a significant diversion of management's attention and resources and an increase in professional fees. Enforcement actions and sanctions could harm our business, results of operations and financial condition.

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

These laws and regulations impose added costs on our business, and failure by us, our employees, representatives, contractors, channel partners, agents, intermediaries, or other third parties to comply with these or other applicable regulations and requirements could lead to claims for damages, penalties, termination of contracts, loss of exclusive rights in our intellectual property and temporary suspension or permanent debarment from government contracting. Any such damages, penalties, disruptions or limitations in our ability to do business with customers, including those in the public sector, and could result in reduced sales of our products, substantial product inventory write-offs, reputational damage, penalties, and other sanctions, any of which could harm our business, reputation, and results of operations.

We are subject to laws and regulations, including governmental export and import controls, sanctions, and anti-corruption laws, that could impair our ability to compete in our markets and subject us to liability if we are not in full compliance with applicable laws.

We are subject to laws and regulations, including governmental export controls, that could subject us to liability or impair our ability to compete in our markets. Our products are subject to U.S. export controls, including the U.S. Department of Commerce's Export Administration Regulations, and we and our employees, representatives, contractors, agents, intermediaries, and other third parties are also subject to various economic and trade sanctions regulations administered by the U.S. Treasury Department's Office of Foreign Assets Control. We incorporate standard encryption algorithms into our products, which, along with the underlying technology, may be exported outside of the U.S. only with the required export authorizations, including by license, license exception or other appropriate government authorizations, which may require the filing of an encryption registration and classification request. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain cloud-based solutions to countries, governments, and persons targeted by U.S. sanctions. We also collect information about cyber threats from open sources, intermediaries, and third parties that we make available to our customers in our threat industry publications. While we have implemented certain procedures to facilitate compliance with applicable laws and regulations in connection with the collection of this information, we cannot assure you that these procedures have been effective or that we, or third parties, many of whom we do not control, have complied with all laws or regulations in this regard. Failure by our employees, representatives, contractors, channel partners, agents, intermediaries, or other third parties to comply with applicable laws and regulations in the collection of this information also could have negative consequences to us, including reputational harm, government investigations and penalties.

Although we take precautions to prevent our information collection practices and services from being provided in violation of such laws, our information collection practices and services may have been in the past, and could in the future be, provided in violation of such laws. If we or our employees, representatives, contractors, channel partners, agents, intermediaries, or other third parties fail to comply with these laws and regulations, we could be subject to civil or criminal penalties, including the possible loss of export privileges and fines. We may also be adversely affected through reputational harm, loss of access to certain markets, or otherwise. Obtaining the necessary authorizations, including any required license, for a particular transaction may be time-consuming, is not guaranteed and may result in the delay or loss of sales opportunities.

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 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 in 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 or sell our products would likely adversely affect our business, results of operations, and financial condition.

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

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

Our products and subscriptions contain third-party open source software components, and failure to comply with the terms of the underlying open source software licenses could restrict our ability to sell our products and subscriptions. The use and distribution of open source software may entail greater risks than the use of third-party commercial software, as open source licensors generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Many of the risks associated with use of open source software cannot be eliminated and could negatively affect our business. In addition, the wide availability of source code used in our solutions could expose us to security vulnerabilities.

Some open source licenses contain requirements that we make available source code for modifications or derivative works we create based upon the type of open source software we use. If we combine our proprietary software with open source software in a certain manner, we could, under certain open source licenses, be required to release the source code of our proprietary software to the public, including authorizing further modification and redistribution, or otherwise be limited in the licensing of our services, each of which could provide an advantage to our competitors or other entrants to the market, create security vulnerabilities in our solutions, require us to re-engineer all or a portion of our Falcon platform, and could reduce or eliminate the value of our services. This would allow our competitors to create similar products with lower development effort and time and ultimately could result in a loss of sales for us.

The terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in ways that could impose unanticipated conditions or restrictions on our ability to commercialize products and subscriptions incorporating such software. Moreover, we cannot assure you that our processes for controlling our use of open source software in our products and subscriptions will be effective. From time to time, we may face claims from third parties asserting ownership of, or demanding release of, the open source software or derivative works that we developed using such software (which could include our proprietary source code), or otherwise seeking to enforce the terms of the applicable open source license. These claims could result in litigation. Litigation could be costly for us to defend, have a negative effect on our results of operations and financial condition or require us to devote additional research and development resources to change our solutions. Responding to any infringement or noncompliance claim by an open source vendor, regardless of its validity, discovering certain open source software code in our Falcon platform, or a finding that we have breached the terms of an open source software license, could harm our business, results of operations and financial condition, by, among other things:

- resulting in time-consuming and costly litigation;
- diverting management's time and attention from developing our business;
- requiring us to pay monetary damages or enter into royalty and licensing agreements that we would not normally find acceptable;

- causing delays in the deployment of our Falcon platform or service offerings to our customers;
- requiring us to stop offering certain services or features of our Falcon platform;
- requiring us to redesign certain components of our Falcon platform using alternative non-infringing or non-open source technology, which could require significant effort and expense;
- requiring us to disclose our software source code and the detailed program commands for our software; and
- requiring us to satisfy indemnification obligations to our customers.

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

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

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

We are regularly subject to claims, suits, and government investigations and other proceedings including patent, product liability, class action, whistleblower, personal injury, property damage, labor and employment, commercial disputes, compliance with laws and regulatory requirements and other matters, and we may become subject to additional types of claims, suits, investigations and proceedings as our business develops. For example, we, along with certain other cybersecurity providers, currently are subject to a civil investigation regarding participation in cybersecurity testing standard-setting and allegations that this standard-setting facilitated a concerted refusal to deal with cybersecurity testing organizations that did not adhere to those standards. While we believe that we have acted in compliance in all material respects with applicable antitrust laws, such investigation, as well as any other claims, suits, and government investigations and proceedings that may be asserted against us in the future are inherently uncertain and their results cannot be predicted with certainty. Regardless of the outcome, any of these types of legal proceedings can have an adverse impact on us because of legal costs and diversion of management attention and resources, and could cause us to incur significant expenses or liability, adversely affect our brand recognition, and/or require us to change our business practices. The expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations. It is possible that a resolution of one or more such proceedings could result in substantial damages, settlement costs, fines and penalties that could adversely affect our business, consolidated financial position, results of operations, or cash flows in a particular period. These proceedings could also result in reputational harm, sanctions, consent decrees, or orders requiring a change in our business practices. Because of the potential risks, expenses and uncertainties of litigation, we may, from time to time, settle disputes, even where we have meritorious claims or defenses, by agreeing to settlement agreements. Because litigation is inherently unpredictable, we cannot assure you that the results of any of these actions will not have a material adverse effect on our business, financial condition, results of operations, and prospects. Any of these consequences could adversely affect our business and results of operations.

Our ability to maintain customer satisfaction depends in part on the quality of our customer support.

Once our Falcon platform is deployed within our customers' networks, our customers depend on our customer support services to resolve any issues relating to the implementation and maintenance of our Falcon platform. If we do not provide effective ongoing support, customer renewals and our ability to sell additional modules as part of our Falcon platform to existing customers could be adversely affected and our reputation with potential customers could be damaged. Many larger organizations have more complex networks and require higher levels of support than smaller customers and we offer premium services for these customers. Failure to maintain high-quality customer support could have a material adverse effect on our business, results of operations, and financial condition.

We may need to raise additional capital to expand our operations and invest in new solutions, which capital may not be available on terms acceptable to us, or at all, and which could reduce our ability to compete and could harm our business.

We expect that our existing cash and cash equivalents and marketable securities will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next 12 months. Retaining or expanding our current levels of personnel and products offerings may require additional funds to respond to business challenges, including the need to develop new products and enhancements to our Falcon platform, improve our operating infrastructure, or acquire complementary businesses and technologies. 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. Accordingly, we may need to engage in additional equity or debt financings to secure additional funds. If we raise additional equity financing, our stockholders may experience significant dilution of their ownership interests and the market price of our Class A common stock could decline. If we engage in debt financing, the holders of debt would have priority over the holders of our Class A common stock, and we may be required to accept terms that restrict our operations or our ability to incur additional indebtedness or to take other actions that would otherwise be in the interests of the debt holders. Any of the above could harm our business, results of operations, and financial condition.

Our business is subject to the risks of warranty claims, product returns, product liability, and product defects from real or perceived defects in our solutions or their misuse by our customers or third parties and indemnity provisions in various agreements potentially expose us to substantial liability for intellectual property infringement and other losses.

We may be subject to liability claims for damages related to errors or defects in our solutions. A material liability claim or other occurrence that harms our reputation or decreases market acceptance of our products may harm our business and results of operations. Although we generally have limitation of liability provisions in our terms and conditions of sale, these provisions do not cover our indemnification obligations as described in the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Indemnification” and they may not fully or effectively protect us from claims as a result of federal, state, or local laws or ordinances, or unfavorable judicial decisions in the United States or other countries. The sale and support of our products also entails the risk of product liability claims.

Additionally, our agreements with customers and other third parties typically include indemnification or other provisions under which we agree to indemnify or otherwise be liable to them for losses suffered or incurred as a result of claims regarding intellectual property infringement, breach of agreement, including confidentiality, privacy and security obligations, violation of applicable laws, damages caused by failures of our solutions or to property or persons, or other liabilities relating to or arising from our products and services, or other acts or omissions. These contractual provisions often survive termination or expiration of the applicable agreement. We have not to date received any indemnification claims from third parties. However, as we continue to grow, the possibility of these claims against us will increase.

If our customers or other third parties we do business with make intellectual property rights or other indemnification claims against us, we will incur significant legal expenses and may have to pay damages, license fees, and/or stop using technology found to be in violation of the third party’s rights. We may also have to seek a license for the technology. Such license may not be available on reasonable terms, if at all, and may significantly increase our operating expenses or may require us to restrict our business activities and limit our ability to deliver certain solutions or features. We may also be required to develop alternative non-infringing technology, which could require significant effort and expense and/or cause us to alter our products and services, which could harm our business. Large indemnity obligations, whether for intellectual property or other claims, could harm our business, results of operations, and financial condition.

Additionally, our Falcon platform may be used by our customers and other third parties who obtain access to our solutions for purposes other than for which our platform was intended. For example, our Falcon platform might be misused by a customer to monitor its employee’s activities in a manner that violates the employee’s privacy rights under applicable law.

During the course of performing certain solution-related services and our professional services, our teams may have significant access to our customers’ networks. We cannot be sure that an employee may not take advantage of such access which may make our customers vulnerable to malicious activity by such employee. Any such misuse of our Falcon platform could result in negative press coverage and negatively affect our reputation, which could result in harm to our business, reputation, and results of operations.

We maintain insurance to protect against certain claims associated with the use of our products, but our insurance coverage may not adequately cover any claim asserted against us. In addition, even claims that ultimately are unsuccessful could result in our expenditure of funds in litigation, divert management’s time and other resources, and harm our business and reputation. We offer our customers a limited warranty, subject to certain conditions, with our Falcon Complete cloud module and our potential liability under this warranty is provided by our insurance carrier to us. Any failure or refusal of our insurance providers to provide the expected insurance benefits to us after we have paid the warranty claims would cause us to incur significant expense or cause us to cease offering this warranty which could damage our reputation, cause us to lose customers, expose us to liability claims by our customers, negatively impact our sales and marketing efforts, and have an adverse effect on our business, financial condition and results of operations.

Our credit agreement contains restrictive covenants that limit our ability to borrow more money, to make distributions to our stockholders, and to engage in certain other activities, as well as financial covenants that may limit our operating flexibility.

Our existing credit agreement contains a number of covenants that limit our ability and our subsidiaries’ ability to, among other things, transfer or dispose of assets, pay dividends or make distributions, incur additional indebtedness, create liens, make investments, loans and acquisitions, engage in transactions with affiliates, merge or consolidate with other companies, or sell substantially all of our assets. Our credit agreement is guaranteed by us and certain of our subsidiaries and secured by substantially all of the assets of the borrower subsidiary, us, and the guarantor subsidiaries. The terms of our credit agreement may restrict our current and future operations and could adversely affect our ability to finance our future operations or capital needs or to execute preferred business strategies. In addition, complying with these covenants may make it more difficult for us to successfully execute our business strategy and compete against companies who are not subject to such restrictions. Additionally, our credit agreement includes financial covenants that require us to maintain minimum growth rates of our recurring subscription revenue, and to maintain minimum liquidity at specified levels. We may not be able to generate sufficient cash flow or sales to meet the financial covenants or pay the principal or interest under the credit facility.

If we are unable to comply with our payment requirements, our lender may accelerate our obligations under our credit agreement and foreclose upon the collateral, or we may be forced to sell assets, restructure our indebtedness or seek additional equity capital, which would dilute our stockholders’ interests. If we fail to comply with any covenant it could result in an event of default under the agreement and our lender could make the entire debt immediately due and payable. If this occurs, we might not be able to repay our debt or borrow sufficient funds to refinance it. Even if new financing is available, it may not be on terms that are acceptable to us.

The requirements of being a public company may strain our resources, divert managements’ attention, and if we fail to maintain an effective system of internal controls, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a new public company, we recently became subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and the rules and regulations of Nasdaq. We expect that the requirements of these rules and regulations will increase our legal, accounting and financial compliance costs; make some activities more difficult, time-consuming and costly, and place significant strain on our personnel, systems and resources. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal control over financial reporting. We are continuing to develop and refine our disclosure controls, internal control over financial reporting and other procedures that are designed to ensure information required to be disclosed by us in our financial statements and in the reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and information required to be disclosed in reports under the Exchange Act is accumulated and communicated to our principal executive and financial officers.

Our current controls and any new controls we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our internal controls may be discovered in the future. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our results of operations, may result in a restatement of our financial statements for prior periods, cause us to fail to meet our reporting obligations, and could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in the periodic reports we are required to file with the SEC. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the market price of our Class A common stock. As a result of becoming a public company, our management is required, pursuant to Section 404 of the Sarbanes-Oxley Act, to certify financial and other information in our quarterly and annual reports and provide an annual management report on the effectiveness of our internal control over financial reporting commencing with our second Annual Report on Form 10-K. In order to improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management's attention may be diverted from other business concerns, which could harm our business, financial condition, and results of operations.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until after we are no longer an emerging growth company. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could have a material and adverse effect on our business and results of operations and could cause a decline in the price of our stock.

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

As part of our business strategy, we have in the past and expect to continue to make investments in and/or acquire complementary companies, services or technologies. Our ability as an organization to acquire and integrate other companies, services or technologies in a successful manner in the future is not guaranteed. We may not be able to find suitable acquisition candidates, and we may not be able to complete such acquisitions on favorable terms, if at all. If we do complete acquisitions, we may not ultimately strengthen our competitive position or ability to achieve our business objectives, and any acquisitions we complete could be viewed negatively by our end-customers or investors. In addition, if we are unsuccessful at integrating such 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, and we may not be able to manage the process successfully. We may not successfully evaluate or utilize the acquired technology or personnel, or accurately forecast the financial impact of an acquisition transaction, including accounting charges. We may have to pay cash, incur debt or issue equity securities to pay for any such acquisition, each of which could adversely affect our financial condition and the market price of our Class A common stock. The sale of equity or issuance of debt to finance any such acquisitions could result in dilution to our stockholders. 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.

Additional risks we may face in connection with acquisitions include:

- diversion of management time and focus from operating our business to addressing acquisition integration challenges;
- coordination of research and development and sales and marketing functions;
- integration of product and service offerings;
- retention of key employees from the acquired company;
- changes in relationships with strategic partners as a result of product acquisitions or strategic positioning resulting from the acquisition;
- cultural challenges associated with integrating employees from the acquired company into our organization;
- integration of the acquired company's accounting, management information, human resources and other administrative systems;
- the need to implement or improve controls, procedures, and policies at a business that prior to the acquisition may have lacked sufficiently effective controls, procedures and policies;
- additional legal, regulatory or compliance requirements;
- financial reporting, revenue recognition or other financial or control deficiencies of the acquired company that we don't adequately address and that cause our reported results to be incorrect;
- liability for activities of the acquired company before the acquisition, including intellectual property infringement claims, violations of laws, commercial disputes, tax liabilities and other known and unknown liabilities;

- unanticipated write-offs or charges; and
- litigation or other claims in connection with the acquired company, including claims from terminated employees, customers, former stockholders or other third parties.

Our failure to address these risks or other problems encountered in connection with acquisitions and investments could cause us to fail to realize the anticipated benefits of these acquisitions or investments, cause us to incur unanticipated liabilities, and harm our business generally.

If we cannot maintain our company culture as we grow, we could lose the innovation, teamwork, passion, and focus on execution that we believe contribute to our success and our business may be harmed.

We believe that our corporate culture has been a contributor to our success, which we believe fosters innovation, teamwork, passion and focus on building and marketing our Falcon platform. As we grow, we may find it difficult to maintain our corporate culture. Any failure to preserve our culture could harm our future success, including our ability to retain and recruit personnel, innovate and operate effectively and execute on our business strategy. Additionally, our productivity and the quality of our solutions may be adversely affected if we do not integrate and train our new employees quickly and effectively. If we experience any of these effects in connection with future growth, it could impair our ability to attract new customers, retain existing customers and expand their use of our Falcon platform, all of which would adversely affect our business, financial condition and results of operations.

Our international operations and plans for future international expansion expose us to significant risks, and failure to manage those risks could adversely impact our business.

We derived approximately 17%, 23%, and 26% of our total revenue from our international customers for fiscal 2018, fiscal 2019, and fiscal 2020, respectively. We are continuing to adapt to and develop strategies to address international markets and our growth strategy includes expansion into target geographies, but there is no guarantee that such efforts will be successful. We expect that our international activities will continue to grow in the future, as we continue to pursue opportunities in international markets. These international operations will require significant management attention and financial resources and are subject to substantial risks, including:

- greater difficulty in negotiating contracts with standard terms, enforcing contracts and managing collections, and longer collection periods;
- higher costs of doing business internationally, including costs incurred in establishing and maintaining office space and equipment for our international operations;
- management communication and integration problems resulting from cultural and geographic dispersion;
- risks associated with trade restrictions and foreign legal requirements, including any importation, certification, and localization of our Falcon platform that may be required in foreign countries;
- greater risk of unexpected changes in regulatory practices, tariffs, and tax laws and treaties;
- compliance with anti-bribery laws, including, without limitation, compliance with the U.S. Foreign Corrupt Practices Act of 1977, as amended, the U.S. Travel Act and the UK Bribery Act 2010, violations of which could lead to significant fines, penalties, and collateral consequences for our company;
- heightened risk of unfair or corrupt business practices in certain geographies and of improper or fraudulent sales arrangements that may impact financial results and result in restatements of, or irregularities in, financial statements;
- the uncertainty of protection for intellectual property rights in some countries;
- general economic and political conditions in these foreign markets;
- foreign exchange controls or tax regulations that might prevent us from repatriating cash earned outside the United States;

- political and economic instability in some countries;
- double taxation of our international earnings and potentially adverse tax consequences due to changes in the tax laws of the United States or the foreign jurisdictions in which we operate;
- unexpected costs for the localization of our services, including translation into foreign languages and adaptation for local practices and regulatory requirements;
- requirements to comply with foreign privacy, data protection, and information security laws and regulations and the risks and costs of noncompliance;
- greater difficulty in identifying, attracting and retaining local qualified personnel, and the costs and expenses associated with such activities;
- greater difficulty identifying qualified channel partners and maintaining successful relationships with such partners;
- differing employment practices and labor relations issues; and
- difficulties in managing and staffing international offices and increased travel, infrastructure, and legal compliance costs associated with multiple international locations.

Additionally, all of our sales contracts are currently denominated in U.S. dollars. However, a strengthening of the U.S. dollar could increase the cost of our solutions to our international customers, which could adversely affect our business and results of operations. In addition, an increasing portion of our operating expenses is incurred outside the United States, is denominated in foreign currencies, such as the British Pound, Indian Rupee, Euro, Australian Dollar, and Canadian Dollar, and is subject to fluctuations due to changes in foreign currency exchange rates. If we become more exposed to currency fluctuations and are not able to successfully hedge against the risks associated with currency fluctuations, our results of operations could be adversely affected.

As we continue to develop and grow our business globally, our success will depend in large part on our ability to anticipate and effectively manage these risks. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources. Our failure to successfully manage our international operations and the associated risks could limit the future growth of our business.

CrowdStrike is a highly-visible public company whose management, products, business, results of operations, statements and actions are scrutinized by critics whose influence could negatively impact the perception of our brand and the market value of our common stock.

CrowdStrike is a highly-visible public company whose management, products, business, results of operations, statements and actions are publicized. Such attention sometimes includes criticism of us by a range of third-parties. Our continued success depends on our ability to focus on executing on our mission and business plan while maintaining the trust of our current and potential customers, employees, stockholders and business partners. Any criticism, whether or not accurate, could influence the perception of our brand or our management by our customers, suppliers or investors, which could adversely impact our business prospects, operating results and the market value of our common stock.

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

As of January 31, 2020, we had aggregate U.S. federal and California net operating loss carryforwards of $657.3 million and $94.8 million, respectively, which may be available to offset future taxable income for income tax purposes. If not utilized, the federal and California net operating loss carryforwards will begin to expire in 2031. As of January 31, 2020, we had net operating loss carryforwards for other states of $352.8 million that will begin to expire in 2023. As of January 31, 2020, we had federal and California research and development credit carryforwards of $17.2 million and $4.3 million, respectively. The federal research and development credit carryforwards will begin to expire in 2031, and the California carryforwards are carried forward indefinitely. Realization of these net operating loss and research and development credit carryforwards depends on future income, and there is a risk that our existing carryforwards could expire unused and be unavailable to offset future income tax liabilities, which could adversely affect our results of operations.

In addition, under Sections 382 and 383 of the Internal Revenue Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50% change (by value) in ownership by "5 percent shareholders" over a rolling three-year period, the corporation's ability to use its pre-change net operating loss carryovers and other pre-change tax attributes, such as research and development credits, to offset its post-change income or taxes may be limited. We may experience ownership changes in the future as a result of shifts in our stock ownership. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

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 results of operations.

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

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

We are expanding our international operations and staff to support our business in international markets. We generally conduct our international operations through wholly-owned subsidiaries and are or may be required to report our taxable income in various jurisdictions worldwide based upon our business operations in those jurisdictions. Our intercompany relationships are subject to complex transfer pricing regulations administered by taxing authorities in various jurisdictions. The amount of taxes we pay in different jurisdictions may depend on the application of the tax laws of the various jurisdictions, including the United States, to our international business activities, changes in tax rates, new or revised tax laws or interpretations of existing tax laws and policies, and our ability to operate our business in a manner consistent with our corporate structure and intercompany arrangements. The relevant taxing authorities may disagree with our determinations as to the income and expenses attributable to specific jurisdictions. If such a disagreement were to occur, and our position was not sustained, we could be required to pay additional taxes, interest and penalties, which could result in one-time tax charges, higher effective tax rates, reduced cash flows and lower overall profitability of our operations.

We are subject to federal, state, and local income, sales, and other taxes in the United States and income, withholding, transaction, and other taxes in numerous foreign jurisdictions. Significant judgment is required in evaluating our tax positions and our worldwide provision for taxes. During the ordinary course of business, there are many activities and transactions for which the ultimate tax determination is uncertain. In addition, our tax obligations and effective tax rates could be adversely affected by changes in the relevant tax, accounting and other laws, regulations, principles and interpretations, including those relating to income tax nexus, by recognizing tax losses or lower than anticipated earnings in jurisdictions where we have lower statutory rates and higher than anticipated earnings in jurisdictions where we have higher statutory rates, by changes in foreign currency exchange rates, or by changes in the valuation of our deferred tax assets and liabilities. We may be audited in various jurisdictions, and such jurisdictions may assess additional taxes, sales taxes and value added taxes against us. Although we believe our tax estimates are reasonable, the final determination of any tax audits or litigation could be materially different from our historical tax provisions and accruals, which could have an adverse effect on our results of operations or cash flows in the period or periods for which a determination is made.

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

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and accompanying notes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, as discussed in the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations." The results of these estimates form the basis for making judgments about the carrying values of assets, liabilities and equity, and the amount of revenue and expenses that are not readily apparent from other sources. Significant assumptions and estimates used in preparing our consolidated financial statements include those related to revenue recognition; allowance for doubtful accounts; valuation of common stock and redeemable convertible preferred stock warrants; carrying value and useful lives of long-lived assets; loss contingencies; and the provision for income taxes and related deferred taxes. Our results of operations may be adversely affected if our assumptions change or if actual circumstances differ from those in our assumptions, which could cause our results of operations to fall below the expectations of industry or financial analysts and investors, resulting in a decline in the market price of our Class A common stock.

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

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

Our corporate headquarters are located in the San Francisco Bay Area, a region known for seismic activity. A significant natural disaster, such as an earthquake, a fire, a flood, or significant power outage and other catastrophic events, including the occurrence of a contagious disease or illness, such as COVID-19, could have a material adverse impact on our business, results of operations, and financial condition. The outbreak of a contagious disease like COVID-19 has, among other things, prompted responses such as government-imposed travel restrictions, the grounding of flights, and the shutdown of workplaces. It is not possible for us to predict the duration or magnitude of the adverse results of the outbreak and its effects on our business or results of operations at this time. Natural disasters and other catastrophic events such as COVID-19, could affect our personnel, recovery of our assets, data centers, supply chain, manufacturing vendors, or logistics providers' ability to provide materials and perform services such as manufacturing products or assisting with shipments on a timely basis. In addition, climate change could result in an increase in the frequency or severity of natural disasters. In the event that our or our service providers' information technology systems or manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed, resulting in missed financial targets, such as revenue and shipment targets, for a particular quarter. In addition, computer malware, viruses and computer hacking, fraudulent use attempts, and phishing attacks have become more prevalent in our industry, and our internal systems may be victimized by such attacks. Although we maintain incident management and disaster response plans, in the event of a major disruption caused by a natural disaster or man-made problem, we may be unable to continue our operations and may endure system interruptions, reputational harm, delays in our development activities, lengthy interruptions in service, breaches of data security and loss of critical data, and our insurance may not cover such events or may be insufficient to compensate us for the potentially significant losses we may incur. Acts of terrorism and other geo-political unrest could also cause disruptions in our business or the business of our supply chain, manufacturers, logistics providers, partners, or customers or the economy as a whole. Any disruption in the business of our supply chain, manufacturers, logistics providers, partners or end-customers that impacts sales at the end of a fiscal quarter could have a significant adverse impact on our financial results. 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 delays or cancellations of customer orders, or the delay in the manufacture, deployment or shipment of our products, our business, financial condition and results of operations would be adversely affected.

Risks Related to Ownership of Our Class A Common Stock

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

We cannot predict the prices at which our Class A common stock will trade. The market price of our Class A common stock depends on a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. In addition, the limited public float of our Class A common stock tends to increase the volatility of the trading price of our Class A common stock. These fluctuations could cause you to lose all or part of your investment in our Class A common stock. Factors that could cause fluctuations in the market price of our Class A common stock include the following:

- actual or anticipated changes or fluctuations in our results of operations;
- the financial projections we may provide to the public, any changes in these projections or our failure to meet these projections;
- announcements by us or our competitors of new products or new or terminated significant contracts, commercial relationships or capital commitments;
- industry or financial analyst or investor reaction to our press releases, other public announcements and filings with the SEC;
- rumors and market speculation involving us or other companies in our industry;
- price and volume fluctuations in the overall stock market from time to time;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- failure of industry or financial analysts to maintain coverage of us, changes in financial estimates by any analysts who follow our company, or our failure to meet these estimates or the expectations of investors;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- litigation involving us, our industry or both, or investigations by regulators into our operations or those of our competitors;
- developments or disputes concerning our intellectual property rights or our solutions, or third-party proprietary rights;
- announced or completed acquisitions of businesses or technologies by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- any major changes in our management or our board of directors, particularly with respect to Mr. Kurtz;
- effects of public health crises, pandemics and epidemics, such as COVID-19;
- general economic conditions and slow or negative growth of our markets; and
- other events or factors, including those resulting from war, incidents of terrorism or responses to these events.

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

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

Sales of a substantial number of shares of our Class A common stock in the public market, including shares of Class A stock that have been converted from shares of Class B common stock, and particularly sales by our directors, executive officers and significant stockholders, or the perception that these sales could occur, could adversely affect the market price of our Class A common stock. As of February 29, 2020, we had 114,945,286 shares of Class A common stock outstanding and 98,267,729 shares of Class B common stock outstanding.

All of the shares of Class A common stock sold in our initial public offering are freely tradable without restrictions or further registration under the Securities Act of 1933, as amended, or the Securities Act, except for any shares held by our affiliates as defined in Rule 144 under the Securities Act.

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

As of January 31, 2020, an aggregate of approximately 5.5 million shares of our Class B common stock that are beneficially owned by George Kurtz, our President and Chief Executive Officer and a member of our board of directors, and Burt Podbere, our Chief Financial Officer, are pledged to secure obligations of Mr. Kurtz and Mr. Podbere under certain loan agreements. In the case of nonpayment at maturity or another event of default (including but not limited to the borrower's inability to satisfy a margin call, which may be instituted by the lender following certain declines in our stock price), the lender or any transferee (in the event that the lender had assigned or otherwise transferred its rights under the pledge to a non-affiliate) may exercise its rights under the applicable loan agreement to foreclose on and sell shares pledged to cover the amount due under the loan. Any transfers or sales of such pledged shares may cause the price of our Class A common stock to decline.

We may also issue our shares of Class A common stock or securities convertible into shares of our Class A common stock from time to time in connection with a financing, acquisition, investments or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and cause the market price of our Class A common stock to decline.

If industry or financial analysts do not publish research or reports about our business, or if they issue inaccurate or unfavorable research regarding our Class A common stock, our stock price and trading volume could decline.

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

The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock (or options or other securities convertible into or exercisable for our capital stock) prior to the completion of our initial public offering, including our executive officers, employees, directors, principal stockholders, and their affiliates, which will limit your ability to influence the outcome of matters submitted to our stockholders for approval.

Our Class B common stock has 10 votes per share, and our Class A common stock has one vote per share. The dual class structure of our common stock has the effect of concentrating voting control with those stockholders who held our capital stock (or options or other securities convertible into or exercisable for our capital stock) prior to the initial public offering, including our executive officers, employees, directors, principal stockholders, and their affiliates, which will limit your ability to influence the outcome of matters submitted to our stockholders for approval, including the election of our directors and the approval of any change in control transaction. Future transfers by holders of Class B common stock will generally result in those shares converting to Class A common stock, which will have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain their shares in the long term.

As of January 31, 2020, our executive officers, directors, three of our current stockholders and their respective affiliates held, in aggregate, 82% of the voting power of our outstanding capital stock. Furthermore, three of our current stockholders and their affiliates held, in aggregate, 63% of the voting power of our outstanding capital stock. As a result, these stockholders, acting together, have control over most matters that require approval by our stockholders, including the election of directors and approval of significant corporate transactions. They may also have interests that differ from yours and may vote in a way with which you disagree and which may be adverse to your interests. Corporate action might be taken even if other stockholders, including those who purchased shares in our initial public offering, oppose them. This concentration of ownership may have the effect of delaying, preventing or deterring a change of control or other liquidity event of our company, could deprive our stockholders of an opportunity to receive a premium for their shares of common stock as part of a sale or other liquidity event and might ultimately affect the market price of our common stock.

Further, our amended and restated certificate of incorporation provides that, to the fullest extent permitted by law, the doctrine of “corporate opportunity” does not apply to Accel and Warburg Pincus, or their respective affiliates, in a manner that would prohibit them from investing in competing businesses or doing business with our partners or customers.

Shares of our common stock are subordinate to our debts and other liabilities, resulting in a greater risk of loss for stockholders.

Shares of our common stock are subordinate in right of payment to all of our current and future debt. We cannot assure that there would be any remaining funds after the payment of all of our debts for any distribution to our common stockholders.

We do not intend to pay dividends in the foreseeable future. As a result, your ability to achieve a return on your investment will depend on appreciation in the price of our Class A common stock.

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

We are an “emerging growth company” and we cannot be certain if the reduced disclosure requirements applicable to emerging growth companies will make our Class A common stock less attractive to investors.

For so long as we remain an “emerging growth company” as defined in the JOBS Act, we may take advantage of certain exemptions from various requirements that are applicable to public companies that are not “emerging growth companies,” including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We may take advantage of these exemptions until we are no longer an emerging growth company. We would cease to be an emerging growth company upon the earliest to occur of: (i) the first fiscal year following the fifth anniversary of our initial public offering; (ii) the first fiscal year after our annual gross revenue is $1.07 billion or more; (iii) the date on which we have, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities; or (iv) date on which we qualify as a “large accelerated filer,” as defined in Rule 12b-2 under the Exchange Act, which would occur at the end of the fiscal year in which the market value of our common stock held by non-affiliates exceeded $700.0 million as of the end of the second quarter of that fiscal year, and after which we have been a reporting company for at least 12 months. Further, pursuant to Section 107 of the JOBS Act, as an emerging growth company, we have elected to take advantage of the extended transition period for complying with new or revised accounting standards until those standards would otherwise apply to private companies. As a result, our results of operations and financial statements may not be comparable to the results of operations and financial statements of other companies who have adopted the new or revised accounting standards. We cannot predict if investors will find our Class A common stock less attractive because we may rely on these exemptions. If some investors find our Class A common stock less attractive as a result, our stock price may be more volatile.

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

Our amended and restated certificate of incorporation authorizes us to issue up to 2,000,000,000 shares of Class A common stock, up to 300,000,000 shares of Class B common stock, and up to 100,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors. Subject to compliance with applicable rules and regulations, we may issue shares of Class A common stock or securities convertible into shares of our Class A common stock from time to time in connection with a financing, acquisition, investment, our stock incentive plans or otherwise. Any such issuance could result in substantial dilution to our existing stockholders and cause the market price of our Class A common stock to decline.

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

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

- our dual class common stock structure, which provides our holders of Class B common stock with the ability to significantly influence the outcome of matters requiring stockholder approval, even if they own significantly less than a majority of the shares of our outstanding Class A and Class B common stock;

- a classified board of directors with three-year staggered terms, which could delay the ability of stockholders to change the membership of a majority of our board of directors;

- the ability of our board of directors to issue shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquirer;

- the exclusive right of our board of directors to elect a director to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;

- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders, which prohibition will take effect on the first date on which the number of outstanding shares of our Class B common stock represents less than 10% of the aggregate number of outstanding shares of our Class A common stock and our Class B common stock, taken together as a single class;

- the requirement that a special meeting of stockholders may be called only by the chairperson of our board of directors, chief executive officer or by the board of directors acting pursuant to a resolution adopted by a majority of our board of directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;

- certain amendments to our amended and restated certificate of incorporation require the approval of two-thirds of the then-outstanding voting power of our capital stock; and

- advance notice procedures with which stockholders must comply to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect the acquirer's own slate of directors or otherwise attempting to obtain control of us.

These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware, and to the extent enforceable, the federal district courts of the United States, will be the exclusive forum for certain disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware is the exclusive forum for:

- any derivative action or proceeding brought on our behalf;

- any action asserting a breach of fiduciary duty;

- any action asserting a claim against us arising under the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws;

- any action to interpret, apply, enforce or determine the validity of our amended and restated certificate of incorporation or our amended and restated bylaws; and

- any action asserting a claim against us that is governed by the internal-affairs doctrine.

However, this exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act. In addition, our amended and restated bylaws provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision.

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

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our corporate headquarters occupies approximately 68,791 square feet in Sunnyvale, California under a lease that expires in 2025. We also lease offices in California, Maryland, Missouri, Minnesota, Texas, Virginia, and Washington, as well as locations internationally, including in Australia, Germany, India, Romania, and the United Kingdom.

We believe that our existing facilities are sufficient for our current needs. In the future, we may need to add new facilities and expand our existing facilities as we add employees, grow our infrastructure and evolve our business, and we believe that suitable additional or substitute space will be available on commercially reasonable terms to meet our future needs.

Item 3. Legal Proceedings

We are currently involved in proceedings before the Trademark Trial and Appeal Board ("TTAB"), at the U.S. Patent and Trademark Office, (the "USPTO"), regarding our U.S. trademark registrations for "CrowdStrike Falcon" and our U.S. application to register our "Falcon OverWatch" trademark. On November 23, 2016, Fair Isaac Corporation, or FICO, filed a Petition for Cancellation of our "CrowdStrike Falcon" trademark registrations and a Notice of Opposition against our "Falcon OverWatch" trademark application before the USPTO, TTAB. On January 3, 2017, we filed answers to both the cancellation and opposition proceedings, and the proceedings thereafter were consolidated. On November 21, 2018, we filed a Petition for Partial Cancellation or Amendment of one of FICO's "Falcon" trademark registrations, and on December 10, 2018, the parties filed a joint request to consolidate the proceedings and adjust the schedule. On January 16, 2019, FICO moved to dismiss our petition. On July 2, 2019, the TTAB consolidated the proceedings and granted FICO's motion to dismiss with leave to amend. On July 22, 2019, we filed an Amended Petition for Cancellation or Amendment and on August 12, 2019, FICO moved to dismiss our Amended Petition for Cancellation. On January 31, 2020, the TTAB denied the motion to dismiss as to two grounds for partial cancellation and as to the request for amendment, and granted the motion as to a third ground for partial cancellation of one of FICO's "Falcon" registrations and the claim for abandonment of both of FICO's "Falcon" trademark registrations, with the right to reassert both claims for relief. The TTAB also set a new schedule for the consolidated proceedings, with trial periods set to begin on December 6, 2020. On March 18, 2020, we filed a motion for leave to file a Second Amended Petition to include a claim for abandonment for two of FICO's "Falcon" trademark registrations. We are vigorously defending the case, but given the early stage, although a loss may reasonably be possible, we are unable to predict the likelihood of success of FICO's claims or estimate a loss or a range of loss. As a result, no liability has been recorded as of January 31, 2020 or January 31, 2019.

In addition, from time to time, we are a party to various litigation matters and subject to claims that arise in the ordinary course of business. In addition, third parties may from time to time assert claims against us in the form of letters and other communications. For any claims for which we believe a liability is both probable and reasonably estimable, we record a liability in the period for which it makes this determination. There is no pending or threatened legal proceeding to which we are a party that, in our opinion, is likely to have a material adverse effect on our consolidated financial statements; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on our business because of defense and settlement costs, diversion of management resources, and other factors. In addition, the expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect our results of operations.

Item 4. Mine Safety Disclosures

Not applicable.

Part II

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

Market Information for Common Stock

Our common stock is listed and traded on the Nasdaq Global Select Market under the symbol "CRWD" since June 12, 2019. Prior to that date, there was no public market for our common stock.

Holders of Record

As of January 31, 2020, we had 271 holders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not expect to pay any dividends on our capital stock in the foreseeable future. Additionally, our ability to pay dividends is limited by restrictions on our ability to pay dividends or make distributions under the terms of our credit facility. Any future determination to declare dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions, and other factors that our board of directors may deem relevant.

Securities Authorized for Issuance under Equity Compensation Plans

The information required by this item with respect to our equity compensation plans is incorporated by reference to our Proxy Statement for the 2020 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2020.

Recent Sales of Unregistered Equity Securities and Use of Proceeds

(a) Sale of Unregistered Equity Securities

None.

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

On June 11, 2019, the SEC declared our registration statement on Form S-1 (File No. 333-231461) for our IPO effective. There have been no material changes in the planned use of proceeds from our IPO as described in our final prospectus filed with the SEC on June 13, 2019.

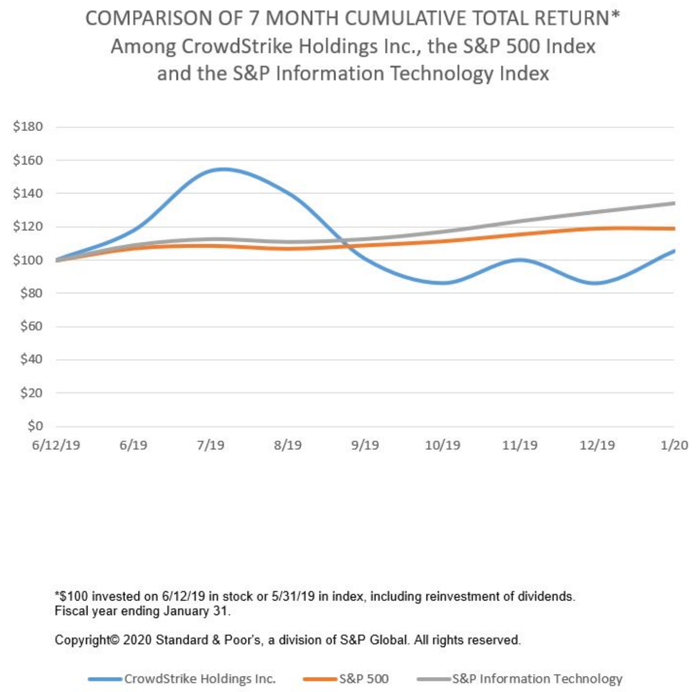
Issuer Purchases of Equity Securities

None.

Stock Performance Graph

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

We have presented below the cumulative total return to our stockholders between June 12, 2019 (the date our common stock commenced trading on the Nasdaq) through January 31, 2020 in comparison to the Standard & Poor’s 500 Index and Standard & Poor Information Technology Index. All values assume a $100 initial investment and data for the Standard & Poor’s 500 Index and Standard & Poor Information Technology Index assume reinvestment of dividends. The comparisons are based on historical data and are not indicative of, nor intended to forecast, the future performance of our common stock.



Company/ Index	June 12, 2019	June 30, 2019	July 31, 2019	August 31, 2019	September 30, 2019	October 31, 2019	November 30, 2019	December 31, 2019	January 31, 2020
CrowdStrike Holdings, Inc.	$ 100.00	$ 117.74	$ 153.57	$ 140.14	$ 100.53	$ 86.05	$ 100.00	$ 85.98	$ 105.33
S&P 500	$ 100.00	$ 107.05	$ 108.59	$ 106.87	$ 108.87	$ 111.22	$ 115.26	$ 118.74	$ 118.69
S&P Information Technology	$ 100.00	$ 109.13	$ 112.77	$ 111.10	$ 112.78	$ 117.16	$ 123.47	$ 129.02	$ 134.13

Item 6. Selected Financial Data

The selected consolidated statements of operations data presented below for fiscal 2020, fiscal 2019 and fiscal 2018 and the consolidated balance sheet data as of January 31, 2020 and 2019 are derived from our audited consolidated financial statements that are included elsewhere in this Annual Report on Form 10-K. The selected consolidated statements of operations data for fiscal 2017 and the consolidated balance sheet data as of January 31, 2018, and 2017 have been derived from our audited consolidated financial statements not included elsewhere in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future. Effective February 1, 2019, the Company adopted Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers ("ASC 606") as discussed in Note 2, "Summary of Significant Accounting Policies" to our Consolidated Financial Statements. Prior periods were not retrospectively adjusted, and accordingly, the consolidated statement of operations data for the years ended January 31, 2019, 2018 and 2017 and the consolidated balance sheet data as of January 31, 2019, 2018 and 2017 were prepared using the prior revenue recognition standard referred to as ASC 605. The selected consolidated financial data and other data set forth below should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

	Year Ended January 31,			
	2020	2019	2018	2017
	(in thousands, except per share data)			
Consolidated Statement of Operations Data:				
Revenue				
Subscription	$ 436,323	$ 219,401	$ 92,568	$ 37,895
Professional services	45,090	30,423	26,184	14,850
Total revenue	481,413	249,824	118,752	52,745
Cost of revenue				
Subscription (1)(2)	112,474	69,208	39,857	24,378
Professional services (1)	29,153	18,030	14,629	9,628
Total cost of revenue	141,627	87,238	54,486	34,006
Gross profit	339,786	162,586	64,266	18,739
Operating expenses				
Sales and marketing(1)(2)	266,595	172,682	104,277	53,748
Research and development(1)(2)	130,188	84,551	58,887	39,145
General and administrative(1)	89,068	42,217	32,542	16,402
Total operating expenses	485,851	299,450	195,706	109,295
Loss from operations	(146,065)	(136,864)	(131,440)	(90,556)
Interest expense	(442)	(428)	(1,648)	(615)
Other income (expense), net	6,725	(1,418)	(1,473)	(82)
Loss before provision for income taxes	(139,782)	(138,710)	(134,561)	(91,253)
Provision for income taxes	(1,997)	(1,367)	(929)	(87)
Net loss	$ (141,779)	$ (140,077)	$ (135,490)	$ (91,340)
Accretion of redeemable convertible preferred stock	—	—	(5,853)	(17,012)
Net loss attributable to Class A and Class B common stockholders, basic and diluted	$ (141,779)	$ (140,077)	$ (141,343)	(108,352)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted(3)	$ (0.96)	$ (3.12)	$ (3.38)	$ (2.73)
Weighted-average shares used in computing net loss per share attributable to Class A and Class B common stockholders, basic and diluted(3)	148,062	44,863	41,876	39,706

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

	Year Ended January 31,			
	2020	2019	2018	2017
	(in thousands)			
Subscription cost of revenue	$ 5,226	$ 689	$ 89	$ 50
Professional services cost of revenue	2,486	205	252	41
Sales and marketing	23,919	5,175	1,386	638
Research and development	15,403	7,815	3,429	561
General and administrative	32,906	6,621	7,187	704
Total stock-based compensation expense	$ 79,940	$ 20,505	$ 12,343	$ 1,994

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

	Year Ended January 31,			
	2020	2019	2018	2017
	(in thousands)			
Subscription cost of revenue	$ 323	$ 327	$ 287	$ 97
Sales and marketing	123	143	20	—
Research and development	41	113	321	—
Total amortization of purchased intangibles	$ 487	$ 583	$ 628	$ 97

(3) See Note 2 and Note 14 to our consolidated financial statements elsewhere in this Annual Report on Form 10-K for an explanation of the method used to calculate our basic and diluted net loss per share attributable to our common stockholders and the weighted-average number of shares used in the computation of the per share amounts.

	As of January 31,			
	2020	2019	2018	2017
	(in thousands)			
Consolidated Balance Sheet Data:				
Cash, cash equivalents and marketable securities	$ 912,064	$ 191,655	$ 65,772	$ 33,450
Working capital (deficit)[(1)]	$ 678,540	$ 49,968	$ (12,279)	$ (19,013)
Total assets	$ 1,404,906	$ 433,219	$ 217,703	$ 91,371
Deferred revenue, current and noncurrent	$ 571,168	$ 290,067	$ 158,950	$ 76,551
Redeemable convertible preferred stock	$ —	$ 557,912	$ 351,016	$ 214,728
Accumulated deficit	$ (637,487)	$ (519,126)	$ (378,948)	$ (243,458)
Total stockholders' equity (deficit)	$ 742,607	$ (487,793)	$ (369,474)	$ (243,453)

(1) Working capital (deficit) is defined as current assets less current liabilities.

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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and related notes thereto included elsewhere in this Annual Report on Form 10-K. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in the sections titled "Special Note Regarding Forward-Looking Statements" and "Risk Factors." Our fiscal year end is January 31, and our fiscal quarters end on April 30, July 31, October 31, and January 31. Our fiscal years ended January 31, 2020, January 31, 2019, and January 31, 2018, are referred to herein as fiscal 2020, fiscal 2019, and fiscal 2018, respectively.

Overview

We founded CrowdStrike in 2011 to reinvent security for the cloud era. When we started the company, cyberattackers had a decided, asymmetric advantage over existing security products. We turned the tables on the adversaries by taking a fundamentally new approach that leverages the network effects of crowdsourced data applied to modern technologies such as AI, cloud computing, and graph databases. Realizing that the nature of cybersecurity problems had changed but the solutions had not, we built our CrowdStrike Falcon platform to detect threats and stop breaches.

We believe we are defining a new category called the Security Cloud, with the power to transform the security industry much the same way the cloud has transformed the CRM, HR, and service management industries. With our Falcon platform, we created the first multi-tenant, cloud native, intelligent security solution capable of protecting workloads across on-premise, virtualized, and cloud-based environments running on a variety of endpoints such as desktops, laptops, servers, virtual machines, and IoT devices. Our Falcon platform is composed of two tightly integrated proprietary technologies: our easily deployed intelligent lightweight agent and our cloud-based, dynamic graph database called Threat Graph. Our solution benefits from crowdsourcing and economies of scale, which we believe enables our AI algorithms to be uniquely effective. We call this cloud-scale AI. We initially provided intelligence and incident response services while we developed our Falcon platform. In June 2013, we first began providing EDR capabilities as a single solution. In February 2017, as we executed on our Falcon platform expansion strategy, we began offering these and additional capabilities as separate cloud modules. This strategic move facilitated new customer adoption and allowed us to further expand within our customer base. Today, we offer 11 cloud modules on our Falcon platform via a SaaS subscription-based model that spans multiple large security markets, including endpoint security, security and IT operations (including vulnerability management), and threat intelligence.

On June 14, 2019 we closed our initial public offering, or IPO, in which we issued and sold 20,700,000 shares of Class A common stock. The price per share to the public was $34.00. We received aggregate proceeds of $665.1 million from the IPO, net of underwriters' discounts and commissions and before deducting estimated offering costs of $5.9 million. Upon the closing of the IPO, all shares of our outstanding preferred stock automatically converted into 131,267,586 shares of Class B common stock. In connection with our IPO, all shares of our common stock outstanding prior to our IPO were automatically converted into shares of Class B common stock.

The World Health Organization has declared the recent COVID-19 outbreak a public health emergency. The extent of the impact of the COVID-19 on our operational and financial performance will depend on certain developments, including the duration and spread of the outbreak; impact on our customers and our sales cycles; impact on our customer, employee, and industry events; and effect on our vendors, all of which are uncertain and cannot be predicted at this time. We are conducting business as usual with modifications to employee travel, employee work locations, and cancellation of certain marketing events, among other modifications. Other companies are taking precautionary and preemptive actions to address COVID-19 and may take further actions that alter their normal business operations. We will continue to actively monitor the situation and may take further actions that alter our business operations as may be required by federal, state, or local authorities, or that we determine are in the best interests of our employees, customers, partners, suppliers, and stockholders. At this point, the extent to which the COVID-19 may impact our financial condition or results of operations is uncertain. Furthermore, due to our subscription based business model, the effect of the COVID-19 may not be fully reflected in our results of operations until future periods, if at all.

Our Go-To-Market Strategy

We sell subscriptions to our Falcon platform and cloud modules to organizations across multiple industries. We primarily sell subscriptions to our Falcon platform and cloud modules through our direct sales team that leverages our network of channel partners. Our direct sales team is comprised of field sales and inside sales professionals who are segmented by a customer's number of endpoints.

We have a low friction land-and-expand sales strategy. When customers deploy our Falcon platform, they can start with any number of cloud modules and we can activate additional cloud modules in real time on the same agent already deployed on the endpoint. This architecture has also allowed us to begin to offer a free trial of our Falcon Prevent module directly from our website or the AWS Marketplace, and we plan to extend this capability to additional modules in the future. Once customers experience the benefits of our Falcon platform, they often expand their adoption over time by adding more endpoints or purchasing additional modules. We also use our sales team to identify current customers who may be interested in free trials of additional cloud modules, which serves as a powerful driver of our land-and-expand model. By segmenting our sales teams, we can deploy a low-touch sales model that efficiently identifies prospective customers.

We began as a solution for large enterprises, but the flexibility and scalability of our Falcon platform has enabled us to seamlessly offer our solution to customers of any size—from those with hundreds of thousands of endpoints to as few as three. We have expanded our sales focus to include any organization without the need to modify our Falcon platform for small and medium sized businesses.

A substantial majority of our customers purchase subscriptions with a term of one year. Our subscriptions are generally priced on a per-endpoint and per-module basis. We recognize revenue from our subscriptions ratably over the term of the subscription. We also generate revenue from our incident response and proactive professional services, which are generally priced on a time and materials basis. We view our professional services business primarily as an opportunity to cross-sell subscriptions to our Falcon platform and cloud modules.

Certain Factors Affecting Our Performance

Adoption of Our Solutions. We believe our future success depends in large part on the growth in the market for cloud-based SaaS-delivered endpoint security solutions. Many organizations have not yet abandoned the on-premise legacy products in which they have invested substantial personnel and financial resources to design and maintain. As a result, it is difficult to predict customer adoption rates and demand for our cloud-based solutions.

New Customer Acquisition. Our future growth depends in large part on our ability to acquire new customers. If our efforts to attract new customers are not successful, our revenue and rate of revenue growth may decline. We believe that our go-to-market strategy and the flexibility and scalability of our Falcon platform allow us to rapidly expand our customer base. Our incident response and proactive services also help drive new customer acquisitions, as many of these professional services customers subsequently purchase subscriptions to our Falcon platform. Many organizations have not yet adopted cloud-based security solutions, and since our Falcon platform has offerings for organizations of all sizes, worldwide, and across industries, we believe this presents a significant opportunity for growth.

Maintain Customer Retention and Increase Sales. Our ability to increase revenue depends in large part on our ability to retain our existing customers and increase the ARR of their subscriptions. We focus on increasing sales to our existing customers by expanding their deployments to more endpoints and selling additional cloud modules for increased functionality. In February 2017, we transitioned our platform from a single offering into highly-integrated offerings of multiple SKU cloud modules. We initially launched this strategy with our IT hygiene, next-generation antivirus, EDR, managed threat hunting, and intelligence modules, and added five additional modules between February 2017 and October 2019. The Falcon Platform currently has 11 cloud modules that span endpoint security, security operations, and threat intelligence.

Invest in Growth. We believe that our market opportunity is large and requires us to continue to invest significantly in sales and marketing efforts to further grow our customer base, both domestically and internationally. Our open cloud architecture and single data model have allowed us to rapidly build and deploy new cloud modules, and we expect to continue investing in those efforts to further enhance our technology platform and product functionality. In addition to our ongoing investment in research and development, we may also pursue acquisitions of businesses, technologies, and assets that complement and expand the functionality of our Falcon platform, add to our technology or security expertise, or bolster our leadership position by gaining access to new customers or markets. Furthermore, we expect our general and administrative expenses to increase in dollar amount for the foreseeable future given the additional expenses for accounting, compliance, and investor relations as we become a public company.

Key Metrics

We monitor the following key metrics to help us evaluate our business, identify trends affecting our business, formulate business plans, and make strategic decisions.

Subscription Customers

We define a subscription customer as a separate legal entity that has entered into a distinct subscription agreement for access to Falcon platform for which the term has not ended or with which we are negotiating a renewal contract. We do not consider our channel partners as customers, and we treat managed service security providers, who may purchase our products on behalf of multiple companies, as a single customer. While initially we focused our sales and marketing efforts on large enterprises, in recent years we have also increased our sales and marketing to small and medium sized businesses.

The following table sets forth the number of our subscription customers as of the dates presented:

	As of January 31,		
	2020	2019	2018
	(in thousands)		
Subscription customers	5,431	2,516	1,242
Year-over-year growth	116 %	103 %	176 %

Annual Recurring Revenue ("ARR")

ARR is calculated as the annualized value of our customer subscription contracts as of the measurement date, assuming any contract that expires during the next 12 months is renewed on its existing terms. To the extent that we are negotiating a renewal with a customer after the expiration of the subscription, we continue to include that revenue in ARR if we are actively in discussion with such an organization for a new subscription or renewal, or until such organization notifies us that it is not renewing its subscription.

The following table sets forth our ARR as of the dates presented:

	As of January 31,		
	2020	2019	2018
	(dollars in thousands)		
Annual recurring revenue	$ 600,456	$ 312,656	$ 141,314
Year-over-year growth	92 %	121 %	140 %

Dollar-Based Net Retention Rate

Our dollar-based net retention rate compares our ARR from a set of subscription customers against the same metric for those subscription customers from the prior year. Our dollar-based net retention rate reflects customer renewals, expansion, contraction, and churn, and excludes revenue from our incident response and proactive services. We calculate our dollar-based net retention rate as of period end by starting with the ARR from all subscription customers as of 12 months prior to such period end, or Prior Period ARR. We then calculate the ARR from these same subscription customers as of the current period end, or Current Period ARR. Current Period ARR includes any expansion and is net of contraction or churn over the trailing 12 months but excludes revenue from new subscription customers in the current period. We then divide the Current Period ARR by the Prior Period ARR to arrive at our dollar-based net retention rate.

Since January 2016, our dollar-based net retention rate has consistently exceeded 100%, which is primarily attributable to an expansion of endpoints within, and cross-selling additional cloud modules to, our existing subscription customers. Our dollar-based net retention rate can fluctuate from period to period due to large customer contracts in a given period, which may reduce our dollar-based net retention rate in subsequent periods if the customer makes a larger upfront purchase and does not continue to increase purchases.

	As of January 31,		
	2020	2019	2018
Dollar-based net retention rate	124 %	147 %	119 %

Our dollar-based net retention rate has varied from quarter to quarter due to a number of factors and we expect that trend to continue. For example in the fourth quarter of fiscal 2019, we had an outsized expansion deal that contributed 11 percentage points to our net retention in that quarter. While we once again expanded within this account in the fourth quarter of fiscal 2020, the impact was smaller than the prior year. In addition, we have seen strong success with our strategy to land bigger deals with more modules, and we are also seeing an acceleration in our acquisition of new customers. While we view these two trends as positive developments, they have a natural trade off on our ability to expand business with existing customers in the near term.

Components of Our Results of Operations

Revenue

Subscription Revenue. Subscription revenue primarily consists of subscription fees for our Falcon platform and additional cloud modules that are supported by our cloud-based platform. Subscription revenue is driven primarily by the number of subscription customers, the number of endpoints per customer, and the number of cloud modules included in the subscription. We recognize subscription revenue ratably over the term of the agreement, which is generally one to three years. Because our subscription customers are generally billed upfront, we have recorded significant deferred revenue. Consequently, a substantial portion of the revenue that we report in each period is attributable to the recognition of deferred revenue relating to subscriptions that we entered into during previous periods. We typically invoice our customers annually in advance or multi-year in advance.

Professional Services Revenue. Professional services revenue includes incident response and proactive services, forensic and malware analysis, and attribution analysis. Professional services are generally sold separately from subscriptions to our Falcon platform, although customers frequently enter into a separate arrangement to purchase subscriptions to our Falcon platform at the conclusion of a professional services arrangement. Professional services are available through hourly rate and fixed fee contracts, one-time and ongoing engagements, and retainer-based agreements. For time and materials and retainer-based arrangements, revenue is recognized as services are performed. For fixed fee contracts, we recognize revenue by applying the proportional performance method.

Cost of Revenue

Subscription Cost of Revenue. Subscription cost of revenue consists primarily of costs related to hosting our cloud-based Falcon platform in data centers, amortization of our capitalized internal-use software, employee-related costs such as salaries and bonuses, stock-based compensation expense, benefits costs associated with our operations and support personnel, software license fees, property and equipment depreciation, and an allocated portion of facilities and administrative costs.

As new customers subscribe to our platform and existing subscription customers increase the number of endpoints on our Falcon platform, our cost of revenue will increase due to greater cloud hosting costs related to powering new cloud modules and the incremental costs for storing additional data collected for such cloud modules and employee-related costs. We intend to continue to invest additional resources in our cloud platform and our customer support organizations as we grow our business. The level and timing of investment in these areas could affect our cost of revenue in the future.

Professional Services Cost of Revenue. Professional services cost of revenue consists primarily of employee-related costs, such as salaries and bonuses, stock-based compensation expense, technology, property and equipment depreciation, and an allocated portion of facilities and administrative costs.

Gross Profit and Gross Margin

Gross profit and gross margin have been and will continue to be affected by various factors, including the timing of our acquisition of new subscription customers, renewals from existing subscription customers, sales of additional modules to existing subscription customers, the data center and bandwidth costs associated with operating our cloud platform, the extent to which we expand our customer support and cloud operations organizations, and the extent to which we can increase the efficiency of our technology, infrastructure, and data centers through technological improvements. We expect our gross profit to increase in dollar amount and our gross margin to increase modestly over the long term, although our gross margin could fluctuate from period to period depending on the interplay of these factors. Demand for our incident response services is driven by the number of breaches experienced by non-customers. Also, we view our professional services solutions in the context of our larger business and as a significant lead generator for new subscriptions. Because of these factors, our services revenue and gross margin may fluctuate over time.

Operating Expenses

Our operating expenses consist of sales and marketing, research and development and general administrative expenses. For each of these categories of expense, employee-related expenses are the most significant component, which include salaries, employee bonuses, sales commissions, and employer payroll tax. Operating expenses also include an allocated portion of overhead costs for facilities and IT.

Sales and Marketing. Sales and marketing expenses primarily consist of employee-related expenses such as salaries, commissions, and bonuses. Sales and marketing expenses also include stock-based compensation; expenses related to our Fal.Con customer conference and other marketing events; an allocated portion of facilities and administrative expenses; and cloud hosting and related services costs related to proof of value efforts. Prior to February 1, 2019, we amortized sales commissions on a straight-line basis to sales and marketing expense over the term of the subscription. On February 1, 2019, we adopted ASC 606, and began capitalizing and amortizing sales commissions and any other incremental payments made upon the initial acquisition of a subscription or upsells to existing customers to sales and marketing expense over the estimated customer life, and amortizing any such expenses paid for the renewal of a subscription to sales and marketing expense over the term of the renewal.

We expect sales and marketing expenses to increase in dollar amount as we continue to make significant investments in our sales and marketing organization to drive additional revenue, further penetrate the market, and expand our global customer base. However, we anticipate sales and marketing costs to decrease as a percentage of revenue over time.

Research and Development. Research and development expenses primarily consist of employee-related expenses such as salaries and bonuses; stock-based compensation, consulting expenses related to the design; development, testing, and enhancements of our subscription services; and an allocated portion of facilities and administrative expenses. Our cloud platform is software-driven, and our research and development teams employ software engineers in the design, and the related development, testing, certification, and support of these solutions.

We expect research and development expenses to increase in dollar amount as we continue to increase investments in our technology architecture and software platform. However, we anticipate research and development expenses to decrease as a percentage of our total revenue over time, although our research and development expenses may fluctuate as a percentage of our total revenue from period-to-period depending on the timing of these expenses.

General and Administrative. General and administrative expenses consist of employee-related expenses such as salaries and bonuses; stock-based compensation; and related expenses for our executive, finance, human resources; and legal organizations. In addition, general and administrative expenses include outside legal, accounting, and other professional fees; and an allocated portion of facilities and administrative expenses.

We expect to incur additional expenses as a result of operating as a public company. As a result, we expect our general and administrative expenses to increase in dollar amount. However, we anticipate general and administrative expenses to decrease as a percentage of our total revenue over time.

Other Income (Expense), Net. Other income (expense), net, consists primarily of income earned on our cash equivalents and marketable securities; expense related to the fair value of warrants for our redeemable convertible preferred stock; interest expense on our bank facility; and foreign currency transaction gains and losses.

Provision for Income Taxes. The provision for income taxes consists primarily of income taxes in certain foreign jurisdictions in which we conduct business, as well as state income taxes in the United States. We have not recorded any U.S. federal income tax expense. We maintain a full valuation allowance on our U.S. federal and state and U.K. deferred tax assets as we have concluded that it is more likely than not that those deferred assets will not be utilized.

Results of Operations

The following tables set forth our consolidated statements of operations in dollar amounts and as a percentage of total revenue for each period presented:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Revenue			
Subscription	$ 436,323	$ 219,401	$ 92,568
Professional services	45,090	30,423	26,184
Total revenue	481,413	249,824	118,752
Cost of revenue			
Subscription(1)(2)	112,474	69,208	39,857
Professional services(1)	29,153	18,030	14,629
Total cost of revenue	141,627	87,238	54,486
Gross profit	339,786	162,586	64,266
Operating expenses			
Sales and marketing(1)(2)	266,595	172,682	104,277
Research and development(1)(2)	130,188	84,551	58,887
General and administrative(1)	89,068	42,217	32,542
Total operating expenses	485,851	299,450	195,706
Loss from operations	(146,065)	(136,864)	(131,440)
Interest expense	(442)	(428)	(1,648)
Other income (expense), net	6,725	(1,418)	(1,473)
Loss before provision for income taxes	(139,782)	(138,710)	(134,561)
Provision for income taxes	(1,997)	(1,367)	(929)
Net loss	$ (141,779)	$ (140,077)	$ (135,490)

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

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Subscription cost of revenue	$ 5,226	$ 689	$ 89
Professional services cost of revenue	2,486	205	252
Sales and marketing	23,919	5,175	1,386
Research and development	15,403	7,815	3,429
General and administrative	32,906	6,621	7,187
Total stock-based compensation expense	$ 79,940	$ 20,505	$ 12,343

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

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Subscription cost of revenue	$ 323	$ 327	$ 287
Sales and marketing	123	143	20
Research and development	41	113	321
Total amortization of purchased intangibles	$ 487	$ 583	$ 628

	Year Ended January 31,		
	2020	2019	2018
	%	%	%
Revenue			
Subscription	91 %	88 %	78 %
Professional services	9 %	12 %	22 %
Total revenue	100 %	100 %	100 %
Cost of revenue			
Subscription	23 %	28 %	34 %
Professional services	6 %	7 %	12 %
Total cost of revenue	29 %	35 %	46 %
Gross profit	71 %	65 %	54 %
Operating expenses			
Sales and marketing	55 %	69 %	88 %
Research and development	27 %	34 %	50 %
General and administrative	19 %	17 %	27 %
Total operating expenses	101 %	120 %	165 %
Loss from operations	(30)%	(55)%	(111)%
Interest expense	— %	— %	(1)%
Other income (expense), net	1 %	(1)%	(1)%
Loss before provision for income taxes	(29)%	(56)%	(113)%
Provision for income taxes	— %	(1)%	(1)%
Net loss	(29)%	(56)%	(114)%

Comparison of Fiscal 2020 and Fiscal 2019

Revenue

The following is a breakdown of total revenue from subscriptions and professional services for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Subscription	$ 436,323	$ 219,401	$ 216,922	99 %
Professional services	45,090	30,423	14,667	48 %
Total revenue	$ 481,413	$ 249,824	$ 231,589	93 %

Total revenue increased by $231.6 million, or 93%, in fiscal 2020, compared to fiscal 2019. Subscription revenue accounted for 91% of our total revenue in fiscal 2020, and 88% in fiscal 2019. Professional services revenue accounted for 9% of our total revenue in fiscal 2020 and 12% in fiscal 2019.

Subscription revenue increased by $216.9 million, or 99%, in fiscal 2020, compared to fiscal 2019. This increase was primarily attributable to the addition of new subscription customers, as we increased our customer base by 116%, from 2,516 subscription customers in fiscal 2019 to 5,431 subscription customers in fiscal 2020. Subscription revenue from new customers, subscription revenue from the renewal of existing customers, and subscription revenue from the sale of additional endpoints and additional modules to existing customers accounted for 40%, 33%, and 27% of total subscription revenue in fiscal 2020, respectively. Subscription revenue from new customers, subscription revenue from the renewal of existing customers, and subscription revenue from the sale of additional endpoints and additional modules to existing customers accounted for 59%, 23%, and 18% of total subscription revenue in fiscal 2019, respectively.

Professional services revenue increased by $14.7 million, or 48%, in fiscal 2020, compared to fiscal 2019, and was primarily attributable to an increase in the number of professional service hours performed.

The following is a breakdown of cost of revenue related to subscriptions and professional services for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Subscription	$ 112,474	$ 69,208	$ 43,266	63 %
Professional services	29,153	18,030	11,123	62 %
Total cost of revenue	$ 141,627	$ 87,238	$ 54,389	62 %

Total cost of revenue increased by $54.4 million, or 62%, in fiscal 2020, compared to fiscal 2019. Subscription cost of revenue increased by $43.3 million, or 63%, in fiscal 2020, compared to fiscal 2019. The increase in subscription cost of revenue was primarily due to an increase in employee-related payroll expenses of $17.1 million driven by a 114% increase in average headcount which included significant hiring of customer support employees, an increase in cloud hosting and related services of $10.1 million, an increase in stock-based compensation expense of $4.5 million, an increase in depreciation of data center equipment of $3.8 million, an increase in allocated overhead costs of $3.7 million, an increase in employee health insurance expense of $1.1 million, and an increase in the amortization of capitalized internal use software of $1.0 million.

Professional services cost of revenue increased by $11.1 million, or 62%, in fiscal 2020, compared to fiscal 2019. The increase in professional services cost of revenue was primarily due to an increase in employee-related payroll expenses of $6.5 million driven by an increase in average headcount of 53%, an increase in stock-based compensation of $2.3 million, an increase in allocated overhead costs of $0.9 million, and an increase in cloud hosting and related services of $0.4 million.

The following is a breakdown of gross profit and gross margin for subscriptions and professional services for fiscal 2020, as compared to fiscal 2019.

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Subscription gross profit	$ 323,849	$ 150,193	$ 173,656	116 %
Professional services gross profit	15,937	12,393	3,544	29 %
Total gross profit	$ 339,786	$ 162,586	$ 177,200	109 %

	Year Ended January 31,		
	2020	2019	Change
Subscription gross margin	74 %	68 %	6 %
Professional services gross margin	35 %	41 %	(6)%
Total gross margin	71 %	65 %	6 %

Subscription gross margin increased by 6%, in fiscal 2020, compared to fiscal 2019. This increase was a result of moving more of our operations to co-location data centers from third-party cloud service providers and renegotiating the terms of a third-party cloud service provider contract. This increase in gross margin was also due to incentivizing our sales team to drive higher margin subscriptions and efforts to optimize our channel partner programs and the uptake of multiple cloud modules by our customer base. Our “collect once, reuse many” data strategy means that after the first module is paid for and covers the cost of data storage and most computational costs, each additional subscription module carries a higher margin. The decrease in professional services gross margin was due to a decrease in utilization in fiscal 2020 compared to fiscal 2019.

Operating Expenses

Sales and Marketing

The following is a breakdown of sales and marketing expenses for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Sales and marketing expenses	$ 266,595	$ 172,682	$ 93,913	54 %

Sales and marketing expenses increased by $93.9 million, or 54%, in fiscal 2020, compared to fiscal 2019. The increase in sales and marketing expenses was primarily due to an increase in employee-related payroll expenses of $36.5 million driven by an increase in average sales and marketing headcount of 54%, an increase in stock-based compensation of $18.7 million, an increase in marketing programs of $17.3 million, an increase in allocated overhead costs of $6.8 million, an increase in travel-related costs of $5.4 million, and an increase in employee health insurance expense of $2.2 million. As a result of adopting ASC 606 effective February 1, 2019, our commissions expense in fiscal 2020 was $21.7 million lower than it would have been under ASC 605.

Research and Development

The following is a breakdown of research and development expenses for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Research and development expenses	$ 130,188	$ 84,551	$ 45,637	54 %

Research and development expenses increased by $45.6 million, or 54%, in fiscal 2020, compared to fiscal 2019. This increase was primarily due to an increase in employee-related payroll expenses of $24.5 million, driven by an increase in average research and development headcount of 45%. In addition, there was an increase of $7.6 million in stock-based compensation expense, an increase in cloud hosting and related costs of $6.3 million, an increase in allocated overhead costs of $3.7 million, an increase in employee health insurance expense of $1.3 million, and an increase in travel-related costs of $1.0 million.

General and Administrative

The following is a breakdown of general and administrative expenses for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
General and administrative expenses	$ 89,068	$ 42,217	$ 46,851	111 %

General and administrative expenses increased by $46.9 million, or 111%, in fiscal 2020, compared to fiscal 2019. The increase in general and administrative expenses was primarily due to an increase in stock-based compensation expense of $26.9 million and an increase in employee-related payroll expenses of $9.9 million, driven by an increase in average general and administrative headcount of 66%. In addition, there was a $3.6 million increase in corporate insurance expense and a $1.6 million increase in allocated overhead costs.

Interest and Other Income (expense), Net

The following is a breakdown of interest and other expense, net, for fiscal 2020, as compared to fiscal 2019:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Interest expense	$ (442)	$ (428)	$ (14)	3 %
Other income (expense), net	$ 6,725	$ (1,418)	$ 8,143	(574)%

Interest expense was essentially unchanged in fiscal 2020 compared to fiscal 2019 and is primarily due to the amortization of debt issuance costs on our $150.0 million loan facility which has not been drawn down.

Other income (expense), net, was an income of $6.7 million in fiscal 2020 compared to an expense of $1.4 million in fiscal 2019. This increase in other income of $8.1 million was driven primarily by an increase in interest income of $9.0 million due to increased cash balances in fiscal 2020 as a result of our IPO and income from a legal settlement of $1.3 million, partially offset by an increase in the fair value of the redeemable convertible preferred stock warrants of $2.4 million. These warrants were converted to warrants to purchase common stock in connection with our IPO.

Provision for Income Taxes

The following is a breakdown of the provision for income taxes for fiscal 2019, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2020	2019	$	%
	(dollars in thousands)			
Provision for income taxes	$ (1,997)	$ (1,367)	$ (630)	46 %

We had a provision for income taxes of $2.0 million in fiscal 2020 and a provision for income taxes of $1.4 million in fiscal 2019 resulting in an increase in income tax expense of $0.6 million. The increase was driven primarily by an increase in our international income tax expense of $1.0 million due to increased activity in several countries during fiscal 2020, partially offset by an income tax benefit of $0.4 million related to the unrealized gain on our available-for-sale securities. We maintain a full valuation allowance against our deferred tax assets for US federal and state and U.K. income tax purposes.

Comparison of Fiscal 2019 and 2018

Revenue

The following is a breakdown of total revenue from subscriptions and professional services for fiscal 2019 and fiscal 2018:

	Year Ended January 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
Subscription	$ 219,401	$ 92,568	$ 126,833	137 %
Professional services	30,423	26,184	4,239	16 %
Total revenue	$ 249,824	$ 118,752	$ 131,072	110 %

Total revenue increased by $131.1 million, or 110%, in fiscal 2019, compared to fiscal 2018. Subscription revenue accounted for 88% of our total revenue for fiscal 2019 and 78% for fiscal 2018. Professional services revenue accounted for 12% of our total revenue for fiscal 2019 and 22% for fiscal 2018.

Subscription revenue increased by $126.8 million, or 137%, in fiscal 2019, compared to fiscal 2018. This increase was primarily attributable to the addition of new customers, as we increased our subscription customer base by 103% from 1,242 customers as of January 31, 2018 to 2,516 customers as of January 31, 2019. Subscription revenue from new customers, subscription revenue from the renewal of existing customers, subscription revenue from the sale of additional endpoints to existing customers, and subscription revenue from the sale of additional modules to existing customers accounted for 59%, 23% and 18% of total subscription revenue for fiscal 2019, respectively.

Professional services revenue grew by $4.2 million, or 16%, in fiscal 2019, compared to fiscal 2018, and was primarily attributable to an increase in the number of professional service hours performed.

Cost of Revenue, Gross Profit, and Gross Margin

The following is a breakdown of cost of revenue related to subscriptions and professional services for fiscal 2019 and fiscal 2018:

	Year Ended January 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
Subscription	$ 69,208	$ 39,857	$ 29,351	74 %
Professional services	18,030	14,629	3,401	23 %
Total cost of revenue	$ 87,238	$ 54,486	$ 32,752	60 %

Total cost of revenue increased by $32.8 million, or 60%, in fiscal 2019, compared to fiscal 2018. Subscription cost of revenue increased by $29.4 million, or 74%, in fiscal 2019, compared to fiscal 2018. The increase in subscription cost of revenue was primarily due to an increase of $11.0 million in cloud hosting and related services, an increase in employee-related expenses of $7.9 million, which includes an increase of $0.6 million in stock-based compensation expense, driven by an increase in average headcount of 151%, an increase in depreciation of data center equipment of $3.7 million, an increase in amortization of internal-use software of $2.0 million, an increase in allocated overhead costs of $1.7 million, and an increase in software license fees of $1.3 million.

Professional services cost of revenue increased by $3.4 million, or 23%, in fiscal 2019, compared to fiscal 2018. The increase in professional services cost of revenue was primarily due to an increase in employee-related expenses of $1.9 million driven by an increase in average headcount of 37%, a $0.6 million increase in travel- related costs, an increase of $0.5 million in allocated overhead costs, and a $0.4 million increase in consulting costs.

The following is a breakdown of gross profit and gross margin for subscriptions and professional services for fiscal 2019 compared to fiscal 2018:

	Year Ended January 31, 2019	Year Ended January 31, 2018	Change $	Change %
	(dollars in thousands)			
Subscription	$ 150,193	$ 52,711	$ 97,482	185 %
Professional services	12,393	11,555	838	7 %
Total gross profit	$ 162,586	$ 64,266	$ 98,320	153 %

	Year Ended January 31, 2019	Year Ended January 31, 2018	Change
Subscription gross margin	68 %	57 %	11 %
Professional services gross margin	41 %	44 %	(3)%
Total gross margin	65 %	54 %	11 %

Subscription gross margin increased by 11%, in fiscal 2019, compared to fiscal 2018. This increase was a result of moving more of our operations to colocation data centers from third-party cloud service providers and renegotiating the terms of a third-party cloud service provider contract. This increase in gross margin was also due to incentivizing our sales team to drive higher margin subscriptions and efforts to optimize our channel partner programs. Professional services gross margin decreased by 3%, in fiscal 2019, compared to fiscal 2018, primarily due to the lower utilization of professional services personnel. The timing of professional services engagements is highly variable and can result in fluctuations in gross margin on professional services.

Operating Expenses

Sales and Marketing

The following is a breakdown of sales and marketing expenses for fiscal 2019 and fiscal 2018:

	Year Ended January 31, 2019	Year Ended January 31, 2018	Change $	Change %
	(dollars in thousands)			
Sales and marketing expenses	$ 172,682	$ 104,277	$ 68,405	66 %

Sales and marketing expenses increased by $68.4 million, or 66%, in fiscal 2019, compared to fiscal 2018. The increase in sales and marketing expenses was primarily due to an increase in employee-related expenses of $48.6 million, which includes an increase in stock-based compensation expense of $3.8 million, driven by an increase in average sales and marketing headcount of 73%, an increase in marketing program costs of $7.4 million, an increase in allocated overhead costs of $7.1 million, an increase in travel-related costs of $3.4 million, and an increase in cloud hosting and related services of $0.9 million.

Research and Development

The following is a breakdown of research and development expenses for fiscal 2019 and fiscal 2018:

	Year Ended January 31, 2019	Year Ended January 31, 2018	Change $	Change %
	(dollars in thousands)			
Research and development expenses	$ 84,551	$ 58,887	$ 25,664	44 %

Research and development expenses increased by $25.7 million, or 44%, in fiscal 2019, compared to fiscal 2018. This increase was primarily due to an increase in employee-related expenses of $19.5 million, which includes an increase of $4.4 million in stock-based compensation expense, driven by an increase in average research and development headcount of 36% . In addition, there was an increase of $3.3 million in allocated overhead costs, an increase in cloud hosting and related services of $3.1 million, and an increase in travel-related costs of $0.6 million, partially offset by a decrease in contract labor and consulting expenses of $1.9 million.

General and Administrative

The following is a breakdown of general and administrative expenses for fiscal 2019 and fiscal 2018:

	Year Ended January 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
General and administrative expenses	$ 42,217	$ 32,542	$ 9,675	30 %

General and administrative expenses increased by $9.7 million, or 30%, in fiscal 2019, compared to fiscal 2018. The increase in general and administrative expenses was primarily due to an increase in employee-related expenses of $3.9 million, driven by an increase in average general and administrative headcount of 59%. In addition, there was a $3.2 million increase in legal and accounting fees, and a $0.8 million increase in software licensing fees.

Interest and Other Expense, Net

The following is a breakdown of interest and other expense, net, for fiscal 2019 and fiscal 2018:

	Year Ended January 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
Interest expense	$ (428)	$ (1,648)	$ 1,220	(74)%
Other expense, net	$ (1,418)	$ (1,473)	$ 55	(4)%

The decrease in interest expense of $1.2 million was driven primarily by a decrease in the amounts borrowed during fiscal 2019 compared to fiscal 2018. Other expense, net, decreased by $0.1 million, which was driven primarily by an increase in the fair value of the redeemable convertible preferred stock warrants of $3.3 million, offset by an increase in interest income of $2.4 million and a decrease in the amortization of debt issuance costs of $1.0 million.

Provision for Income Taxes

The following is a breakdown of the provision for income taxes for the years ended fiscal 2019 and fiscal 2018:

	Year Ended January 31,		Change	
	2019	2018	$	%
	(dollars in thousands)			
Provision for income taxes	$ (1,367)	$ (929)	$ (438)	47 %

The increase in the provision for income taxes was driven primarily by an increase in international income tax expense due to our expansion into several countries during fiscal 2019.

Non-GAAP Financial Measures

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

We believe that these non-GAAP financial measures as presented in the tables below, when taken together with the corresponding GAAP financial measures, provide meaningful supplemental information regarding our performance by excluding certain items that may not be indicative of our business, results of operations, or outlook.

Non-GAAP Subscription Gross Profit and Non-GAAP Subscription Gross Margin

We define non-GAAP subscription gross profit and non-GAAP subscription gross margin as GAAP subscription gross profit and GAAP subscription gross margin, respectively, excluding stock-based compensation expense and amortization of acquired intangible assets. We believe non-GAAP subscription gross profit and non-GAAP subscription gross margin provide our management and investors consistency and comparability with our past financial performance and facilitate period-to-period comparisons of operations, as these measures eliminate the effects of certain variables unrelated to our overall operating performance.

The following table presents a reconciliation of our non-GAAP subscription gross profit to our GAAP subscription gross profit and of our non-GAAP subscription gross margin to our GAAP subscription gross margin as of the periods presented:

	Year Ended January 31,		
	2020	2019	2018
	(dollars in thousands)		
GAAP subscription revenue	$ 436,323	$ 219,401	$ 92,568
GAAP subscription gross profit	$ 323,849	$ 150,193	$ 52,711
Add: Stock-based compensation expense	5,226	689	89
Add: Amortization of acquired intangible assets	323	327	287
Non-GAAP subscription gross profit	$ 329,398	$ 151,209	$ 53,087
GAAP subscription gross margin	74 %	68 %	57 %
Non-GAAP subscription gross margin	75 %	69 %	57 %

Non-GAAP Loss from Operations and Non-GAAP Operating Margin

We define non-GAAP loss from operations and non-GAAP operating margin as GAAP loss from operations and GAAP operating margin, respectively, excluding stock-based compensation expense, amortization of acquired intangible assets, and acquisition-related expenses. We believe non-GAAP loss from operations and non-GAAP operating margin provide our management and investors consistency and comparability with our past financial performance and facilitate period-to-period comparisons of operations, as these metrics generally eliminate the effects of certain variables unrelated to our overall operating performance.

The following table presents a reconciliation of our non-GAAP loss from operations to our GAAP loss from operations and our non-GAAP operating margin to our GAAP operating margin as of the periods presented:

	Year Ended January 31,		
	2020	2019	2018
	(dollars in thousands)		
GAAP total revenue	$ 481,413	$ 249,824	$ 118,752
GAAP loss from operations	$ (146,065)	$ (136,864)	$ (131,440)
Add: Stock-based compensation expense	79,940	20,505	12,343
Add: Amortization of acquired intangible assets	487	583	628
Add: Acquisition-related expenses	—	—	167
Non-GAAP loss from operations	$ (65,638)	$ (115,776)	$ (118,302)
GAAP operating margin	(30)%	(55)%	(111)%
Non-GAAP operating margin	(14)%	(46)%	(100)%

Free Cash Flow and Free Cash Flow Margin

Free cash flow is a non-GAAP financial measure that we define as net cash provided by (used in) operating activities less purchases of property and equipment and capitalized internal use software.

Free cash flow margin is calculated as free cash flow divided by total revenue. We believe that free cash flow and free cash flow margin are useful indicators of liquidity that provide useful information to management and investors about the amount of cash consumed by our operating activities that is therefore not available to be used for other strategic initiatives. One limitation of free cash flow and free cash flow margin is that they do not reflect our future contractual commitments. Additionally, free cash flow does not represent the total increase or decrease in our cash balance for a given period.

The following table presents a reconciliation of free cash flow and free cash flow margin to net cash provided by (used in) operating activities:

	Year Ended January 31,		
	2020	2019	2018
	(dollars in thousands)		
GAAP total revenue	$ 481,413	$ 249,824	$ 118,752
GAAP net cash provided by (used in) operating activities	99,943	(22,968)	(58,766)
Less: Purchases of property and equipment	(80,198)	(35,851)	(22,906)
Less: Capitalized internal-use software	(7,289)	(6,794)	(6,542)
Free cash flow	$ 12,456	$ (65,613)	$ (88,214)
GAAP net cash used in investing activities	$ (629,631)	$ (142,030)	$ (28,330)
GAAP net cash provided by financing activities	$ 706,144	$ 190,389	$ 126,831
GAAP net cash provided by (used in) operating activities as a percentage of revenue	21 %	(9)%	(49)%
Less: Purchases of property and equipment as a percentage of revenue	(17)%	(14)%	(19)%
Less: Capitalized internal-use software as a percentage of revenue	(2)%	(3)%	(6)%
Free cash flow margin	3 %	(26)%	(74)%

Quarterly Results of Operations

The following table sets forth our unaudited quarterly statements of operations data for each of the quarters indicated. The unaudited quarterly statements of operations data set forth below have been prepared on the same basis as our audited consolidated financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, that are necessary for the fair statement of such data. Our historical results are not necessarily indicative of the results that may be expected in the future, and the results for any quarter are not necessarily indicative of results to be expected for a full year or any other period. The following quarterly financial data should be read in conjunction with our consolidated financial statements and the related notes included else wherein this prospectus.

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
	(in thousands)							
Revenue								
Subscription	$ 39,758	$ 49,161	$ 57,651	$ 72,831	$ 85,990	$ 97,575	$ 114,221	$ 138,537
Professional services	7,531	6,540	8,728	7,624	10,087	10,533	10,898	13,572
Total revenue	47,289	55,701	66,379	80,455	96,077	108,108	125,119	152,109
Cost of revenue								
Subscription(1)(2)	15,171	14,604	17,302	22,131	23,691	24,946	29,221	34,616
Professional services(1)	4,223	3,971	4,972	4,864	5,582	6,636	8,134	8,801
Total cost of revenue	19,394	18,575	22,274	26,995	29,273	31,582	37,355	43,417
Gross profit	27,895	37,126	44,105	53,460	66,804	76,526	87,764	108,692
Operating expenses								
Sales and marketing(1)(2)	36,617	40,113	46,614	49,338	56,843	65,274	68,675	75,803
Research and development(1)(2)	17,615	18,963	25,968	22,005	23,875	31,630	35,992	38,691
General and administrative(1)	6,777	8,477	13,614	13,349	11,861	30,261	21,615	25,331
Total operating expenses	61,009	67,553	86,196	84,692	92,579	127,165	126,282	139,825
Loss from operations	(33,114)	(30,427)	(42,091)	(31,232)	(25,775)	(50,639)	(38,518)	(31,133)
Interest expense	(192)	(236)	—	—	(1)	(164)	(132)	(145)
Other income (expense), net	(190)	(1,852)	303	321	394	(451)	3,579	3,203
Loss before provision for income taxes	(33,496)	(32,515)	(41,788)	(30,911)	(25,382)	(51,254)	(35,071)	(28,075)
Provision for income taxes	(121)	(362)	(535)	(349)	(595)	(635)	(434)	(333)
Net loss	$ (33,617)	$ (32,877)	$ (42,323)	$ (31,260)	$ (25,977)	$ (51,889)	$ (35,505)	$ (28,408)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.77)	$ (0.75)	$ (0.93)	$ (0.67)	$ (0.55)	$ (0.40)	$ (0.17)	$ (0.14)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	43,614	44,105	45,287	46,416	47,205	130,091	204,096	207,565

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

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
	(in thousands)							
Subscription cost of revenue	$ 63	$ 88	$ 382	$ 156	$ 265	$ 1,233	$ 1,666	$ 2,062
Professional services cost of revenue	46	57	53	49	103	644	784	955
Sales and marketing	773	1,031	2,137	1,234	1,518	6,638	7,355	8,408
Research and development	448	539	6,245	583	681	4,976	4,696	5,050
General and administrative	389	509	4,643	1,080	1,185	16,368	7,465	7,888
Total stock-based compensation expense	$ 1,719	$ 2,224	$ 13,460	$ 3,102	$ 3,752	$ 29,859	$ 21,966	$ 24,363

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

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
	(in thousands)							
Subscription cost of revenue	$ 96	$ 106	$ 20	$ 105	$ 104	$ 97	$ 61	$ 61
Sales and marketing	17	62	32	32	30	32	30	31
Research and development	53	39	10	11	11	10	10	10
Total amortization of purchased intangibles	$ 166	$ 207	$ 62	$ 148	$ 145	$ 139	$ 101	$ 102

Percentage of Revenue Data

The following table presents the components of our statement of operations as a percentage of total revenue for each of the quarters indicated:

	Three Months Ended							
	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019	October 31, 2019	January 31, 2020
Revenue								
Subscription	84 %	88 %	87 %	91 %	90 %	90 %	91 %	91 %
Professional services	16 %	12 %	13 %	9 %	10 %	10 %	9 %	9 %
Total revenue	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Cost of revenue								
Subscription	32 %	26 %	27 %	28 %	25 %	23 %	23 %	23 %
Professional services	9 %	7 %	7 %	6 %	6 %	6 %	7 %	6 %
Total cost of revenue	41 %	33 %	34 %	34 %	30 %	29 %	30 %	29 %
Gross margin	59 %	67 %	66 %	66 %	70 %	71 %	70 %	71 %
Operating expenses								
Sales and marketing	78 %	73 %	69 %	61 %	59 %	60 %	55 %	50 %
Research and development	38 %	34 %	39 %	27 %	25 %	29 %	29 %	25 %
General and administrative	14 %	15 %	21 %	17 %	12 %	28 %	17 %	17 %
Total operating expenses	130 %	122 %	129 %	105 %	96 %	118 %	101 %	92 %
Loss from operations	(70) %	(55) %	(63) %	(39) %	(27) %	(47) %	(31) %	(20) %
Interest expense	— %	— %	— %	— %	— %	— %	— %	— %
Other income (expense), net	— %	(3) %	— %	— %	— %	— %	3 %	2 %
Loss before provision for income taxes	(71) %	(58) %	(63) %	(39) %	(26) %	(47) %	(28) %	(18) %
Provision for income taxes	— %	(1) %	(1) %	— %	(1) %	(1) %	— %	— %
Net loss	(71) %	(59) %	(64) %	(39) %	(27) %	(48) %	(28) %	(19) %

Quarterly Revenue Trends

Total revenue increased sequentially in each of the quarters presented primarily due to our addition of new customers, as well as sales of additional endpoints and modules to existing customers. We typically receive a higher percentage of our annual orders from new customers, as well as renewal orders from existing customers, in our fourth fiscal quarter as compared to other quarters due to the annual budget approval process of many of our customers. However, because we recognize revenue ratably over the term of our subscription contracts, a substantial portion of the revenue that we report in each period is attributable to orders that we received during previous periods. Consequently, increases or decreases in new sales or renewals in any one period may not be immediately reflected in our revenue for that period and may negatively affect our revenue in future periods. Accordingly, the effect of downturns in sales and market acceptance of our cloud platform, and potential changes in our rate of renewals, may not be fully reflected in our results of operations until future periods. Professional services revenue is dependent upon the number of hours performed in a quarter and can vary from period to period.

Quarterly Cost of Revenue Trends

Total cost of revenue increased sequentially in each of the quarters presented except for the three months ended July 31, 2018, when it decreased. The increases were primarily driven by expanded use of our cloud platform by existing and new customers, which resulted in increased data center costs, and due to an expansion in our customer support and cloud operations organizations to support our growth. These increases were tempered by cost savings as a result of moving more of our operations to colocation data centers from third-party cloud service providers and renegotiating the terms of a third-party cloud service provider contract, and these changes had a larger impact on total cost of revenue in the three months ended July 31, 2018.

Quarterly Gross Margin Trends

The overall increase in gross margin over the course of the periods presented was enabled primarily by an increase in our revenue and, to a lesser extent, by the increased efficiency of our technology, infrastructure, and data centers through technological improvements, even as our customers expanded their use of our cloud platform. The increase in gross margin during the quarters presented was the result of moving more of our operations to colocation data centers from third-party cloud service providers and renegotiating the terms of a third-party cloud service provider contract. The increase in gross margin was also due to incentivizing our sales team to drive higher margin subscriptions and efforts to optimize our channel partner programs.

Quarterly Expense Trends

Operating expenses generally have increased sequentially for each of the quarters presented except for the three months ended January 31, 2019 and the three months ended October 31, 2019 primarily due to increases in employee related expenses associated with increases in our headcount to support our growth. We intend to continue to make the significant investments to support our sales and marketing related activities to acquire new customers that we believe will position the Company for future growth. We also intend to invest in research and development efforts to add new features to and enhance the functionality of our existing cloud platform, and to ensure the reliability, availability, and scalability of our solutions.

The significant increase in sales and marketing, research and development, and general and administrative expenses during the three months ended October 31, 2018 was primarily due to an increase of $1.0 million, $5.7 million, and $3.9 million, respectively, in stock-based compensation expense primarily from the third-party tender offer transaction that was executed among certain of our employees and directors and certain of our stockholders. Operating expenses, particularly general and administrative expenses, increased significantly during the three months ended July 31, 2019 due to the stock based compensation of $17.3 million related to the performance based vesting condition for our outstanding RSUs being met during the quarter. We expect operating expenses to continue to increase for the foreseeable future.

The increase in Other income (expense), net during the three months ended July 31, 2018 was due to an increase in the fair value of our redeemable convertible preferred stock warrants of $2.1 million. The increase in Other income (expense), net during the three months ended October 31, 2019 was primarily driven by interest income of $4.1 million. The increase in Other income (expense), net during the three months ended January 31, 2020 was primarily driven by interest income of $3.4 million. Interest income has increased in recent quarters due to the investment of the proceeds of our IPO which closed on June 14, 2019.

Liquidity and Capital Resources

In June 2019, upon completion of our IPO, we received net proceeds of $659.2 million, after deducting underwriters' discounts and commissions and offering expenses of $44.8 million.

Prior to our IPO, we financed our operations principally through private placements of our equity securities, payments received from customers using our Falcon platform and professional services, and borrowings under our credit facility. As of January 31, 2020, we had cash and cash equivalents, consisting of money market funds and corporate debt securities, of $264.8 million, and marketable securities, consisting of corporate debt securities, asset backed securities, and U.S. treasury securities, of $647.3 million. Our cash and cash equivalents primarily consist of highly liquid investments.

Since our inception, we have generated operating losses, as reflected in our accumulated deficit of $637.5 million as of January 31, 2020. We expect to continue to incur operating losses for the foreseeable future due to the investments we intend to continue to make in sales and marketing and research and development, and due to additional general and administrative costs incurred as a result of operating as a public company. As a result, we may require additional capital resources to execute strategic initiatives to grow our business.

We typically invoice our subscription customers annually in advance. Therefore, a substantial source of our cash is from such prepayments, which are included on our consolidated balance sheets as deferred revenue. Deferred revenue primarily consists of billed fees for our subscriptions, prior to satisfying the criteria for revenue recognition, which are subsequently recognized as revenue in accordance with our revenue recognition policy. As of January 31, 2020, we had deferred revenue of $571.2 million, of which $413.0 million was recorded as a current liability and is expected to be recorded as revenue in the next 12 months, provided all other revenue recognition criteria have been met.

Cash Flows

The following table summarizes our cash flows for the periods presented:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Net cash provided by (used in) operating activities	$ 99,943	$ (22,968)	$ (58,766)
Net cash used in investing activities	$ (629,631)	$ (142,030)	$ (28,330)
Net cash provided by financing activities	$ 706,144	$ 190,389	$ 126,831

Operating Activities

Net cash provided by operating activities during fiscal 2020 was $99.9 million, which resulted from a net loss of $141.8 million, adjusted for non-cash charges of $144.3 million and net cash inflow of $97.5 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $79.9 million in stock-based compensation expense, $35.5 million of amortization of deferred contract acquisition costs, $23.0 million of depreciation and amortization, and $6.0 million due to the change in the fair value of our redeemable convertible preferred stock warrant liability. The net cash inflow from changes in operating assets and liabilities was primarily due to a $280.8 million increase in deferred revenue and $17.5 million increase in accrued payroll and benefits, partially offset by a $86.6 million increase in deferred contract acquisition costs, $73.1 million increase in accounts receivable, and a $43.5 million increase in prepaid expenses and other assets.

Net cash used in operating activities during fiscal 2019 was $23.0 million, which resulted from a net loss of $140.1 million, adjusted for non-cash charges of $67.8 million and net cash inflow of $49.3 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $28.6 million of amortization of deferred commissions, $20.5 million in stock-based compensation expense, $14.8 million of depreciation and amortization, and $3.6 million due to the change in the fair value of our redeemable convertible preferred stock warrant liability. The net cash inflow from changes in operating assets and liabilities was primarily due to a $131.1 million increase in deferred revenue, partially offset by a $45.1 million increase in deferred contract acquisition costs, and a $33.4 million increase in accounts receivable.

Net cash used in operating activities during fiscal 2018 was $58.8 million, which resulted from a net loss of $135.5 million, adjusted for non-cash charges of $34.3 million and net cash inflow of $42.4 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $12.5 million of amortization of deferred commissions, $12.3 million of stock-based compensation expense, and $7.1 million of depreciation and amortization. The net cash inflow from changes in operating assets and liabilities was primarily the result of an $82.2 million increase in deferred revenue from advance invoicing in accordance with our subscriptions and a $23.7 million increase in accounts payable and accrued expenses, partially offset by a $25.3 million increase in deferred contract acquisition costs and an increase in accounts receivable of $35.3 million.

Investing Activities

Net cash used in investing activities during fiscal 2020 of $629.6 million was primarily due to purchases of marketable securities of $779.7 million, purchases of property and equipment of $80.2 million, and capitalized internal-use software of $7.3 million, partially offset by maturities of marketable securities of $229.0 million and proceeds from sales of marketable securities of $9.6 million.

Net cash used in investing activities during fiscal 2019 of $142.0 million was primarily due to purchases of marketable securities of $199.3 million, purchases of property and equipment of $35.9 million, and capitalized internal-use software of $6.8 million, partially offset by maturities of marketable securities of $100.0 million.

Net cash used in investing activities during fiscal 2018 of $28.3 million was primarily due to purchases of property and equipment of $22.9 million, capitalization of internal-use software of $6.5 million, cash used in business combinations of $6.5 million, and the purchase of marketable securities of $9.6 million, partially offset by maturities of marketable securities of $17.5 million.

Financing Activities

Net cash provided by financing activities of $706.1 million during fiscal 2020 was primarily due to our IPO. On June 14, 2019, we closed our IPO in which we sold 20,700,000 shares of Class A common stock. The shares were sold at a public offering price of $34.00 per share for net proceeds of $665.1 million, after deducting underwriters' discounts and commissions. In addition, there were proceeds from the exercise of stock options of $21.5 million, proceeds from issuance of common stock under the employee stock purchase plan of $12.4 million, proceeds from issuance of common stock upon exercise of early exercisable stock options of $10.3 million and $2.3 million in claims settlement under Section 16(b) of the Securities Exchange Act of 1934, partially offset by payments of deferred offering costs in the amount of $5.9 million. In December 2019, a security holder paid us $2.3 million to settle a claim under Section 16(b) of the Securities Exchange Act of 1934. Section 16(b) requires certain persons and entities whose securities trading activities result in "short swing" profits to repay such profits to the issuer of the security. This payment was recorded as an increase to stockholders' equity and as cash provided by financing activities in our consolidated statement of cash flows for the fiscal year ended January 31, 2020.

Net cash provided by financing activities of $190.4 million during fiscal 2019 was primarily due to $206.9 million in net proceeds from the issuance of our Series E redeemable convertible preferred stock, $10.0 million in proceeds from our revolving line of credit, and $3.9 million from the exercise of stock options, partially offset by a repayment on our line of credit of $20.0 million, a repayment on our outstanding bank loan of $6.2 million, the repurchase of stock options of $2.3 million, and payments of indemnity holdback and contingent consideration of $2.1 million.

Net cash provided by financing activities of $126.8 million during fiscal 2018 was primarily due to $130.4 million in net proceeds from the issuance of shares of our Series D and Series D-1 redeemable convertible preferred stock, $10.0 million in proceeds from our revolving line of credit, $3.7 million from the exercise of stock options, and the repayment of notes receivable from related parties of $2.4 million, partially offset by a repayment on our outstanding bank loan of $19.3 million.

Debt Obligations

In April 2019, we entered into a Credit Agreement with Silicon Valley Bank and other lenders, to provide a revolving line of credit of up to $150.0 million, including a letter of credit sub-facility in the aggregate amount of $10.0 million, and a swingline sub-facility in the aggregate amount of $10.0 million. We also have the option to request an incremental facility of up to an additional $75.0 million from one or more of the lenders under the Credit Agreement. The amount we may borrow under the Credit Agreement may not exceed the lesser of $150.0 million or our ordinary course recurring subscription revenue for the most recent month, as determined under the Credit Agreement, multiplied by a number that is (i) 6, for the first year after entry into the Credit Agreement; (ii) 5, for the second year after entry into the Credit Agreement; and (iii) 4, thereafter. Under the terms of the Credit Agreement, revolving loans may be either Eurodollar Loans or ABR Loans. Outstanding Eurodollar Loans incur interest at the Eurodollar Rate, which is defined in the Credit Agreement as LIBOR (or any successor thereto), plus a margin between 2.50% and 3.00%, depending on usage. Outstanding ABR Loans incur interest at the highest of (a) the Prime Rate, as published by the Wall Street Journal, (b) the federal funds rate in effect for such day plus 0.50%, and (c) the Eurodollar Rate plus 1.00%, in each case plus a margin between 1.50% and 2.00%, depending on usage. We are charged a commitment fee of 0.2% to 0.3% per year for committed but unused amounts. The Credit Agreement will terminate on April 19, 2022.

The Credit Agreement is collateralized by substantially all of our current and future property, rights, and assets, including, but not limited to, cash, goods, equipment, contractual rights, financial assets, and intangible assets of the Company and our subsidiaries. The Credit Agreement contains covenants limiting our ability to, among other things, dispose of assets, undergo a change in control, merge or consolidate, make acquisitions, incur debt, incur liens, pay dividends, repurchase stock, and make investments, in each case subject to certain exceptions. The Credit Agreement also contains financial covenants requiring us to maintain the year-over-year growth rate of our ordinary course recurring subscription revenue above specified rates and to maintain minimum liquidity at specified levels. The Credit Agreement also contains events of default that include, among others, non-payment of principal, interest, or fees, breach of covenants, inaccuracy of representations and warranties, cross defaults to certain other indebtedness, bankruptcy and insolvency events, and material judgments. We were in compliance with all covenants as of January 31, 2020.

No amounts were outstanding under the Credit Agreement as of January 31, 2020.

Strategic Investments

In July 2019, we agreed to commit up to $10.0 million to a newly formed entity, CrowdStrike Falcon Fund LLC (“Falcon Fund”), in exchange for 50% of the sharing percentage of any distribution by Falcon Fund. Additionally, entities associated with Accel, a holder of more than 5% of our capital stock, also agreed to commit up to $10.0 million to Falcon Fund and collectively own the remaining 50% of the sharing percentage of Falcon Fund. Falcon Fund is in the business of purchasing, selling, investing and trading in minority equity and convertible debt securities of privately-held companies that develop applications that have potential for substantial contribution to CrowdStrike and its platform. Falcon Fund has a duration of ten years which may be extended for three additional years. At dissolution, Falcon Fund will be liquidated and the remaining assets will be distributed to the investors based on their sharing percentage. As of January 31, 2020, we have made a contribution to Falcon Fund totaling $0.5 million. This $0.5 million and the matching $0.5 million contribution by Accel has been invested in the Series B preferred stock of a private company that develops and sells a SaaS-based cyber hygiene product.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of January 31, 2020 and the fiscal years in which these obligations are due:

		Payments Due by Fiscal Year					
	Total	2021	2022	2023	2024	2025	Thereafter
				(in thousands)			
Operating leases[1]	$ 50,686	$ 9,958	$ 9,869	$ 9,377	$ 9,370	$ 8,441	$ 3,671
Data center commitments[2]	166,000	63,511	76,491	10,207	9,832	2,723	3,236
Other purchase obligations[3]	32,327	19,960	12,240	57	57	13	—
Total	$ 249,013	$ 93,429	$ 98,600	$ 19,641	$ 19,259	$ 11,177	$ 6,907

(1) Relates to our facilities worldwide.
(2) Relates to non-cancelable commitments to data center vendors.
(3) Relates to non-cancelable purchase commitments with various parties to purchase products and services entered into in the normal course of business.

Indemnification

Our subscription agreements contain standard indemnification obligations. Pursuant to these agreements, we will indemnify, defend, and hold the other party harmless with respect to a claim, suit, or proceeding brought against the other party by a third party alleging that our intellectual property infringes upon the intellectual property of the third party, or results from a breach of our representations and warranties or covenants, or that results from any acts of negligence or willful misconduct. The term of these indemnification agreements is generally perpetual any time after the execution of the agreement. Typically, these indemnification provisions do not provide for a maximum potential amount of future payments we could be required to make. However, in the past we have not been obligated to make significant payments for these obligations and no liabilities have been recorded for these obligations on our consolidated balance sheet as of January 31, 2020 or January 31, 2019.

We also indemnify our officers and directors for certain events or occurrences, subject to certain limits, while the officer is or was serving at our request in such capacity. The maximum amount of potential future indemnification is unlimited. However, our director and officer insurance policy limits our exposure and enables us to recover a portion of any future amounts paid. Historically, we have not been obligated to make any payments for these obligations and no liabilities have been recorded for these obligations on our consolidated balance sheet as of January 31, 2020 or January 31, 2019.

Off-Balance Sheet Arrangements

We do not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities. We do not have any outstanding derivative financial instruments, off-balance sheet guarantees, interest rate swap transactions, or foreign currency forward contracts.

Critical Accounting Policies and Estimates

Our management's discussion and analysis of financial condition and results of operations is based upon our financial statements and notes to our financial statements, which were prepared in accordance with GAAP. The preparation of the financial statements requires our management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Our management evaluates our estimates on an ongoing basis, including those related to the allowance for doubtful accounts, the carrying value and useful lives of long-lived assets, the fair value of financial instruments, the recognition and disclosure of contingent liabilities, income taxes, and stock-based compensation. We base our estimates and judgments on our historical experience, knowledge of factors affecting our business and our belief as to what could occur in the future considering available information and assumptions that are believed to be reasonable under the circumstances.

The accounting estimates we use in the preparation of our financial statements will change as new events occur, more experience is acquired, additional information is obtained and our operating environment changes. Changes in estimates are made when circumstances warrant. Such changes in estimates and refinements in estimation methodologies are reflected in our reported results of operations and, if material, the effects of changes in estimates are disclosed in the notes to our financial statements. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty and actual results could differ materially from the amounts reported based on these estimates.

The critical accounting estimates, assumptions and judgments that we believe have the most significant impact on our consolidated financial statements are described below.

Revenue Recognition

We adopted Accounting Standards Codification ("ASC") Topic 606, Revenue From Contracts With Customers ("ASC 606") on February 1, 2019, using the modified retrospective transition method. Under this method, results for reporting periods beginning on February 1, 2019 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with historic accounting under Topic 605.

We recorded a cumulative effect adjustment to opening accumulated deficit of $23.4 million, net of tax, as of the date of adoption. The change resulted from a $23.7 million reduction in commissions expense offset by a $0.3 million reduction in revenue.

The adoption of ASC 606 had no impact on net cash provided by or used in operating, investing, or financing activities in our consolidated statements of cash flows for the year ended January 31, 2020. As a result of adopting ASC 606 effective February 1, 2019, our commissions expense for the year ended January 31, 2020 was $21.7 million lower than it would have been under ASC 605, respectively.

Under ASC 606, we report our revenues in two categories: (i) subscriptions and (ii) professional services.

Revenues are recognized when control of these services is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for those services.

We determine revenue recognition through the following steps:

(1) Identification of the contract, or contracts, with a customer

We consider the terms and conditions of contracts with customers and our customary business practices in identifying contracts under ASC 606. We determine we have a contract with a customer when the contract is approved, each party's rights regarding the services to be transferred can be identified, payment terms for the services can be identified, we have determined that the customer has the ability and intent to pay, and the contract has commercial substance. We apply judgment in determining the customer's ability and intent to pay, which is based on a variety of factors, including the customer's historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

(2) Identification of the performance obligations in the contract

Performance obligations promised in a contract are identified based on the services that will be transferred to the customer that are both capable of being distinct, meaning that the customer can benefit from the service either on its own or together with other resources that are readily available from us or from third parties, and are distinct in the context of the contract, meaning that the transfer of the services is separately identifiable from other promises in the contract. Our performance obligations in our contracts with customers consist of (i) subscription and support services and (ii) professional services.

(3) Determination of the transaction price

The transaction price is determined based on the consideration to which we are expected to be entitled in exchange for transferring services to the customer. Variable consideration is included in the transaction price if it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of our contracts contains a significant financing component.

(4) 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. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price ("SSP").

(5) Recognition of revenue when, or as, we satisfy a performance obligation

Revenue is recognized at the time the related performance obligation is satisfied by transferring the promised service to the customer. Revenue is recognized when control of the services is transferred to the customer, in an amount that reflects the consideration expected to be received in exchange for those services. We generate all our revenue from contracts with customers.

Subscription Revenue

Our Falcon Platform technology solutions are SaaS offerings designed to continuously monitor, share, and mitigate risks from determined attackers. Customers do not have the right to take possession of the cloud-based software platform. Fees are based on several factors, including the solutions subscribed for by the customer and the number of endpoints purchased by the customer. The subscription fees are typically payable within 30 to 60 days after the execution of the arrangement, and thereafter upon renewal or subsequent installment. We initially record the subscription fees as deferred revenue and recognize revenue on a straight-line basis over the term of the agreement.

Professional Services Revenue

We offer several types of professional services including incident response and forensic services, surge forensic and malware analysis, and attribution analysis, which are focused on responding to imminent and direct threats, assessing vulnerabilities, and recommending solutions. The professional services are available through hourly rate and fixed fee contracts, one-time and ongoing engagements, and retainer-based agreements. Revenue for time and materials arrangements is recognized as services are performed and revenue for fixed fees is recognized on a proportional performance basis as the services are performed.

Contracts with Multiple Performance Obligations

Some contracts with customers contain multiple promised services consisting of subscription and professional services that are distinct and accounted for separately. The transaction price is allocated to the separate performance obligations on a relative SSP basis. The SSP is the price at which we would sell promised subscription or professional services separately to a customer. Judgment is required to determine the SSP for each distinct performance obligation. We determine SSP based on our overall pricing objectives, taking into consideration the type of subscription or professional service and the number of endpoints.

Variable Consideration

Revenue from sales is recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. The amount of variable consideration that is included in the transaction price is constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue will not occur when the uncertainty is resolved.

If subscriptions do not meet certain service level commitments, our customers are entitled to receive service credits, and in certain cases, refunds, each representing a form of variable consideration. We have historically not experienced any significant incidents affecting the defined levels of reliability and performance as required by our subscription contracts. Accordingly, any estimated refunds related to these agreements in the consolidated financial statements is not material during the periods presented.

We provide rebates and other credits within our contracts with certain resellers, which are estimated based on the most likely amounts expected to be earned or claimed on the related sales transaction. Overall, the transaction price is reduced to reflect our estimate of the amount of consideration to which we are entitled based on the terms of the contract. Estimated rebates and other credits were not material during the periods presented.

Stock-Based Compensation

We account for stock-based awards granted to employees and directors based on the awards' estimated grant date fair value. We estimate the fair value of our stock options using the Black-Scholes option-pricing model. The resulting fair value is recognized on a straight-line basis over the period during which the employee or director is required to provide service in exchange for the award, usually the vesting period, which is generally four years. We account for forfeitures as they occur.

Prior to our adoption of ASU 2018-07, stock-based awards issued to non-employees were accounted for at fair value determined by using the Black-Scholes option-pricing model. We believe that the fair value of the stock options is more reliably measured than the fair value of the services received. The fair value of each non-employee stock-based award is remeasured each period until a commitment date is reached, which is generally the vesting date. We early adopted ASU 2018-07 on February 1, 2019 and began accounting for stock-based awards issued to non-employees the same as we account for stock-based awards issued to employees. The effect on our consolidated financial statements for the year ended January 31, 2020 was not material.

Restricted stock units ("RSUs") granted under the 2011 Plan are subject to a service-based vesting condition and a performance-based vesting condition. The service-based vesting condition is generally satisfied based on one of three vesting schedules: (i) vesting of one-fourth of the RSUs on the first "Company vest date" (defined as March 20, June 20, September 20, or December 20) on or following the one-year anniversary of the vesting commencement date with the remainder of the RSUs vesting in twelve equal quarterly installments thereafter, subject to continued service, (ii) vesting in sixteen equal quarterly installments beginning on December 20, 2018, subject to continued service, or (iii) vesting in eight equal quarterly installments beginning on December 20, 2022, subject to continued service. The performance-based vesting condition is satisfied on the earlier of (i) a change in control, in which the consideration paid to holders of shares is either cash, publicly traded securities, or a combination thereof, or (ii) our first vest date to occur following the expiration of the lock-up period upon an IPO, subject to continued service through such change in control or lock-up expiration, as applicable. None of the RSUs vest unless the performance-based vesting condition is satisfied. Upon the completion of the IPO, the performance-based vesting condition was met and we recognized $17.3 million of deferred expense related to RSUs as of that date in our consolidated statement of operations. Upon its IPO, the Company began issuing RSUs to its employees that generally have only a service condition. The valuation of such RSUs is based solely on the fair value of the Company's stock price on the date of grant.

Performance-based stock units ("PSUs") granted under the 2019 Plan are subject to a performance-based vesting condition. With regard to the performance conditions, the fair value of new or modified awards is equal to the grant date fair market value of our common stock. PSUs generally vest over a four-year period based on the achievement of specified performance targets for the fiscal year ended January 31, 2020 and subject to continued service through the applicable vesting dates. The compensation cost is recognized over the requisite service period when it is probable that the performance condition will be satisfied.

Business Combinations

We allocate the fair value of purchase consideration to the tangible assets acquired, 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 recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired users, acquired technology, trade names 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 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 in the consolidated statement of operations.

Strategic Investments

In July 2019, we agreed to commit up to $10.0 million to a newly formed entity, CrowdStrike Falcon Fund LLC ("Falcon Fund") in exchange for 50% of the sharing percentage of any distribution by Falcon Fund. Entities associated with Accel, a holder of more than 5% of the our capital stock, also agreed to commit up to $10.0 million to Falcon Fund, and collectively own the remaining 50% of the sharing percentage of Falcon Fund. Falcon Fund is in the business of purchasing, selling, investing and trading in minority equity and convertible debt securities of privately-held companies that develop applications that have potential for substantial contribution to CrowdStrike and its platform. We are the manager of the Falcon Fund and control the investment decisions and day-to-day operations and accordingly consolidate the Falcon Fund. Falcon Fund has a duration of ten years and may be extended for three additional years. At dissolution, Falcon Fund will be liquidated and the remaining assets will be distributed to the investors based on their respective sharing percentage.

During the year ended January 31, 2020, both CrowdStrike and Accel had made a contribution to Falcon Fund totaling $0.5 million each. The total of $1.0 million has been invested in the Series B preferred stock of a private company that develops and sells a SaaS-based cyber hygiene product.

We have elected the measurement alternative for the non-marketable equity investments of the Falcon Fund where eligible. Under the measurement alternative, the equity investments are measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. The non-marketable equity investments of the Falcon Fund are valued using significant unobservable inputs or data in inactive markets which requires judgment due to the absence of market prices and inherent lack of liquidity. As a result, there could be volatility in the our consolidated statements of operations in future periods due to the valuation and timing of identical or similar investments of the same issuer.

Income Taxes

We account for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement and tax basis of assets and liabilities and net operating loss and credit carryforwards using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

We account for unrecognized tax benefits using a more-likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. We establish a liability for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. We record an income tax liability, if any, for the difference between the benefit recognized and measured and the tax position taken or expected to be taken on our tax returns. To the extent that the assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. The liability is adjusted considering changing facts and circumstances, such as the outcome of a tax audit. The provision for income taxes includes the impact of liability provisions and changes to the liability that are considered appropriate. We maintain a full valuation allowance against our deferred tax assets in the United States and the U.K., the changes resulted in no additional tax expense during the year ended January 31, 2020. We do not expect that changes in the liability for unrecognized tax benefits for the next twelve months will have a material impact on our consolidated financial statements.

JOBS Act Accounting Election

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued after the enactment of the JOBS Act until those standards apply to private companies. We have elected to use this extended transition period under the JOBS Act.

Recently Issued Accounting Pronouncements

See Note 2, “Summary of Significant Accounting Policies”, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information about the impact of certain recent accounting pronouncements on our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We have operations in the United States and internationally, and we are exposed to market risk in the ordinary course of business.

Inflation Rate Risk

We do not believe that inflation has had a material effect on our business, financial condition or results of operations. Nonetheless, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, financial condition, and results of operations.

Interest Rate Risk

Our cash and cash equivalents primarily consist of cash on hand and highly liquid investments in corporate debt securities and money market funds. Our investments are exposed to market risk due to fluctuations in interest rates, which may affect our interest income and the fair value of our investments. As of January 31, 2020, we had cash and cash equivalents of $264.8 million and marketable securities of $647.3 million. The carrying amount of our cash equivalents reasonably approximates fair value due to the short maturities of these instruments. The primary objectives of our investment activities are the preservation of capital, the fulfillment of liquidity needs, and the fiduciary control of cash and investments. We do not enter into investments for trading or speculative purposes. As of January 31, 2020, the effect of a hypothetical 100 basis point change in interest rates would have changed the fair value of our investment portfolio by $8.9 million.

Foreign Currency Risk

To date, all of our sales contracts have been denominated in U.S. dollars. A portion of our operating expenses are incurred outside the United States, denominated in foreign currencies and subject to fluctuations due to changes in foreign currency exchange rates, particularly changes in the British Pound, Australian Dollar, and Euro. The functional currency of our foreign subsidiaries is that country’s local currency. Foreign currency transaction gains and losses are recorded to Other income (expense), net. As of January 31, 2020, the cumulative foreign currency exchange rate loss recorded in other comprehensive income (loss) was $0.4 million. A hypothetical 10% decrease in the U.S. dollar against other currencies would have resulted in an increase in operating loss of approximately $12.4 million for the year ended January 31, 2020. As the impact of foreign currency exchange rates has not been material to our historical results of operations, we have not entered into derivative or hedging transactions, but we may do so in the future if our exposure to foreign currency becomes more significant.

Item 8. Financial Statements and Supplementary Data

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of CrowdStrike Holdings, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CrowdStrike Holdings, Inc. and its subsidiaries (the “Company”) as of January 31, 2020 and 2019, and the related consolidated statements of operations, of comprehensive loss, of redeemable convertible preferred stock and stockholders’ equity (deficit) and of cash flows for each of the three years in the period ended January 31, 2020, including the related notes (collectively referred to as the “consolidated financial statements”).

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of January 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2020 in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for revenues from contracts with customers in 2020.

Basis for Opinion

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

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

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.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 23, 2020

We have served as the Company’s auditor since 2016.

CrowdStrike Holdings, Inc.
Consolidated Balance Sheets
(in thousands, except per share data)

	January 31, 2020		January 31, 2019	
Assets				
Current assets:				
Cash and cash equivalents	$	264,798	$	88,408
Marketable securities		647,266		103,247
Accounts receivable, net of allowance for doubtful accounts of $1.1 million and $1.0 million as of January 31, 2020 and January 31, 2019, respectively		164,987		92,476
Deferred contract acquisition costs, current		42,971		28,847
Prepaid expenses and other current assets		51,614		18,410
Total current assets		1,171,636		331,388
Strategic investments		1,000		—
Property and equipment, net		136,078		73,735
Deferred contract acquisition costs, noncurrent		71,235		9,918
Goodwill		7,722		7,947
Intangible assets, net		527		1,048
Other assets		16,708		9,183
Total assets	$	1,404,906	$	433,219
Liabilities, Redeemable Convertible Preferred Stock, and Stockholders' Equity (Deficit)				
Current liabilities:				
Accounts payable	$	1,345	$	6,855
Accrued expenses		30,355		32,541
Accrued payroll and benefits		36,810		19,284
Deferred revenue		412,985		218,700
Other current liabilities		11,601		4,040
Total current liabilities		493,096		281,420
Deferred revenue, noncurrent		158,183		71,367
Other liabilities, noncurrent		11,020		10,313
Total liabilities		662,299		363,100
Commitments and contingencies *(Note 11)*				
Redeemable Convertible Preferred Stock				
Redeemable convertible preferred stock, $0.0005 par value; no shares and 137,419 shares authorized as of January 31, 2020 and January 31, 2019, respectively; no shares and 131,268 shares issued and outstanding as of January 31, 2020 and January 31, 2019, respectively; liquidation preference $0 and $545,000 as of January 31, 2020 and January 31, 2019, respectively		—		557,912
Stockholders' Equity (Deficit)				
Preferred stock, $0.0005 par value; 100,000 shares and no shares authorized as of January 31, 2020 and January 31, 2019, respectively; no shares issued and outstanding as of January 31, 2020 and January 31, 2019		—		—
Common stock, $0.0005 par value; no shares authorized, issued, or outstanding as of January 31, 2020, 220,000 shares authorized and 47,421 issued and outstanding as of January 31, 2019		—		24
Class A common stock, $0.0005 par value; 2,000,000 shares and no shares authorized as of January 31, 2020 and January 31, 2019, respectively; 107,666 shares, and no shares issued and outstanding as of January 31, 2020 and January 31, 2019, respectively; Class B common stock, $0.0005 par value; 300,000 shares and no shares authorized as of January 31, 2020 and January 31, 2019, respectively; 105,282 shares, and no shares issued and outstanding as of January 31, 2020 and January 31, 2019, respectively		106		—
Additional paid-in capital		1,378,479		31,211
Accumulated deficit		(637,487)		(519,126)
Accumulated other comprehensive income		1,009		98
Total CrowdStrike Holdings, Inc. stockholders' equity (deficit)		742,107		(487,793)
Non-controlling interest		500		—
Total stockholders' equity (deficit)		742,607		(487,793)
Total liabilities, redeemable convertible preferred stock, and stockholders' equity (deficit)	$	1,404,906	$	433,219

The accompanying notes are an integral part of these consolidated financial statements.

CrowdStrike Holdings, Inc.
Consolidated Statements of Operations
(in thousands, except per share data)

	Year Ended January 31,		
	2020	2019	2018
Revenue			
Subscription	$ 436,323	$ 219,401	$ 92,568
Professional services	45,090	30,423	26,184
Total revenue	481,413	249,824	118,752
Cost of revenue			
Subscription	112,474	69,208	39,857
Professional services	29,153	18,030	14,629
Total cost of revenue	141,627	87,238	54,486
Gross profit	339,786	162,586	64,266
Operating expenses			
Sales and marketing	266,595	172,682	104,277
Research and development	130,188	84,551	58,887
General and administrative	89,068	42,217	32,542
Total operating expenses	485,851	299,450	195,706
Loss from operations	(146,065)	(136,864)	(131,440)
Interest expense	(442)	(428)	(1,648)
Other income (expense), net	6,725	(1,418)	(1,473)
Loss before provision for income taxes	(139,782)	(138,710)	(134,561)
Provision for income taxes	(1,997)	(1,367)	(929)
Net loss	(141,779)	(140,077)	(135,490)
Accretion of redeemable convertible preferred stock	—	—	(5,853)
Net loss attributable to Class A and Class B common stockholders, basic and diluted	$ (141,779)	$ (140,077)	$ (141,343)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.96)	$ (3.12)	$ (3.38)
Weighted-average shares used in computing net loss per share attributable to Class A and Class B common stockholders, basic and diluted	148,062	44,863	41,876

The accompanying notes are an integral part of these consolidated financial statements.

CrowdStrike Holdings, Inc.
Consolidated Statements of Comprehensive Loss
(in thousands)

	Year Ended January 31,		
	2020	2019	2018
Net loss	$ (141,779)	$ (140,077)	$ (135,490)
Other comprehensive income (loss):			
Foreign currency translation adjustments	(410)	(878)	977
Unrealized gain on available-for-sale securities, net of tax	1,321	6	8
Other comprehensive income (loss)	911	(872)	985
Comprehensive loss	$ (140,868)	$ (140,949)	$ (134,505)

The accompanying notes are an integral part of these consolidated financial statements.

CrowdStrike Holdings, Inc.
Consolidated Statements of Redeemable Convertible Preferred Stock and Stockholders' Equity (Deficit)
(in thousands)

	Redeemable Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Non-controlling Interest	Total Stockholders' Deficit
	Shares	Amount	Shares	Amount					
Balances at January 31, 2017	**95,729**	**$ 214,728**	**40,498**	**$ 20**	**$ —**	**$ (243,458)**	**$ (15)**	**$ —**	**$ (243,453)**
Issuance of Series D redeemable convertible preferred stock, net of issuance costs of $187	17,570	99,813	—	—	—	—	—	—	—
Issuance of Series D-1 redeemable convertible preferred stock, net of issuance costs of $78	5,394	30,622	—	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	2,363	2	1,418	—	—	—	1,420
Issuance of common stock related to early exercised options	—	—	1,370	—	—	—	—	—	—
Vesting of early exercised options	—	—	—	—	574	—	—	—	574
Stock-based compensation expense	—	—	—	—	12,343	—	—	—	12,343
Accretion of redeemable convertible preferred stock	—	5,853	—	—	(5,853)	—	—	—	(5,853)
Net loss	—	—	—	—	—	(135,490)	—	—	(135,490)
Other comprehensive income	—	—	—	—	—	—	985	—	985
Balances at January 31, 2018	**118,693**	**$ 351,016**	**44,231**	**$ 22**	**$ 8,482**	**$ (378,948)**	**$ 970**	**$ —**	**$ (369,474)**
Cumulative effect of accounting change	—	—	—	—	101	(101)	—	—	—
Issuance of Series E and Series E-1 redeemable convertible preferred stock, net of issuance costs of $104	12,575	206,896	—	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	3,046	2	3,910	—	—	—	3,912
Issuance of common stock related to early exercised options	—	—	38	—	—	—	—	—	—
Issuance of common stock	—	—	106	—	—	—	—	—	—
Vesting of early exercised options	—	—		—	543	—	—	—	543
Stock-based compensation expense	—	—	—	—	20,505	—	—	—	20,505
Repurchase of stock options	—	—	—	—	(2,330)	—	—	—	(2,330)
Net loss	—	—	—	—	—	(140,077)	—	—	(140,077)
Other comprehensive loss	—	—	—	—	—	—	(872)	—	(872)
Balances at January 31, 2019	**131,268**	**$ 557,912**	**47,421**	**$ 24**	**$ 31,211**	**$ (519,126)**	**$ 98**	**$ —**	**$ (487,793)**
Cumulative effect of accounting change- ASC 606	—	—	—	—	—	23,418	—	—	23,418
Issuance of common stock upon initial public offering, net of underwriting discounts and issuance costs	—	—	20,700	11	659,207	—	—	—	659,218
Conversion of redeemable convertible preferred stock to common stock upon initial public offering	(131,268)	(557,912)	131,268	66	557,846	—	—	—	557,912
Reclassification of redeemable convertible preferred stock warrant liability to additional paid-in capital upon initial public offering	—	—	—	—	10,559	—	—	—	10,559
Net exercise of common stock warrants	—	—	322	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	10,645	5	21,507	—	—	—	21,512
Issuance of common stock under RSU release	—	—	1,127	—	—	—	—	—	—
Issuance of common stock under employee stock purchase plan	—	—	428	—	12,365	—	—	—	12,365
Issuance of common stock related to early exercised options	—	—	1,037	—	—	—	—	—	—
Vesting of early exercised options	—	—	—	—	2,704	—	—	—	2,704
Stock-based compensation expense	—	—	—	—	79,940	—	—	—	79,940
Capitalized stock-based compensation	—	—	—	—	857	—	—	—	857
Settlement related to stockholders short-swing trade profit	—	—	—	—	2,283	—	—	—	2,283
Net loss	—	—	—	—	—	(141,779)	—	—	(141,779)
Non-controlling interest	—	—	—	—	—	—	—	500	500
Unrealized net gain on available-for-sale-securities, net of tax	—	—	—	—	—	—	1,321	—	1,321
Foreign currency translation adjustments	—	—	—	—	—	—	(410)	—	(410)
Balances at January 31, 2020	**—**	**$ —**	**212,948**	**$ 106**	**$ 1,378,479**	**$ (637,487)**	**$ 1,009**	**$ 500**	**$ 742,607**

The accompanying notes are an integral part of these consolidated financial statements.

CrowdStrike Holdings, Inc.
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended January 31,		
	2020	2019	2018
Operating activities			
Net loss	$ (141,779)	$ (140,077)	$ (135,490)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	23,026	14,815	7,111
Loss on disposal of fixed assets	—	191	—
Amortization of intangible assets	487	583	628
Amortization of deferred contract acquisition costs	35,459	28,642	12,481
Change in fair value of redeemable convertible preferred stock warrant liability	6,022	3,576	264
Provision for bad debts	556	551	400
Stock-based compensation expense	79,940	20,505	12,343
Accretion of marketable securities purchased at a discount	(1,247)	(1,152)	—
Non-cash interest expense	435	98	1,036
Other non-cash charges	(427)	—	—
Changes in operating assets and liabilities, net of business combinations			
Accounts receivable	(73,067)	(33,413)	(35,268)
Deferred contract acquisition costs	(86,594)	(45,073)	(25,338)
Prepaid expenses and other assets	(43,467)	(5,819)	(12,718)
Accounts payable	(6,570)	(2,403)	7,136
Accrued expenses and other current liabilities	9,173	3,564	16,603
Accrued payroll and benefits	17,526	971	9,005
Deferred revenue	280,768	131,117	82,169
Other liabilities, noncurrent	(298)	356	872
Net cash provided by (used in) operating activities	99,943	(22,968)	(58,766)
Investing activities			
Purchases of property and equipment	(80,198)	(35,851)	(22,906)
Capitalized internal-use software	(7,289)	(6,794)	(6,542)
Purchase of strategic investments	(1,000)	—	—
Business combinations, net of cash acquired	—	—	(6,471)
Acquisition of intangible assets	—	—	(307)
Purchases of marketable securities	(779,701)	(199,335)	(9,559)
Proceeds from sales of marketable securities	9,581	—	—
Maturities of marketable securities	228,976	99,950	17,455
Net cash used in investing activities	(629,631)	(142,030)	(28,330)
Financing activities			
Proceeds from the issuance of common stock upon initial public offering, net of underwriting discounts	665,092	—	—
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	—	206,896	130,435
Repayment of loan payable	—	(6,158)	(19,324)
Proceeds from revolving line of credit	—	10,000	10,000
Repayment of revolving line of credit	—	(20,000)	—
Issuance of notes receivable to related parties	—	—	(370)
Repayment of notes receivable from related parties	—	198	2,389
Payments of contingent consideration	—	(242)	—
Payments of indemnity holdback	—	(1,887)	—
Repurchase of stock options	—	(2,330)	—
Payments of deferred offering costs	(5,872)	—	—
Proceeds from issuance of common stock upon exercise of stock options	21,512	3,912	3,701
Proceeds from the issuance of common stock upon exercise of early exercisable stock options	10,264	—	—
Proceeds from issuance of common stock under the employee stock purchase plan	12,365	—	—
Settlement related to stockholder short-swing trade profit	2,283	—	—
Capital contributions from non-controlling interest holders	500	—	—
Net cash provided by financing activities	706,144	190,389	126,831
Effect of foreign exchange rates on cash and cash equivalents	(66)	(162)	618
Net increase in cash and cash equivalents	176,390	25,229	40,353
Cash and cash equivalents, beginning of period	88,408	63,179	22,826
Cash and cash equivalents, end of period	$ 264,798	$ 88,408	$ 63,179
Supplemental disclosure of cash flow information:			
Interest paid	$ 7	$ 449	$ 1,648
Income taxes paid	$ 1,862	$ 1,394	$ 107
Supplemental disclosure of non-cash investing and financing activities:			
Indemnity holdback consideration associated with business combinations	$ —	$ —	$ 1,799
Contingent consideration associated with business combinations	$ —	$ 474	$ 635
Conversion of redeemable convertible preferred stock to common stock	$ 557,912	$ —	$ —
Conversion of redeemable convertible preferred stock warrant liabilities reclassified to additional paid-in capital	$ 10,559	$ —	$ —
Net (decrease) increase in deferred offering costs, accrued but not paid	$ (2,858)	$ 2,858	$ —
Net (decrease) increase in property and equipment included in accounts payable and accrued expenses	$ (3,193)	$ 3,004	$ 3,482
Accretion of redeemable convertible preferred stock	$ —	$ —	$ 5,853
Vesting of early exercised stock options	$ 2,704	$ 543	$ 574

The accompanying notes are an integral part of these consolidated financial statements.

CrowdStrike Holdings, Inc.
Notes to Consolidated Financial Statements

1. Description of Business and Basis of Presentation

Business

CrowdStrike Holdings, Inc. (the "Company") was formed on November 7, 2011. The Company provides a leading cloud-delivered solution for next-generation endpoint protection that offers 11 cloud modules on its Falcon platform via a software as a service ("SaaS") subscription-based model that spans multiple large security markets, including endpoint security, security and IT operations (including vulnerability management), and threat intelligence. The Company is headquartered in Sunnyvale, California. The Company conducts its business in the United States, as well as locations internationally, including in Australia, Germany, India, Romania, and the United Kingdom.

Initial Public Offering

On June 14, 2019, the Company closed its initial public offering ("IPO"), in which it sold 20,700,000 shares of Class A common stock. The shares were sold at a public offering price of $34.00 per share for net proceeds of $659.2 million, after deducting underwriters' discounts and commissions and offering expenses of $44.8 million. Immediately prior to the closing of the IPO, all outstanding shares of redeemable convertible preferred stock automatically converted into 131,267,586 shares of Class B common stock on a one-to-one basis. Additionally, in connection with the IPO all of the Company's outstanding common stock was reclassified into shares of Class B common stock on a one-for-one basis. Redeemable convertible preferred stock warrants also converted into 336,386 warrants to purchase Class B common stock on a one-to-one basis.

Basis of Presentation

The accompanying consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles in the United States of America ("U.S. GAAP"). Effective February 1, 2019, the Company adopted the Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers ("ASC 606") as discussed in Note 2 below. Prior periods were not retrospectively restated, and accordingly, the consolidated balance sheet as of January 31, 2019, and the consolidated statements of operations for the years ended January 31, 2019 and 2018 were prepared using the prior revenue recognition standard referred to as ASC 605.

2. Summary of Significant Accounting Policies

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

JOBS Act Accounting Election

The Company is an "emerging growth company" ("EGC") as defined in the Jumpstart Our Business Startups Act of 2012 ("JOBS Act"). An EGC may take advantage of specified reduced reporting requirements that are otherwise applicable generally to public companies, including, but not limited to, delayed adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act"), reduced disclosure obligations regarding executive compensation in the Company's periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

The Company may take advantage of these exemptions until it is no longer an EGC. The Company would cease to be an EGC upon the earliest to occur of: (i) the first fiscal year following the fifth anniversary of its initial public offering; (ii) the first fiscal year after annual gross revenue is $1.07 billion or more; (iii) the date on which the Company has, during the previous three-year period, issued more than $1.0 billion in non-convertible debt securities; or (iv) the date on which the Company qualifies as a “large accelerated filer,” as defined in Rule 12b-2 under the Exchange Act, which would occur at the end of any fiscal year in which the market value of the Company’s common stock held by non-affiliates exceeded $700.0 million as of the end of the second quarter of that fiscal year, and as of the end of such fiscal year the Company has been a reporting company for at least 12 months.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported and disclosed in the Company’s consolidated financial statements and accompanying notes. These estimates are based on information available as of the date of the consolidated financial statements. On a regular basis, management evaluates these estimates and assumptions. Actual results may differ from these estimates and such difference could be material to the Company’s consolidated financial statements.

Estimates and assumptions used by management affect revenue recognition, the allowance for doubtful accounts, the carrying value and useful lives of long-lived assets, the fair values of financial instruments and strategic investments, the period of benefit for deferred contract acquisition costs, the recognition and disclosure of contingent liabilities, income taxes, stock-based compensation, and for the periods prior to the Company’s IPO, the fair value of common stock and redeemable convertible preferred stock warrants.

Concentration of Credit Risk and Geographic Information

The Company generates revenue from the sale of subscriptions to access its cloud platform and professional services. The Company’s sales team, along with its channel partner network of system integrators and value-added resellers (collectively, “channel partners”), sells the Company’s services worldwide to organizations of all sizes. Due to the nature of the Company’s services and the terms and conditions of the Company’s contracts with its channel partners, the Company’s business could be affected unfavorably if it is not able to continue its relationships with them.

Financial instruments that potentially subject the Company to concentrations of credit risk consist of cash, cash equivalents, marketable securities, accounts receivable, and strategic investments. The Company’s cash is placed with high-credit-quality financial institutions and issuers, and at times exceed federally insured limits. The Company limits its concentration of risk in cash equivalents and marketable securities by diversifying its investments among a variety of industries and issuers. The Company has not experienced any credit loss relating to its cash equivalents, marketable securities, and strategic investments. The Company performs periodic credit evaluations of its customers and generally does not require collateral.

Channel partners or direct customers who represented 10% or more of the Company’s accounts receivable were as follows:

	January 31,	
	2020	2019
Channel partner A	11 %	9 %
Channel partner B	10 %	2 %
Customer A	— %	10 %
Customer B	20 %	19 %

Channel partners who represented 10% or more of the Company’s total revenue were as follows:

	Year Ended January 31,		
	2020	2019	2018
Channel partner A	10 %	15 %	15 %

There were no direct customers who represented 10% or more of the Company’s total revenue during the years ended January 31, 2018, January 31, 2019, and January 31, 2020.

Cash Equivalents and Marketable Securities

The Company considers all highly liquid investments with original maturities of three months or less at date of purchase to be cash equivalents. Cash equivalents as of January 31, 2019 and January 31, 2020 consisted of corporate debt securities and money market funds stated at fair value. The Company classifies investments in marketable securities as available-for-sale securities at the time of purchase and re-evaluates the designations as of each balance sheet date. The Company classifies its available-for-sale securities as short-term investments based on their nature and their availability for use in current operations. Available-for-sale securities are carried at fair value with unrealized gains and losses, if any, included in accumulated other comprehensive income (loss). Unrealized losses are recorded in Other income (expense), net, for declines in fair value below the cost of an individual investment that is deemed to be other-than-temporary. The Company did not identify any marketable securities as other-than-temporarily impaired as of January 31, 2020 and January 31, 2019. The Company determines realized gains or losses on the sale of marketable securities on a specific identification method and records such gains or losses in Other income (expense), net. Marketable securities as of January 31, 2020 and January 31, 2019 consisted of corporate debt securities and U.S. treasury securities.

Strategic Investments

In July 2019, the Company agreed to commit up to $10.0 million to a newly formed entity, CrowdStrike Falcon Fund LLC (“Falcon Fund”) in exchange for 50% of the sharing percentage of any distribution by Falcon Fund. Entities associated with Accel, a holder of more than 5% of the Company’s capital stock, also agreed to commit up to $10.0 million to Falcon Fund, and collectively own the remaining 50% of the sharing percentage of Falcon Fund. Falcon Fund is in the business of purchasing, selling and investing in minority equity and convertible debt securities of privately-held companies that develop applications that have potential for substantial contribution to CrowdStrike and its platform. The Company is the manager of the Falcon Fund and controls the investment decisions and day-to-day operations and accordingly has consolidated the Falcon Fund. Falcon Fund has a duration of ten years and may be extended for three additional years. At dissolution, Falcon Fund will be liquidated and the remaining assets will be distributed to the investors based on their respective sharing percentage.

During the year ended January 31, 2020, both CrowdStrike and Accel had made a contribution to Falcon Fund of $0.5 million each. The total contribution of $1.0 million has been invested in the Series B preferred stock of a private company that develops and sells a SaaS-based cyber hygiene product.

The Company has elected the measurement alternative for the non-marketable equity investments of the Falcon Fund where eligible. Under the measurement alternative, the carrying value of the strategic investments is adjusted to fair value for observable transactions for identical or similar investments of the same issuer or impairment. All gains and losses on strategic investments, realized and unrealized, are recognized in Other income (expense), net. Strategic investments are classified within Level 3 in the fair value hierarchy when a remeasurement occurs based on price changes from observable transactions of identical or similar securities of the same issuer or for impairment. The fair value is estimated based on valuation methods using the observable transaction price at the transaction date and other unobservable inputs including volatility, rights, and obligations of the investments. The Company classifies the investments in Falcon Fund as a non-current asset called Strategic Investments on the Consolidated Balance Sheets as of January 31, 2020. There have been no realized or unrealized gains or losses on the strategic investments during the year ended January 31, 2020.

Fair Value of Financial Instruments

The Company’s financial instruments consist of cash equivalents, marketable securities, strategic investments, accounts receivable, accounts payable, accrued expenses, and the redeemable convertible preferred stock warrant liability. The carrying values of cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate fair value due to their short-term nature. Refer to Note 3, *Fair Value Measurements and Marketable Securities* regarding the fair value of the Company’s marketable securities and non-marketable securities.

The Company reports the redeemable convertible preferred stock warrant liability at fair value (see Note 3, *Fair Value Measurements*). The warrants issued by the Company for redeemable convertible preferred stock in January 2015, December 2016, and March 2017 (see Note 7, *Redeemable Convertible Preferred Stock*) have been recorded as a liability based on “Level 3” inputs, which consist of unobservable inputs and reflect management’s estimates of assumptions that market participants would use in pricing the liability. The fair value of the warrants was determined using the Black-Scholes option-pricing model, which is affected by changes in inputs to that model including the Company’s stock price, expected stock price volatility, risk-free rate, and contractual term. Immediately prior to the closing of the IPO on June 14, 2019, the redeemable convertible preferred stock warrants converted into 336,386 warrants to purchase Class B common stock on a one-to-one basis. The redeemable convertible preferred stock warrant liability was reclassified to additional paid-in capital upon the closing of the IPO.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount and are non-interest bearing. Accounts receivable are stated at their net realizable value, net of allowance for doubtful accounts. The Company has a well-established collections history from its customers. Credit is extended to customers based on an evaluation of their financial condition and other factors. The Company generally does not require collateral from its customers; however, the Company may require payment prior to commencing service in certain instances to limit credit risk. The Company records allowance for doubtful accounts based on management’s assessment of the collectability of accounts. Management regularly reviews the adequacy of the allowance for doubtful accounts by considering the age of each outstanding invoice, each customer’s expected ability to pay, and the collection history with each customer, when applicable, to determine whether the allowance is appropriate. Amounts deemed uncollectible are written off against the allowance for doubtful accounts. As of January 31, 2020 and January 31, 2019, the allowance for doubtful accounts was $1.1 million and $1.0 million, respectively.

Deferred Offering Costs

Deferred offering costs of $2.9 million were recorded within other assets on the consolidated balance sheet as of January 31, 2019, and consist of expenses incurred in connection with the Company’s IPO, including legal, accounting, printing, and other IPO-related costs. Subsequent to January 31, 2019, the Company capitalized an additional $3.0 million of offering costs. Upon the close of the IPO on June 14, 2019, all of these deferred offering costs were reclassified to stockholders’ equity and recorded against the proceeds from the offering. As of January 31, 2020, the Company had paid all $5.9 million of these deferred offering costs.

Property and Equipment, Net

Property and equipment, net, is stated at historical cost less accumulated depreciation and amortization. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the assets as follows:

Data center and other computer equipment	3 - 5 years
Furniture and equipment	5 years
Purchased software	3 - 5 years
Capitalized internal-use software	3 years
Leasehold improvements	Estimated useful life or term of the lease, whichever is shorter

Expenditures for routine maintenance and repairs are charged to operating expense as incurred. Major renewals and improvements are capitalized and depreciated over their estimated useful lives. Upon retirement or other disposition of property and equipment, the cost and accumulated depreciation are removed from the accounts, and any gain or loss is recorded in operating expenses in the consolidated statement of operations.

Capitalized Internal-Use Software

The Company capitalizes certain development costs incurred in connection with its internal-use software. These capitalized costs are primarily related to the Company's cloud-delivered solution for next-generation endpoint protection. Costs incurred in the preliminary stages of development are expensed as incurred. Once an application has reached the development stage, internal and external costs, if direct, are capitalized until the software is substantially complete and ready for its intended use. Capitalization ceases upon completion of all substantial testing. The Company also capitalizes costs related to specific upgrades and enhancements when it is probable the expenditures will result in additional functionality. Capitalized costs are recorded as property and equipment, net. Maintenance and training costs are expensed as incurred. Internal-use software is amortized to cost of revenue on a straight-line basis over its estimated useful life of three years. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. There were no impairments of internal-use software during the years ended January 31, 2020, January 31, 2019, and January 31, 2018. The Company capitalized $8.1 million, $6.8 million, and $6.5 million in internal-use software during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively. Amortization expense associated with internal-use software totaled $6.2 million, $5.2 million and $3.2 million during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively. The net book value of capitalized internal-use software was $13.4 million and $11.5 million as of January 31, 2020 and January 31, 2019, respectively.

Intangible Assets, Net

Intangible assets, net, consisting of developed technology, customer relationships, and non-compete agreements, are stated at cost less accumulated amortization. All intangible assets have been determined to have definite lives and are amortized on a straight-line basis over their estimated economic lives of three to five years. Amortization expense related to developed technology is included in cost of revenue, amortization expense related to customer relationships is included in sales and marketing expenses, and amortization expense related to non-compete agreements is included in research and development expenses.

Deferred Contract Acquisition Costs

Prior to the adoption of ASC606, sales commissions associated with the Falcon platform were amortized over the contract term and sales commissions associated with professional service contracts were expensed as incurred. Under ASC 606, the Company capitalizes contract acquisition costs that are incremental to the acquisition of customer contracts. Contract acquisition costs are accrued and capitalized upon execution of the sales contract by the customer. Sales commissions for renewal of a contract are not considered commensurate with the commissions paid for the acquisition of the initial contract or follow-on upsell given the substantive difference in commission rates in proportion to their respective contract values. Commissions, including referral fees paid to channel partners, paid upon the initial acquisition of a contract or subsequent upsell are amortized over an estimated period of benefit of four years while commissions paid for renewal contracts are amortized over the contractual term of the renewals. Sales commissions associated with professional service contract are amortized ratably over an estimated period of benefit of six months. The Company capitalized contract acquisition costs of $86.6 million under ASC606, and $45.1 million prior to the adoption of ASC606, during the years ended January 31, 2020 and January 31, 2019, respectively. Contract acquisition cost amortization expense was $35.5 million under ASC 606 during the year ended January 31, 2020 and $28.6 million and $12.5 million under ASC 605, during the years ended January 31, 2019, and January 31, 2018, respectively.

Impairment of Long-Lived Assets

The Company reviews for impairment of long-lived assets whenever events or changes in circumstances indicate that the carrying amount of the asset (or asset group) may not be recoverable. Events and changes in circumstances considered by the Company in determining whether the carrying value of long-lived assets may not be recoverable, include, but are not limited to: significant changes in performance relative to expected operating results, significant changes in the use of the assets, significant negative industry or economic trends, and changes in the Company's business strategy. Impairment testing is performed at an asset level that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities (an "asset group"). An impairment loss would be recognized when estimated future cash flows expected to result from the use of the asset (or asset group) and its eventual disposition is less than its carrying amount. No impairment indicators were identified by the Company and no impairment losses were recorded by the Company during the years ended January 31, 2020, January 31, 2019, and January 31, 2018.

Deferred Revenue

The deferred revenue balance consists of subscription and professional services which have been invoiced upfront and are recognized as revenue only when the revenue recognition criteria are met. The Company's subscription contracts are typically invoiced to its customers at the beginning of the term, or in some instances, such as in multi-year arrangements, in installments. Professional services are either invoiced upfront, invoiced in installments, or invoiced as the services are performed. Accordingly, the Company's deferred revenue balance does not include revenues for future years of multi-year non-cancellable contracts that have not yet been billed.

The Company recognizes subscription revenue ratably over the contract term beginning on the commencement date of each contract, the date that services are made available to customers. The Company recognizes professional services revenue as services are delivered. Once services are available to customers, the Company records amounts due in accounts receivable and in deferred revenue. To the extent the Company bills customers in advance of the contract commencement date, the accounts receivable and corresponding deferred revenue amounts are netted to zero on the consolidated balance sheets, unless such amounts have been paid as of the balance sheet date.

Redeemable Convertible Preferred Stock Warrants

Warrants related to the Company's redeemable convertible preferred stock are classified as liabilities on the Company's consolidated balance sheet. The warrants are subject to reassessment at each balance sheet date, and any change in fair value is recognized as a component of Other income (expense), net, in the consolidated statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the expiration or exercise of the warrants, or upon their automatic conversion into warrants to purchase common stock in connection with a qualified initial public offering (as defined in Note 7, *Redeemable Convertible Preferred Stock*) such that they qualify for equity classification and no further remeasurement is required.

Immediately prior to the closing of the IPO on June 14, 2019, the redeemable convertible preferred stock warrants converted into 336,386 warrants to purchase Class B common stock on a one-to-one basis. The redeemable convertible preferred stock warrant liability was reclassified to additional paid-in capital. Within the same month, the Company received notice from the holders of 336,386 warrants as to their intentions to exercise the warrants for shares of common stock of the Company. Such shares were settled via net settlement method, which was elected by the holders to reduce the number of shares issued upon exercise to reflect net settlement of the exercise price, resulting in the issuance of 322,278 shares of the Company's common stock.

Revenue Recognition – ASC 606

The Company adopted ASC 606 on February 1, 2019, using the modified retrospective transition method. Under this method, results for reporting periods beginning on February 1, 2019 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with prior accounting under Topic 605. The Company has shown the effect of applying ASC 606 for the year ended January 31, 2020 in the disclosures below.

The following table summarizes cumulative effect of changes from the adoption of ASC 606 on the Company’s consolidated balance sheets as of February 1, 2019:

	Balance at January 31, 2019	Cumulative Effect Adjustments Due to the Adoption of Topic 606	Balance at February 1, 2019
		(in thousands)	
Consolidated Balance Sheet			
Assets:			
Deferred contract acquisition costs, current	$ 28,847	$ (6,031)	$ 22,816
Deferred contract acquisition costs, noncurrent	9,918	30,337	40,255
Liabilities:			
Accrued expenses	32,541	555	33,096
Deferred revenue, current	218,700	333	219,033
Stockholders’ Deficit:			
Accumulated deficit	(519,126)	23,418	(495,708)

The following tables summarize the effect of the adoption of ASC 606 on the Company’s select line items included in the consolidated financial statements as of and for the year ended January 31, 2020, as if the previous accounting was in effect:

	January 31, 2020		
	As Reported (ASC 606)	Impact of Adoption	Without Adoption (ASC 605)
		(in thousands)	
Consolidated Balance Sheet			
Assets:			
Deferred contract acquisition costs, current	$ 42,971	$ 5,309	$ 48,280
Deferred contract acquisition costs, noncurrent	71,235	(50,958)	20,277
Liabilities:			
Accrued expenses	30,355	(218)	30,137
Deferred revenue, current	412,985	(114)	412,871
Stockholders’ Equity:			
Accumulated deficit	(637,487)	(45,317)	(682,804)

	Year Ended January 31, 2020		
	As Reported (ASC 606)	Impact of Adoption	Without Adoption (ASC 605)
		(in thousands)	
Consolidated Statement of Operations			
Revenue	$ 481,413	$ (218)	$ 481,195
Operating expenses:			
Sales and marketing	266,595	21,681	288,276
Net loss	(141,779)	(21,899)	(163,678)
Net loss per share, basic and diluted	$ (0.96)		$ (1.11)

The adoption of ASC 606 had no impact on net cash provided by or used in operating, investing, or financing activities in the Company’s consolidated statement of cash flows for the year ended January 31, 2020.

In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration that the Company expects to be entitled to receive in exchange for these services. To achieve the core principle of this standard, the Company applies the following five steps:

(1) Identify the contract with a customer

The Company considers the terms and conditions of contracts with customers and its customary business practices in identifying contracts under ASC 606. The Company determines it has a contract with a customer when the contract is approved, each party's rights regarding the services to be transferred can be identified, payment terms for the services can be identified, it has been determined that the customer has the ability and intent to pay, and the contract has commercial substance. The Company applies judgment in determining the customer's ability and intent to pay, which is based on a variety of factors, including the customer's historical payment experience or, in the case of a new customer, credit and financial information pertaining to the customer.

(2) Identify the performance obligations in the contract

Performance obligations promised in a contract are identified based on the services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the service either on its own or together with other resources that are readily available from the Company or from third parties, and are distinct in the context of the contract, whereby the transfer of the services is separately identifiable from other promises in the contract. The Company's performance obligations consist of (i) subscriptions and (ii) professional services.

(3) Determine the transaction price

The transaction price is determined based on the consideration which the Company is expected to be entitled to in exchange for transferring services to the customer. Variable consideration is included in the transaction price if it is probable that a significant future reversal of cumulative revenue under the contract will not occur. None of the Company's contracts contain a significant financing component.

(4) Allocate the transaction price to performance obligations in the contract

If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price ("SSP").

(5) Recognize revenue when or as performance obligations are satisfied

Revenue is recognized at the time the related performance obligation is satisfied by transferring the promised service to the customer. Revenue is recognized when control of the services is transferred to the customer, in an amount that reflects the consideration expected to be received in exchange for those services. The Company generates all its revenue from contracts with customers.

Subscription Revenue

The Company's Falcon Platform technology solutions are subscription, SaaS offerings designed to continuously monitor, share, and mitigate risks from determined attackers. Customers do not have the right to take possession of the cloud-based software platform. Fees are based on several factors, including the solutions subscribed for by the customer and the number of endpoints purchased by the customer. The subscription fees are typically payable within 30 to 60 days after the execution of the arrangement, and thereafter upon renewal or subsequent installment. The Company initially records the subscription fees as deferred revenue and recognizes revenue on a straight-line basis over the term of the agreement.

The typical subscription term is one to three years. Most of the Company's contracts are non-cancelable over the contractual term. Customers typically have the right to terminate their contracts for cause if the Company fails to perform in accordance with the contractual terms. Some customers have the option to purchase additional subscription at a stated price. These options generally do not provide a material right as they are priced at the Company's SSP.

Professional Services Revenue

The Company offers several types of professional services including incident response and forensic services, surge forensic and malware analysis, and attribution analysis, which are focused on responding to imminent and direct threats, assessing vulnerabilities, and recommending solutions. These services are distinct from subscription services. Professional services do not result in significant customization of the subscription service. The professional services are available through hourly rate and fixed fee contracts, one-time and ongoing engagements, and retainer-based agreements. Revenue for time and materials arrangements is recognized as services are performed and revenue for fixed fees is recognized on a proportional performance basis as the services are performed.

Contracts with Multiple Performance Obligations

Some contracts with customers contain multiple promised services consisting of subscription and professional services that are distinct and accounted for separately. The transaction price is allocated to the separate performance obligations on a relative SSP basis. The SSP is the price at which the Company would sell promised subscription or professional services separately to a customer. Judgment is required to determine the SSP for each distinct performance obligation. The Company determines SSP based on its overall pricing objectives, taking into consideration the type of subscription or professional service and the number of endpoints.

Variable Consideration

Revenue from sales is recorded at the net sales price, which is the transaction price, and includes estimates of variable consideration. The amount of variable consideration that is included in the transaction price is constrained and is included in the net sales price only to the extent that it is probable that a significant reversal in the amount of the cumulative revenue will not occur when the uncertainty is resolved.

If subscriptions do not meet certain service level commitments, the Company’s customers are entitled to receive service credits, and in certain cases, refunds, each representing a form of variable consideration. The Company has historically not experienced any significant incidents affecting the defined levels of reliability and performance as required by its subscription contracts. Accordingly, any estimated refunds related to these agreements in the consolidated financial statements is not material during the periods presented.

The Company provides rebates and other credits within its contracts with certain resellers, which are estimated based on the most likely amounts expected to be earned or claimed on the related sales transaction. Overall, the transaction price is reduced to reflect the Company’s estimate of the amount of consideration to which it is entitled based on the terms of the contract. Estimated rebates and other credits were not material during the periods presented.

Revenue Recognition – ASC 605

Prior to adopting ASC 606 on February 1, 2019, the Company recognized subscription and professional services when: (1) persuasive evidence of the contract exists in the form of a written contract, amendments to that contract, or purchase orders from a third party; (2) delivery has occurred, or services have been rendered; (3) the price is fixed or determinable; and (4) collectability is reasonably assured based on customer creditworthiness and history of collection.

The timing and the amount the Company recognized as revenue was determined based on the facts and circumstances of each customer’s arrangements. Evidence of an arrangement consisted of a signed customer agreement. The Company considered that the delivery of its solution had commenced once it provided the customer with log-in information and the term of the contract had started. Fees were fixed based on stated rates specified in the customer agreement. The Company assessed collectability based on several factors, including the credit worthiness of the customer and transaction history. If collectability was not reasonably assured, revenue was deferred until the fees were collected.

For arrangements that involve the contemporaneous sale of subscription and professional services, the Company applied the multiple-element arrangement guidance to allocate the arrangement consideration to all deliverables based on their relative selling price. The Company determined that the cloud-based platform subscription has standalone value, because once access is given to the customer, the solutions are fully functional and do not require any additional development, modification, or customization. Professional services have standalone value because they are regularly sold by the Company in separate transactions. Additionally, the performance of these professional services generally does not require highly specialized or technologically skilled individuals and the professional services are not essential to the functionality of the solutions.

The Company used a hierarchy to determine the selling price to be used for allocating revenue to deliverables: (i) vendor-specific objective evidence of fair value ("VSOE"); (ii) third-party evidence of selling price ("TPE"); and (iii) best estimate of selling price ("BESP"). BESP reflected the Company's best estimates of what the selling prices of elements would be if they were sold regularly on a stand-alone basis. The Company's process for determining BESP involved management's judgment and considered numerous factors including the nature of the deliverables themselves and historical discounting practices. The Company updated its estimates of BESP on an ongoing basis as events and circumstances required.

Research and Development Expense

Research and development costs are expensed when incurred, except for certain internal-use software development costs, which may be capitalized as noted above. Research and development expenses consist primarily of personnel and related headcount costs, costs of professional services associated with the ongoing development of the Company's technology, and allocated overhead.

Advertising

All advertising costs are expensed as incurred and are included in sales and marketing expense in the consolidated statements of operations. The Company incurred $8.0 million, $3.1 million, and $1.6 million of advertising costs during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

Stock-Based Compensation

The Company accounts for stock-based awards granted to employees and directors based on the awards' estimated grant date fair value. The Company estimates the fair value of its stock options using the Black-Scholes option-pricing model. The resulting fair value is recognized on a straight-line basis over the period during which the employee or director is required to provide service in exchange for the award, usually the vesting period, which is generally four years. The Company accounts for forfeitures as they occur.

Prior to the Company's adoption of ASU 2018-07, stock-based awards issued to non-employees were accounted for at fair value determined by using the Black-Scholes option-pricing model. The Company believes that the fair value of the stock options is more reliably measured than the fair value of the services received. The fair value of each non-employee stock-based award is remeasured each period until a commitment date is reached, which is generally the vesting date. The Company early adopted ASU 2018-07 on February 1, 2019 and began accounting for stock-based awards issued to non-employees the same as it accounts for stock-based awards issued to employees. The effect on the Company's consolidated financial statements for the year ended January 31, 2020 was not material.

Restricted stock units ("RSUs") granted under the 2011 Plan are subject to a service-based vesting condition and a performance-based vesting condition. The service-based vesting condition is generally satisfied based on one of three vesting schedules: (i) vesting of one-fourth of the RSUs on the first "Company vest date" (defined as March 20, June 20, September 20, or December 20) on or following the one-year anniversary of the vesting commencement date with the remainder of the RSUs vesting in twelve equal quarterly installments thereafter, subject to continued service, (ii) vesting in sixteen equal quarterly installments beginning on December 20, 2018, subject to continued service, or (iii) vesting in eight equal quarterly installments beginning on December 20, 2022, subject to continued service. The performance-based vesting condition is satisfied on the earlier of (i) a change in control, in which the consideration paid to holders of shares is either cash, publicly traded securities, or a combination thereof, or (ii) the first Company vest date to occur following the expiration of the lock-up period upon an IPO, subject to continued service through such change in control or lock-up expiration, as applicable. None of the RSUs vest unless the performance-based vesting condition is satisfied. Upon the completion of the IPO, the performance-based vesting condition was met and the Company recognized $17.3 million of deferred expense related to RSUs as of that date in its consolidated statement of operations. Upon its IPO, the Company began issuing RSUs to its employees and these RSUs generally have only a service condition. The service-based vesting condition is generally with a vesting term of four years. The valuation of such RSUs is based solely on the fair value of the Company’s stock price on the date of grant. Expense for RSUs that have a service-based condition only are being amortized on a straight-line basis.

Performance-based stock units (“PSUs”) granted under the 2019 Plan are subject to a performance-based vesting condition. With regard to the performance conditions, the fair value of new or modified awards is equal to the grant date fair market value of the Company’s common stock. PSUs vest over a four-year period based on the achievement of specified performance targets for the fiscal year ended January 31, 2020 and subject to continued service through the applicable vesting dates. The compensation cost is recognized over the requisite service period when it is probable that the performance condition will be satisfied.

Business Combinations

The Company allocates the fair value of purchase consideration to the tangible assets acquired, 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 recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets. Significant estimates in valuing certain intangible assets include, but are not limited to, future expected cash flows from acquired users, acquired technology, trade names 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 one year from the acquisition date, the Company 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 in the consolidated statement of operations.

Goodwill and Intangible Assets

The Company evaluates and tests the recoverability of goodwill for impairment at least annually, on January 31, or more frequently if circumstances indicate that goodwill may not be recoverable. The Company performs the impairment testing by first assessing qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of its reporting unit is less than its carrying amount. The Company has one reporting unit. If, after assessing the totality of events or circumstances, the Company determines it is more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company performs the first step of a two-step analysis by comparing the book value of net assets to the fair value of the reporting unit. To calculate any potential impairment, the Company compares the fair value of a reporting unit with its carrying amount, including goodwill. Any excess of the carrying amount of the reporting unit’s goodwill over its fair value is recognized as an impairment loss, and the carrying value of goodwill is written down. In assessing the qualitative factors, the Company considers the impact of certain key factors including macroeconomic conditions, industry and market considerations, management turnover, changes in regulation, litigation matters, changes in enterprise value, and overall financial performance. No impairment was recorded during the years ended January 31, 2020, January 31, 2019, or January 31, 2018. The change in goodwill balance during the years ended January 31, 2020 and January 31, 2019 was due to changes in foreign currency exchange rates.

Acquired intangible assets consisting of identifiable intangible assets, were comprised of developed technology, customer relationships, and non-compete agreements resulting from acquisitions. Acquired intangible assets are recorded at fair value on the date of acquisition and amortized over their estimated economic lives following the pattern in which the economic benefits of the assets will be consumed which is on a straight-line basis. Acquired intangible assets are presented net of accumulated amortization on the consolidated balance sheets. The Company reviews the carrying amounts of intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable. The Company measures the recoverability of intangible assets by comparing the carrying amount of each asset to the future undiscounted cash flows it expects the asset to generate. If the Company considers any of these assets to be impaired, the impairment to be recognized equals the amount by which the carrying value of the asset exceeds its fair value. In addition, the Company periodically evaluates the estimated remaining useful lives of long-lived assets to determine whether events or changes in circumstances warrant a revision to the remaining period of depreciation or amortization.

Leases

The Company leases its office space under various noncancelable operating lease agreements and recognizes related rent expense on a straight-line basis over the term of the lease. Certain lease agreements contain rent holidays, scheduled rent increases, lease incentives, and renewal options. Rent holidays and scheduled rent increases are included in the determination of rent expense to be recorded over the lease term. Lease incentives are recognized as a reduction of rent expense on a straight-line basis over the term of the lease. Renewals are not assumed in the determination of the lease term unless they are deemed to be reasonably assured at the inception of the lease. The Company begins to recognize rent expense on the date that the Company obtains the legal right to use and control the leased space.

Foreign Currency Translation

The functional currencies of the Company's foreign subsidiaries are each country's local currency. Assets and liabilities of the subsidiaries are translated into U.S. Dollars at exchange rates in effect at the reporting date. Amounts classified in stockholders' equity (deficit) are translated at historical exchange rates. Revenue and expenses are translated at the average exchange rates during the period. The resulting translation adjustments are recorded in accumulated other comprehensive income (loss). Foreign currency transaction gains or losses, whether realized or unrealized, are reflected in the consolidated statements of operations within Other income (expense), net, and have not been material for all periods presented.

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement and tax basis of assets and liabilities and net operating loss and credit carryforwards using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established when necessary to reduce deferred tax assets to the amounts expected to be realized.

The Company accounts for unrecognized tax benefits using a more-likely-than-not threshold for financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. The Company establishes a liability for tax-related uncertainties based on estimates of whether, and the extent to which, additional taxes will be due. The Company records an income tax liability, if any, for the difference between the benefit recognized and measured and the tax position taken or expected to be taken on the Company's tax returns. To the extent that the assessment of such tax positions changes, the change in estimate is recorded in the period in which the determination is made. The liability is adjusted considering changing facts and circumstances, such as the outcome of a tax audit. The provision for income taxes includes the impact of liability provisions and changes to the liability that are considered appropriate. As the Company maintains a full valuation allowance against its deferred tax assets in the United States, the changes resulted in no additional tax expense during the years ended January 31, 2020, January 31, 2019, and January 31, 2018. As of January 31, 2020, the Company does not expect that changes in the liability for unrecognized tax benefits for the next twelve months will have a material impact on its consolidated financial statements.

Sales Taxes

When sales and other taxes are billed, such amounts are recorded as accounts receivable with a corresponding increase to other current liabilities, respectively. The balances are then removed from the consolidated balance sheet as cash is collected from the customer and as remitted to the respective tax authority.

Segment and Geographic Information

The Company's chief operating decision maker ("CODM") is its chief executive officer. The CODM reviews financial information presented on a consolidated basis for the purposes of allocating resources and evaluating financial performance. Accordingly, management has determined that the Company operates as one operating and reportable segment. The Company presents financial information about its geographic areas in Note 12 to the consolidated financial statements.

Net Loss per Share

The Company computes basic and diluted net loss per share attributable to common stockholders for Class A and Class B common stock using the two-class method required for participating securities. The Company considers all series of its redeemable convertible preferred stock to be participating securities. Net loss is attributed to Class A and Class B common stock based on their participation rights. Under the two-class method, basic net loss per share attributable to common stockholders is computed by dividing the net loss attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period.

Diluted earnings per share attributable to common stockholders adjusts basic earnings per share for the potentially dilutive impact of outstanding stock options, RSUs, PSUs, ESPP obligations, warrants and redeemable convertible preferred stock. As the Company has reported losses for all periods presented, all potentially dilutive securities are antidilutive and accordingly, basic net loss per share equals diluted net loss per share.

Recently Adopted Accounting Pronouncements

In May 2014, the FASB issued ASU No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which provides guidance for revenue recognition. Under the new guidance, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. In addition, the guidance requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Subsequently, the FASB has issued the following guidance to amend ASU 2014-09: ASU No. 2015-14, *Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date*; ASU No. 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*; ASU No. 2016-10, *Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing*; ASU No. 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*; and ASU No. 2016-20, *Technical Corrections and Improvements to Topic 606,* which clarifies narrow aspects of Topic 606 or corrects unintended application of the guidance. The Company must adopt ASU No. 2015-14, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-20 with ASU No. 2014-09, which are referred to collectively as the "new revenue guidance." On February 1, 2019, the Company adopted ASU No. 2014-09 using the modified retrospective transition method. Under this method, results for reporting periods beginning on February 1, 2019 are presented under Topic 606, while prior period amounts are not adjusted and continue to be reported in accordance with the Company's historical accounting under Topic 605. The Company recorded a cumulative effect adjustment to the opening accumulated deficit of $23.4 million, net of tax, as of the date of adoption. The change resulted from a $23.7 million reduction in commissions expense that the Company capitalized under Topic 606, but would have been recognized during the prior period as commissions expense under its historical accounting practices under Topic 605 and a $0.3 million reduction in revenue that would have been recognized during the prior period under Topic 605.

In January 2017, the FASB issued ASU No. 2017-01, *Business Combinations (Topic 805): Clarifying the Definition of a Business*, which changes the definition of a business to assist entities with evaluating when a set of transferred assets and activities is a business. If substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or a group of similar identifiable assets, the set of transferred assets and activities is not a business. On February 1, 2019, the Company adopted ASU No. 2017-01, which did not have a material effect on its consolidated financial statements.

In June 2018, the FASB issued ASU No. 2018-07, *Compensation—Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting.* This ASU simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. This ASU is effective for public business entities for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. For all other entities, this ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, but no earlier than the adoption date of Topic 606. On February 1, 2019, the Company adopted ASU No. 2018-07, which did not have a material effect on its consolidated financial statements.

In February 2018, the FASB issued ASU No. 2018-02, *Income Statement—Reporting Comprehensive Income (Topic 220)*: Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, which provides financial statement preparers with an option to reclassify stranded tax effects within accumulated other comprehensive income to retained earnings in each period in which the effect of the change in the U.S. federal corporate income tax rate in the Tax Cuts and Jobs Act (or portion thereof) is recorded. On February 1, 2019, the Company adopted ASU No. 2018-02, which did not have a material effect on its consolidated financial statements.

In January 2016, the FASB issued ASU No. 2016-01, *Financial Instruments - Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities.* This ASU requires that equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) are to be measured at fair value with changes in fair value recognized in net income. The Company may choose to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. This ASU also requires the Company to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet or the accompanying notes to the financial statements; and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. The Company adopted this ASU on February 1, 2019, which did not have a material effect on its consolidated financial statements.

Recently Issued Accounting Pronouncements

Under the JOBS Act, the Company meets the definition of an emerging growth company. The Company has elected to use the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act.

In February 2016, the FASB issued ASU No. 2016-02, *Leases*. The new guidance supersedes current guidance related to accounting for leases and generally requires an entity to recognize on its balance sheet operating and financing lease liabilities and corresponding right-of-use assets. In July 2018, the FASB issued ASU No. 2018-10, *Codification Improvements to Topic 842*. This ASU makes 16 technical corrections to the new lease standard and other accounting topics, alleviating unintended consequences from applying the new standard. It does not make any substantive changes to the core provisions or principles of the new standard. In July 2018, the FASB also issued ASU No. 2018-11, *Leases (Topic 842): Targeted Improvements*.

The Company will adopt this standard effective February 1, 2020 on a modified retrospective basis and therefore will not restate comparative periods. In addition, the Company intends to elect the following:

- the package of practical expedients which allows for not reassessing 1) whether existing contracts contain leases, 2) the lease classification of existing leases, and 3) whether existing initial direct costs meet the new definition.

- the practical expedient in ASC Subtopic 842-10 to not separate non-lease components from lease components and instead account for each separate lease component and non-lease components associated with that lease component as a single lease component by class of the underlying asset.

- not to recognize right of use assets and lease liabilities for short-term leases, which have a lease term of twelve months or less and do not include an option to purchase the underlying asset that the Company is reasonably certain to exercise.

The Company is not planning to elect the hindsight practical expedient.

The Company has substantially completed the review of existing real estate leases and has reviewed its vendor arrangements for embedded leases. The present value of its operating lease commitments will be recognized as right-of-use assets and lease liabilities at the later to occur of (i) the adoption date of February 1, 2020 or (ii) the time the Company takes possession of the leased asset, which will have a material impact on its consolidated balance sheet. The Company expects the adoption of this ASU to result in the recognition of total right-of-use assets and a net increase in liabilities of approximately $35.5 million to $39.5 million. The Company does not anticipate that the adoption of this standard will have a material impact on its consolidated statements of operations or its consolidated statements of cash flows.

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*. This ASU amends guidance on reporting credit losses for assets held at amortized cost basis and available-for-sale debt securities to require that credit losses on available-for-sale debt securities be presented as an allowance rather than as a write-down. In May 2019, the FASB issued an update for ASU No. 2016-13. The standard replaces the existing incurred loss model with an expected credit loss model for financial assets measured at amortized cost, including trade receivables, and requires that credit losses on available-for-sale debt securities be presented as an allowance rather than as a write-down. The measurement of credit losses for newly recognized financial assets and subsequent changes in the allowance for credit losses are recorded in the consolidated statements of operations. For public business entities that are SEC filers, this ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. For all other entities, this ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Early adoption is permitted. As an emerging growth company defined in the JOBS Act, the Company has elected to delay adoption of this ASU until February 1, 2021. The Company is currently evaluating the potential impact of this ASU on its consolidated financial statements.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles—Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. This ASU simplifies the measurement of goodwill by eliminating step two of the two-step impairment test. Step two measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. This ASU requires an entity to compare the fair value of a reporting unit with its carrying amount and recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. Additionally, an entity should consider income tax effects from any tax-deductible goodwill on the carrying amount of the reporting unit when measuring the goodwill impairment loss, if applicable. The Company is required to adopt this ASU on February 1, 2021. The Company is currently evaluating the potential impact of this ASU on its consolidated financial statements.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. This ASU modifies the disclosure requirements on fair value measurements in Topic 820, *Fair Value Measurement*. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. The Company will adopt this ASU effective February 1, 2020 and does not expect such adoption will have a material impact on its consolidated financial statement.

In August 2018, the FASB issued ASU No. 2018-15, *Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract (*a consensus of the FASB Emerging Issues Task Force). This ASU aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal use software. As an emerging growth company defined in the JOBS Act, the Company has elected to delay adoption of this ASU until February 1, 2021. Entities can choose to adopt this ASU prospectively or retrospectively. The Company is currently evaluating the potential impact of this ASU on its consolidated financial statements.

In December 2019, the Financial Accounting Standards Board (the "FASB") issued ASU 2019-12, Income Taxes (Topic 740), which enhances and simplifies various aspects of the income tax accounting guidance, including requirements such as tax basis step-up in goodwill obtained in a transaction that is not a business combination, ownership changes in investments, and interim-period accounting for enacted changes in tax law. As an emerging growth company defined in the JOBS Act, the Company has elected to delay adoption of this ASU until February 1, 2021. The Company is currently assessing the impact of this pronouncement on its consolidated financial statements.

3. Fair Value Measurements and Marketable Securities

The Company follows ASC 820, *Fair Value Measurements*, with respect to marketable securities that are measured at fair value on a recurring basis. Under the standard, fair value is defined as the exit price, or the amount that would be received to sell an asset or a liability in an orderly transaction between market participants as of the measurement date. The standard also establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use in valuing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available in the circumstances.

The hierarchy is broken down into three levels as follows:

Level 1 Assets and liabilities whose values are based on unadjusted quoted market prices for identical assets and liabilities in active markets

Level 2 Assets and liabilities whose values are based on quoted prices in markets that are not active or inputs that are observable for substantially the full term of the asset or liability

Level 3 Assets and liabilities whose values are based on prices or valuation techniques that require inputs that are both unobservable and significant to the overall fair value measurement

Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The Company's fair value hierarchy for its financial assets and liabilities that are measured at fair value on a recurring basis are as follows:

	January 31, 2020			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets				
Cash equivalents[1]				
Money market funds	$ 205,379	$ —	$ —	$ 205,379
Corporate debt securities	—	39,940	—	39,940
Total cash equivalents	205,379	39,940	—	245,319
Marketable securities				
Corporate debt securities	—	495,022	—	495,022
US Treasury securities	84,431	—	—	84,431
Asset backed securities	—	67,813	—	67,813
Total marketable securities	84,431	562,835	—	647,266
Total assets	$ 289,810	$ 602,775	$ —	$ 892,585

(1) Included in "Cash and cash equivalents" on the consolidated balance sheets.

	January 31, 2019			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Assets				
Cash equivalents[1]				
Money market funds	$ 42,132	$ —	$ —	$ 42,132
Corporate debt securities	—	27,941	—	27,941
Total cash equivalents	42,132	27,941	—	70,073
Marketable securities				
Corporate debt securities	—	91,796	—	91,796
U.S. treasury securities	11,451	—	—	11,451
Total marketable securities	11,451	91,796	—	103,247
Total assets	$ 53,583	$ 119,737	$ —	$ 173,320
Liability				
Contingent consideration related to business combinations[2]	$ —	$ —	$ 474	$ 474
Redeemable convertible preferred stock warrant liability[3]	—	—	4,537	4,537
Total liabilities	$ —	$ —	$ 5,011	$ 5,011

(1) Included in “Cash and cash equivalents” on the consolidated balance sheets.

(2) The contingent consideration consists of development milestone payments. The fair value of the contingent consideration was estimated by developing the risk-adjusted discounted value as well as discounted probability-weighted expected payments. That measure is based on Level 3 inputs which are significant inputs that are not observable in the market. Key assumptions at the acquisition date included (a) a discount rate range of 3%-3.02% and (b) three probability-adjusted milestone payments, each $0.2 million. As of January 31, 2019, the first milestone payment of $0.2 million had been made. During the year ended January 31, 2020, the remaining milestones were deemed not probable of being paid and the remaining contingent consideration of $0.5 million was written off to Other income (expense), net.

(3) Immediately prior to the closing of the IPO on June 14, 2019, the redeemable convertible preferred stock warrants converted into 336,386 warrants to purchase Class B common stock on a one-to-one basis. The redeemable convertible preferred stock warrant liability was reclassified to additional paid-in capital. Within the same month, the Company received notice from the holders of 336,386 warrants as to their intentions to exercise the warrants for shares of common stock of the Company. Such shares were settled via net settlement method, which was elected by the holders to reduce the number of shares issued upon exercise to reflect net settlement of the exercise price, resulting in the issuance of 322,278 shares of the Company’s common stock.

There were no transfers between the levels of the fair value hierarchy during the years ended January 31, 2020 or January 31, 2019.

At January 31, 2020 and January 31, 2019, the amortized cost of the Company’s cash equivalents and marketable securities approximated their fair value and there were no material realized or unrealized gains or losses, either individually or in the aggregate. In addition, the securities that had been in continuous unrealized loss position per security type and in aggregate are not material as of January 31, 2020 and January 31, 2019. There were no impairments considered “other-than-temporary” as it is more likely than not the Company will hold the securities until maturity or a recovery of the cost basis.

The following table presents the contractual maturities of marketable securities as of January 31, 2020:

	Amortized cost	Fair value
	(in thousands)	
Due in one year or less	$ 377,722	$ 378,408
Due after one year through five years	266,670	267,728
Due after five years through nineteen years	1,127	1,130
	$ 645,519	$ 647,266

The following summarizes the changes in strategic investments:

	Year Ended January 31
	2020
	(in thousands)
Total initial cost	$ 1,000
Cumulative gain	—
Carrying value	$ 1,000

There was no unrealized gain and loss included as an adjustment to the carrying value related to non-marketable securities as of January 31, 2020.

The following summarizes the changes in the redeemable convertible preferred stock warrant liability, which is classified as a Level 3 instrument:

	Year Ended January 31		
	2020	2019	2018
	(in thousands)		
Balance at beginning of period	$ 4,537	$ 961	$ 568
Additions	—	—	129
Adjustment resulting from change in fair value recognized in the consolidated statement of operations	6,022	3,576	264
Reclassification of redeemable convertible preferred stock warrant liability to additional paid-in capital upon IPO	(10,559)	—	—
Balance at end of period	$ —	$ 4,537	$ 961

The fair value of the redeemable convertible preferred stock warrant liability was estimated using the Black-Scholes option-pricing model and was based on significant inputs not observable in the market, and therefore was classified as a Level 3 instrument. The inputs include the Company's preferred stock price, expected stock price volatility, risk-free interest rate, and contractual term. A loss of $6.0 million, $3.6 million, and $0.3 million was recorded as a component of Other income (expense), net, because of the remeasurement of the redeemable convertible preferred stock warrant liability during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

4. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	January 31, 2020	January 31, 2019
	(in thousands)	
Prepaid expenses	$ 20,390	$ 5,982
Prepaid software licenses	16,645	8,408
Prepaid hosting services	8,056	2,915
Other current assets	6,523	1,105
Prepaid expenses and other current assets	$ 51,614	$ 18,410

Property and Equipment, Net

Property and equipment, net consisted of the following:

	January 31, 2020	January 31, 2019
	(in thousands)	
Data center and other computer equipment	$ 87,166	$ 44,735
Capitalized internal-use software	30,354	22,209
Leasehold improvements	13,157	10,011
Purchased software	2,604	1,460
Furniture and equipment	4,835	2,553
Construction in process	47,626	19,455
	185,742	100,423
Less: Accumulated depreciation and amortization	(49,664)	(26,688)
Property and equipment, net	$ 136,078	$ 73,735

Construction in process mainly includes data center equipment purchased that has not yet been placed in service. As of January 31, 2020, $44.9 million of data center equipment was purchased but not yet been placed into service.

Depreciation and amortization expense of property and equipment was $23.0 million, $14.8 million, and $7.1 million, during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

Intangible Assets, Net

Total intangible assets, net consisted of the following:

	January 31, 2020			
	Gross Carrying Amount	Accumulated Amortization	Net Amount	Weighted-Average Remaining Useful Life
	(in thousands)			(in months)
Developed technology	$ 1,238	$ 1,067	$ 171	9
Customer relationships	607	280	327	33
Non-compete agreement	121	92	29	9
Total	$ 1,966	$ 1,439	$ 527	

	January 31, 2019			Weighted-Average Remaining Useful Life
	Gross Carrying Amount	Accumulated Amortization	Net Amount	
	(in thousands)			(in months)
Developed Technology	$ 1,269	$ 761	$ 508	21
Customer relationships	632	163	469	45
Non-compete agreement	126	55	71	21
Total	$ 2,027	$ 979	$ 1,048	

Amortization of developed technology, customer relationships, and non-compete agreement are recorded within cost of revenue, sales and marketing expense, and research and development expense, respectively, in the consolidated statements of operations. Amortization expense of intangible assets was $0.5 million, $0.6 million, and $0.6 million, during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

The estimated aggregate future amortization expense of intangible assets as of January 31, 2020 is as follows:

	Total
	(in thousands)
Fiscal 2021	$ 321
Fiscal 2022	121
Fiscal 2023	85
Fiscal 2024	—
Fiscal 2025	—
Total amortization expense	$ 527

The developed technology, customer relationships, and non-compete agreement assets are being amortized over 3 years, 5 years, and 3 years, respectively.

Accrued Expenses

Accrued expenses consisted of the following:

	January 31,	
	2020	2019
	(in thousands)	
Web hosting services	$ 16,367	$ 12,224
Other accrued expenses	11,199	13,275
Accrued purchases of property and equipment	2,789	7,042
Accrued expenses	$ 30,355	$ 32,541

Accrued Payroll and Benefits

Accrued payroll and benefits consisted of the following:

	January 31,	
	2020	2019
	(in thousands)	
Accrued commission	$ 15,399	$ 9,499
Accrued bonuses	8,171	5,459
Accrued payroll and related expenses	6,680	4,326
Employee Stock Purchase Plan	6,560	—
Accrued payroll and benefits	$ 36,810	$ 19,284

5. Secured Revolving Credit Facility

In April 2019, the Company entered into a Credit Agreement with Silicon Valley Bank and other lenders, to provide a revolving line of credit of up to $150.0 million, including a letter of credit sub-facility in the aggregate amount of $10.0 million, and a swingline sub-facility in the aggregate amount of $10.0 million. The Company also has the option to request an incremental facility of up to an additional $75.0 million from one or more of the lenders under the Credit Agreement. The amount the Company may borrow under the Credit Agreement may not exceed the lesser of $150.0 million or the Company's ordinary course recurring subscription revenue for the most recent month, as determined under the Credit Agreement, multiplied by a number that is (i) 6, for the first year after entry into the Credit Agreement; (ii) 5, for the second year after entry into the Credit Agreement; and (iii) 4, thereafter. Under the terms of the Credit Agreement, revolving loans may be either Eurodollar Loans or ABR Loans. Outstanding Eurodollar Loans incur interest at the Eurodollar Rate, which is defined in the Credit Agreement as LIBOR (or any successor thereto), plus a margin between 2.50% and 3.00%, depending on usage. Outstanding ABR Loans incur interest at the highest of (a) the Prime Rate, as published by the Wall Street Journal, (b) the federal funds rate in effect for such day plus 0.50%, and (c) the Eurodollar Rate plus 1.00%, in each case plus a margin between 1.50% and 2.00%, depending on usage. The Company will be charged a commitment fee of 0.20% to 0.30% per year for committed but unused amounts. The Credit Agreement will terminate on April 19, 2022.

The Credit Agreement is collateralized by substantially all of the Company's current and future property, rights, and assets, including, but not limited to, cash, goods, equipment, contractual rights, financial assets, and intangible assets of the Company and its subsidiaries. The Credit Agreement contains covenants limiting the ability to, among other things, dispose of assets, undergo a change in control, merge or consolidate, make acquisitions, incur debt, incur liens, pay dividends, repurchase stock, and make investments, in each case subject to certain exceptions. The Credit Agreement also contains financial covenants requiring the Company to maintain the year-over-year growth rate of its ordinary course recurring subscription revenue above specified rates and to maintain minimum liquidity at specified levels. The Company was in compliance with the financial covenants as of January 31, 2020. The Credit Agreement contains events of default that include, among others, non-payment of principal, interest, or fees, breach of covenants, inaccuracy of representations and warranties, cross defaults to certain other indebtedness, bankruptcy and insolvency events, and material judgments.

No amounts were outstanding under the Credit Agreement as of January 31, 2020.

6. Income Taxes

The Company's geographical breakdown of its loss before provision for income taxes for the years ended January 31, 2020, January 31, 2019, and January 31, 2018 is as follows:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Domestic	$ (149,807)	$ (143,308)	$ (137,523)
International	10,025	4,598	2,962
Loss before provision for income taxes	$ (139,782)	$ (138,710)	$ (134,561)

The components of the provision for income taxes as of January 31, 2020, January 31, 2019, and January 31, 2018 are as follows:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Current			
Federal	$ —	$ —	$ —
State	(104)	(304)	(240)
Foreign	(2,574)	(1,481)	(800)
Total current	(2,678)	(1,785)	(1,040)
Deferred			
Federal	362	—	—
State	57	—	—
Foreign	262	418	111
Total deferred	681	418	111
Provision for income taxes	$ (1,997)	$ (1,367)	$ (929)

The following table provides a reconciliation between income taxes computed at the federal statutory rate and the provision for income taxes as of January 31, 2020, January 31, 2019, and January 31, 2018:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Provision for income taxes at statutory rate	$ 29,354	$ 29,129	$ 44,265
State income taxes, net of federal benefit	(25)	(245)	(162)
Foreign earnings at different rates	(207)	(97)	285
Research and other credits	1,534	3,769	2,621
Stock-based compensation	43,477	(2,414)	(3,738)
Non-deductible expenses	(1,773)	(1,833)	(1,142)
Change in unrecognized tax benefits	2,659	—	—
Impact of U.S. tax reform	—	—	(36,146)
Transition tax	—	—	(521)
Valuation allowance	(77,016)	(29,676)	(6,391)
Provision for income taxes	$ (1,997)	$ (1,367)	$ (929)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes.

Significant components of the Company's deferred tax assets and liabilities as of January 31, 2020 and January 31, 2019 are as follows:

	Year Ended January 31,	
	2020	2019
	(in thousands)	
Deferred tax assets		
Net operating loss carryforwards	$ 166,083	$ 95,619
Research credit carryforwards	15,355	11,102
Intangible assets	78	307
Stock-based compensation	8,716	498
Deferred revenue	21,012	12,245
Accrued expenses	2,555	1,712
Other	950	1,009
Gross deferred assets	214,749	122,492
Less: Valuation allowance	(207,596)	(120,391)
Total deferred tax assets	7,153	2,101
Deferred tax liabilities		
Property and equipment, net	(2,534)	(1,890)
Capitalized Commissions	(4,456)	—
Intangible assets	—	(310)
Deferred revenue	—	—
Total deferred tax liabilities	(6,990)	(2,200)
Net deferred tax assets (liabilities)	$ 163	$ (99)

At each reporting date, the Company has established a valuation allowance against its U.S. net deferred tax assets due to the uncertainty surrounding the realization of those assets. During the fiscal year ended January 31, 2020, the Company has established a valuation allowance against its net U.K. deferred tax assets due to uncertainty surrounding the realization of those assets. The Company periodically evaluates the recoverability of the deferred tax assets and, when it is determined to be more-likely-than-not that the deferred tax assets are realizable, the valuation allowance is reduced. During the years ended January 31, 2020, January 31, 2019 and January 31, 2018, the valuation allowance increased by $87.2 million, $36.0 million, and $12.2 million, respectively. The increase in the valuation allowance during the years ended January 31, 2020 and January 31, 2019 was primarily driven by losses generated in the United States and the United Kingdom. The increase in the valuation allowance during the year ended January 31, 2018 was also primarily driven by losses generated in the U.S., partially offset by the reduction in its federal corporate tax rate from 35% to 21% as part of the enactment of the Tax Cuts and Jobs Act (the "Tax Act") as detailed below.

During the years ended January 31, 2020, January 31, 2019, January 31, 2018 and January 31, 2017, the valuation allowance for deferred taxes balance was $207.6 million, $120.4 million, $84.4 million, and $72.2 million, respectively.

As of January 31, 2020, the Company had aggregate federal and California net operating loss carryforwards of $657.3 million and $94.8 million, respectively, which may be available to offset future taxable income for income tax purposes. The federal and California net operating loss carryforwards begin to expire in fiscal 2031 through fiscal 2039. As of January 31, 2020, net operating loss carryforwards for other states total $352.8 million which begin to expire in fiscal 2023 through fiscal 2039. As of January 31, 2020, net operating loss carryforwards for United Kingdom total $15.3 million which are carried forward indefinitely.

As of January 31, 2020, the Company had federal and California research and development ("R&D") credit carryforwards of $17.2 million and $4.3 million, respectively. The federal R&D credit carryforwards will begin to expire in fiscal 2031 though fiscal 2039. The California R&D credits are carried forward indefinitely.

Realization of these net operating loss and research and development credit carryforwards depends on future income, and there is a risk that the Company's existing carryforwards could expire unused and be unavailable to offset future income tax liabilities.

The Internal Revenue Code imposes limitations on a corporation's ability to utilize net operating loss ("NOLs") and credit carryovers if it experiences an ownership change as defined in Section 382. In general terms, an ownership change may result from transactions increasing the ownership of certain stockholders in the stock of a corporation by more than 50% over a three-year period. If an ownership change has occurred, or were to occur, utilization of the Company's NOLs and credit carryovers could be restricted.

Total gross unrecognized tax benefit as of January 31, 2020, January 31, 2019 and January 31, 2018 were $5.5 million, $8.1 million, and $8.1 million, respectively. As of January 31, 2020, the Company had no unrecognized tax benefits, which, if recognized, would affect the Company's effective tax rate due to full valuation allowance. The Company's policy is to classify interest and penalties related to unrecognized tax benefits as part of the income tax provision in the consolidated statements of operations. The Company had no accrued interest and penalties related to unrecognized tax benefits as of January 31, 2020, January 31, 2019, or January 31, 2018. In the current year, the uncertain tax benefits balance decreased due to the application of the IRS' simplified approach for determining research credits. The change was not material. The potential reduction in unrecognized tax benefits during the next 12 months is not expected to be material.

The following is a rollforward of the total gross unrecognized tax benefits for the years ended January 31, 2020, January 31, 2019, and January 31, 2018 (in thousands):

Balance as of February 1, 2017	$	5,060
Increases in current period tax positions		3,068
Balance as of January 31, 2018		8,128
Increases in current period tax positions		—
Balance as of January 31, 2019		8,128
Reductions in prior period tax positions		(2,659)
Balance as of January 31, 2020	$	5,469

The Company files income tax returns in the U.S. federal jurisdiction and various state jurisdictions. As the Company expands its global operations in the normal course of business, the Company could be subject to examination by taxing authorities throughout the world. These audits could include questioning the timing and amount of deductions; the nexus of income among various tax jurisdictions; and compliance with federal, state, local, and foreign tax laws. The Company is not currently under audit by the Internal Revenue Service or other similar state, local, and foreign authorities. All tax years remain subject to examination by U.S. taxing authorities due to the Company's net operating losses and R&D credit carryforwards.

On December 22, 2017, the U.S. government enacted the Tax Act which makes significant changes to the U.S. tax code. The Tax Act includes several key tax provisions that affect the Company including, but not limited to, lowering the U.S. federal corporate tax rate to 21% for tax years beginning after December 31, 2017, establishing a new provision to currently tax certain global intangible low-taxed income of controlled foreign corporations, and imposing a one-time tax ("Transition Tax") on the mandatory deemed repatriation of cumulative foreign earnings. The Transition Tax is based upon the post-1986 earnings and profits that were previously deferred from U.S. income taxes.

On December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cuts and Jobs Act ("SAB 118"), which provides guidance on accounting for the Tax Act's impact and allows registrants to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. The Company has determined that the Tax Act did not have a material impact to the financial statements, thereby impacting exclusively the disclosures in the Company's year-end financial statements. The Company currently maintains a full valuation allowance against its U.S. deferred tax assets since the Company continues to incur losses in the United States for all fiscal years since inception.

During the year ended January 31, 2019, the Company completed the accounting for the Tax Act within the measurement period. The previously recorded provisional amount recorded for the Transition Tax was adjusted by an immaterial amount but was fully offset by a corresponding adjustment to the valuation allowance resulting in no impact to the provision for income taxes. The Company has also completed the analysis of the impact of the Tax Act on its existing assertion to indefinitely reinvest the earnings of its subsidiaries outside the United States and concluded that no change was necessary.

As a result of the Tax Act, the Company can make an accounting policy election to either treat taxes due on the global intangible low-taxed income inclusion as a current period expense or factor such amounts into the Company's measurement of deferred taxes. The Company has completed its analysis of the global intangible low-tax income provisions and elected to use the period cost method and therefore no accrual for the deferred tax aspects of this provision was made.

7. Redeemable Convertible Preferred Stock

Upon the close of the Company's IPO on June 14, 2019, all shares of convertible preferred stock then outstanding, totaling 131,267,586 shares, were automatically converted into an equivalent number of shares of Class B common stock on a one-to-one basis and the carrying value, totaling $557.9 million, was reclassified into Class B common stock and additional paid-in capital on the consolidated balance sheet.

The following table summarizes the authorized, issued, and outstanding redeemable convertible preferred stock of the Company as of January 31, 2019:

Class	Issue Price per Share	Shares Authorized	Shares Issued and Outstanding	Net Carrying Value	Liquidation Preference	Redemption Value
	(in thousands, except per share values)					
Series A-1	$ 0.50000	52,300	52,300	$ 76,325	$ 52,300	$ 623,678
Series B	$ 1.40500	21,523	21,352	44,320	30,000	254,623
Series C	$ 4.52972	22,275	22,077	99,900	100,000	263,765
Series D	$ 5.69153	17,570	17,570	99,845	125,000	211,631
Series D-1	$ 5.69153	5,394	5,394	30,626	30,700	64,607
Series E	$ 16.46136	18,357	12,575	206,896	207,000	207,000
Total		137,419	131,268	$ 557,912	$ 545,000	$ 1,625,304

8. Equity Transactions

Common Stock

In connection with the IPO, on June 14, 2019, the Company filed an Amended and Restated Certificate of Incorporation which authorizes the issuance of 2,000,000,000 shares of Class A common stock with a par value of $0.0005 per share, 300,000,000 shares of Class B common stock with a par value of $0.0005 per share, and 100,000,000 shares of undesignated preferred stock with a par value of $0.0005 per share. The rights of the holders of Class A common stock and Class B common stock are identical, except with respect to voting and conversion rights. Each share of Class A common stock is entitled to one vote per share. Each share of Class B common stock is entitled to ten votes per share and is convertible into one share of Class A common stock. Class A and Class B common stockholders are not entitled to receive dividends unless declared by the Company's board of directors.

Claims Settlement

In December 2019, a security holder paid the Company $2.3 million to settle a claim under Section 16(b) of the Securities Exchange Act of 1934. Section 16(b) requires certain persons and entities whose securities trading activities result in "short swing" profits to repay such profits to the issuer of the security. This payment was recorded as an increase to stockholders' equity and as cash provided by financing activities in the consolidated statement of cash flows for the fiscal year ended January 31, 2020.

9. Stock-Based Compensation

Stock Incentive Plan

In May 2019, the Company's board of directors adopted, and the stockholders approved the CrowdStrike Holdings, Inc. 2019 Equity Incentive Plan (the "2019 Plan") with the purpose of granting stock-based awards to employees, directors, officers and consultants, including stock options, restricted stock awards, restricted stock units and performance-based restricted stock units. A total of 8,750,000 shares of Class A common stock were initially available for issuance under the 2019 Plan. The Company's compensation committee administers the 2019 Plan. The number of shares of the Company's common stock available for issuance under the 2019 Plan is subject to an annual increase on the first day of each fiscal year beginning on February 1, 2020, equal to the lesser of: (i) two percent (2.0%) of outstanding shares of the Company's capital stock as of the last day of the immediately preceding fiscal year or (ii) such other amount as the Company's board of directors may determine.

The 2011 Plan was terminated on June 10, 2019, which was the business day prior to the effectiveness of the Company's registration statement on Form S-1 used in connection with the Company's IPO, and stock-based awards are no longer granted under the 2011 Plan. Any shares underlying stock options that expire or terminate or are forfeited or repurchased under the 2011 Plan will be automatically transferred to the 2019 Plan.

Stock Options

The Company records compensation expense for employee stock options based on the estimated fair value of the options on the date of grant using the Black-Scholes option-pricing model with the assumptions included in the table below. The expected term represents the period that the Company's share-based awards are expected to be outstanding. The expected term assumptions were determined based on the vesting terms, exercise terms, and contractual lives of the options. The expected stock price volatility is based upon comparable public company data. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for the estimated option life.

The fair value of each option was estimated on the date of grant using the following assumptions during the period:

	Year Ended January 31,		
	2020	2019	2018
Expected term (in years)	6.05	6.05 - 7.52	6.05
Risk-free interest rate	2.0% - 2.4%	2.6% - 3.1%	1.9% - 2.2%
Expected stock price volatility	37.7% - 37.9%	37.8% - 38.9%	40.3% - 41.4%
Dividend yield	— %	— %	— %

The following table is a summary of stock option activity for the years ended January 31, 2020, January 31, 2019, and January 31, 2018:

	Number of Shares	Weighted-Average Exercise Price Per Share
	(in thousands)	
Options outstanding at February 1, 2017	19,347	$ 1.10
Granted	9,691	$ 2.14
Exercised	(3,733)	$ 1.00
Canceled	(2,111)	$ 1.57
Options outstanding at January 31, 2018	23,194	$ 1.51
Granted	8,233	$ 9.24
Exercised	(3,084)	$ 1.26
Canceled	(1,808)	$ 2.51
Options outstanding at January 31, 2019	26,535	$ 3.87
Granted	1,048	$ 17.76
Exercised	(11,682)	$ 2.72
Canceled	(1,212)	$ 6.91
Options outstanding at January 31, 2020	14,689	$ 5.52
Options vested and expected to vest at January 31, 2020	14,689	$ 5.52
Options exercisable at January 31, 2020	7,288	$ 3.15

Options exercisable include 857,201 options that were unvested as of January 31, 2020.

The aggregate intrinsic value of options vested and exercisable was $469.6 million, $181.1 million, and $17.9 million as of January 31, 2020, January 31, 2019, and January 31, 2018, respectively. The weighted-average remaining contractual term of options vested and exercisable was 6.7 years, 7.1 years, and 6.6 years as of January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

The weighted-average grant date fair values of all options granted was $9.51, $5.70, and $0.90 per share during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively. The total intrinsic value of all options exercised was $407.9 million, $26.9 million, and $4.0 million during the years ended January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

The aggregate intrinsic value of stock options outstanding as of January 31, 2020, January 31, 2019, and January 31, 2018 was $816.3 million, $286.1 million, and $26.1 million, respectively, which represents the excess of the fair value of the Company's common stock over the exercise price of the options multiplied by the number of options outstanding. The weighted-average remaining contractual term of stock options outstanding was 7.4 years, 7.9 years, and 8.0 years as of January 31, 2020, January 31, 2019, and January 31, 2018, respectively.

Total unrecognized stock-based compensation expense related to unvested options was $34.7 million as of January 31, 2020. This expense is expected to be amortized on a straight-line basis over a weighted-average vesting period of 2.1 years. Total unrecognized stock-based compensation expense related to unvested options was $45.8 million as of January 31, 2019. This expense is expected to be amortized on a straight-line basis over a weighted-average vesting period of 3.4 years.

Early Exercise of Employee Options

The 2011 Stock Plan allows for the early exercise of stock options for certain individuals as determined by the Board of Directors. The consideration received for an early exercise of an option is a deposit of the exercise price and the related dollar amount is recorded as a liability for early exercise of unvested stock options in the consolidated balance sheets. This liability is reclassified to additional paid-in capital as the awards vest. If a stock option is early exercised, the unvested shares may be repurchased by the Company in case of employment termination or for any reason, including death and disability, at the price paid by the purchaser for such shares. During the year ended January 31, 2020, the Company issued 1,037,356 shares of common stock for total proceeds of $10.3 million related to early exercised stock options. As of January 31, 2020, the number of shares of common stock related to early exercised stock options subject to repurchase was 984,417 shares for $8.7 million. During the year ended January 31, 2019, the Company issued 37,605 shares of common stock for total proceeds of $74,000 related to early exercised stock options. As of January 31, 2019, the number of shares of common stock related to early exercised stock options subject to repurchase was 545,941 shares for $1.2 million. Common stock purchased pursuant to an early exercise of stock options is not deemed to be outstanding for accounting purposes until those shares vest. The Company includes unvested shares subject to repurchase in the number of shares outstanding in the consolidated statement of redeemable convertible preferred stock and stockholders' equity (deficit).

Secondary Stock Sale

In October 2017, the Company facilitated a secondary stock sale of its common stock. Under the terms of the sale, certain Series D-1 Preferred Stock investors and certain other new investors purchased 3.3 million shares of common stock from certain eligible employees for prices ranging from $5.12 to $5.69 per share for an aggregate purchase price of $17.5 million. The Company recognized stock-based compensation expense of $8.8 million during the year ended January 31, 2018 in connection with the sale, which represented the difference between the purchase price and the fair value of the common stock on the date of the sale.

Tender Offer Transaction

In October 2018, the Company facilitated a tender offer of its common stock. Under the terms of the offer, certain existing Series E Preferred Stock investors purchased an aggregate of 2.4 million shares of common stock from certain eligible employees and directors for $15.64 per share for an aggregate purchase price of $37.6 million. The Company recognized stock-based compensation expense of $10.8 million during the year ended January 31, 2019 in connection with the tender offer, which represented the difference between the purchase price and the fair value of the common stock on the date of the sale.

Restricted Stock Units

Beginning in September 2018, the Company began issuing RSUs to certain employees. These RSUs include a service-based vesting condition and a performance-based vesting condition. The service-based vesting condition is generally satisfied based on one of three vesting schedules: (i) vesting of one-fourth of the RSUs on the first "Company vest date" (defined as March 20, June 20, September 20, or December 20) on or following the one-year anniversary of the vesting commencement date with the remainder of the RSUs vesting in twelve equal quarterly installments thereafter, subject to continued service, (ii) vesting in sixteen equal quarterly installments beginning on December 20, 2018, subject to continued service, or (iii) vesting in eight equal quarterly installments beginning on December 20, 2022, subject to continued service. The performance-based vesting condition is satisfied on the earlier of (i) a change in control, in which the consideration paid to holders of shares is either cash, publicly traded securities, or a combination thereof, or (ii) the first Company vest date to occur following the expiration of the lock-up period upon an IPO, subject to continued service through such change in control or lock-up expiration, as applicable. None of the RSUs vest unless the performance-based vesting condition is satisfied. Upon the completion of the IPO, the performance-based vesting condition was met and the Company recognized $17.3 million of deferred expense related to RSUs as of that date in its consolidated statement of operations. Upon its IPO, the Company began issuing RSUs to its employees that generally have only a service condition. The valuation of such RSUs is based solely on the fair value of the Company's stock price on the date of grant.

Expense for RSUs that have a service-based condition only are being amortized on a straight-line basis. Expense for RSUs that have both a service-based and a performance-based condition are being amortized under the accelerated attribution method. Total unrecognized stock-based compensation expense related to unvested RSUs was $139.4 million as of January 31, 2020. This expense is expected to be amortized (subject to acceleration or straight-line basis) over a weighted-average vesting period of 2.5 years. Total unrecognized stock-based compensation expense related to unvested RSUs was $51.9 million as of January 31, 2019. This expense is expected to be amortized on an accelerated attribution method over a weighted-average vesting period of 2.2 years.

Performance-based Stock Units

Performance-based stock units ("PSUs") granted under the 2019 Plan are subject to a performance-based vesting condition. PSUs generally vest over a four -year period based on the achievement of specified performance targets for the fiscal year ended January 31, 2020 and subject to continued service through the applicable vesting dates. The compensation cost is recognized over the requisite service period when it is probable that the performance condition will be satisfied.

Expense for PSUs are being amortized under the accelerated attribution method. Total unrecognized stock-based compensation expense related to unvested PSUs was $2.7 million as of January 31, 2020. This expense is expected to be amortized over a weighted-average vesting period of 1.6 years.

The following table is a summary of RSU and PSU activities for the years ended January 31, 2020:

	Number of Shares		Weighted-Average Grant Date Fair Value Per Share
	(in thousands)		
RSUs and PSUs outstanding at February 1, 2018	—	$	—
Granted	4,064	$	12.66
Forfeited	(5)	$	12.48
RSUs and PSUs outstanding at January 31, 2019	4,059	$	12.66
Granted	3,442	$	43.80
Released	(1,127)	$	14.00
Forfeited	(311)	$	19.37
RSUs and PSUs outstanding at January 31, 2020	6,063	$	29.82
RSUs and PSUs expected to vest at January 31, 2020	6,063	$	29.82

Employee Stock Purchase Plan

In May 2019, the board of directors adopted, and the stockholders approved the CrowdStrike Holdings, Inc. 2019 Employee Stock Purchase Plan ("ESPP"), which became effective on June 10, 2019, which was the business day prior to the effectiveness of the Company's registration statement on Form S-1 used in connection with the Company's IPO. A total of 3,500,000 shares of Class A common stock were initially reserved for issuance under the ESPP. The Company's compensation committee administers the ESPP. The number of shares of common stock available for issuance under the ESPP is subject to an annual increase on the first day of each fiscal year beginning on February 1, 2020, equal to the lesser of: (i) one percent (1%) of outstanding shares of the Company's capital stock as of the last day of the immediately preceding fiscal year or (ii) such other amount as its board of directors may determine.

The ESPP provides for consecutive offering periods that will typically have a duration of approximately 24 months in length and is comprised of four purchase periods of approximately six months in length. The offering periods are scheduled to start on the first trading day on or after June 11 and December 11 of each year. The first offering period commenced on June 11, 2019 and is scheduled to end on the first trading day on or before June 10, 2021.

The ESPP provides eligible employees with an opportunity to purchase shares of the Company’s Class A common stock through payroll deductions of up to 15% of their eligible compensation. A participant may purchase a maximum of 2,500 shares of common stock during a purchase period. Amounts deducted and accumulated by the participant are used to purchase shares of common stock at the end of each six-month purchase period. The purchase price of the shares shall be 85% of the lower of the fair market value of the Class A common stock on (i) the first trading day of the applicable offering period and (ii) the last trading day of each purchase period in the related offering period. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of common stock. Participation ends automatically upon termination of employment.

Employee payroll contributions ultimately used to purchase shares are reclassified to stockholders’ equity on the purchase date. ESPP employee payroll contributions accrued at January 31, 2020 totaled $6.6 million and are included within accrued compensation in the consolidated balance sheets. The Company recorded stock-based compensation of $10.3 million during the year ended January 31, 2020 in connection with the ESPP.

The fair value of the share purchase rights granted under the ESPP during the year ended January 31, 2020 was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions:

	Year ended January 31, 2020
Expected term (in years)	0.5-2.0
Risk-free interest rate	1.6 - 2.2%
Expected stock price volatility	30.1 - 35.7%
Dividend yield	— %

Stock-Based Compensation Expense

Stock-based compensation expense included in the consolidated statements of operations is as follows:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Subscription cost of revenue	$ 5,226	$ 689	$ 89
Professional services cost of revenue	2,486	205	252
Sales and marketing	23,919	5,175	1,386
Research and development	15,403	7,815	3,429
General and administrative	32,906	6,621	7,187
Total stock-based compensation expense	$ 79,940	$ 20,505	$ 12,343

10. Revenue, Deferred Revenue and Remaining Performance Obligations

The following table summarizes the revenue from contracts by type of customer:

	Year Ended January 31,					
	2020		2019		2018	
	Amount	% Revenue	Amount	% Revenue	Amount	% Revenue
	(in thousands, except percentages)					
Channel Partners	$ 331,279	69 %	$ 172,141	69 %	$ 81,308	68 %
Direct Customers	150,134	31 %	77,683	31 %	37,444	32 %
Total revenue	$ 481,413	100 %	$ 249,824	100 %	$ 118,752	100 %

The Company uses channel partners to complement direct sales and marketing efforts. The partners place an order with the Company after negotiating the order directly with an end customer. The partners negotiate pricing with the end customer and in some rare instances are responsible for certain support levels directly with the end customer. The Company's contract is with the partner and payment to the Company is not contingent on the receipt of payment from the end customer. The Company recognizes the contractual amount charged to the partners as revenue ratably over the term of the arrangement once access to the Company's solution has been provided to the end customer.

The Company also uses referral partners who refer customers in exchange for a referral fee. The Company negotiates pricing and contracts directly with the end customer. The Company recognizes revenue from the sales to the end customers, ratably over the term of the contract, once access to the Company's solution has been provided to the end customer.

The following table summarizes the revenue by region based on the shipping address of customers who have contracted to use the Company's cloud platform:

	Year Ended January 31,					
	2020		2019		2018	
	Amount	% Revenue	Amount	% Revenue	Amount	% Revenue
	(in thousands, except percentages)					
United States	$ 356,513	74 %	$ 192,057	77 %	$ 99,209	84 %
Europe, Middle East, and Africa	67,428	14 %	29,721	12 %	8,924	8 %
Asia Pacific	37,672	8 %	17,213	7 %	7,966	6 %
Other	19,800	4 %	10,833	4 %	2,653	2 %
Total revenue	$ 481,413	100 %	$ 249,824	100 %	$ 118,752	100 %

No single country other than the United States represented 10% or more of the Company's total revenue during the years ended January 31, 2020, January 31, 2019 or January 31, 2018.

Contract Balances

Contract liabilities consist of deferred revenue and include payments received in advance of performance under the contract. Such amounts are recognized as revenue over the contractual period. For the year ended January 31, 2020, the Company recognized revenue of $217.9 million that were included in the corresponding contract liability balance at the beginning of the period.

The Company receives payments from customers based upon contractual billing schedules. Accounts receivable are recorded when the right to consideration becomes unconditional. Payment terms on invoiced amounts are typically 30 - 60 days. Contract assets include amounts related to the contractual right to consideration for both completed and partially completed performance obligations that may not have been invoiced.

Changes in deferred revenue for the year ended January 31, 2020 and 2019 were as follows (in thousands):

	Carrying Amount	
	Year Ended January 31,	
	2020	2019
Beginning Balance	$ 290,067	$ 158,950
Additions to deferred revenue	762,514	380,941
Recognition of deferred revenue	(481,413)	(249,824)
Ending Balance	$ 571,168	$ 290,067

Remaining Performance Obligations

The Company's subscription contracts with its customers have a typical term of one to three years and most subscription contracts are non-cancelable. Customers typically have the right to terminate their contracts for cause as a result of the Company's failure to perform. As of January 31, 2020, the aggregate amount of the transaction price allocated to remaining performance obligations was $764.0 million. The Company expects to recognize 69% of the remaining performance obligations in the 12 months following January 31, 2020, with the remainder to be recognized thereafter.

Costs to Obtain and Fulfill a Contract

The Company capitalizes referral fees paid to partners and sales commission and associated payroll taxes paid to internal sales personnel that are incremental to the acquisition of channel partner and direct customer contracts and would not have occurred absent the customer contract. These costs are recorded as deferred contract acquisition costs on the consolidated balance sheets.

Sales commissions for renewal of a contract are not considered commensurate with the commissions paid for the acquisition of the initial contract or follow-on upsell given the substantive difference in commission rates in proportion to their respective contract values. Commissions, including referral fees paid to channel partners, paid upon the initial acquisition of a contract or subsequent upsell are amortized over an estimated period of benefit of four years while commissions paid for renewal contracts are amortized over the contractual term of the renewals. Sales commissions associated with professional service contracts are amortized ratably over an estimated period of benefit of six months and included in sales and marketing expense in the consolidated statements of operations. In determining the period of benefit for commissions paid for the acquisition of the initial contract, the Company took into consideration the expected subscription term and expected renewals of customer contracts, the historical duration of relationships with customers, customer retention data, and the life of the developed technology. The Company periodically reviews the carrying amount of deferred contract acquisition costs to determine whether events or changes in circumstances have occurred that could impact the period of benefit of these deferred costs. The Company did not recognize any material impairment losses of deferred contract acquisition costs during the year ended January 31, 2020.

The following table summarizes the activity of deferred contract acquisition costs:

	Year Ended January 31,	
	2020	2019
	(in thousands)	
Beginning balance	$ 38,765	$ 22,334
Adjustment due to adoption of ASU 606	24,306	—
Capitalization of contract acquisition costs	86,594	45,073
Amortization of deferred contract acquisition costs	(35,459)	(28,642)
Ending balance	$ 114,206	$ 38,765
Deferred contract acquisition costs, current	$ 42,971	$ 28,847
Deferred contract acquisition costs, noncurrent	71,235	9,918
Total deferred contract acquisition costs	$ 114,206	$ 38,765

11. Commitments and Contingencies

Lease Commitments

The Company leases its office space under various non-cancelable operating lease agreements. Leases expire at various dates through fiscal year 2027. The aggregate future minimum payments under non-cancelable operating leases as of January 31, 2020 are as follows:

	Operating Leases
	(in thousands)
Fiscal 2021	$ 9,958
Fiscal 2022	9,869
Fiscal 2023	9,377
Fiscal 2024	9,370
Fiscal 2025	8,441
Thereafter	3,671
Total minimum lease payments	$ 50,686

Rent expense was $10.3 million, $6.9 million, and $4.6 million during the years ended January 31, 2020, January 31, 2019 and January 31, 2018, respectively.

Purchase Obligations

The Company enters into long-term non-cancelable agreements with providers to purchase data center capacity, such as bandwidth and colocation space, for the Company’s cloud platform. As of January 31, 2020, the Company is committed to spend $166.0 million on such agreements through 2027. These obligations are included in purchase obligations below.

In the normal course of business, the Company enters into non-cancelable purchase commitments with various parties to purchase products and services such as technology, equipment, office renovations, corporate events, and consulting services. A summary of noncancelable purchase obligations as of January 31, 2020 with expected date of payment is as follows:

	Total Commitments
	(In thousands)
Fiscal 2021	$ 83,471
Fiscal 2022	88,731
Fiscal 2023	10,264
Fiscal 2024	9,889
Fiscal 2025	2,736
Thereafter	3,236
Total purchase commitments	$ 198,327

Letters of Credit

As of January 31, 2020 and January 31, 2019, the Company had an unused standby letter of credit for $0.6 million and $0.5 million, respectively, securing its headquarters facility in Sunnyvale, California. As of January 31, 2020 and January 31, 2019, the Company had an unused standby letter of credit for $1.0 million and $0.8 million, respectively, securing its facility in Austin, Texas.

Litigation

The Company is currently involved in proceedings before the Trademark Trial and Appeal Board ("TTAB") at the U.S. Patent and Trademark Office (the "USPTO") regarding its U.S. trademark registrations for "CrowdStrike Falcon" and its U.S. application to register its "Falcon OverWatch" trademark. On November 23, 2016, Fair Isaac Corporation ("FICO") filed a Petition for Cancellation of the Company's "CrowdStrike Falcon" trademark registrations and a Notice of Opposition against the Company's "Falcon OverWatch" trademark application before the USPTO, TTAB. On January 3, 2017, the Company filed answers to both the cancellation and opposition proceedings, and the proceedings thereafter were consolidated. On November 21, 2018, the Company filed a Petition for Partial Cancellation or Amendment of one of FICO's "Falcon" trademark registrations, and on December 10, 2018, the parties filed a joint request to consolidate the proceedings and adjust the schedule. On January 16, 2019, FICO moved to dismiss the Company's petition. On July 2, 2019, the TTAB consolidated the proceedings and granted FICO's motion to dismiss with leave to amend. On July 22, 2019, the Company filed its Amended Petition for Cancellation or Amendment and on August 12, 2019, FICO moved to dismiss the Company's Amended Petition for Cancellation or Amendment. On January 31, 2020, the TTAB denied the motion to dismiss as to two grounds for partial cancellation and as to the request for amendment, and granted the motion as to a third ground for partial cancellation of one of FICO's "Falcon" registrations and the claim for abandonment of both of FICO's "Falcon" trademark registrations, with the right to reassert both claims for relief. The TTAB also set a new schedule for the consolidated proceedings, with trial periods set to begin on December 6, 2020. On March 18, 2020, the Company filed a motion for leave to file a Second Amended Petition to include a claim for abandonment for two of FICO's "Falcon" trademark registrations. The Company is vigorously defending the case, but given the early stage, although a loss may reasonably be possible, the Company is unable to predict the likelihood of success of FICO's claims or estimate a loss or range of loss. As a result, no liability has been recorded as of January 31, 2020 or January 31, 2019.

In addition, from time to time the Company is a party to various litigation matters and subject to claims that arise in the ordinary course of business. In addition, third parties may from time to time assert claims against the Company in the form of letters and other communications. For any claims for which the Company believes a liability is both probable and reasonably estimable, the Company records a liability in the period for which it makes this determination. There is no pending or threatened legal proceeding to which the Company is a party that, in the Company's opinion, is likely to have a material adverse effect on its consolidated financial statements; however, the results of litigation and claims are inherently unpredictable. Regardless of the outcome, litigation can have an adverse impact on the Company's business because of defense and settlement costs, diversion of management resources, and other factors. In addition, the expense of litigation and the timing of this expense from period to period are difficult to estimate, subject to change and could adversely affect the Company's consolidated financial statements.

Warranties and Indemnification

The Company's cloud computing services are typically warranted to perform in a manner consistent with general industry standards that are reasonably applicable and materially in accordance with the Company's online help documentation under normal use and circumstances.

The Company's arrangements generally include certain provisions for indemnifying customers against liabilities if its products or services infringe a third party's intellectual property rights. In addition, for its Falcon Complete module customers, the Company offers a limited warranty, subject to certain conditions, to cover certain costs incurred by the customer in case of a cybersecurity breach. The Company has entered into an insurance policy to cover its potential liability arising from this limited warranty arrangement. To date, the Company has not incurred any material costs because of such obligations and has not accrued any liabilities related to such obligations in the consolidated financial statements.

The Company has also agreed to indemnify its directors and executive officers for costs associated with any fees, expenses, judgments, fines and settlement amounts incurred by any of these persons in any action or proceeding to which any of those persons is, or is threatened to be, made a party by reason of the person's service as a director or officer, including any action by the Company, arising out of that person's services as the Company's director or officer or that person's services provided to any other company or enterprise at the Company's request. The Company maintains director and officer insurance coverage that would generally enable the Company to recover a portion of any future amounts paid. The Company may also be subject to indemnification obligations by law with respect to the actions of its employees under certain circumstances and in certain jurisdictions. No liabilities have been accrued associated with this indemnification provision as of January 31, 2020 or January 31, 2019.

12. Geographic Information

The Company's long-lived assets are composed of property and equipment, net, and are summarized by geographic area as follows:

	January 31,	
	2020	2019
	(in thousands)	
United States	$ 125,409	$ 70,699
International	10,669	3,036
Total property and equipment, net	$ 136,078	$ 73,735

13. Related Party Transactions

Subscription and Professional Services Revenue from Related Parties

During the years ended January 31, 2020, January 31, 2019 and January 31, 2018, certain investors and companies with whom the Company's Board of Directors are affiliated with, purchased subscriptions and professional services. The Company recorded revenue from subscriptions and professional services from related parties of $9.0 million, $6.6 million, and $2.5 million during the years ended January 31, 2020, January 31, 2019 and January 31, 2018, respectively. Accounts receivable associated with these related parties was $0.2 million as of both January 31, 2020 and January 31, 2019.

Accounts Payable to Related Parties

During the years ended January 31, 2020, January 31, 2019 and January 31, 2018, the Company purchased goods and services totaling $3.2 million, $2.2 million, and $1.1 million, respectively, from certain investors and companies with whom its Board of Directors are affiliated with. Accounts payable to such vendors was none and less than $0.1 million as of January 31, 2020 and January 31, 2019, respectively.

14. Net Loss Per Share Attributable to Common Stockholders

The following table sets forth the computation of basic and diluted net loss per share attributable to common stockholders:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands, except per share data)		
Common Stock			
Net loss	$ —	$ (140,077)	$ (135,490)
Accretion of redeemable convertible preferred stock	—	—	(5,853)
Net loss attributable to common stockholders	$ —	$ (140,077)	$ (141,343)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	—	44,863	41,876
Net loss per share attributable to common stockholders, basic and diluted	$ —	$ (3.12)	$ (3.38)
Class A Common Stock			
Net loss attributable to common stockholders	$ (23,369)	$ —	$ —
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	24,405	—	—
Net loss per share attributable to common stockholders, basic and diluted	$ (0.96)	$ —	$ —
Class B Common Stock			
Net loss attributable to common stockholders	$ (118,410)	$ —	$ —
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	123,657	—	—
Net loss per share attributable to common stockholders, basic and diluted	$ (0.96)	$ —	$ —

Since the Company was in a net loss position for all periods presented, basic net loss per share is the same as diluted net loss per share as the inclusion of all potential common shares outstanding would have been antidilutive. The potential shares of common stock that were excluded from the computation of diluted net loss per share attributable to common stockholders for the periods presented because including them would have been antidilutive are as follows:

	Year Ended January 31,		
	2020	2019	2018
	(in thousands)		
Shares of common stock issuable upon conversion of redeemable convertible preferred stock	—	131,268	118,693
Shares of common stock issuable upon conversion of redeemable convertible preferred stock warrants	—	336	336
Shares of common stock subject to repurchase from outstanding stock options	984	546	872
RSUs and PSUs subject to future vesting	6,063	—	—
Shares of common stock issuable from stock options	14,689	26,535	23,194
Share purchase rights under the employee stock purchase plan	1,458	—	—
Potential common shares excluded from diluted net loss per share	23,194	158,685	143,095

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as defined in Rule 13a–15(e) and Rule 15d–15(e) under the Exchange Act that are designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of January 31, 2020. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

This Annual Report on Form 10-K does not include a report of management's assessment regarding internal control over financial reporting or an attestation report of our independent registered public accounting firm due to a transition period established by the rules of SEC for newly public companies.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Exchange Act that occurred during the fiscal quarter ended January 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, believes that our disclosure controls and procedures and internal control over financial reporting are designed to provide reasonable assurance of achieving their objectives and are effective at the reasonable assurance level. However, our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost–effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item (other than the information set forth in the next paragraph) will be included in our definitive proxy statement for our 2020 annual meeting of stockholders (the “2020 Proxy Statement”), which will be filed with the SEC within 120 days after the end of our fiscal year ended January 31, 2020, and is incorporated herein by reference.

We have adopted a code of business conduct and ethics (the “Code of Conduct”) that applies to all of our employees, executive officers and directors. The full text of the Code of Conduct is available on our website at ir.crowdstrike.com. The nominating and corporate governance committee of our board of directors is responsible for overseeing the Code of Conduct and must approve any waivers of the Code of Conduct for employees, executive officers and directors. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website, as required by applicable law or the listing standards of The Nasdaq Global Market.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to our 2020 Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this item is incorporated herein by reference to our 2020 Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this item is incorporated herein by reference to our 2020 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to our 2020 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedule

(a)(1) Financial Statements

See Index to Consolidated Financial Statements in Item 8 of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedule

All financial statement schedules have been omitted as the information is not required under the related instructions or is not applicable or because the information required is already included in the financial statements or the notes to those financial statements.

(a)(3) Exhibits

We have filed the exhibits listed on the accompanying Exhibit Index, which is incorporated herein by reference.

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference				Filed Herewith
		Form	File No.	Exhibit	Filing Date	
3.1	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.	8-K	001-38933	3.1	June 14, 2019	
3.2	Bylaws of the Registrant, as currently in effect.	8-K	001-38933	3.2	June 14, 2019	
4.1	Amended and Restated Stockholders Agreement among the Registrant and certain holders of its capital stock, dated as of June 21, 2018, as amended on September 25, 2018 and April 17, 2019.	S-1	333-231461	4.1	May 14, 2019	
4.2	Amended and Restated Registration Rights Agreement among the Registrant and certain holders of its capital stock, dated as of June 21, 2018.	S-1	333-231461	4.2	May 14, 2019	
4.3	Class A common stock certificate of the Registrant.	S-1/A	333-231461	4.3	May 29, 2019	
4.4	Description of Registrant's securities.					X
4.5	Plain English Warrant Agreement between the Registrant and TriplePoint Venture Growth BDC Corp., dated as of December 29, 2016.	S-1/A	333-231461	4.4	May 29, 2019	
4.6	Warrant to Purchase Stock between the Registrant and Silicon Valley Bank, dated as of January 21, 2015.	S-1	333-231461	4.5	May 14, 2019	
4.7	Warrant to Purchase Stock between the Registrant and Silicon Valley Bank, dated as of March 1, 2017.	S-1	333-231461	4.6	May 14, 2019	
10.1‡	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	333-231461	10.1	May 14, 2019	
10.2‡	2019 Equity Incentive Plan and related form agreement.	S-1/A	333-231461	10.2	May 29, 2019	
10.3‡	2019 Employee Stock Purchase Plan and related form agreements.	S-1/A	333-231461	10.3	May 29, 2019	
10.4‡	Amended and Restated 2011 Stock Incentive Plan and related form agreements.	S-1	333-231461	10.4	May 14, 2019	
10.5‡	Outside Director Compensation Plan.	S-1/A	333-231461	10.5	May 29, 2019	
10.6‡	Employment Agreement between the Registrant and George Kurtz, dated as of November 18, 2011.	S-1	333-231461	10.6	May 14, 2019	
10.7‡	Offer Letter between the Registrant and Colin Black, dated as of October 3, 2015.	S-1	333-231461	10.7	May 14, 2019	
10.8‡	Offer Letter between the Registrant and Burt W. Podbere, dated as of August 10, 2015.	S-1	333-231461	10.8	May 14, 2019	
10.9‡	Offer Letter between the Registrant and Roxanne S. Austin dated as of September 10, 2018.	S-1	333-231461	10.9	May 14, 2019	
10.10‡	Offer Letter between the Registrant and Godfrey R. Sullivan, undated.	S-1	333-231461	10.10	May 14, 2019	
10.11‡	George Kurtz Fiscal 2019 Bonus Plan.	S-1	333-231461	10.11	May 14, 2019	
10.12	Office Lease between CrowdStrike, Inc. and SPF Mathilda, LLC, dated as of April 4, 2017, as amended on September 18, 2017, October 27, 2017 and November 5, 2018.	S-1	333-231461	10.12	May 14, 2019	
10.13	Fourth Amendment to Office Lease between SPF Mathilda, LLC and CrowdStrike, Inc., dated August 16, 2019	10-Q	001-38933	10.1	December 6, 2019	
10.14	Fifth Amendment to Office Lease between SPF Mathilda, LLC and CrowdStrike, Inc., dated October 2, 2019					X

10.15	Sublease by and between CrowdStrike, Inc. and Knowles Electronics, LLC, dated December 17, 2015.	S-1	333-231461	10.13	May 14, 2019	
10.16	Sublease by and between CrowdStrike, Inc. and LANDesk Software Inc., dated November 1, 2016.	S-1	333-231461	10.14	May 14, 2019	
10.17	Credit Agreement, dated as of April 19, 2019, by and among the Registrant, CrowdStrike, Inc., CrowdStrike Services, Inc., the Lenders party thereto, and Silicon Valley Bank.	S-1	333-231461	10.15	May 14, 2019	
21.1	List of subsidiaries of the Registrant.					X
23.1	Consent of PricewaterhouseCoopers LLC, independent registered public accounting firm.					X
24.1	Power of Attorney (reference is made to the signature page hereto).					X
31.1	Certification of the Principal Executive Officer pursuant to Exchange Act Rules 13a14(a) and 15d14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of the Principal Financial Officer pursuant to Exchange Act Rules 13a14(a) and 15d14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of the Principal Executive Officer and Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	Inline XBRL Instance Document					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document					X
101.CAL	Inline XBRL Taxonomy 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 Extension Presentation Linkbase Document					X
104	Cover Page Interactive Data File – the cover page XBRL tags are embedded within the Inline Instance XBRL document					X

† Indicates management contract or compensatory plan, contract or agreement.

* The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed “filed” for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in Sunnyvale, California, on the day of March 23, 2020.

CROWDSTRIKE HOLDINGS, INC.

By: /s/ Burt W. Podbere

Burt W. Podbere, Chief Financial Officer (Principal Financial and Accounting Officer)

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints George Kurtz and Burt W. Podbere, and each of them, as his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or their, his or her substitutes, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ George Kurtz George Kurtz	President, Chief Executive Officer, and Director (Principal Executive Officer)	March 23, 2020
/s/ Burt W. Podbere Burt W. Podbere	Chief Financial Officer (Principal Financial and Accounting Officer)	March 23, 2020
/s/ Gerhard Watzinger Gerhard Watzinger	Chairman of the Board of Directors	March 23, 2020
/s/ Cary J. Davis Cary J. Davis	Director	March 23, 2020
/s/ Denis J. O’Leary Denis J. O’Leary	Director	March 23, 2020
/s/ Godfrey R. Sullivan Godfrey R. Sullivan	Director	March 23, 2020
/s/ Joseph P. Landy Joseph P. Landy	Director	March 23, 2020
/s/ Joseph E. Sexton Joseph E. Sexton	Director	March 23, 2020
/s/ Roxanne S. Austin Roxanne S. Austin	Director	March 23, 2020
/s/ Sameer K. Gandhi Sameer K. Gandhi	Director	March 23, 2020

Exhibit 4.4

DESCRIPTION OF SECURITIES

The following description of the terms of our Class A and Class B common stock is not complete and is qualified in its entirety by reference to our amended and restated certificate of incorporation (the “Certificate of Incorporation”) and amended and restated bylaws (the “Bylaws”), each previously filed with the Securities and Exchange Commission (“SEC”) and incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.4 is a part, as well as to the applicable provisions of the Delaware General Corporation Law.

General

Our Certificate of Incorporation authorizes us to issue up to 2,000,000,000 shares of Class A common stock, up to 300,000,000 shares of Class B common stock, and up to 100,000,000 shares of preferred stock with such rights and preferences as may be determined by our board of directors.

Our Class A common stock, par value $0.0005 per share, is listed on the Nasdaq Global Select market, under the symbol “CRWD” and began trading on June 12, 2019. Prior to that date, there was no public trading market for our Class A common stock. There is no public trading market for our Class B common stock, par value $0.0005 per share.

There is no preferred stock outstanding.

Common Stock Rights

The rights of Class A common stock and Class B common stock are identical, except with respect to voting and conversion.

Dividend Rights

We have never declared or paid any dividends on our capital stock. Subject to preferences that may be applicable to any preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive ratably any dividends declared by our board of directors out of assets legally available.

Voting Rights

Shares of our Class A common stock are entitled to one vote per share. Shares of our Class B common stock are entitled to 10 votes per share. The holders of our Class A common stock and Class B common stock generally vote together as a single class on all matters submitted to a vote of our stockholders unless otherwise required by Delaware law or our Certificate of Incorporation.

Our Certificate of Incorporation provides that prior to the Final Conversion Date (as defined below), we shall not, without the prior affirmative vote of the holders of two-thirds of the outstanding shares of Class B common stock, voting as a separate class, in addition to any other vote required by applicable law or our Certificate of Incorporation:

- directly or indirectly, whether by amendment, or through merger, recapitalization, consolidation or otherwise, amend, repeal or adopt any provision of our Certificate of Incorporation inconsistent with, or otherwise alter or change, any provision of our

Certificate of Incorporation that modifies the voting, conversion or other rights, powers, preferences, privileges or restrictions of the shares of Class B common stock;

- reclassify any outstanding shares of Class A common stock into shares having (i) rights as to dividends or liquidation that are senior to the Class B common stock or (ii) the right to have more than one vote per share, except as required by law; or

- issue any shares of Class B common stock (other than shares of Class B common stock originally issued by us after our initial public offering pursuant to the exercise or conversion of options or warrants or settlements of RSUs that, in each case, were outstanding as of the date of our initial public offering).

Additionally, Delaware law could require either holders of our Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our Certificate of Incorporation to increase or decrease the par value of a class of our capital stock, then that class would be required to vote separately to approve the proposed amendment; and

- if we were to seek to amend our Certificate of Incorporation in a manner that alters or changes the powers, preferences, or special rights of a class of our capital stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

Liquidation Rights

Upon our liquidation, dissolution, or winding up, holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preference of any then outstanding shares of preferred stock. Holders of common stock have no preemptive or conversion rights or other subscription rights.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights, and there are no redemption or sinking fund provisions applicable to the common stock.

Conversion Rights

Each share of Class B common stock will automatically convert into one share of Class A common stock on the Final Conversion Date, which is the earliest of (X) the date specified by the holders of two-thirds of the then outstanding shares of our Class B common stock voting as a separate class, (Y) the date on which the number of outstanding shares of our Class B common stock represents less than 5% of the number of outstanding shares of our Class A common stock and our Class B common stock, taken together as a single class, provided that shares of Class A common stock issued after our initial public offering in connection with any acquisition by us or any of our subsidiaries of the securities, business, technology, property or other assets of another person or entity or in connection with the entry by us or any of our subsidiaries into any joint venture, commercial relationship or other strategic transaction (any such shares of Class A common stock being referred to as “Acquisition Securities”) shall not be considered to be “outstanding” for the purposes of the proviso, and provided further that a determination by the board of directors as to whether shares of Class A common stock constitute Acquisition Securities shall be conclusive and binding; and (Z) the date that is nine months after the death or permanent and total disability of our founder, George Kurtz, provided that such date may be extended by a majority of the independent members of our board of directors to a date that is not longer than 18 months from the date of such death or disability.

In addition, a holder's shares of Class B common stock will automatically convert into shares of Class A common stock upon (i) the affirmative written election of such Class B stockholder, (ii) the occurrence of a transfer, except for certain transfers described in our Certificate of Incorporation, including certain transfers where sole dispositive power and exclusive voting control with respect to the shares of the Class B common stock are retained by the transferring holder and transfers of Class B common stock made by an Identified Fund Stockholder (as defined in our Certificate of Incorporation) to a fund managed or advised by such Identified Fund Stockholder, or (iii) if such holder is a natural person, the death of such holder.

Preferred Stock

Pursuant to our Certificate of Incorporation, our board of directors has the authority, without further action by the stockholders, to issue from time to time up to 100,000,000 shares of preferred stock in one or more series. Our board of directors may designate the rights, preferences, privileges and restrictions of the preferred stock, including dividend rights, conversion rights, voting rights, redemption rights, liquidation preference, sinking fund terms, and the number of shares constituting any series or the designation of any series. The issuance of preferred stock could have the effect of restricting dividends on the common stock, diluting the voting power of the common stock, impairing the liquidation rights of the common stock or delaying, deterring, or preventing a change in control. Such issuance could have the effect of decreasing the market price of the common stock. We currently have no plans to issue any shares of preferred stock.

Anti-Takeover Provisions of our Certificate of Incorporation, Bylaws, and Delaware Law

Our Certificate of Incorporation and Bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, could discourage takeovers, coercive or otherwise. These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Dual Class Stock. We have a dual class common stock structure, which provides our stockholders prior to our initial public offering, co-founders, executives, employees, directors and their affiliates with significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or our assets.

Issuance of Undesignated Preferred Stock. As discussed above in the section titled "Preferred Stock," our board of directors will have the ability to designate and issue preferred stock with voting or other rights or preferences that could deter hostile takeovers or delay changes in our control or management.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting. Our Certificate of Incorporation provides that our stockholders may not act by written consent after the first date on which the number of outstanding shares of our Class B common stock represents less than 10% of the aggregate number of outstanding shares of our Class A common stock and our Class B common stock, taken together as a single class. This limit on the ability of stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, the holders of a majority of our capital stock would not be able to amend the Bylaws or remove directors without holding a meeting of stockholders called in accordance with the Bylaws.

In addition, our Certificate of Incorporation provides that special meetings of the stockholders may be called only by the chairman of the board, the chief executive officer, or our board of directors acting pursuant to a resolution adopted by a majority of the board of directors. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Requirements for Advance Notification of Stockholder Nominations and Proposals. Our Bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of the board of directors. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of our company.

Board Classification. Our Certificate of Incorporation provides that our board of directors is divided into three classes, one class of which is elected each year by our stockholders. The directors in each class serve for a three-year term. Our classified board of directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because it generally makes it more difficult for stockholders to replace a majority of the directors.

Election and Removal of Directors. Our Certificate of Incorporation and Bylaws contain provisions that establish specific procedures for appointing and removing members of our board of directors. Under our Certificate of Incorporation and Bylaws, vacancies and newly created directorships on our board of directors may be filled only by a majority of the directors then serving on the board of directors. Under our Certificate of Incorporation and Bylaws, directors may be removed only for cause by the affirmative vote of the holders of a majority of the total voting power of all outstanding securities of the Company generally entitled to vote in the election of directors, voting together as a single class.

No Cumulative Voting. The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our Certificate of Incorporation provides otherwise. Our Certificate of Incorporation and Bylaws do not expressly provide for cumulative voting. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board of directors’ decision regarding a takeover.

Amendment of Charter Provision. Certain amendments to our Certificate of Incorporation will require the approval of two-thirds of the then-outstanding voting power of our capital stock.

Delaware Anti-Takeover Statute. We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock. The existence of this provision could have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage attempts that might result in a premium over the market price for the shares of common stock held by stockholders.

The provisions of Delaware law and the provisions of our Certificate of Incorporation and Bylaws could have the effect of discouraging others from attempting hostile takeovers and as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions might also have the effect of preventing changes in our management. It is also possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests.

Exclusive Forum. Our Bylaws provide that, unless we consent in writing to the selection of an alternative forum, the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or other employees to us or our stockholders, (3) any action asserting a claim against the company or any director or officer of the company arising pursuant to any provision of the Delaware General Corporation Law, (4) any action to interpret, apply, enforce, or determine the validity of our Certificate of Incorporation or Bylaws, or (5) any other action asserting a claim that is governed by the internal affairs doctrine shall be a state or federal court located within the State of Delaware, in all cases subject to the court's having jurisdiction over indispensable parties named as defendants. However, this exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Exchange Act. In addition, our Bylaws provide that the federal district courts of the United States will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, subject to and contingent upon a final adjudication in the State of Delaware of the enforceability of such exclusive forum provision. Any person or entity purchasing or otherwise acquiring any interest in our shares of capital stock shall be deemed to have notice of and consented to these provisions. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law or federal law for the specified types of actions and proceedings, these provisions may have the effect of discouraging lawsuits against us or our directors and officers.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent's address is 6201 15th Avenue, Brooklyn, New York 11219, and its telephone number is (800) 937-5449.

Exhibit 10.14

FIFTH AMENDMENT TO OFFICE LEASE

THIS FIFTH AMENDMENT TO OFFICE LEASE (this "Amendment") is dated as of October 2, 2019, between SPF MATHILDA, LLC, a Delaware limited liability company ("Landlord"), and CROWDSTRIKE, INC., a Delaware corporation ("Tenant").

RECITALS

A. Landlord and Tenant entered into that certain Office Lease dated as of April 4, 2017 (the "Original Lease"), as amended by that certain First Amendment to Lease dated as of September 18, 2018 (the "First Amendment"), that certain Second Amendment to Lease dated as of October 27, 2017 (the "Second Amendment"), that certain Third Amendment to Office Lease dated as of November 5, 2018 (the "Third Amendment"), and that certain Fourth Amendment to Lease dated as of August 16, 2019 (the "Fourth Amendment"), pursuant to which Tenant leases from Landlord certain premises (collectively, the "Existing Premises") consisting of (i) Suite 102 on the first (1st) floor (the "1st Floor Premises") of that certain building located at 150 Mathilda Place, Sunnyvale, California (the "Building"), (ii) Suite 200 on the second (2nd) floor of the Building, (iii) Suites 304 and 306 on the third (3rd) floor of the Building, (iv) Suites 202, 204, 206 and 208 on the second (2nd) floor of the Building, and (v) Suites 300 and 302 on the third (3rd) floor of the Building, but Suites 300 and 302 have not yet been delivered to Tenant pursuant to the Fourth Amendment. The Original Lease, the First Amendment, the Second Amendment, the Third Amendment and the Fourth Amendment are collectively referred to herein as the "Lease". All capitalized terms not defined herein shall have the respective meanings given to them in the Lease.

B. Pursuant to Section 10 of the Fourth Amendment, the Lease Term with respect to the 1st Floor Premises is scheduled to expire on December 31, 2019.

C. Landlord and Tenant desire to amend the Lease to provide for (i) the extension of the Lease Term with respect only to the 1st Floor Premises, and (ii) certain other Lease modifications, all as more particularly set forth herein.

AGREEMENT

NOW, THEREFORE, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. <u>1st Floor Premises; Extension of Lease Term</u>. The Lease Term with respect to the 1st Floor Premises, which is defined in Section 10.1 of the Fourth Amendment as the "1st Floor Extension Period", is hereby extended to expire on February 15, 2020. All of the other terms and conditions of the Lease with respect to Tenant's occupancy of the 1st Floor Premises during the 1st Floor Extension Period shall otherwise apply on the terms and conditions set forth in the Lease.

2. <u>Brokers</u>. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent other than Cushman & Wakefield and CBRE, Inc., collectively on behalf of Landlord, and Jones Lang LaSalle, on behalf of Tenant (collectively, the "Brokers") in connection with the negotiation of this Amendment and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Amendment.

Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, and costs and expenses (including, without limitation, reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of the indemnifying party's dealings with any real estate broker or agent (other than the Brokers) occurring by, through, or under the indemnifying party. The terms of this Section 2 shall survive the expiration or earlier termination of the Lease, as amended.

3. Organization and Authority. Tenant hereby covenants, represents and warrants that (a) Tenant is duly organized, in good standing and qualified to do business under the laws of the state of its formation and, if different, is qualified to do business in the State of California and has all necessary powers to enter into and perform its obligations under the Lease, as amended, (b) this Amendment has been duly and effectively authorized by all necessary action required under Tenant's organizational documents, and (c) this Amendment has been duly executed and delivered on behalf of Tenant, and is a valid and binding agreement of Tenant.

4. Counterparts. This Amendment may be executed in any number of original counterparts. Any such counterpart, when executed, shall constitute an original of this Amendment, and all such counterparts together shall constitute one and the same Amendment.

5. California Accessibility Disclosure. For purposes of Section 1938 of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that the Project, the Building, the Existing Premises and the 4th Amendment Premises have not undergone inspection by a Certified Access Specialist (CASp). As required by Section 1938(e) of the California Civil Code, Landlord hereby states as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises." In furtherance of the foregoing, Landlord and Tenant hereby agree as follows: (a) any CASp inspection requested by Tenant shall be conducted, at Tenant's sole cost and expense, by a CASp approved in advance by Landlord; and (b) pursuant to Article 24 of the Original Lease, Tenant, at its cost, is responsible for making any repairs within the Existing Premises and the 4th Amendment Premises to correct violations of construction-related accessibility standards disclosed by a CASp inspection requested by Tenant; and, if anything done by or for Tenant in its use or occupancy of the Existing Premises and/or the 4th Amendment Premises shall require repairs to the Building (outside the Existing Premises and/or the 4th Amendment Premises) to correct violations of construction-related accessibility standards, then Tenant shall, at Landlord's option, either perform such repairs at Tenant's sole cost and expense or reimburse Landlord upon demand, as Additional Rent, for the cost to Landlord of performing such repairs.

6. Rent from Real Property. Tenant and Landlord intend that all amounts payable by Tenant to Landlord shall qualify as "rents from real property," and will otherwise not constitute "unrelated business taxable income" or "impermissible tenant services income," all within the meaning of both Sections 512(b)(3) and 856(d) of the Internal Revenue Code of 1986, as amended (the "Code") and the U.S. Department of Treasury Regulations promulgated thereunder (the "Regulations"). In the event that Landlord reasonably determines that there is any risk that any amount payable under the Lease, as amended hereby, shall not qualify as "rents from real property" or will otherwise constitute unrelated business taxable income or impermissible tenant services income within the meaning of Sections 512(b)(3) or 856(d) of the Code and the Regulations promulgated thereunder, Tenant agrees (a) to cooperate with Landlord by entering into such amendment or amendments as Landlord deems necessary to qualify all amounts payable under the Lease, as amended hereby, as "rents from real property" and (b) to permit (and, upon request, to acknowledge in writing) an assignment of certain services under the Lease, as amended hereby, and, upon request, to enter into direct agreements with the parties furnishing such services. Notwithstanding the foregoing, Tenant shall not be required to take any action pursuant to the preceding sentence (including acknowledging in writing an assignment of services pursuant thereto) if such action would result in (i) Tenant's incurring more than de minimis additional liability under the Lease, as amended hereby, or (ii) more than a de minimis negative change in the quality or level of Building operations or services rendered to Tenant under the Lease, as amended hereby. For the avoidance of doubt, (A) if Tenant does not acknowledge in writing an assignment as described in clause (ii) above (it being agreed that Tenant shall not unreasonably withhold, condition or delay such acknowledgment so long as the criteria in clauses (i) and (ii) are satisfied), then Landlord shall not be released from liability under the Lease, as amended hereby, with respect to the services so assigned; and (B) nothing in this Section shall limit or otherwise affect Landlord's ability to assign its entire interest in the Lease, as amended hereby, to any party as part of a conveyance of Landlord's ownership interest in the Building.

7. Ratification and Confirmation. Except as set forth in this Amendment, all of the terms and provisions of the Lease are hereby ratified and confirmed and shall remain unmodified and in full force and effect, and the provisions of Section 8.6 of the Original Lease (Tenant's Security System) shall apply to the 4th Amendment Premises. In the event of any conflict between the terms and conditions of the Lease and the terms and conditions of this Amendment, the terms and conditions of this Amendment shall prevail.

[signatures appear on the following page]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LANDLORD:

SPF MATHILDA, LLC,
a Delaware limited liability company

By ______________________
Name Lauren B. Graham
Title Authorized Signatory

TENANT:

CROWDSTRIKE, INC.,
a Delaware corporation

DocuSigned by:
By Tiffany Ketterer-Buchanan
Name Tiffany Ketterer-Buchanan
Title VP Finance

Exhibit 21.1

LIST OF SUBSIDIARIES
OF
CROWDSTRIKE HOLDINGS, INC.

Name of Subsidiary	Jurisdiction of Incorporation
Crowdstrike, Inc.	Delaware
CrowdStrike Services, Inc.	Delaware
CrowdStrike International Inc.	Delaware
CrowdStrike UK LTD	United Kingdom
CrowdStrike Singapore PTE. LTD	Singapore
CrowdStrike Ireland Limited	Ireland
CrowdStrike (Netherlands) B.V.	Netherlands
CrowdStrike Israel	Israel
CrowdStrike GMBH	Germany
CrowdStrike Italy S.R.L.	Italy
CrowdStrike Middle East DMCC	United Arab Emirates
CrowdStrike Japan KK	Japan
CrowdStrike Australia PTY LTD	Australia
CrowdStrike S.R.L.	Romania
CrowdStrike India Private Limited	India
CrowdStrike Mexico S de RL de CV	Mexico
CrowdStrike Canada, Inc.	Canada
CrowdStrike Malaysia Sdn. Bhd.	Malaysia
CrowdStrike Switzerland GMBH	Switzerland
CrowdStrike Spain S.R.L.	Spain
Hybrid Analysis GMBH	Germany
CrowdStrike Sweden AB	Sweden

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No.333-232084) of CrowdStrike Holdings, Inc. of our report dated March 23, 2020 relating to the financial statements, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 23, 2020

Exhibit 31.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, George Kurtz, certify that:

1. I have reviewed this Annual Report on Form 10-K of CrowdStrike Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 23, 2020
CROWDSTRIKE HOLDINGS, INC.

By:	/s/ George Kurtz
Name:	George Kurtz
Title:	President, Chief Executive Officer, and Director (Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
PURSUANT TO EXCHANGE ACT RULES 13a-14(a) AND 15d-14(a),
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Burt W. Podbere, certify that:

1. I have reviewed this Annual Report on Form 10-K of CrowdStrike Holdings, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 23, 2020

CROWDSTRIKE HOLDINGS, INC.

By:	/s/ Burt W. Podbere
Name:	Burt W. Podbere
Title:	Chief Financial Officer (Principal Financial and Accounting Officer)

Exhibit 32.1

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER AND PRINCIPAL FINANCIAL OFFICER
PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, George Kurtz, the President and Chief Executive Officer of CrowdStrike Holdings, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of CrowdStrike Holdings, Inc. for the year ended January 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of CrowdStrike Holdings, Inc.

Date: March 23, 2020

By:	/s/ George Kurtz
Name:	George Kurtz
Title:	President, Chief Executive Officer, and Director (Principal Executive Officer)

I, Burt W. Podbere, the Chief Financial Officer of CrowdStrike Holdings, Inc., certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of CrowdStrike Holdings, Inc. for the year ended January 31, 2020 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Annual Report on Form 10-K fairly presents, in all material respects, the financial condition and results of operations of CrowdStrike Holdings, Inc.

Date: March 23, 2020

By:	/s/ Burt W. Podbere
Name:	Burt W. Podbere
Title:	Chief Financial Officer (Principal Financial and Accounting Officer)