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, 2021

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the 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, 2020 (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 $20.8 billion.

As of February 28, 2021, the number of shares of the registrant's Class A common stock outstanding was 195,247,309, and the number of shares of the registrant's Class B common stock outstanding was 28,628,920.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement relating to its 2021 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;
- the impact of the COVID-19 pandemic on our operations, financial results, and liquidity and capital resources, including on customers, sales, expenses, and employees;
- 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 and cash equivalents 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 develop, maintain, and improve our internal control over financial reporting;
- instability in the global credit and financial markets;
- our ability to successfully close and integrate acquisitions to contribute to our growth objectives; and

- 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 customer relationship management, human resources, 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, cloud workloads, cloud containers, mobile, 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. Our single lightweight agent is installed on each endpoint or the cloud workload 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 19 cloud modules and our Falcon platform via a SaaS subscription-based model that spans multiple large markets, including corporate workload security, security and vulnerability management, managed security services, IT operations management, threat intelligence services, identity protection and log management.

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 pioneering 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 CrowdStrike’s single agent, customers are able to leverage 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 five 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. 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. We are uniquely effective because we not only have a massive amount of high fidelity data to train our AI models but also because of our deep 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. Additionally, via the CrowdStrike Store, customers can discover, try, buy and deploy trusted partner applications that extend their investment in the CrowdStrike Falcon platform. 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 lean 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 began offering Falcon Prevent for trial and purchase through the AWS Marketplace and have since expanded our modules available through 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, 2021, subscription customers that had adopted four or more modules, five or more modules and six or more modules increased to 63%, 47%, and 24%, respectively. Our dollar based net retention rate, which measures expansion in existing customers' subscriptions over a 12 month period, was 125% as of January 31, 2021, demonstrating the power of our land-and-expand strategy.

Some of the world's largest enterprises, government organizations, and high profile brands trust CrowdStrike to protect their business. As of January 31, 2021, we had 9,896 subscription customers worldwide. 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 experienced significant growth, with total revenue increasing from $249.8 million for fiscal 2019 to $481.4 million for fiscal 2020, representing year-over-year growth of 93%, and from $481.4 million for fiscal 2020 to $874.4 million for fiscal 2021, representing year-over-year growth of 82%. Subscription revenue grew from $219.4 million for fiscal 2019 to $436.3 million for fiscal 2020, a 99% increase, and from $436.3 million for fiscal 2020 to $804.7 million for fiscal 2021, a 84% increase. Our annual recurring revenue, or ARR, has grown from $312.7 million as of January 31, 2019 to $600.5 million as of January 31, 2020, a 92% increase, and from $600.5 million as of January 31, 2020 to $1.1 billion as of January 31, 2021, a 75% increase. We had net losses of $92.6 million, $141.8 million, and $140.1 million in fiscal 2021, fiscal 2020 and fiscal 2019, respectively. We expect to continue to incur net losses for the foreseeable future as we continue to invest in our business, and in particular, our sales and R&D capabilities, 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.

Proliferation of Workloads Expanding the Attack Surface

The rise of digital transformation, cloud computing, workforce mobility, and growth in connected devices has created a rapid expansion of workloads across endpoints and industries. 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 cataloged 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.

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, and workforces become more distributed, 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 17 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, 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, cloud workloads, cloud containers, mobile, 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. The benefits of our cloud-based AI are automatically shared with customers across 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 supports 19 cloud modules via a SaaS subscription-based model that spans multiple large markets, including corporate workload security, security and vulnerability management, managed security services, IT operations management, threat intelligence services, identity protection and log management. 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 silos 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.

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 cloud workload security, next-generation antivirus, endpoint detection and response (EDR), device control, host firewall management, vulnerability management, forensic analysis, 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. Our single agent approach allows 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 customer workloads such as desktops, laptops, servers, virtual machines, cloud workloads, cloud containers, mobile, 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.

Growth Strategy

Key elements of our growth strategy include:

- ***Growing 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 4,465 customers from 5,431 at January 31, 2020, to 9,896 at January 31, 2021, representing an 82% 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 Penetrating 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 125% dollar-based net retention rate as of January 31, 2021.

- ***Leveraging 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, Falcon Discover 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.

- ***Broadening Our 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.

- ***Extending 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.

- ***Broadening Our 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.

- ***Expanding 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 $124.9 million for fiscal 2020, to $247.0 million for fiscal 2021, representing an increase of 98%. 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 modules including next-generation antivirus, EDR, device control, host firewall management, managed threat hunting, IT hygiene, vulnerability management, and threat intelligence. The Falcon platform also encompasses recently acquired technologies where integration may be ongoing. 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:

Cloud Security

Falcon Cloud Workload Protection—Cloud Runtime Protection. Falcon Cloud Workload Protection provides comprehensive breach protection at run-time for workloads and containers as well as detecting vulnerabilities before services and images are deployed. Falcon Cloud Workload Protection reduces the attack surface by automatically detecting vulnerabilities, hidden malware, secrets, keys, and more, enabling customers to build, run, and deploy secure applications with speed and confidence.

Falcon Horizon—Cloud Security Posture Management. Falcon Horizon delivers unified visibility, threat detection and continuous monitoring and compliance for multi-cloud environments. Falcon Horizon automates the process to detect cloud related misconfigurations, vulnerabilities, and identity-based risks, providing step-by-step remediation and giving developers guardrails to avoid costly mistakes.

Discover for Cloud and Containers—Cloud Service Discovery. Discover for Cloud and Containers delivers comprehensive visibility of cloud assets, security configurations, workloads and containers across multi-cloud environments so customers can mitigate risks and reduce the attack surface.

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

Falcon Firewall Management—Host 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 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 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.

Falcon Forensics—Forensic Data for Analysis of Cybersecurity Incidents. Falcon Forensics streamlines the collection of point-in-time and historic forensic triage data for robust analysis of cybersecurity incidents, enabling responders to quickly identify relevant data with preset dashboards and rapidly investigate.

Managed Services

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

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.

Threat Intelligence

Falcon X—Threat Intelligence. Falcon X integrates threat intelligence into endpoint protection and provides automated analysis of detected threats to provide insight into the capabilities, motivation and attribution of attacks. 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 2.8 petabytes of malware collected in our Falcon platform and indexed by our proprietary binary data indexing technology.

Falcon Sandbox—Malware Analysis. Falcon Sandbox allows our customers to analyze unknown files for malicious behavior by detonating them safely in virtual machines.

Falcon X Recon—Situational Awareness. Falcon X Recon allows our customers to identify and mitigate digital risks on the hidden areas of the clear, deep and dark web. These risks include digital fraud, data theft exposure, social media impersonations, and much more.

Identity Protection

Falcon Zero Trust—Zero Trust Security. Frictionless Zero Trust security with real-time threat prevention and IT policy enforcement using identity, behavioral and risk analytics.

Falcon Identity Threat Detection—Identity Threat Detection. Visibility for identity-based attacks and anomalies, comparing live traffic against behavior baselines and rules to detect attacks and lateral movement.

Log Management

Humio—Log Management. Humio is a high-performance, index-free cloud log management solution that allows customers to collect logs from any data source and to search and query streaming data in real-time.

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 or cloud workload. 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 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. 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 proprietary dataset that we use 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 performance 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 and cloud workload 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.

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.

Data Center Operations

We have data center co-location facilities throughout the United States and in Europe, and we also utilize AWS data centers located in the United States and Europe. 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 and forensic investigatory services, technical assessment and strategic advisory services, as well as training to assist organizations that have experienced a breach or are assessing their security posture and ability to respond to breaches.

- *Incident Response/ Forensics 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, 2019, for each $1.00 spent by those customers on their initial engagement for our incident response or proactive services, as of January 31, 2021, we derived an average of $5.51 in ARR from those subscription contracts.

- *Technical Assessment and Strategic Advisory Services.* Our proactive security services include technical assessment services designed to help organizations understand their cyber maturity levels. These services include cybersecurity maturity assessments, security program in-depth assessments, service organization control assessments, cloud security assessments, IT hygiene assessments and active directory security assessments. We also advise customers on readiness and preparation through the execution of table-top exercises, live fire exercises, red team/blue team assessments and advanced adversary emulation exercises. 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.

- *Training.* We offer training and certification services to customers and partners on CrowdStrike technologies and cybersecurity topics to facilitate the adoption of CrowdStrike and to broaden and deepen their skills. CrowdStrike University is an online learning management system that organizes all CrowdStrike e-learning, instructor-led training and certification in one place, providing a personalized learning experience for individuals who have an active training subscription. Beginning the first quarter of fiscal year 2022 CrowdStrike University plans to offer proctored exam certifications through industry leading training partner Pearson Vue for its Falcon Administration, Incident Response, and Threat Hunting training programs.

Customers

Some of the world's largest enterprises, government organizations, and high profile brands trust us to protect their business. As of January 31, 2021, we had 9,896 subscription customers worldwide. 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, whitepaper development, 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, a program that has continued to grow over time. In May 2018, we announced that Falcon Prevent was available for trial and purchase from the AWS Marketplace and have since expanded our modules available through the AWS Marketplace. In February 2019, we launched the CrowdStrike Store, a marketplace platform that enables customers access to third-party applications and add-on capabilities to extend the value of the Falcon platform. In 2020, we significantly expanded our technical and go-to-market alliances, including new partnerships with identity providers and business consulting firms in addition to launching new capabilities in the identity protection space.

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, the research and development organization works closely with our customer success teams to ensure customer satisfaction is the top priority.

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. We also maintain research and development centers in Irvine, California, and Israel. We employ subject matter experts in a number of jurisdictions around the world. 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, VMware Carbon Black and SentinelOne, 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 and workload 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, 2021, we had 65 issued patents and 102 pending patent applications in the United States and other countries. Our issued patents expire between 2032 and 2039. 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, 2021, we had backlog of approximately $448.2 million. Of this amount, approximately $164.4 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.

Human Capital Resources

As of January 31, 2021, we had 3,394 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 local labor law requirements which may automatically make our employees subject to industry-wide collective bargaining agreements. We have not experienced any work stoppages, and we consider our relations with our employees to be good.

Attraction, Retention, and Talent Development

Supporting our people is a foundational value for CrowdStrike. We believe the company's success depends on our ability to attract, develop and retain key personnel. The skills, experience and industry knowledge of key employees significantly benefit our operations and performance.

Our talent sourcing is aligned to our organizational strategy to provide the expertise and skills needed to move our mission forward. We have created a high performance talent model that pinpoints the top traits and qualities we look for in talent and that may already exist within the organization, then consistently use that model to develop interview questions, screen candidates, and make hiring decisions.

We continue to market to and recruit technical talent in diverse communities by engaging as a high-level sponsor or partner of professional conferences and organizations such as Grace Hopper, Society of Women Engineers, Blavity Afrotech World, Hire Military, Black Girls Code, Thurgood Marshall College Foundation, and others.

To attract high performers, we have a team dedicated to building and promoting our employer brand focused on creating a strong employer value proposition:

- Competitive pay and benefits
- Flexible working arrangements
- Role and task diversity
- Professional development opportunities
- Organizational reputation and culture

We provide robust compensation and benefits programs to help meet the needs of our employees. In addition to base salary, these programs (which vary by country/region) include annual bonuses, equity awards, an employee stock purchase plan, a 401(k) plan, healthcare and insurance benefits, health savings and flexible spending accounts, paid time off, family leave, family care resources, flexible work schedules, adoption and surrogacy assistance, employee assistance programs, tuition assistance and on-site services such as health and fitness centers.

We invest resources to develop the talent needed to remain a leader in cybersecurity. We deliver numerous training opportunities, provide rotational assignment opportunities, have expanded our focus on continuous learning and development, and implemented new methodologies to manage performance, provide feedback, and develop talent.

Remote-First Distributed Workforce

For CrowdStrike, the ability to work remotely is a deliberate strategy that we believe fuels rapid innovation and attracts the best and brightest around the world. Our culture is purpose-built around a remote-first way of working, creating a competitive advantage for both the company and its customers and minimizing disruption from localized issues such as natural disasters, political events, or health emergencies like COVID-19.

CrowdStrike has had a distributed workforce since its inception. Before COVID-19, 70% of our workforce, including nearly all engineering and technology teams, worked on a remote basis. 100% of our workforce is remote in response to COVID-19 and we do not have immediate plans to return to physical offices.

Since the Company's inception, we recognized that creating high-functioning, effective remote-first teams would require careful planning and system design to not only establish the culture but help it grow and evolve organically. We have designed our processes, systems, and teams so that people can perform their jobs without needing to be physically present in the same room or even in the same time zone. Part of supporting our remote-first culture also involves actively encouraging personal well-being through initiatives, including wellness programs, engagement programs (speaker series, employee resource groups, gift exchanges, mentorship opportunities, virtual events, etc.), community outreach activities, recognition programs, and groups to connect people, no matter where they are geographically, with similar interests, life circumstances or backgrounds.

Diversity, Equity, and Inclusion

A diverse, equitable, and inclusive culture fuels creative excellence and innovation, helping people achieve their best work. We continue to strive to advance our efforts to build an equitable workplace and formally establish it as part of CrowdStrike's mission and organization.

We strive to create an environment where everyone feels seen, heard, and empowered to succeed. Through employee resource groups, internal development programs, allyship training, speaker series, and networking opportunities, we are empowered to come together to create a workplace that reflects the diverse communities around us.

Setting a diverse workforce up for success requires a commitment to the practices of inclusion in everything we do. What a practice of inclusion means to us is that we are creating an environment and providing tools that help our people understand how to actively involve every employee's ideas, knowledge, perspectives, approaches, and styles and how to engage all of our people via a mindful approach to organizational design and experiences that feels accessible and relevant to everyone.

Employee Resource Groups

Employee Resource Groups are an integral component of our commitment to foster community, promote a sense of belonging, facilitate organizational change, and drive a greater understanding of the diversity of perspectives we have across CrowdStrike. In addition to the Embracing Equity majority ally group, we have five official Employee Resource Groups and we are anticipate additional groups in the future:

- Women of CrowdStrike
- Veterans of CrowdStrike
- Pride Team (LGBTQ)
- Green Team (Sustainability)
- Team BELIEVE (Black employees)

Our Employee Resource Groups are employee led, self-directed, voluntary groups that align with our organizational mission, values, and goals that offer opportunities for groups to network, recommend business initiatives and process improvements, increase organizational awareness and allyship, and create opportunities for talent development. Employees who join an Employee Resource Group can:

- Network and build community with people with similar interests, life circumstances or backgrounds.

- Serve as champions for inclusion and belonging at CrowdStrike and help identify opportunities for us to become more inclusive.
- Identify initiatives and best practices throughout the organization and make recommendations to the business to help spark and facilitate change.

Executive Officers

The following table sets forth certain information with respect to our current executive officers as of March 18, 2021:

Name:	Age:	Position:
George Kurtz	50	President, Chief Executive Officer and Director
Burt W. Podbere	55	Chief Financial Officer
Colin Black	57	Chief Operating Officer
Michael Carpenter	45	President, Global Sales and Field Operations
Shawn Henry	58	President, CrowdStrike Services and Chief Security Officer

There is no family relationship between any of our directors or executive officers and any other director or executive officer.

George Kurtz - President, Chief Executive Officer, and Director

Mr. Kurtz is one of our co-founders and has served as our President, Chief Executive Officer, and a member of our board of directors since November 2011. From October 2004 to October 2011, Mr. Kurtz served in executive roles at McAfee, Inc., a security technology company, including as Executive Vice President and Worldwide Chief Technology Officer from October 2009 to October 2011. In October 1999, Mr. Kurtz founded Foundstone, Inc., a security technology company, where he served as its Chief Executive Officer until it was acquired by McAfee, Inc. in October 2004. Since November 2017, he has also served as Chairman as a board member, and as President for the CrowdStrike Foundation, a nonprofit established to support the next generation of talent and research in cybersecurity and artificial intelligence through scholarships, grants, and other activities. He has also served on the board of directors of Hewlett Packard Enterprise, an enterprise information technology company, since June 2019. Mr. Kurtz holds a B.S. in Accounting from Seton Hall University. Mr. Kurtz also holds a CPA license from the State of New Jersey with an inactive status.

Burt W. Podbere - Chief Financial Officer

Mr. Podbere has served as our Chief Financial Officer since September 2015. From May 2014 to August 2015, Mr. Podbere served as Chief Financial Officer for OpenDNS, Inc. (acquired by Cisco in 2015), a cloud-delivered network security company, where he oversaw the finance function. From October 2011 to April 2014, he served as Chief Financial Officer for Net Optics, Inc. (acquired by Ixia in 2013), a manufacturer of network monitoring and intelligent access solutions for physical and virtual networks. Since November 2017, he has also served as Treasurer and as a board member for the CrowdStrike Foundation, a nonprofit established to support the next generation of talent and research in cybersecurity and artificial intelligence through scholarships, grants, and other activities. Mr. Podbere is a Chartered Accountant and holds a B.A. from McGill University.

Colin Black - Chief Operating Officer

Mr. Black has served as our Chief Operating Officer since January 2017 and as our Chief Information Officer from November 2015 to December 2017. From May 2012 to November 2015, he served as Chief Information Officer for Kratos Defense and Security Solutions. Inc., a provider of advanced engineering, security, surveillance, and information technology services. From August 2008 to May 2012, he served as Chief Information Officer for Cymer, LLC. a developer and manufacturer of lithography light sources used in the semiconductor industry. Since November 2017, he has also served as a board member, and until November 2020 as Secretary, for the CrowdStrike Foundation, a nonprofit established to support the next generation of talent and research in cybersecurity and artificial intelligence through scholarships, grants, and other activities. Mr. Black holds a B.S. in Electronics Engineering from the University of Glasgow.

Michael Carpenter - President Global Sales and Field Operations

Mr. Carpenter has served as our President, Global Sales and Field Operations since November 2016. From February 2014 to September 2016, he served as President of Global Sales and Field Operations for Tanium Inc., an endpoint security and systems management company. From December 2012 to January 2014, Mr. Carpenter served as President. Americas Sales for Intel Security Group, a global computer security software company. Mr. Carpenter holds a B.A. in Accounting from the University of Massachusetts Lowell.

Shawn Henry - President, CrowdStrike Services and Chief Security Officer

Mr. Henry has served as President of CrowdStrike Services and our Chief Security Officer since March 2012. Mr. Henry previously worked for the FBI from 1987 through March 2012, including most recently as Executive Assistant Director of the FBI's Criminal, Cyber, Response and Services Branch. Since June 2016, Mr. Henry has served as a faculty member specializing in cybersecurity for the National Association of Corporate Directors, an organization providing training and education for private and public company directors. Since June 2015, Mr. Henry has served as a cybersecurity and national security analyst for NBC News. Mr. Henry holds a B.B.A. from Hofstra University and an M.S. in Criminal Justice from Virginia Commonwealth University.

Corporate Information

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.

Available Information

Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports are filed with the SEC pursuant to Sections 13(a) and 15(d) of the Exchange Act. Such reports and other information filed or furnished by us with the SEC are available free of charge on our website at https://ir.crowdstrike.com/financial-information/sec-filings, as soon as reasonably practicable after we file such material with, or furnish it to, the SEC. The SEC maintains a website that contains the materials we file with or furnish to the SEC at www.sec.gov.

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.

SUMMARY OF RISK FACTORS

Our business is subject to numerous risks and uncertainties, any one of which could materially adversely affect our business, results of operations, financial condition and growth prospects. Below is a summary of some of these risks. This summary is not complete, and should be read together with the entire section titled “Risk Factors” in this Annual Report on Form 10-K, as well as the other information in this Annual Report on Form 10-K and the other filings that we make with the SEC.

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

- Our limited operating history makes it difficult to evaluate our current business and future prospects, and may increase the risk of your investment.
- The COVID-19 pandemic could adversely affect global economic conditions and our business, operating results and future revenue.
- 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.
- If we are unable to attract new customers, our future results of operations could 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.
- We face intense competition and could lose market share to our competitors, which could adversely affect our business, financial condition, and results of operations.
- 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.
- 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 breached, our reputation may be damaged and our financial results may be negatively affected.
- Our business is focused on cloud-based data analytics, and cybersecurity, privacy, and other regulations may affect how we collect and process certain types of data.
- 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.
- 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.
- 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.
- 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.
- 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.

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 3,394 employees as of January 31, 2021. 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 $140.1 million, $141.8 million, and $92.6 million for fiscal 2019, fiscal 2020, and fiscal 2021, respectively. As of January 31, 2021, we had an accumulated deficit of $730.1 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 have incurred and expect to continue 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.

The COVID-19 pandemic could adversely affect our business, operating results and future revenue.

In March 2020, the World Health Organization declared COVID-19 a global pandemic. This contagious disease outbreak has spread across the globe and is impacting worldwide economic activity and financial markets. In light of the uncertain and rapidly evolving situation relating to the spread of COVID-19, we have taken precautionary measures intended to mitigate the spread of the virus and minimize the risk to our employees, customers, partners, and the communities in which we operate. These measures include transitioning our employee population to work remotely from home until at least April 30, 2021, imposing travel restrictions for our employees, shifting customer, partner and investor events to virtual-only formats, and limiting capacity at any of our offices which have reopened or may reopen during the pandemic's duration. These precautionary measures could negatively affect our customer success efforts, delay and lengthen our sales cycles, impact our sales and marketing efforts, reduce employee efficiency and productivity, slow our international expansion efforts, increase cybersecurity risks, and create operational or other challenges, any of which could harm our business and results of operations. Moreover, due to our subscription-based business model, the effect of the COVID-19 pandemic may not be fully reflected in our results of operations until future periods, if at all.

In addition, the COVID-19 pandemic may disrupt the operations of our customers and partners for an indefinite period of time. Some of our customers have been negatively impacted by the COVID-19 pandemic which could result in delays in accounts receivable collection, or result in decreased technology spending which could negatively affect our revenues.

More generally, the COVID-19 pandemic has adversely affected economies and financial markets globally, and continued uncertainty could lead to a prolonged economic downturn, which could result in a larger customer churn than we currently anticipate and reduced demand for our products and services, in which case our revenues could be significantly impacted. The impact of the COVID-19 pandemic may also exacerbate other risks discussed in this "Risk Factors" section and elsewhere in this Annual Report on Form 10-K. It is not possible at this time to estimate the impact that the COVID-19 pandemic could have on our business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted.

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, could 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 COVID-19, may cause our current and prospective 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, LLC, Broadcom Inc.'s Symantec Enterprise division, 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, VMware Carbon Black and SentinelOne, 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 if the attack would have otherwise been mitigated or prevented if the customer had fully deployed aspects of our Falcon platform. 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:

- the impact of the COVID-19 pandemic on our operations, financial results, and liquidity and capital resources, including on customers, sales, expenses, and employees;
- 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 President and 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.

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 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 additional debt financing, the holders of such debt would have priority over the holders of our Class A common stock, and we may be required to accept terms that further 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.

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 23%, 26%, and 28% of our total revenue from our international customers for fiscal 2019, fiscal 2020, fiscal 2021, 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, or FCPA the U.S. Travel Act and the UK Bribery Act 2010, or Bribery Act, 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, nearly 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 third-parties whose influence could negatively impact the perception of our brand and the market value of our Class A 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 Class A common stock.

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 at this time to estimate the impact that the COVID-19 pandemic could have on our business, as the impact will depend on future developments, which are highly uncertain and cannot be predicted. 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 geopolitical 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.

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 may be 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.

Risks Related to Intellectual Property, Legal, and Regulatory Matters

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, the Health Insurance Portability and Accountability Act, 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 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 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, with enforcement commencing on July 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. In addition, the California Privacy Rights Act of 2020, or the CPRA was passed by California voters in November 2020. The CPRA amends the CCPA by creating additional privacy rights for California consumers and additional obligations on businesses, which could subject us to additional compliance costs as well as potential fines, individual claims and commercial liabilities. The majority of the CPRA provisions will take effect on January 1, 2023. The CCPA and CPRA could mark the beginning of a trend toward more stringent privacy legislation in the United States, as other states or the federal government may follow California’s lead and increase protections for U.S. residents. For example, on March 2, 2021, the Virginia Consumer Data Protection Act, which will take effect on January 1, 2023, was signed into law. The CCPA has already prompted a number of proposals for new federal and state privacy legislation that, if passed, could increase our potential liability, add layers of complexity to compliance in the U.S. market, increase our compliance costs and adversely affect our business.

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 FCPA, the 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 the FCPA, the 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 sheets 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 (including all allegations of wage and hour violations), 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. Such claims, suits, and government investigations and proceedings 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 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 Falcon Complete customers a limited warranty, subject to certain conditions, 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.

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.

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 28, 2021, we had 195,247,309 shares of Class A common stock outstanding and 28,628,920 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, 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. 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.

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 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, 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, 2021, our executive officers, directors, one of our current stockholders and its respective affiliates held, in aggregate, 58% of the voting power of our outstanding capital stock. Furthermore, one of our current stockholders and its respective affiliates held, in aggregate, 24% 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, or its 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.

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.

Risks Related to our Indebtedness

Our indebtedness could adversely affect our financial condition.

As of January 31, 2021, we had $750.0 million of indebtedness outstanding (excluding intercompany indebtedness) and there is additional availability under our revolving facility of up to $750.0 million (excluding issued but undrawn letters of credit). Our indebtedness could have important consequences, including:

- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or other general corporate requirements;
- requiring a portion of our cash flows to be dedicated to debt service payments instead of other purposes, thereby reducing the amount of cash flows available for working capital, capital expenditures, acquisitions and other general corporate purposes;
- increasing our vulnerability to adverse changes in general economic, industry and competitive conditions;
- exposing us to the risk of increased interest rates as certain of our borrowings, including borrowings under our revolving facility, are at variable rates of interest; and increasing our cost of borrowing.

In addition, our revolving facility and the indenture that governs our Senior Notes contain restrictive covenants that limit our ability to engage in activities that may be in our long-term best interest. Our failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of substantially all of our indebtedness.

We may not be able to generate sufficient cash to service all of our indebtedness, including the notes, and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.

Our ability to make scheduled payments on or to refinance our debt obligations, including the Senior Notes, depends on our financial condition and results of operations, which in turn are subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We may not be able to maintain a level of cash flows from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness, including the notes.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we could face substantial liquidity problems and may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our indebtedness, including the Senior Notes. Our ability to restructure or refinance our debt will depend on, among other things, the condition of the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. The terms of existing or future debt instruments and the indenture that governs the Senior Notes may restrict us from adopting some of these alternatives. In addition, any failure to make payments of interest and principal on our outstanding indebtedness on a timely basis would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness. In the absence of such cash flows and resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations.

Further, our credit agreement contains provisions that restrict our ability to dispose of assets and use the proceeds from any such disposition. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them and these proceeds may not be adequate to meet any debt service obligations then due. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations.

Our inability to generate sufficient cash flows to satisfy our debt obligations, or to refinance our indebtedness on commercially reasonable terms or at all, would materially and adversely affect our financial position and results of operations.

If we cannot make scheduled payments on our indebtedness, we will be in default and holders of our Senior Notes could declare all outstanding principal and interest to be due and payable, the lenders under our revolving facility could terminate their commitments to loan money, our secured lenders could foreclose against the assets securing their borrowings and we could be forced into bankruptcy or liquidation. If we breach the covenants under our debt instruments, we would be in default under such instruments. The holders of such indebtedness could exercise their rights, as described above, and we could be forced into bankruptcy or liquidation.

Our revolving facility and the indenture that governs our Senior Notes contain terms which restrict our current and future operations, particularly our ability to respond to changes or to take certain actions.

Our revolving facility and the indenture that governs our Senior Notes contain a number of restrictive covenants that impose significant operating and financial restrictions on us and may limit our ability to engage in acts that may be in our long-term best interest, including, among other things, restrictions on our ability to:

- incur additional indebtedness and guarantee indebtedness;
- prepay, redeem or repurchase certain indebtedness;
- sell or otherwise dispose of assets;
- incur liens;

- enter into transactions with affiliates;
- alter the businesses we conduct;
- enter into agreements restricting our subsidiaries' ability to pay dividends; and
- consolidate, merge with, or sell all or substantially all of our assets to, another person.

The covenants in the indenture and supplemental indenture that govern the Senior Notes are subject to exceptions and qualifications.

In addition, the restrictive covenants in the credit agreement governing our revolving facility require us to maintain specified financial ratios and satisfy other financial condition tests. Our ability to meet those financial ratios and tests can be affected by events beyond our control, and we may not be able to meet them. These restrictive covenants could adversely affect our ability to:

- finance our operations;
- make needed capital expenditures;
- make strategic acquisitions or investments or enter into joint ventures;
- withstand a future downturn in our business, the industry or the economy in general;
- engage in business activities, including future opportunities, that may be in our best interest; and
- plan for or react to market conditions or otherwise execute our business strategies.

These restrictions may affect our ability to expand our business, which could have a material adverse effect on our business, financial condition and results of operations.

As a result of these restrictions, we will be limited as to how we conduct our business and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, that we will be able to obtain waivers from the lenders and/or amend the covenants.

Our failure to comply with the restrictive covenants described above and/or the terms of any future indebtedness from time to time could result in an event of default, which, if not cured or waived, could result in our being required to repay these borrowings before their due date. If we are forced to refinance these borrowings on less favorable terms or cannot refinance these borrowings, our results of operations and financial condition could be adversely affected.

Our revolving facility and the indenture that governs our Senior Notes contain cross-default provisions that could result in the acceleration of all of our indebtedness.

A breach of the covenants under our revolving facility or the indenture that governs our Senior Notes could result in an event of default under the applicable indebtedness. Such a default may allow the creditors to accelerate the related indebtedness and may result in the acceleration of any other indebtedness to which a cross-acceleration or cross-default provision applies. In addition, an event of default under the credit agreement governing our revolving facility would permit the lenders under our revolving facility to terminate all commitments to extend further credit under that facility. Furthermore, if we were unable to repay amounts due and payable under our revolving facility, those lenders could proceed against the collateral granted to them to secure that indebtedness. In the event our lenders or noteholders accelerate the repayment of our borrowings, we and our guarantors may not have sufficient assets to repay that indebtedness. Additionally, we may not be able to borrow money from other lenders to enable us to refinance our indebtedness.

The phase-out, replacement or unavailability of LIBOR could adversely affect our cost of capital or our financial condition.

The head of the United Kingdom Financial Conduct Authority has announced the desire to phase out the use of LIBOR by the end of 2021. Our revolving facility provides that LIBOR may be substituted in certain circumstances with an alternative benchmark interest rate, subject to notice to all lenders and the absence of objection by the lenders. Any such substitution could have an adverse impact on our cost of capital. Currently, there is no definitive information regarding which alternative benchmark interest rate that will replace LIBOR, how such alternative benchmark interest rate may differ from LIBOR, and when such substitution may occur. As such, we cannot determine the potential effect of such transition on our financial condition.

General Risk Factors

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.

We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley Act), the rules and regulations of Nasdaq, and other securities rules and regulations that impose various requirements on public companies. Our management and other personnel devote substantial time and resources to comply with these rules and regulations. Such compliance has increased, and will continue to 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. Additionally, to the extent we acquire other businesses, the acquired company may not have a sufficiently robust system of internal controls and we may uncover new deficiencies. 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 result in an adverse opinion regarding our internal control over financial reporting from our independent registered public accounting firm, and lead to investigations or sanctions by regulatory authorities.

Section 404 of the Sarbanes-Oxley Act, requires our management 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. We are also required to have our independent registered public accounting firm attest to, and issue an opinion on, the effectiveness of our internal control over financial reporting. If we are unable to assert that our internal control over financial reporting is effective, or if, when required, our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal control over financial reporting, we could lose investor confidence in the accuracy and completeness of our financial reports, which would cause the price of our Class A common stock to decline.

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, our due diligence may fail to identify all of the problems, liabilities or other shortcomings or challenges of an acquired business, product or technology, including issues related to intellectual property, product quality or product architecture, regulatory compliance practices, revenue recognition or other accounting practices or issues with employees or customers. 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 do not 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.

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

As of January 31, 2021, we had aggregate U.S. federal and California net operating loss carryforwards of $1.1 billion and $122.6 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, 2021, we had net operating loss carryforwards for other states of $660.7 million that will begin to expire in 2024. As of January 31, 2021, we had federal and California research and development credit carryforwards of $38.7 million and $8.7 million, respectively. The federal research and development credit carryforwards will begin to expire in 2031, and the California carryforwards are carried forward indefinitely. As of January 31, 2021, we had aggregate United Kingdom net operating loss carryforwards of $50.2 million which 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.

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. Additionally, as a result of the global COVID-19 pandemic, many of management’s estimates and assumptions require increased judgment and carry a higher degree of variability and volatility. 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.

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, Oregon, and Washington, as well as locations internationally, including in Australia, Germany, India, Romania, Japan, Israel, Spain, the United Arab Emirates, Singapore, 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 a party to, and may from time to time in the future be involved in, various litigation matters and subject to claims that arise in the ordinary course of business, including claims asserted by third parties in the form of letters and other communications. For information regarding legal proceedings and other claims in which we are involved, see Note 12, “Commitments and Contingencies” in our Notes to Consolidated Financial Statements in Part II, Item 8 of this Annual Report on Form 10-K.

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 consolidated financial statements.

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 Class A common stock has been 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 Class A common stock. There is no public market for our Class B common stock.

Holders of Record

As of January 31, 2021, we had 24 holders of record of our Class A common stock and 98 holders of record of our Class B 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 2021 Annual Meeting of Stockholders to be filed with the Securities and Exchange Commission within 120 days of the fiscal year ended January 31, 2021.

Recent Sales of Unregistered Equity Securities and Use of Proceeds

(a) Sale of Unregistered Equity Securities

On September 30, 2020, we agreed to issue up to $5.3 million of shares of our Class A common stock, subject to service-based vesting and other conditions, to certain individual stockholders of Preempt Security in connection with our acquisition of Preempt Security. The transaction was exempt from registration under Section 4(a)(2) of the Securities Act.

(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.

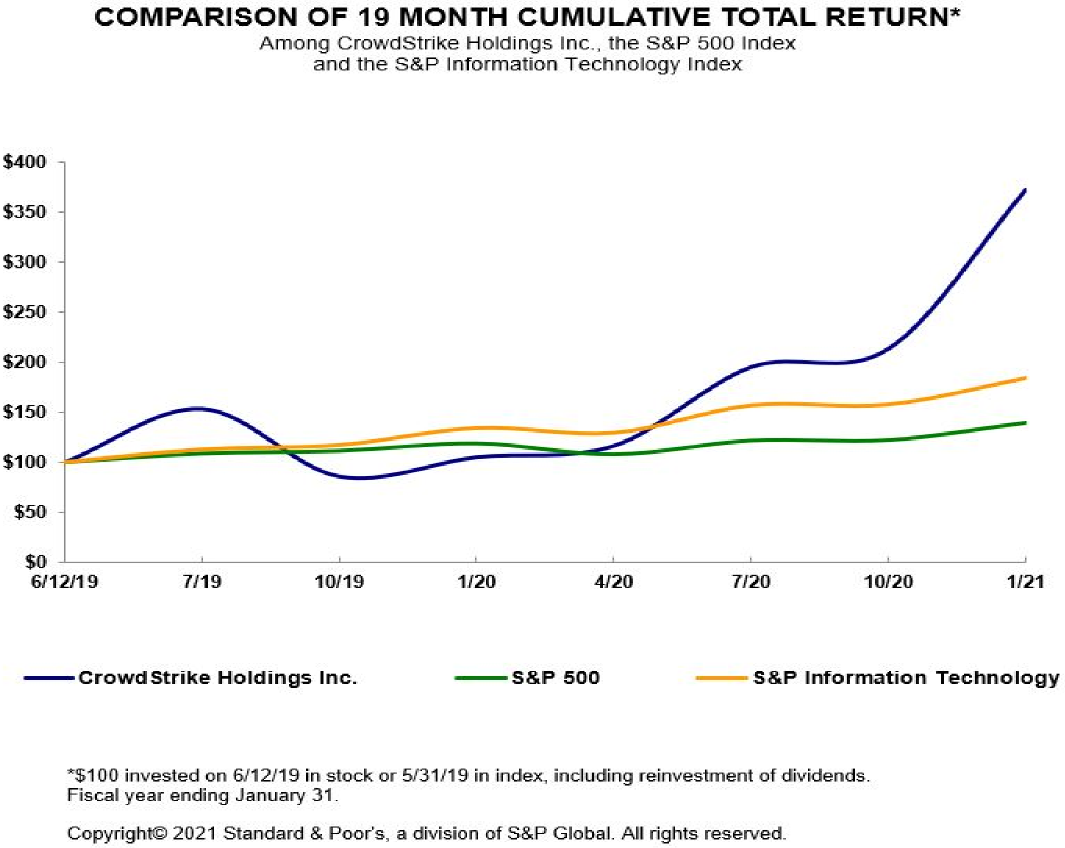
Issuer Purchases of Equity Securities

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, 2021 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	July 31, 2019	October 31, 2019	January 31, 2020	April 30, 2020	July 31, 2020	October 31, 2020	January 31, 2021
CrowdStrike Holdings, Inc.	$ 100.00	$ 153.57	$ 86.05	$ 105.33	$ 116.66	$ 195.17	$ 213.52	$ 372.07
S&P 500	$ 100.00	$ 108.59	$ 111.22	$ 118.69	$ 107.71	$ 121.57	$ 122.02	$ 139.17
S&P Information Technology	$ 100.00	$ 112.77	$ 117.16	$ 134.13	$ 129.30	$ 156.64	$ 157.56	$ 183.94

Item 6. Selected Financial Data

The selected consolidated statements of operations data presented below for fiscal 2021, fiscal 2020, and fiscal 2019 and the consolidated balance sheets data as of January 31, 2021 and 2020 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 2018 and 2017 and the consolidated balance sheets data as of January 31, 2019, 2018, and 2017 have been derived from our audited consolidated financial statements that are 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, 2020, we adopted the Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842) as discussed in Note 2, "Summary of Significant Accounting Policies" to our consolidated financial statements in this Annual Report on Form 10-K. Prior periods were not retrospectively adjusted, and accordingly, the consolidated statements of operations for the years ended January 31, 2020, 2019, 2018, and 2017 and the consolidated balance sheets as of January 31, 2020, 2019, 2018, and 2017 were prepared using the prior lease accounting standard referred to as ASC Topic 840. Effective February 1, 2019, the Company adopted 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 in this Annual Report on Form 10-K. 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 sheets 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,				
	2021	2020	2019	2018	2017
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenue					
Subscription	$ 804,670	$ 436,323	$ 219,401	$ 92,568	$ 37,895
Professional services	69,768	45,090	30,423	26,184	14,850
Total revenue	874,438	481,413	249,824	118,752	52,745
Cost of revenue					
Subscription [(1)(2)]	185,212	112,474	69,208	39,857	24,378
Professional services [(1)]	44,333	29,153	18,030	14,629	9,628
Total cost of revenue	229,545	141,627	87,238	54,486	34,006
Gross profit	644,893	339,786	162,586	64,266	18,739
Operating expenses					
Sales and marketing[(1)(2)]	401,316	266,595	172,682	104,277	53,748
Research and development[(1)(2)]	214,670	130,188	84,551	58,887	39,145
General and administrative[(1)(3)]	121,436	89,068	42,217	32,542	16,402
Total operating expenses	737,422	485,851	299,450	195,706	109,295
Loss from operations	(92,529)	(146,065)	(136,864)	(131,440)	(90,556)
Interest expense[(4)]	(1,559)	(442)	(428)	(1,648)	(615)
Other income (expense), net	6,219	6,725	(1,418)	(1,473)	(82)
Loss before provision for income taxes	(87,869)	(139,782)	(138,710)	(134,561)	(91,253)
Provision for income taxes	4,760	1,997	1,367	929	87
Net loss	$ (92,629)	$ (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	$ (92,629)	$ (141,779)	$ (140,077)	$ (141,343)	$ (108,352)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted[(5)]	$ (0.43)	$ (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[(5)]	217,756	148,062	44,863	41,876	39,706

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

	Year Ended January 31,				
	2021	2020	2019	2018	2017
	(in thousands)				
Subscription cost of revenue	$ 11,705	$ 5,226	$ 689	$ 89	$ 50
Professional services cost of revenue	6,005	2,486	205	252	41
Sales and marketing	50,557	23,919	5,175	1,386	638
Research and development	40,274	15,403	7,815	3,429	561
General and administrative	41,134	32,906	6,621	7,187	704
Total stock-based compensation expense	$ 149,675	$ 79,940	$ 20,505	$ 12,343	$ 1,994

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

	Year Ended January 31,				
	2021	2020	2019	2018	2017
	(in thousands)				
Subscription cost of revenue	$ 1,057	$ 323	$ 327	$ 287	$ 97
Sales and marketing	362	123	143	20	—
Research and development	29	41	113	321	—
Total amortization of purchased intangibles	$ 1,448	$ 487	$ 583	$ 628	$ 97

(3) Includes acquisition-related expenses as follows:

	Year Ended January 31,				
	2021	2020	2019	2018	2017
	(in thousands)				
General and administrative	$ 3,758	$ —	$ —	$ 167	$ —
Total acquisition-related expenses	$ 3,758	$ —	$ —	$ 167	$ —

(4) Includes amortization of debt issuance costs and discount as follows:

	Year Ended January 31,				
	2021	2020	2019	2018	2017
	(in thousands)				
Interest expense	$ 347	$ —	$ —	$ —	$ —
Total amortization of debt issuance costs and discount	$ 347	$ —	$ —	$ —	$ —

(5) See Note 2 and Note 16 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,				
	2021	2020	2019	2018	2017
	(in thousands)				
Consolidated Balance Sheets Data:					
Cash, cash equivalents and marketable securities	$ 1,918,608	$ 912,064	$ 191,655	$ 65,772	$ 33,450
Working capital (deficit)[1]	$ 1,428,721	$ 678,540	$ 49,968	$ (12,279)	$ (19,013)
Total assets	$ 2,732,533	$ 1,404,906	$ 433,219	$ 217,703	$ 91,371
Deferred revenue, current and noncurrent	$ 911,895	$ 571,168	$ 290,067	$ 158,950	$ 76,551
Long-term debt	$ 738,029	$ —	$ —	$ —	$ —
Redeemable convertible preferred stock	$ —	$ —	$ 557,912	$ 351,016	$ 214,728
Accumulated deficit	$ (730,116)	$ (637,487)	$ (519,126)	$ (378,948)	$ (243,458)
Total stockholders' equity (deficit)	$ 871,874	$ 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. Some of the information contained in this discussion and analysis or set forth elsewhere in this Annual Report on Form 10-K, including information with respect to our plans and strategy for our business, includes forward-looking statements that involve risks and uncertainties, including those described under the heading "Special Note Regarding Forward-Looking Statements." You should review the disclosure under Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. Our fiscal years ended January 31, 2021, January 31, 2020, and January 31, 2019, are referred to herein as fiscal 2021, fiscal 2020, and fiscal 2019, 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 customer relationship management, human resources, 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, cloud workloads, cloud containers, mobile, 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. Our single lightweight agent is installed on each endpoint or the cloud workload host 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 19 cloud modules via a SaaS subscription-based model that spans multiple large markets, including corporate workload security, security and vulnerability management, managed security services, IT operations management, threat intelligence services, identity protection and log management.

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.

In March 2020, the World Health Organization declared the COVID-19 outbreak to be a pandemic. Since then, the COVID-19 pandemic has rapidly spread across the globe and has already resulted in significant volatility, uncertainty, and economic disruption. Thus far, the impact of the pandemic has been modest with some customers, particularly in heavily impacted industries, requesting special billing or payment terms. Our gross retention rate for the fourth quarter of fiscal 2021 remained consistently high and our dollar-based net retention rate once again exceeded 120 percent as we continued to expand module adoption within new and existing customers. In March 2020, we implemented several measures to help protect the health and safety of our employees around the globe including restricting all travel and transitioning 100% of our workforce to be remote. In addition, in response to the uncertain macroeconomic environment, we converted all of our marketable securities to cash and cash equivalents, and as of January 31, 2021, all of our investments were classified as cash.

We continue to conduct business as usual with modifications to employee travel, employee work locations, customer interactions, and cancellation of certain marketing events, among other things. 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. The extent to which the COVID-19 pandemic may impact our longer-term operational and financial performance remains uncertain. Furthermore, due to our subscription-based business model, the effect of the COVID-19 pandemic may not be fully reflected in our results of operations until future periods, if at all. The extent of the impact of the COVID-19 pandemic will depend on several factors, including the pace of reopening the economy around the world; the possible resurgence in the spread of the virus; the development cycle of therapeutics and vaccines; the impact on our customers and our sales cycles; the impact on our customer, employee, and industry events; and the effect on our vendors. Please see Part I, Item 1A, "Risk Factors" in this Annual Report on Form 10-K for a further description of the material risks we currently face, including risks related to the COVID-19 pandemic.

In March 2020, we launched two initiatives to help our customers quickly onboard new remote workers without sacrificing protection or having to worry about a procurement cycle. This included a surge relief plan that allows our customers to surge the number of endpoints for a limited time. Additionally, we launched a Falcon Prevent for Home Use program that allows our customers' company administrators to install Falcon Prevent on their employees' home systems. We believe both of these initiatives have been well received by our customers.

On September 30, 2020, we acquired Preempt Security, a privately-held Delaware corporation that developed real-time access control and threat prevention technology (the "Acquisition"). The total consideration transferred was $91.2 million which consisted of $87.4 million in cash and $3.8 million representing the fair value of replacement equity awards attributable to pre-acquisition service. The purchase price was allocated, on a preliminary basis, to identified intangible assets, which include developed technology, customer relationships and trade names, of $16.4 million, net tangible assets acquired of $(0.5) million and goodwill of $75.3 million, representing the excess of the purchase price over the fair value of net tangible and intangible assets acquired. With this acquisition, we plan to offer customers enhanced Zero Trust security capabilities and strengthen our Falcon platform with conditional access technology. The addition of Preempt Security's technology to the Falcon platform will help customers achieve end-to-end visibility and enforcement on identity data.

On January 4, 2021, we amended and restated our existing credit agreement (the "A&R Credit Agreement" and the facility thereunder the "Revolving Facility") among CrowdStrike, Inc., as borrower, CrowdStrike Holdings, Inc., as guarantor, and Silicon Valley Bank and the other lenders party thereto, providing us with a revolving line of credit of up to $750.0 million, including a letter of credit sub-facility in the aggregate amount of $100.0 million, and a swingline sub-facility in the aggregate amount of $50.0 million. We also have the option to request an incremental facility of up to an additional $250.0 million from one or more of the lenders under the A&R Credit Agreement. The A&R Credit Agreement is guaranteed by all of our material domestic subsidiaries. The maturity date under the A&R Credit Agreement is January 2, 2026.

On January 20, 2021, we issued and sold $750.0 million aggregate principal amount of 3.000% Senior Notes due 2029 (the "Senior Notes"). The Senior Notes are guaranteed by one of our subsidiaries, CrowdStrike, Inc., as of the closing date, and thereafter will be guaranteed by any of our domestic subsidiaries that become borrowers or guarantors under our senior secured revolving credit facility. The Senior Notes and the guarantee are general unsecured senior obligations and rank equal in right of payment to all of our existing and future senior indebtedness. Interest will be payable semi-annually at a rate of 3.000% per year. The Senior Notes will mature on February 15, 2029. We may redeem the Senior Notes prior to maturity under certain circumstances. The net proceeds from the debt offering were $739.6 million after deducting the underwriting commissions of $9.4 million and $1.0 million of issuance costs, which were paid as of January 31, 2021.

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. We currently have 19 cloud modules that span multiple large markets.

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 grow as 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,		
	2021	**2020**	**2019**
Subscription customers	9,896	5,431	2,516
Year-over-year growth	82 %	116 %	103 %

We added 4,465 net new subscription customers during fiscal 2021, including 64 from the acquisition of Preempt Security, for a total of 9,896 subscription customers as of January 31, 2021, representing 82% growth year-over-year.

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,		
	2021	**2020**	**2019**
	(dollars in thousands)		
Annual recurring revenue	$ 1,050,051	$ 600,456	$ 312,656
Year-over-year growth	75 %	92 %	121 %

ARR increased 75% year-over-year and grew to $1.1 billion as of January 31, 2021, of which $449.6 million was net new ARR added during fiscal 2021, including $6.8 million from the acquisition of Preempt Security.

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,		
	2021	2020	2019
Dollar-based net retention rate	125 %	124 %	147 %

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. 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 the majority of our subscription customers are 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. The majority of our customers are invoiced 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, amortization of acquired intangibles, 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; amortization of acquired intangibles, and cloud hosting and related services costs related to proof of value efforts. We capitalize and amortize 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 amortize 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 expenses to decrease as a percentage of our total revenue over time, although our sales and marketing expenses may fluctuate as a percentage of our total revenue from period-to-period depending on the timing of these expenses.

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.

As a public company, we expect general and administrative expenses to increase in dollar amount over time. However, we anticipate general and administrative expenses to decrease as a percentage of our total revenue over time although our general and administrative expenses may fluctuate as a percentage of our total revenue from period-to-period depending on the timing of these expenses.

Interest Expense: Interest Expense consists primarily of interest expense on our secured revolving credit facility, interest expense from amortization of debt issuance costs, and contractual interest expense for our Senior Notes issued in January 2021. We expect interest expense to be higher in fiscal 2022 as a result of the issuance of our Senior Notes.

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 and foreign currency transaction gains and losses.

Provision for Income Taxes. Provision for income taxes consists of federal and state income taxes in the United States and income taxes and withholding taxes related to customer payments in certain foreign jurisdictions in which we conduct business. We maintain a full valuation allowance on our U.S. federal and state and UK deferred tax assets that we have determined are not realizable on a more likely than not basis.

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,		
	2021	**2020**	**2019**
		(in thousands)	
Revenue			
Subscription	$ 804,670	$ 436,323	$ 219,401
Professional services	69,768	45,090	30,423
Total revenue	874,438	481,413	249,824
Cost of revenue			
Subscription(1)(2)	185,212	112,474	69,208
Professional services(1)	44,333	29,153	18,030
Total cost of revenue	229,545	141,627	87,238
Gross profit	644,893	339,786	162,586
Operating expenses			
Sales and marketing(1)(2)	401,316	266,595	172,682
Research and development(1)(2)	214,670	130,188	84,551
General and administrative(1)(3)	121,436	89,068	42,217
Total operating expenses	737,422	485,851	299,450
Loss from operations	(92,529)	(146,065)	(136,864)
Interest expense(4)	(1,559)	(442)	(428)
Other income (expense), net	6,219	6,725	(1,418)
Loss before provision for income taxes	(87,869)	(139,782)	(138,710)
Provision for income taxes	4,760	1,997	1,367
Net loss	$ (92,629)	$ (141,779)	$ (140,077)

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

	Year Ended January 31,		
	2021	**2020**	**2019**
		(in thousands)	
Subscription cost of revenue	$ 11,705	$ 5,226	$ 689
Professional services cost of revenue	6,005	2,486	205
Sales and marketing	50,557	23,919	5,175
Research and development	40,274	15,403	7,815
General and administrative	41,134	32,906	6,621
Total stock-based compensation expense	$ 149,675	$ 79,940	$ 20,505

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

	Year Ended January 31,		
	2021	2020	2019
		(in thousands)	
Subscription cost of revenue	$ 1,057	$ 323	$ 327
Sales and marketing	362	123	143
Research and development	29	41	113
Total amortization of purchased intangibles	$ 1,448	$ 487	$ 583

(3) Includes acquisition-related expenses as follows:

	Year Ended January, 31		
	2021	2020	2019
		(in thousands)	
General and administrative	$ 3,758	$ —	$ —
Total acquisition-related expenses	$ 3,758	$ —	$ —

(4) Includes amortization of debt issuance costs and discount as follows:

	Year Ended January, 31		
	2021	2020	2019
		(in thousands)	
Interest expense	$ 347	$ —	$ —
Total amortization of debt issuance costs and discount	$ 347	$ —	$ —

The following table presents the components of our consolidated statements of operations as a percentage of total revenue for the periods presented:

	Year Ended January 31,		
	2021	2020	2019
	%	%	%
Revenue			
Subscription	92 %	91 %	88 %
Professional services	8 %	9 %	12 %
Total revenue	100 %	100 %	100 %
Cost of revenue			
Subscription	21 %	23 %	28 %
Professional services	5 %	6 %	7 %
Total cost of revenue	26 %	29 %	35 %
Gross profit	74 %	71 %	65 %
Operating expenses			
Sales and marketing	46 %	55 %	69 %
Research and development	25 %	27 %	34 %
General and administrative	14 %	19 %	17 %
Total operating expenses	84 %	101 %	120 %
Loss from operations	(11)%	(30)%	(55)%
Interest expense	— %	— %	— %
Other income (expense), net	1 %	1 %	(1)%
Loss before provision for income taxes	(10)%	(29)%	(56)%
Provision for income taxes	1 %	— %	1 %
Net loss	(11)%	(29)%	(56)%

Comparison of Fiscal 2021 and Fiscal 2020

Revenue

The following shows total revenue from subscriptions and professional services for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	**2020**	**$**	**%**
		(dollars in thousands)		
Subscription	$ 804,670	$ 436,323	$ 368,347	84 %
Professional services	69,768	45,090	24,678	55 %
Total revenue	$ 874,438	$ 481,413	$ 393,025	82 %

Total revenue increased by $393.0 million, or 82%, in fiscal 2021, compared to fiscal 2020. Subscription revenue accounted for 92% of our total revenue in fiscal 2021, and 91% in fiscal 2020. Professional services revenue accounted for 8% of our total revenue in fiscal 2021 and 9% in fiscal 2020.

Subscription revenue increased by $368.3 million, or 84%, in fiscal 2021, compared to fiscal 2020. This increase was primarily attributable to the addition of new subscription customers, as we increased our customer base by 82%, from 5,431 subscription customers in fiscal 2020 to 9,896 subscription customers in fiscal 2021. 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 33%, 36%, and 31% of total subscription revenue in fiscal 2021, 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 40%, 33%, and 27% of total subscription revenue in fiscal 2020, respectively.

Professional services revenue increased by $24.7 million, or 55%, in fiscal 2021, compared to fiscal 2020, and was primarily attributable to an increase in the number of professional service hours performed.

The following shows cost of revenue related to subscriptions and professional services for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	**2020**	**$**	**%**
		(dollars in thousands)		
Subscription	$ 185,212	$ 112,474	$ 72,738	65 %
Professional services	44,333	29,153	15,180	52 %
Total cost of revenue	$ 229,545	$ 141,627	$ 87,918	62 %

Total cost of revenue increased by $87.9 million, or 62%, in fiscal 2021, compared to fiscal 2020. Subscription cost of revenue increased by $72.7 million, or 65%, in fiscal 2021, compared to fiscal 2020. The increase in subscription cost of revenue was primarily due to an increase in employee-related expenses of $27.6 million driven by a 74% increase in average headcount, an increase in cloud hosting and related services of $23.3 million driven by increased customer activity, an increase in depreciation of data center equipment of $7.8 million, an increase in stock-based compensation expense of $6.5 million, an increase in allocated overhead costs of $4.1 million, an increase in the amortization of internal use software of $1.6 million, and an increase in employee health insurance expense of $1.4 million, partially offset by a $1.2 million decrease in travel related costs due to the fact that, as a result of the COVID-19 pandemic, a majority of our workforce was working remotely and incurred limited travel costs during fiscal 2021.

Professional services cost of revenue increased by $15.2 million, or 52%, in fiscal 2021, compared to fiscal 2020. The increase in professional services cost of revenue was primarily due to an increase in employee-related expenses of $11.4 million driven by an increase in average headcount of 47% and an increase in stock-based compensation expense of $3.5 million, partially offset by a $1.1 million decrease in travel related costs due to the fact that, as a result of the COVID-19 pandemic, a majority of our workforce was working remotely and incurred limited travel costs during fiscal 2021.

The following shows gross profit and gross margin for subscriptions and professional services for fiscal 2021, as compared to fiscal 2020.

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
Subscription gross profit	$ 619,458	$ 323,849	$ 295,609	91 %
Professional services gross profit	25,435	15,937	9,498	60 %
Total gross profit	$ 644,893	$ 339,786	$ 305,107	90 %

	Year Ended January 31,		
	2021	2020	Change
Subscription gross margin	77 %	74 %	3 %
Professional services gross margin	36 %	35 %	2 %
Total gross margin	74 %	71 %	3 %

Subscription gross margin increased by 3%, in fiscal 2021, compared to fiscal 2020. This increase was a result of continuing to shift more of our operations from third-party cloud service providers to colocation data centers, renegotiating the terms of a third-party cloud service provider contract, and continued optimization of our software development and our cloud database systems, which has resulted in reduced data center usage. This increase in gross margin was also due to the continued expansion of module adoption by our customer base. As of January 31, 2021, 63% of our customer base had adopted four or more modules and 47% of our customer base had adopted five or more modules. As of January 31, 2020, 54% of our customer base had adopted four or more modules and 33% of our customer base had adopted five or more modules. 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. We expect gross margin to fluctuate quarter to quarter given the timing of turning on new cloud data centers in new geographies to accommodate increased activity and demand.

Professional services gross margin increased by 2% in fiscal 2021, compared to fiscal 2020. The increase in professional services gross margin was due to an increase in utilization during fiscal 2021 compared to fiscal 2020

Operating Expenses

Sales and Marketing

The following shows sales and marketing expenses for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
Sales and marketing expenses	$ 401,316	$ 266,595	$ 134,721	51 %

Sales and marketing expenses increased by $134.7 million, or 51%, in fiscal 2021, compared to fiscal 2020. The increase in sales and marketing expenses was primarily due to an increase in employee-related expenses of $82.5 million driven by an increase in sales and marketing average headcount of 40%, an increase in stock-based compensation of $26.6 million, an increase in marketing programs of $21.5 million, an increase in allocated overhead costs of $5.5 million, an increase in employee health insurance expense of $2.0 million, an increase in company events expenses of $1.3 million, and an increase in contract labor costs of $1.1 million, partially offset by a $11.7 million decrease in travel-related costs due to the fact that, as a result of the COVID-19 pandemic, a majority of our workforce was working remotely and incurred limited travel costs during fiscal 2021.

Research and Development

The following shows research and development expenses for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
Research and development expenses	$ 214,670	$ 130,188	$ 84,482	65 %

Research and development expenses increased by $84.5 million, or 65% in fiscal 2021, compared to fiscal 2020. This increase was primarily due to an increase in employee-related expenses of $46.7 million driven by an increase in research and development average headcount of 59%, an increase in stock-based compensation of $24.9 million, an increase in cloud hosting and related costs of $7.3 million, an increase in allocated overhead costs of $5.2 million, an increase in depreciation of data center equipment of $3.6 million, and an increase in employee health insurance expense of $1.6 million, partially offset by a $3.1 million decrease in travel-related costs due to the fact that, as a result of the COVID-19 pandemic, a majority of our workforce was working remotely and incurred limited travel costs during fiscal 2021, and a decrease in expenses related to company events of $1.9 million.

General and Administrative

The following shows general and administrative expenses for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
General and administrative expenses	$ 121,436	$ 89,068	$ 32,368	36 %

General and administrative expenses increased by $32.4 million, or 36%, in fiscal 2021, compared to fiscal 2020. The increase in general and administrative expenses was primarily due an increase in employee-related expenses of $12.9 million driven by an increase in general and administrative average headcount of 51%, an increase in stock-based compensation expense of $8.2 million, an increase in consulting expense of $3.9 million primarily due to acquisition related expense and debt issuance costs, an increase in corporate insurance expense of $2.5 million due to an increase in directors and officers insurance as a result of being a public company, an increase in overhead costs of $2.0 million, an increase in accounting expenses of $1.5 million, an increase in business taxes and license fees of $1.4 million, and an increase in legal expenses of $1.3 million, partially offset by a decrease in expenses related to company events of $1.1 million and a decrease of $1.1 million in travel-related costs due to the fact that, as a result of the COVID-19 pandemic, a majority of our workforce was working remotely and incurred limited travel costs during fiscal 2021.

Interest Expense and Other Income, Net

The following shows interest and other expense, net, for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
Interest expense	$ (1,559)	$ (442)	$ (1,117)	253 %
Other income, net	$ 6,219	$ 6,725	$ (506)	(8)%

Interest Expense consists primarily of interest expense from the amortization of debt issuance costs and contractual interest expense for our Senior Notes issued in January 2021.

Other income, net, was $6.2 million in fiscal 2021 compared to $6.7 million in fiscal 2020. This decrease of $0.5 million was driven primarily by a decrease in interest income of $6.7 million due to lower prevailing rates in fiscal 2021 compared to fiscal 2020 and a decrease in income from a legal settlement of $1.3 million which occurred during fiscal 2020, partially offset by a decrease in expense related to the fair value of redeemable convertible preferred stock warrants of $6.0 million as the warrants were converted into common stock upon our IPO in June 2019 and an increase in realized gain on marketable securities of $1.3 million due to our having liquidated our portfolio of marketable securities during the first quarter of fiscal 2021 in response to the economic uncertainty surrounding the COVID-19 pandemic.

Provision for Income Taxes

The following shows the provision for income taxes for fiscal 2021, as compared to fiscal 2020:

	Year Ended January 31,		Change	
	2021	2020	$	%
	(dollars in thousands)			
Provision for income taxes	$ 4,760	$ 1,997	$ 2,763	138 %

The increase in the provision for income taxes of $2.8 million during fiscal 2021 compared to fiscal 2020 was primarily driven by an increase in international taxes from increased activity in certain foreign jurisdictions, withholding taxes related to customer payments, and U.S. income tax expense related to the realized gain on the sale of marketable securities, partially offset by a $0.9 million tax benefit from the acquisition of Preempt Security.

Comparison of Fiscal 2020 and Fiscal 2019

Revenue

The following shows 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.

Cost of Revenue, Gross Profit, and Gross Margin

The following shows 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 shows 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 shows 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 shows 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 shows 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 Expense and Other Income (Expense), Net

The following shows 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 shows provision for income taxes for fiscal 2020, as compared to fiscal 2019:

	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.

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 measures, may be helpful to investors because such measures provide consistency and comparability with past financial performance and, 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. 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.

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,		
	2021	2020	2019
	(dollars in thousands)		
GAAP subscription revenue	$ 804,670	$ 436,323	$ 219,401
GAAP subscription gross profit	$ 619,458	$ 323,849	$ 150,193
Add: Stock-based compensation expense	11,705	5,226	689
Add: Amortization of acquired intangible assets	1,057	323	327
Non-GAAP subscription gross profit	$ 632,220	$ 329,398	$ 151,209
GAAP subscription gross margin	77 %	74 %	68 %
Non-GAAP subscription gross margin	79 %	75 %	69 %

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

We define non-GAAP income (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 income (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 income (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,		
	2021	2020	2019
	(dollars in thousands)		
GAAP total revenue	$ 874,438	$ 481,413	$ 249,824
GAAP loss from operations	$ (92,529)	$ (146,065)	$ (136,864)
Add: Stock-based compensation expense	149,675	79,940	20,505
Add: Amortization of acquired intangible assets	1,448	487	583
Add: Acquisition-related expenses	3,758	—	—
Non-GAAP income (loss) from operations	$ 62,352	$ (65,638)	$ (115,776)
GAAP operating margin	(11)%	(30)%	(55)%
Non-GAAP operating margin	7 %	(14)%	(46)%

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. In addition, other companies may calculate free cash flow differently or not at all, which reduces the usefulness of free cash flow as a tool for comparison.

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,		
	2021	2020	2019
	(dollars in thousands)		
GAAP total revenue	$ 874,438	$ 481,413	$ 249,824
GAAP net cash provided by (used in) operating activities	$ 356,566	$ 99,943	$ (22,968)
Less: Purchases of property and equipment	(52,799)	(80,198)	(35,851)
Less: Capitalized internal-use software	(10,864)	(7,289)	(6,794)
Free cash flow	$ 292,903	$ 12,456	$ (65,613)
GAAP net cash provided by (used in) investing activities	$ 495,427	$ (629,631)	$ (142,030)
GAAP net cash provided by financing activities	$ 800,135	$ 706,144	$ 190,389
GAAP net cash provided by operating activities as a percentage of revenue	41 %	21 %	(9)%
Less: Purchases of property and equipment as a percentage of revenue	(6)%	(17)%	(14)%
Less: Capitalized internal-use software as a percentage of revenue	(1)%	(2)%	(3)%
Free cash flow margin	33 %	3 %	(26)%

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 elsewhere in this Annual Report on Form 10-K.

	Three Months Ended							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
	(in thousands)							
Revenue								
Subscription	$ 244,662	$ 213,530	$ 184,256	$ 162,222	$ 138,537	$ 114,221	$ 97,575	$ 85,990
Professional services	20,267	18,930	14,715	15,856	13,572	10,898	10,533	10,087
Total revenue	264,929	232,460	198,971	178,078	152,109	125,119	108,108	96,077
Cost of revenue								
Subscription[1][2]	54,348	49,583	44,037	37,244	34,616	29,221	24,946	23,691
Professional services[1]	12,384	11,944	10,354	9,651	8,801	8,134	6,636	5,582
Total cost of revenue	66,732	61,527	54,391	46,895	43,417	37,355	31,582	29,273
Gross profit	198,197	170,933	144,580	131,183	108,692	87,764	76,526	66,804
Operating expenses								
Sales and marketing[1][2]	112,449	105,602	95,127	88,138	75,803	68,675	65,274	56,843
Research and development[1][2]	66,070	57,539	50,483	40,578	38,691	35,992	31,630	23,875
General and administrative[1][3]	35,481	31,951	28,961	25,043	25,331	21,615	30,261	11,861
Total operating expenses	214,000	195,092	174,571	153,759	139,825	126,282	127,165	92,579
Loss from operations	(15,803)	(24,159)	(29,991)	(22,576)	(31,133)	(38,518)	(50,639)	(25,775)
Interest expense[4]	(1,049)	(193)	(174)	(143)	(145)	(132)	(164)	(1)
Other income (expense), net	682	272	732	4,533	3,203	3,579	(451)	394
Loss before provision for income taxes	(16,170)	(24,080)	(29,433)	(18,186)	(28,075)	(35,071)	(51,254)	(25,382)
Provision for income taxes	2,832	451	441	1,036	333	434	635	595
Net loss	$ (19,002)	$ (24,531)	$ (29,874)	$ (19,222)	$ (28,408)	$ (35,505)	$ (51,889)	$ (25,977)
Net loss per share attributable to common stockholders, basic and diluted	$ (0.09)	$ (0.11)	$ (0.14)	$ (0.09)	$ (0.14)	$ (0.17)	$ (0.40)	$ (0.55)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	221,700	219,401	216,695	213,129	207,565	204,096	130,091	47,205

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

	Three Months Ended							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
	(in thousands)							
Subscription cost of revenue	$ 3,849	$ 3,226	$ 2,635	$ 1,995	$ 2,062	$ 1,666	$ 1,233	$ 265
Professional services cost of revenue	2,058	1,551	1,425	971	955	784	644	103
Sales and marketing	15,456	12,811	13,603	8,687	8,408	7,355	6,638	1,518
Research and development	14,574	11,771	9,029	4,900	5,050	4,696	4,976	681
General and administrative	11,777	11,251	11,021	7,085	7,888	7,465	16,368	1,185
Total stock-based compensation expense	$ 47,714	$ 40,610	$ 37,713	$ 23,638	$ 24,363	$ 21,966	$ 29,859	$ 3,752

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

	Three Months Ended							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
	(in thousands)							
Subscription cost of revenue	$ 660	$ 272	$ 63	$ 62	$ 61	$ 61	$ 97	$ 104
Sales and marketing	209	91	31	31	31	30	32	30
Research and development	—	9	10	10	10	10	10	11
Total amortization of purchased intangibles	$ 869	$ 372	$ 104	$ 103	$ 102	$ 101	$ 139	$ 145

(3) Includes acquisition-related expenses as follows:

	Three Months Ended							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
	(in thousands)							
General and administrative	$ 1,639	$ 2,119	$ —	$ —	$ —	$ —	$ —	$ —
Total acquisition-related expenses	$ 1,639	$ 2,119	$ —	$ —	$ —	$ —	$ —	$ —

(4) Includes amortization of debt issuance costs and discount as follows:

	Three Months Ended							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
	(in thousands)							
Interest expense	$ 347	$ —	$ —	$ —	$ —	$ —	$ —	$ —
Total amortization of debt issuance costs and discount	$ 347	$ —	$ —	$ —	$ —	$ —	$ —	$ —

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							
	January 31, 2021	October 31, 2020	July 31, 2020	April 30, 2020	January 31, 2020	October 31, 2019	July 31, 2019	April 30, 2019
Revenue								
Subscription	92 %	92 %	93 %	91 %	91 %	91 %	90 %	90 %
Professional services	8 %	8 %	7 %	9 %	9 %	9 %	10 %	10 %
Total revenue	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Cost of revenue								
Subscription	21 %	21 %	22 %	21 %	23 %	23 %	23 %	25 %
Professional services	5 %	5 %	5 %	5 %	6 %	7 %	6 %	6 %
Total cost of revenue	25 %	26 %	27 %	26 %	29 %	30 %	29 %	30 %
Gross margin	75 %	74 %	73 %	74 %	71 %	70 %	71 %	70 %
Operating expenses								
Sales and marketing	42 %	45 %	48 %	49 %	50 %	55 %	60 %	59 %
Research and development	25 %	25 %	25 %	23 %	25 %	29 %	29 %	25 %
General and administrative	13 %	14 %	15 %	14 %	17 %	17 %	28 %	12 %
Total operating expenses	81 %	84 %	88 %	86 %	92 %	101 %	118 %	96 %
Loss from operations	(6)%	(10)%	(15)%	(13)%	(20)%	(31)%	(47)%	(27)%
Interest expense	— %	— %	— %	— %	— %	— %	— %	— %
Other income (expense), net	— %	— %	— %	3 %	2 %	3 %	— %	— %
Loss before provision for income taxes	(6)%	(10)%	(15)%	(10)%	(18)%	(28)%	(47)%	(26)%
Provision for income taxes	1 %	— %	— %	1 %	— %	— %	1 %	1 %
Net loss	(7)%	(11)%	(15)%	(11)%	(19)%	(28)%	(48)%	(27)%

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 was primarily driven by an increase in employee-related expenses, cloud hosting and related expenses, depreciation of data center equipment, stock-based compensation expenses and amortization of internal-use software.

Quarterly Gross Margin Trends

The overall increase in gross margin over the course of the periods presented was primarily due to the continued expansion of module adoption by our customer base, the continuation to shift more of our operations from third-party cloud service providers to colocation data centers, renegotiating the terms of a third-party cloud service provider contract, and continued optimization of our software development and our cloud database systems, which has resulted in reduced data center usage.

Quarterly Expense Trends

Operating expenses generally have increased sequentially for each of the quarters presented, except for 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 and stock-based compensation. 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.

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 October 31, 2019 was primarily driven by interest income of $4.1 million driven by the investment of the proceeds of our initial public offering. The increase in Other income (expense), net during the three months ended April 30, 2020 was due to a realized gain on the sale of marketable securities of $1.3 million, as a result of liquidating our portfolio of marketable securities in response to the economic uncertainty surrounding the COVID-19 pandemic. The decrease in Other income (expense), net during the three months ended July 31, 2020 was primarily due to a decrease in interest income of $2.8 million due to the liquidation of our portfolio of marketable securities in the prior quarter.

The increase in Interest Expense during the three months ended January 31, 2021 was primarily driven by interest and amortization of debt issuance costs related to the $750.0 million Senior Notes issued in December 2020.

The increase in the provision for income taxes during the three months ended April 30, 2020 was primarily due to income tax expense of $0.4 million related to the realized gain on the sale of marketable securities. The increase in the provision for income taxes during the three months ended January 31, 2021 was primarily due to an increase in withholding tax related to customer payments, foreign taxes in jurisdictions where we operate, and U.S. state taxes.

Liquidity and Capital Resources

In January 2021, we issued and sold an aggregate principal amount of $750.0 million of 3.000% Senior Notes due 2029. The net proceeds from the debt offering were $739.6 million after deducting the underwriting commissions of $9.4 million and $1.0 million of issuance costs, which were paid as of January 31, 2021.

In January 2021, we amended and restated our existing senior secured revolving credit facility and increased the size of the credit facility from $150.0 million to $750.0 million, including a letter of credit sub-facility in the aggregate amount of $100.0 million, and a swingline sub-facility in the aggregate amount of $50.0 million. No amounts were outstanding under the credit facility as of January 31, 2021.

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.

As of January 31, 2021, we had cash and cash equivalents, consisting of highly liquid bank deposits, of $1.9 billion. During the first quarter of fiscal 2021, we liquidated our entire portfolio of marketable securities largely in response to the global economic uncertainty in conjunction with the COVID-19 pandemic. This resulted in the recognition of a realized gain of $1.3 million. We expect that our existing cash and cash equivalents will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next 12 months.

Since our inception, we have generated operating losses, as reflected in our accumulated deficit of $730.1 million as of January 31, 2021. We expect to continue to incur operating losses for the foreseeable future due to the investments we intend to continue to make, particularly in sales and marketing and research and development. As a result, we may require additional capital resources in the future 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, 2021, we had deferred revenue of $911.9 million, of which $702.0 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,		
	2021	2020	2019
		(in thousands)	
Net cash provided by (used in) operating activities	$ 356,566	$ 99,943	$ (22,968)
Net cash provided by (used in) investing activities	$ 495,427	$ (629,631)	$ (142,030)
Net cash provided by financing activities	$ 800,135	$ 706,144	$ 190,389

Operating Activities

Net cash provided by operating activities during fiscal 2021 was $356.6 million, which resulted from a net loss of $92.6 million, adjusted for non-cash charges of $263.6 million and net cash inflow of $185.6 million from changes in operating assets and liabilities. Non-cash charges primarily consisted of $149.7 million in stock-based compensation expense, $66.4 million of amortization of deferred contract acquisition costs, $38.7 million of depreciation and amortization, and $7.8 million of non-cash operating lease costs. The net cash inflow from changes in operating assets and liabilities was primarily due to a $338.8 million increase in deferred revenue, a $33.2 million increase in accrued payroll and benefits, a $23.8 million increase in accrued expenses and other current liabilities and a $11.3 million increase in accounts payable, partially offset by $151.0 million increase in deferred contract acquisition costs and a $72.5 million increase in accounts receivable.

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.

Investing Activities

Net cash provided by investing activities during fiscal 2021 of $495.4 million was primarily due to the sale of marketable securities of $639.6 million and the maturities of marketable securities of $91.6 million, partially offset by our acquisition of Preempt Security, net of cash acquired, of $85.5 million, purchases of marketable securities of $84.9 million, purchases of property and equipment of $52.8 million, and capitalized internal-use software of $10.9 million.

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.

Financing Activities

Net cash provided by financing activities of $800.1 million during fiscal 2021 was primarily due to $739.6 million related to the issuance of our Senior Notes, after deducting the underwriting commissions and issuance costs paid as of January 31, 2021, proceeds from our employee stock purchase plan of $34.3 million, and proceeds from the exercise of stock options of $28.8 million, partially offset by $3.3 million debt issuance costs related to the revolving credit facility.

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.

Debt Obligations

Revolving Credit Facility

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.

On January 4, 2021, we amended and restated our existing credit agreement (the “A&R Credit Agreement” and the facility thereunder the “Revolving Facility”) among CrowdStrike, Inc., as borrower, CrowdStrike Holdings, Inc., as guarantor, and Silicon Valley Bank and the other lenders party thereto, providing us with a revolving line of credit of up to $750.0 million, including a letter of credit sub-facility in the aggregate amount of $100.0 million, and a swingline sub-facility in the aggregate amount of $50.0 million. We also have the option to request an incremental facility of up to an additional $250.0 million from one or more of the lenders under the A&R Credit Agreement. The A&R Credit Agreement is guaranteed by all of our material domestic subsidiaries. The A&R Credit Agreement extended the maturity date of April 19, 2022 to January 2, 2026. Under the A&R Credit Agreement, revolving loans may be either Eurodollar Loans or Alternate Base Rate (“ABR”) Loans. Outstanding Eurodollar Loans incur interest at the Eurodollar Rate, which is defined as LIBOR (or any successor thereto), subject to a 0.00% LIBOR floor, plus a margin between 1.50% and 2.00%, depending on our senior secured leverage ratio. 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 (0.25%) and 0.25%, depending on the senior secured leverage ratio. We will be charged a commitment fee of 0.15% to 0.25% per year for committed but unused amounts, depending on the senior secured leverage ratio. The financial covenants require us to maintain a minimum consolidated interest coverage ratio of 3.00:1.00, a maximum senior secured leverage ratio of 3.00:1.00 (through January 31, 2023), and a maximum total leverage ratio of 5.50:1.00 stepping down to 3.50:1.00 over time. We were in compliance with the financial covenants as of January 31, 2021.

The A&R Credit Agreement is secured by substantially all of our current and future consolidated assets, property and rights, including, but not limited to, intellectual property, cash, goods, equipment, contractual rights, financial assets, and intangible assets of us and certain of our subsidiaries. The A&R Credit Agreement contains customary covenants limiting our ability and the ability of our subsidiaries 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.

No amounts were outstanding under the A&R Credit Agreement as of January 31, 2021.

Senior Notes

On January 20, 2021, we issued $750.0 million aggregate principal amount of 3.00% Senior Notes maturing in February 2029. The Senior Notes are guaranteed by our subsidiary, CrowdStrike, Inc. and will be guaranteed by each of our existing and future domestic subsidiaries that becomes a borrower or guarantor under our A&R Credit Agreement. The Senior Notes were issued at par and bear interest at a rate of 3.00% per annum. Interest payments are payable semiannually on February 15 and August 15 of each year, commencing on August 15, 2021. We may voluntarily redeem the Senior Notes, in whole or in part, 1) at any time prior to February 15, 2024 at (a) 100.00% of their principal amount, plus a “make whole” premium or (b) with the net cash proceeds received from an equity offering at a redemption price equal to 103.00% of the principal amount, provided the aggregate principal amount of all such redemptions does not exceed 40% of the original aggregate principal amount of the Senior Notes; 2) at any time on or after February 15, 2024 at a prepayment price equal to 101.50% of the principal amount; 3) at any time on or after February 15, 2025 at a prepayment price equal to 100.75% of the principal amount; and 4) at any time on or after February 15, 2026 at a prepayment price equal to 100.00% of the principal amount; in each case, plus accrued and unpaid interest, if any, to but excluding, the date of redemption.

The net proceeds from the debt offering were $739.6 million after deducting the underwriting commissions of $9.4 million and $1.0 million of issuance costs, which were paid as of January 31, 2021. An additional $1.6 million of issuance costs are expected to be paid in the first quarter of fiscal 2022. Debt issuance costs of $2.6 million are being amortized to interest expense using the effective interest method over the term of the Senior Notes. Interest expense related to contractual interest expense and amortization of debt issuance costs was $0.7 million and $0.1 million, respectively, during the fiscal year ended January 31, 2021.

In certain circumstances involving change of control events, we will be required to make an offer to repurchase all or, at the holder's option, any part, of each holder's Senior Notes at 101% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the repurchase date.

The indenture governing the Senior Notes (the "Indenture") contain covenants limiting our ability and the ability of our subsidiaries to create liens on certain assets to secure debt; grant a subsidiary guarantee of certain debt without also providing a guarantee of the Senior Notes; and consolidate or merge with or into, or sell or otherwise dispose of all or substantially all of our assets to, another person. These covenants are subject to a number of important limitations and exceptions. Certain of these covenants will not apply during any period in which the notes are rated investment grade by two of Fitch Ratings, Inc., Moody's Investors Service, Inc. and Standard & Poor's Ratings Services.

As of January 31, 2021, we were in compliance with all of our financial covenants under the Indenture associated with the Senior Notes.

Supplemental Guarantor Financial Information

Our Senior Notes are guaranteed on a senior, unsecured basis by CrowdStrike, Inc., a wholly owned subsidiary of CrowdStrike Holdings, Inc. (the "subsidiary guarantor," and together with CrowdStrike Holdings, Inc., the "Obligor Group"). The guarantee is full and unconditional, and is subject to certain conditions for release. For a brief description of the Senior Notes, see the section of this Annual Report on Form 10-K titled "Liquidity and Capital Resources—Senior Notes."

The Company conducts its operations almost entirely through its subsidiaries. Accordingly, the Obligor Group's cash flow and ability to service the notes will depend on the earnings of the Company's subsidiaries and the distribution of those earnings to the Obligor Group, whether by dividends, loans or otherwise. Holders of the guaranteed registered debt securities will have a direct claim only against the Obligor Group.

Summarized financial information is presented below for the Obligor Group on a combined basis after elimination of intercompany transactions and balances within the Obligor Group and equity in the earnings from and investments in any non-guarantor subsidiary. The summarized financial information of the Obligor Group also includes the amounts of Crowdstrike Services, Inc. which was a separate wholly owned subsidiary of the Company that was merged into Crowdstrike, Inc. on December 31, 2020, therefore becoming part of the Obligor Group prior to the issuance of the Senior Notes. The revenue amounts presented in the summarized financial information include substantially all of the Company's consolidated revenues, and there are no intercompany revenues from the non-guarantor subsidiaries. This summarized financial information has been prepared and presented pursuant to Regulation S-X Rule 13-01, "Financial Disclosures about Guarantors and Issuers of Guaranteed Securities" and is not intended to present the financial position or results of operations of the Obligor Group in accordance with U.S. GAAP.

Statement of operations	**Year Ended January 31, 2021**
	(in thousands)
Revenue	$ 873,653
Cost of revenue	230,045
Operating expenses	740,501
Loss from operations	(96,893)
Net loss	(91,707)

Balance sheets	January 31, 2021
	(in thousands)
Current assets (excluding intercompany receivables from non-Guarantors)	$ 2,249,834
Intercompany receivables from non-Guarantors	8,822
Noncurrent assets	398,656
Current liabilities	834,462
Noncurrent liabilities	988,391

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. We have made contributions to Falcon Fund totaling $1.3 million as of January 31, 2021.

Contractual Obligations and Commitments

The following table summarizes our contractual obligations as of January 31, 2021 and the fiscal years in which these obligations are due:

		Payments Due by Fiscal Year					
	Total	2022	2023	2024	2025	2026	Thereafter
	(in thousands)						
Real estate arrangements[(1)]	$ 46,184	$ 10,187	$ 10,879	$ 10,816	$ 9,973	$ 4,050	$ 279
Data center commitments[(2)]	97,781	66,807	10,395	10,719	5,415	3,012	1,433
Other purchase obligations[(3)]	77,225	31,251	24,738	21,222	14	—	—
Debt obligations[(4)]	750,000	—	—	—	—	—	750,000
Interest payments associated with all debt obligations[(5)]	186,563	22,596	22,875	23,257	23,844	25,553	68,438
Total	$ 1,157,753	$ 130,841	$ 68,887	$ 66,014	$ 39,246	$ 32,615	$ 820,150

(1) Relates to non-cancellable real estate arrangements where the amounts are reflected on an undiscounted basis. For additional information refer to Note 9, Leases, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.
(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.
(4) Relates to $750.0 million aggregate principal amount of Senior Notes due in fiscal 2030.
(5) Relates to the interest payments associated with the Senior Notes based on the principal amount multiplied by the applicable interest rate. The interest payment under the Revolving Credit Facility for the undrawn balance is payable at 15 bps as a commitment fee based on the daily undrawn balance and we utilized the existing rate for the projected interest payments included in the table above. For additional information refer to Note 5, Debt, of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

The contractual commitment amounts in the table above are associated with agreements that are enforceable and legally binding. Obligations under contracts, including purchase orders, that we can cancel without a significant penalty are not included in the table above. Purchase orders issued in the ordinary course of business are not included in the table above, as such purchase orders represent authorizations to purchase rather than binding agreements.

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 sheets as of January 31, 2021 or January 31, 2020.

We also agreed to indemnify our directors and certain executive officers 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 sheets as of January 31, 2021 or January 31, 2020.

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 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.

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

(1) Identify the contract with a customer

We consider the terms and conditions of 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) 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 us 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. Our 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 we are 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 our contracts contain a significant financing component.

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

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

(5) Recognize revenue when or as 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. We generate all our revenue from contracts with customers.

Subscription Revenue

Our 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. We initially record 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 our contracts are non-cancelable over the contractual term. Customers typically have the right to terminate their contracts for cause if we fail to perform in accordance with the contractual terms. Some 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 our SSP.

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. 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 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 accounts 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.

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 we recognized $17.3 million of deferred expense related to RSUs as of that date in its consolidated statement of operations. Upon our IPO, we began issuing RSUs to our 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 our 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 our common stock. PSUs generally vest over a four-year period based on the achievement of specified performance targets 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. We have made contributions to Falcon Fund totaling $1.3 million as of January 31, 2021.

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 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 material tax expense during the year ended January 31, 2021. 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.

Operating Leases

We enter into operating lease arrangements for real estate assets related to office space. We determine if an arrangement is or contains a lease at inception by evaluating various factors, including whether a vendor’s right to substitute an identified asset is substantive. Lease classification is determined at the lease commencement date, which is the date the leased assets are made available for use. Operating leases are included in “Operating lease right-of-use assets”, “Operating lease liabilities, current”, and “Operating lease liabilities, noncurrent” in the consolidated balance sheets. We did not have any financing leases in any of the periods presented.

Operating lease right-of-use assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease payments consist of the fixed payments under the arrangement, less any lease incentives, such as tenant improvement allowances. Variable costs, such as maintenance and utilities based on actual usage, are not included in the measurement of right-to-use assets and lease liabilities but are expensed when the event determining the amount of variable consideration to be paid occurs. As the implicit rate of the leases is not determinable, we use an incremental borrowing rate (“IBR”) based on the information available at the lease commencement date in determining the present value of lease payments. Lease expenses are recognized on a straight-line basis over the lease term.

We use the non-cancelable lease term when recognizing the right-of-use (“ROU”) assets and lease liabilities, unless it is reasonably certain that a renewal or termination option will be exercised. We account for lease components and non-lease components as a single lease component.

Leases with a term of twelve months or less are not recognized on the consolidated balance sheets but are recognized as expense on a straight-line basis over the term of the lease.

JOBS Act Accounting Election

On the last business day of our second quarter in fiscal 2021, the aggregate market value of our shares held by non-affiliate stockholders exceeded $700 million. As a result, as of January 31, 2021, we are considered a large accelerated filer as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, and we ceased to be an emerging growth company as defined in 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.

Interest Rate Risk

Our cash and cash equivalents primarily consist of cash on hand and highly liquid investments in corporate debt securities and bank deposits. 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, 2021, we had cash and cash equivalents of $1.9 billion and no marketable securities. 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. Due to the short-term nature of our investment portfolio, the effect of a hypothetical 100 basis point change in interest rates would not have had a material effect on the fair market value of our portfolio as of January 31, 2021. We therefore do not expect our results of operations or cash flows to be materially affected by a sudden change in market interest rates.

Our debt obligations consist of variety of financial instruments that expose us to interest rate risk, including, but not limited to our revolving credit facility and the Senior Notes. Interest on the revolving credit facility is tied to short term interest rate benchmarks including prime rate or LIBOR. Interest on the term loans is fixed.

Foreign Currency Risk

To date, nearly 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. During the year ended January 31, 2021, foreign currency exchange rate gain recorded to Other comprehensive income (loss) was $2.6 million. A hypothetical 10% decrease in the U.S. dollar against other currencies would have resulted in an increase in operating loss of approximately $17.2 million for the year ended January 31, 2021. 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.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of CrowdStrike Holdings, Inc. and its subsidiaries (the “Company”) as of January 31, 2021 and 2020, 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, 2021, including the related notes (collectively referred to as the “consolidated financial statements”). We also have audited the Company's internal control over financial reporting as of January 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of January 31, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2021 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of January 31, 2021, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for leases in 2021 and the manner in which it accounts for revenues from contracts with customers in 2020.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on the Company’s consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Revenue Recognition – Identification and Evaluation of Terms and Conditions in Contracts

As described in Note 2 to the consolidated financial statements, the Company generates its revenue from contracts with customers for subscriptions and professional services. Management considers the terms and conditions of contracts with customers and the Company's customary business practices in identifying contracts. Management determines the Company 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. Revenue is recognized when control of the promised services is transferred to the customer, in an amount that reflects the consideration expected to be received in exchange for those services. The Company's consolidated revenue for the year ended January 31, 2021 was $874 million.

The principal considerations for our determination that performing procedures relating to revenue recognition, specifically the identification and evaluation of terms and conditions in contracts, is a critical audit matter are the high degree of auditor subjectivity and effort in performing procedures and evaluating evidence relating to the identification and evaluation of terms and conditions in contracts.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the revenue recognition process, including controls over the identification and evaluation of terms and conditions in contracts. These procedures also included, among others, (i) testing management's process for identifying and evaluating terms and conditions in contracts, including evaluating management's determination of the impact of those terms and conditions on revenue recognition, and (ii) testing the completeness and accuracy of management's identification and evaluation of terms and conditions in contracts by examining revenue transactions on a test basis.

/s/ PricewaterhouseCoopers LLP
San Jose, California
March 18, 2021

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

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

	January 31, 2021	January 31, 2020
Assets		
Current assets:		
Cash and cash equivalents	$ 1,918,608	$ 264,798
Marketable securities	—	647,266
Accounts receivable, net of allowance for doubtful accounts of $1.2 million and $1.1 million as of January 31, 2021 and January 31, 2020, respectively	239,199	164,987
Deferred contract acquisition costs, current	80,850	42,971
Prepaid expenses and other current assets	53,617	51,614
Total current assets	2,292,274	1,171,636
Strategic investments	2,500	1,000
Property and equipment, net	167,014	136,078
Operating lease right-of-use assets	36,484	—
Deferred contract acquisition costs, noncurrent	117,906	71,235
Goodwill	83,566	7,722
Intangible assets, net	15,677	527
Other long-term assets	17,112	16,708
Total assets	$ 2,732,533	$ 1,404,906
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 12,065	$ 1,345
Accrued expenses	51,117	30,355
Accrued payroll and benefits	71,907	36,810
Operating lease liabilities, current	8,977	—
Deferred revenue	701,988	412,985
Other current liabilities	17,499	11,601
Total current liabilities	863,553	493,096
Long-term debt	738,029	—
Deferred revenue, noncurrent	209,907	158,183
Operating lease liabilities, noncurrent	31,986	—
Other liabilities, noncurrent	17,184	11,020
Total liabilities	1,860,659	662,299
Commitments and contingencies (Note 12)		
Stockholders' Equity		
Preferred stock, $0.0005 par value; 100,000 shares authorized as of January 31, 2021 and January 31, 2020; no shares issued and outstanding as of January 31, 2021 and January 31, 2020	—	—
Class A common stock, $0.0005 par value; 2,000,000 shares authorized as of January 31, 2021 and January 31, 2020; 195,039 shares, and 107,666 shares issued and outstanding as of January 31, 2021 and January 31, 2020, respectively; Class B common stock, $0.0005 par value; 300,000 shares authorized as of January 31, 2021 and January 31, 2020; 28,685 shares, and 105,282 shares issued and outstanding as of January 31, 2021 and January 31, 2020, respectively	112	106
Additional paid-in capital	1,598,259	1,378,479
Accumulated deficit	(730,116)	(637,487)
Accumulated other comprehensive income	2,319	1,009
Total CrowdStrike Holdings, Inc. stockholders' equity	870,574	742,107
Non-controlling interest	1,300	500
Total stockholders' equity	871,874	742,607
Total liabilities and stockholders' equity	$ 2,732,533	$ 1,404,906

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,		
	2021	2020	2019
Revenue			
Subscription	$ 804,670	$ 436,323	$ 219,401
Professional services	69,768	45,090	30,423
Total revenue	874,438	481,413	249,824
Cost of revenue			
Subscription	185,212	112,474	69,208
Professional services	44,333	29,153	18,030
Total cost of revenue	229,545	141,627	87,238
Gross profit	644,893	339,786	162,586
Operating expenses			
Sales and marketing	401,316	266,595	172,682
Research and development	214,670	130,188	84,551
General and administrative	121,436	89,068	42,217
Total operating expenses	737,422	485,851	299,450
Loss from operations	(92,529)	(146,065)	(136,864)
Interest expense	(1,559)	(442)	(428)
Other income (expense), net	6,219	6,725	(1,418)
Loss before provision for income taxes	(87,869)	(139,782)	(138,710)
Provision for income taxes	4,760	1,997	1,367
Net loss attributable to Class A and Class B common stockholders	$ (92,629)	$ (141,779)	$ (140,077)
Net loss per share attributable to Class A and Class B common stockholders, basic and diluted	$ (0.43)	$ (0.96)	$ (3.12)
Weighted-average shares used in computing net loss per share attributable to Class A and Class B common stockholders, basic and diluted	217,756	148,062	44,863

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,		
	2021	**2020**	**2019**
Net loss	$ (92,629)	$ (141,779)	$ (140,077)
Other comprehensive income (loss):			
Foreign currency translation adjustments	2,630	(410)	(878)
Reversal of unrealized gain upon sale of debt securities, net of tax	(1,320)	—	—
Unrealized gain on available-for-sale securities, net of tax	—	1,321	6
Other comprehensive income (loss)	1,310	911	(872)
Total comprehensive loss	$ (91,319)	$ (140,868)	$ (140,949)

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, 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**
Issuance of common stock upon exercise of options	—	—	7,752	6	28,825	—	—	—	28,831
Issuance of common stock under RSU release	—	—	1,994	—	—	—	—	—	—
Issuance of common stock under employee stock purchase plan	—	—	1,030	—	34,263	—	—	—	34,263
Vesting of early exercised options	—	—	—	—	3,318	—	—	—	3,318
Stock-based compensation expense	—	—	—	—	149,375	—	—	—	149,375
Capitalized stock-based compensation	—	—	—	—	3,686	—	—	—	3,686
Fair value of replacement equity awards attributable to pre-acquisition service	—	—	—	—	313	—	—	—	313
Net loss	—	—	—	—	—	(92,629)	—	—	(92,629)
Non-controlling interest	—	—	—	—	—	—	—	800	800
Other comprehensive loss	—	—	—	—	—	—	1,310	—	1,310
Balances at January 31, 2021	**—**	**$ —**	**223,724**	**$ 112**	**$ 1,598,259**	**$ (730,116)**	**$ 2,319**	**$ 1,300**	**$ 871,874**

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,		
	2021	2020	2019
Operating activities			
Net loss	$ (92,629)	$ (141,779)	$ (140,077)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:			
Depreciation and amortization	38,695	23,026	14,815
Loss on disposal of fixed assets	15	—	191
Amortization of intangible assets	1,448	487	583
Amortization of deferred contract acquisition costs	66,425	35,459	28,642
Non-cash operating lease cost	7,786	—	—
Change in fair value of redeemable convertible preferred stock warrant liability	—	6,022	3,576
Provision for bad debts	(544)	556	551
Stock-based compensation expense	149,675	79,940	20,505
Gain on debt and equity securities, net	(1,347)	—	—
Accretion (amortization) of marketable securities purchased at a premium (discount)	578	(1,247)	(1,152)
Non-cash interest expense	853	435	98
Other non-cash charges	—	(427)	—
Changes in operating assets and liabilities			
Accounts receivable	(72,478)	(73,067)	(33,413)
Deferred contract acquisition costs	(150,975)	(86,594)	(45,073)
Prepaid expenses and other assets	1,203	(43,467)	(5,819)
Accounts payable	11,325	(6,570)	(2,403)
Accrued expenses and other current liabilities	23,838	9,173	3,564
Accrued payroll and benefits	33,212	17,526	971
Operating lease liabilities	(8,105)	—	—
Deferred revenue	338,803	280,768	131,117
Other liabilities	8,788	(298)	356
Net cash provided by (used in) operating activities	356,566	99,943	(22,968)
Investing activities			
Purchases of property and equipment	(52,799)	(80,198)	(35,851)
Capitalized internal-use software	(10,864)	(7,289)	(6,794)
Purchase of strategic investments	(1,500)	(1,000)	—
Business acquisition, net of cash acquired	(85,517)	—	—
Purchase of intangible assets	(180)	—	—
Purchases of marketable securities	(84,904)	(779,701)	(199,335)
Proceeds from sales of marketable securities	639,586	9,581	—
Maturities of marketable securities	91,605	228,976	99,950
Net cash provided by (used in) investing activities	495,427	(629,631)	(142,030)
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
Repayment of loan payable	—	—	(6,158)
Proceeds from revolving line of credit	—	—	10,000
Issuance costs related to revolving line of credit	(3,328)	—	—
Repayment of revolving line of credit	—	—	(20,000)
Proceeds from issuance of Senior Notes, net of debt financing costs	739,569	—	—
Repayment of notes receivable from related parties	—	—	198
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	28,831	21,512	3,912
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	34,263	12,365	—
Settlement related to stockholder short-swing trade profit	—	2,283	—
Capital contributions from non-controlling interest holders	800	500	—
Net cash provided by financing activities	800,135	706,144	190,389
Effect of foreign exchange rates on cash and cash equivalents	1,682	(66)	(162)
Net increase in cash and cash equivalents	1,653,810	176,390	25,229
Cash and cash equivalents, beginning of period	264,798	88,408	63,179
Cash and cash equivalents, end of period	$ 1,918,608	$ 264,798	$ 88,408
Supplemental disclosure of cash flow information:			
Interest paid	$ 18	$ 7	$ 449
Income taxes paid, net of refunds received	$ 1,732	$ 1,862	$ 1,394
Supplemental disclosure of non-cash investing and financing activities:			
Contingent consideration associated with business combinations	$ —	$ —	$ 474
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	$ 1,042	$ (3,193)	$ 3,004
Vesting of early exercised stock options	$ 3,318	$ 2,704	$ 543
Equity consideration for acquisitions	$ 3,842	$ —	$ —
Debt financing costs, accrued but not paid	$ 1,581	$ —	$ —
Operating lease liabilities arising from obtaining operating right of-use assets	$ 6,249	$ —	$ —

The accompanying notes are an integral part of these 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 and cloud workload protection that offers 19 cloud modules and its Falcon platform via a software as a service ("SaaS") subscription-based model that spans multiple security markets, including corporate workload security, security and vulnerability management, managed security services, IT operations management, threat intelligence services, identity protection and log management. 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, Israel, 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 ("U.S. GAAP"). Effective February 1, 2020, the Company adopted the Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842) as discussed in Note 2 below. Prior periods were not retrospectively recast, and accordingly, the consolidated balance sheet as of January 31, 2020, and the consolidated statements of operations for the years ended January 31, 2020 and 2019 were prepared using the prior lease accounting standard referred to as ASC Topic 840. 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 recast, and accordingly, the consolidated statements of operations for the year ended January 31, 2019 was 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.

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 include, but are not limited to, revenue recognition, the allowance for doubtful accounts, the carrying value and the 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 discount rate used for operating leases, the recognition and disclosure of contingent liabilities, income taxes, stock-based compensation, the fair value of assets acquired and liabilities assumed for business combinations, and the accounting for the Senior Notes.

Due to the Coronavirus ("COVID-19") pandemic, there has been uncertainty and disruption in the global economy and financial markets. The Company is not aware of any specific event or circumstance that would require a material update to its estimates or judgments or an adjustment of the carrying value of its assets or liabilities as of January 31, 2021. While there was not a material impact to the Company's consolidated financial statements as of and for the year ended January 31, 2021, these estimates may change, as new events occur and additional information is obtained, as well as other factors related to COVID-19 that could result in material impacts to the Company's consolidated financial statements in future reporting periods.

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.

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. As of January 31, 2021, the Company did not have any cash equivalents or marketable securities.

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

	January 31,	
	2021	**2020**
Channel partner A	6 %	11 %
Channel partner B	4 %	10 %
Channel partner C[(1)]	10 %	3 %
Customer A[(1)]	17 %	17 %

(1) Channel Partner C and Customer A are controlled by the same Company.

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

	Year Ended January 31,		
	2021	**2020**	**2019**
Channel partner A	8 %	10 %	15 %

There were no direct customers who represented 10% or more of the Company's total revenue during the years ended January 31, 2021, January 31, 2020, and January 31, 2019.

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. As of January 31, 2021, the Company did not have any cash equivalents or marketable securities. Cash equivalents as of 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. 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 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. Additionally, 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. The Company has made contributions to Falcon Fund totaling $1.3 million as of January 31, 2021.

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, 2021. There have been no realized or unrealized gains or losses on the strategic investments during the year ended January 31, 2021.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash equivalents, marketable securities, strategic investments, accounts receivable, accounts payable, accrued expenses, the redeemable convertible preferred stock warrant liability, and the Senior Notes. The carrying values of cash equivalents, accounts receivable, accounts payable, and accrued expenses approximate fair value due to their short-term nature. The Senior Notes are carried at the initially allocated liability value less unamortized debt discount and issuance costs on the Company's consolidated balance sheet. The Company discloses the fair value of the Senior Notes at each reporting period for disclosure purposes only. Refer to Note 3, Fair Value Measurements and Marketable Securities, regarding the fair value of the Company's marketable securities and non-marketable securities and Note 5, Debt, for the fair value of the Company's Senior Notes.

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

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 regularly reviews the adequacy of the allowance for doubtful accounts by considering various factors including the age of each outstanding invoice, each customer's expected ability to pay, historical loss rates and expectations of forward-looking loss estimates to determine whether the allowance is appropriate. Amounts deemed uncollectible are written off against the allowance for doubtful accounts. As of January 31, 2021 and January 31, 2020, the allowance for doubtful accounts was $1.2 million and $1.1 million, respectively.

Software Implementation Costs

The Company contracts with third party information technology providers for various service arrangements including software, platform, and information technology infrastructure. The Company capitalizes the implementation cost incurred to develop or obtain internal-use software in such arrangements and are recorded as part of property and equipment, net in the consolidated balance sheets. All capitalized implementation costs are amortized over the term of the arrangement which includes reasonably certain renewals. Costs incurred during the preliminary project and post implement stage are expensed as the activities are performed. Capitalized implementation costs was $0.3 million for the fiscal year ended January 31, 2021.

Deferred Offering Costs

Deferred offering costs consisted of fees and expenses incurred in connection with the sale of the Company's common stock in an IPO, including legal, accounting, printing and other IPO-related costs. Upon the close of the IPO on June 14, 2019, total deferred offering costs of $5.9 million were reclassified to stockholders' equity and recorded against the proceeds from the offering.

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 and website development	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.

Intangible Assets, Net

Intangible assets, net, consisting of developed technology, customer relationships, and other acquired intangibles, 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, which are generally one 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 other acquired intangibles 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, earned upon the initial acquisition of a contract or subsequent upsell are amortized over an estimated period of benefit of four years while commissions earned 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 $151.0 million and $86.6 million during the years ended January 31, 2021 and January 31, 2020, respectively. Contract acquisition cost amortization expense was $66.4 million and $35.5 million under ASC 606 during the year ended January 31, 2021 and January 31, 2020, respectively. Contract acquisition cost amortization expense was $28.6 million under ASC 605, during the year ended January 31, 2019.

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, 2021, January 31, 2020, and January 31, 2019.

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 sheets. 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

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.

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.

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 $27.9 million, $8.0 million, and $3.1 million of advertising costs during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, 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.

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 generally vest over a four-year period 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, 2021, January 31, 2020, or January 31, 2019. The change in goodwill balance during the year ended January 31, 2021 was due to the acquisition of Preempt Security, Inc. and changes in foreign currency exchange rates. The change in goodwill balance during the year ended January 31, 2020 was due to the changes in foreign currency exchange rates. See Note 4 and Note 15 to the consolidated financial statements for more information.

Acquired intangible assets consisting of identifiable intangible assets are 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.

Operating Leases

The Company enters into operating lease arrangements for real estate assets related to office space. The Company determines if an arrangement is or contains a lease at inception by evaluating various factors, including whether a vendor's right to substitute an identified asset is substantive. Lease classification is determined at the lease commencement date, which is the date the leased assets are made available for use. Operating leases are included in "Operating lease right-of-use assets", "Operating lease liabilities, current", and "Operating lease liabilities, noncurrent" in the consolidated balance sheets. The Company did not have any financing leases in any of the periods presented.

Operating lease right-of-use assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. Lease payments consist of the fixed payments under the arrangement, less any lease incentives, such as tenant improvement allowances. Variable costs, such as maintenance and utilities based on actual usage, are not included in the measurement of right-to-use assets and lease liabilities but are expensed when the event determining the amount of variable consideration to be paid occurs. As the implicit rate of the leases is not determinable, the Company uses an incremental borrowing rate ("IBR") based on the information available at the lease commencement date in determining the present value of lease payments. Lease expenses are recognized on a straight-line basis over the lease term.

The Company uses the non-cancelable lease term when recognizing the right-of-use ("ROU") assets and lease liabilities, unless it is reasonably certain that a renewal or termination option will be exercised. The Company accounts for lease components and non-lease components as a single lease component.

Leases with a term of twelve months or less are not recognized on the consolidated balance sheets but are recognized as expense on a straight-line basis over the term of the lease.

Available-for-sale debt securities

The Company evaluates investments with unrealized loss positions by assessing if they are related to deterioration in credit risk and whether the Company expects to recover the entire amortized cost basis of the security, the Company's intent to sell and whether it is more likely than not that the Company will be required to sell the securities before the recovery of its cost basis. Credit-related impairment losses, not to exceed fair value less the amortized cost basis, are recognized through an allowance for credit losses with changes in the allowance for credit losses recorded in Other income (expense), net in the consolidated statements of operations. Impairment that has not been recorded through an allowance for credit losses will be recorded in the consolidated statements of comprehensive income (loss). As of January 31, 2021, there were no marketable securities held by the Company.

Debt Issuance Costs

Debt issuance costs incurred in connection with securing the Company's financing arrangements are generally presented in the consolidated balance sheets as a direct deduction from the carrying amount of the outstanding borrowings, consistent with debt discounts. However, the Company has chosen to present debt issuance costs under "other long-term assets" for its revolving credit facility on the consolidated balance sheets regardless of whether the Company has any outstanding borrowings on the revolving credit facility. Debt issuance costs, net of accumulated amortization, were $4.4 million and $1.2 million as of January 31, 2021 and January 31, 2020, respectively. Debt issuance cost associated with the Senior Notes are recorded as a reduction to the carrying value of the Senior Notes on the consolidated balance sheets. The unamortized issuance costs relating to the Senior Notes were $2.6 million as of January 31, 2021.

All deferred financing costs are being amortized to interest expense. The effective interest method is used for debt issuance cost related to the Senior Notes. Debt issuance costs related to the revolving credit facility are being amortized over the term of the financing arrangement under the straight-line method. The Company's amortization of these costs was $0.8 million, $0.4 million and $0.1 million for the fiscal years ended January 31, 2021, 2020 and 2019, respectively.

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 and United Kingdom, the changes resulted in no material tax expense during the years ended January 31, 2021, January 31, 2020, and January 31, 2019. As of January 31, 2021, 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 sheets 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 13 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 February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02, "Leases (Topic 842)," which requires lessees to generally recognize on the balance sheet operating and financing lease liabilities and corresponding ROU assets, and to recognize on the income statement the expenses in a manner similar to prior practice. The Company adopted Topic 842 using the modified retrospective method on February 1, 2020.

The Company elected the following practical expedients:

- 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 assets.
- 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 did not elect the hindsight practical expedient.

Lease payments consist primarily of the fixed payments under the arrangement, less any lease incentives such as tenant improvement allowance. The Company uses an estimate of its IBR based on the information available at the lease commencement date in determining the present value of lease payments, unless the implicit rate is readily determinable. In determining the appropriate IBR, management considers information including, but not limited to, the Company's credit rating, the lease term, and the currency in which the arrangement is denominated. For leases which commenced prior to the adoption of Topic 842, the Company used the IBR on January 31, 2020.

The adoption of this new standard on February 1, 2020, and the application of the modified retrospective transition approach resulted in the following changes:

a. Assets increased by $37.4 million, primarily representing the recognition of ROU asset for operating leases; and

b. Liabilities increased by $37.4 million, primarily representing the recognition of lease liabilities for operating leases partially offset by derecognition of liabilities for deferred rent previously designated under ASC Topic 840

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 requires a financial asset measured at amortized cost basis to be presented at the net amount expected to be collected, with further clarifications made more recently regarding the treatment of accrued interest, transfers between classifications for loans and debt securities, recoveries and the option to irrevocably elect the fair value option (on an instrument-by-instrument basis) for eligible financial assets at amortized costs. For trade receivables, loans, and other financial assets, the Company will be required to use a forward-looking expected loss model rather than the incurred loss model for recognizing credit losses which reflects losses that are probable. Credit losses relating to available-for-sale debt securities are required to be recorded through an allowance for credit losses in the consolidated statements of operation rather than as a reduction in the amortized cost basis of the securities. The Company adopted this guidance on February 1, 2020, which did not have a material effect 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 adopted this guidance on February 1, 2020 which did not have a material effect 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 Company adopted this guidance on February 1, 2020 which did not have a material effect on its consolidated financial statements.

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. The Company adopted this guidance on February 1, 2020 which did not have a material effect on its consolidated financial statements.

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting.* The ASU provides optional expedients and exceptions for applying generally accepted accounting principles to contract modifications and hedging relationships, subject to meeting certain criteria, that reference LIBOR or another reference rate expected to be discontinued. This ASU may be applied prospectively through December 31, 2022. The Company adopted this guidance on May 1, 2020 which did not have a material effect on its consolidated financial statements. Per the terms of the Company's secured revolving credit facility (see Note 5), 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. The Company's lender is currently preparing to use the Secured Overnight Funding Rate if LIBOR becomes unavailable. No amounts were outstanding under the Credit Agreement as of January 31, 2021.

Recently Issued Accounting Pronouncements

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. For public business entities, this ASU is effective for fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. The Company does not anticipate that the adoption of this guidance will have a material impact 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, 2021				January 31, 2020			
	Level 1	Level 2	Level 3	Total	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
U.S. 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.

There were no transfers between the levels of the fair value hierarchy during the years ended January 31, 2021 or January 31, 2020.

As of January 31, 2021, there were no marketable securities held by the Company. As of January 31, 2020, 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. 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 as of January 31, 2020.

The following summarizes the changes in strategic investments:

	Year Ended January 31	
	2021	2020
	(in thousands)	
Total initial cost	$ 2,500	$ 1,000
Cumulative gain	—	—
Carrying value	$ 2,500	$ 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, 2021.

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		
	2021	2020	2019
		(in thousands)	
Balance at beginning of period	$ —	$ 4,537	$ 961
Adjustment resulting from change in fair value recognized in the consolidated statement of operations	—	6,022	3,576
Reclassification of redeemable convertible preferred stock warrant liability to additional paid-in capital upon IPO	—	(10,559)	—
Balance at end of period	$ —	$ —	$ 4,537

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 and $3.6 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, and January 31, 2019, respectively.

4. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consisted of the following:

	January 31,	
	2021	2020
	(in thousands)	
Prepaid expenses	$ 23,072	$ 20,390
Prepaid software licenses	20,596	16,645
Prepaid hosting services	5,383	8,056
Other current assets	4,566	6,523
Prepaid expenses and other current assets	$ 53,617	$ 51,614

Property and Equipment, Net

Property and equipment, net consisted of the following:

	January 31, 2021	January 31, 2020
	(in thousands)	
Data center and other computer equipment	$ 146,220	$ 87,166
Capitalized internal-use software	44,358	30,354
Leasehold improvements	19,733	13,157
Purchased software	3,211	2,604
Furniture and equipment	6,498	4,835
Construction in process	35,528	47,626
	255,548	185,742
Less: Accumulated depreciation and amortization	(88,534)	(49,664)
Property and equipment, net	$ 167,014	$ 136,078

Construction in process mainly includes data center equipment purchased that has not yet been placed in service. Data center equipment that was purchased but not yet been placed into service was $30.0 million and $44.9 million as of January 31, 2021 and January 31, 2020, respectively.

Depreciation and amortization expense of property and equipment was $38.7 million, $23.0 million, and $14.8 million, during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively.

There were no impairments of internal-use software during the years ended January 31, 2021, January 31, 2020, and January 31, 2019. The Company capitalized $14.0 million, $8.1 million, and $6.8 million in internal-use software during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively. Amortization expense associated with internal-use software totaled $7.9 million, $6.2 million and $5.2 million during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively. The net book value of capitalized internal-use software was $19.5 million and $13.4 million as of January 31, 2021 and January 31, 2020, respectively.

Intangible Assets, Net

Total intangible assets, net consisted of the following:

	January 31, 2021			
	Gross Carrying Amount	Accumulated Amortization	Net Amount	Weighted-Average Remaining Useful Life
	(in thousands)			(in months)
Developed technology	$ 14,513	$ 2,193	$ 12,320	56
Customer relationships	3,769	649	3,120	54
Other acquired intangible assets	399	162	237	185
Total	$ 18,681	$ 3,004	$ 15,677	

	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
Other acquired intangible assets	121	92	29	9
Total	$ 1,966	$ 1,439	$ 527	

Amortization of developed technology, customer relationships, and other acquired intangible assets 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 $1.4 million, $0.5 million, and $0.6 million, during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively.

The estimated aggregate future amortization expense of intangible assets as of January 31, 2021 is as follows:

	Total
	(in thousands)
Fiscal 2022	$ 3,462
Fiscal 2023	3,363
Fiscal 2024	3,268
Fiscal 2025	3,268
Fiscal 2026	2,182
Thereafter	134
Total amortization expense	$ 15,677

The developed technology, customer relationships, and other acquired intangible assets are generally being amortized over 5 years, 5 years, and 1 year, respectively.

Goodwill

Goodwill during the year ended January 31, 2021 consisted of the following:

	Amounts
	(in thousands)
Goodwill as of January 31, 2020	$ 7,722
Goodwill acquired	75,297
Foreign currency translation	547
Goodwill as of January 31, 2021	$ 83,566

Accrued Expenses

Accrued expenses consisted of the following:

	January 31,	
	2021	2020
	(in thousands)	
Accrued marketing	$ 14,592	$ 1,970
Web hosting services	14,187	16,367
Other accrued expenses	12,059	7,459
Accrued legal and accounting	5,709	1,770
Accrued purchases of property and equipment	4,570	2,789
Accrued expenses	$ 51,117	$ 30,355

Accrued Payroll and Benefits

Accrued payroll and benefits consisted of the following:

	January 31,	
	2021	2020
	(in thousands)	
Accrued commissions	$ 32,300	$ 15,399
Accrued payroll and related expenses	16,528	6,680
Accrued bonuses	12,110	8,171
Employee Stock Purchase Plan	10,969	6,560
Accrued payroll and benefits	$ 71,907	$ 36,810

In April 2020, the Company began deferring payment on its share of payroll taxes owed, as permitted by the CARES Act, through December 31, 2020. As of January 31, 2021, the Company had deferred $5.1 million of payroll taxes in “other current liabilities” and $5.1 million of payroll taxes in “other liabilities, noncurrent” on the consolidated balance sheet.

5. Debt

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.

On January 4, 2021, the Company amended and restated its existing credit agreement (the “A&R Credit Agreement” and the facility thereunder the “Revolving Facility”) among CrowdStrike, Inc., as borrower, CrowdStrike Holdings, Inc., as guarantor, and Silicon Valley Bank and the other lenders party thereto, providing the Company with a revolving line of credit of up to $750.0 million, including a letter of credit sub-facility in the aggregate amount of $100.0 million, and a swingline sub-facility in the aggregate amount of $50.0 million. The Company also has the option to request an incremental facility of up to an additional $250.0 million from one or more of the lenders under the A&R Credit Agreement. The A&R Credit Agreement is guaranteed by all of the Company’s material domestic subsidiaries. The A&R Credit Agreement extended the maturity date of April 19, 2022 to January 2, 2026. Under the A&R Credit Agreement, revolving loans may be either Eurodollar Loans or Alternate Base Rate (“ABR”) Loans. Outstanding Eurodollar Loans incur interest at the Eurodollar Rate, which is defined as LIBOR (or any successor thereto), subject to a 0.00% LIBOR floor, plus a margin between 1.50% and 2.00%, depending on the Company’s senior secured leverage ratio. 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 (0.25%) and 0.25%, depending on the senior secured leverage ratio. The Company will be charged a commitment fee of 0.15% to 0.25% per year for committed but unused amounts, depending on the senior secured leverage ratio. The financial covenants require the Company to maintain a minimum consolidated interest coverage ratio of 3.00:1.00, a maximum senior secured leverage ratio of 3.00:1.00 (through January 31, 2023), and a maximum total leverage ratio of 5.50:1.00 stepping down to 3.50:1.00 over time. The Company was in compliance with the financial covenants as of January 31, 2021.

The A&R Credit Agreement is secured by substantially all of the Company’s current and future consolidated assets, property and rights, including, but not limited to, intellectual property, cash, goods, equipment, contractual rights, financial assets, and intangible assets of the Company and certain of its subsidiaries. The A&R Credit Agreement contains customary covenants limiting the Company’s ability and the ability of its subsidiaries 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.

No amounts were outstanding under the A&R Credit Agreement as of January 31, 2021.

Senior Notes

On January 20, 2021, the Company issued $750.0 million in aggregate principal amount of 3.00% Senior Notes maturing in February 2029. The Senior Notes are guaranteed by the Company's subsidiary, CrowdStrike, Inc. and will be guaranteed by each of the Company's existing and future domestic subsidiaries that becomes a borrower or guarantor under the A&R Credit Agreement. The Senior Notes were issued at par and bear interest at a rate of 3.00% per annum. Interest payments are payable semiannually on February 15 and August 15 of each year, commencing on August 15, 2021. The Company may voluntarily redeem the Senior Notes, in whole or in part, 1) at any time prior to February 15, 2024 at (a) 100.00% of their principal amount, plus a "make whole" premium or (b) with the net cash proceeds received from an equity offering at a redemption price equal to 103.00% of the principal amount, provided the aggregate principal amount of all such redemptions does not to exceed 40% of the original aggregate principal amount of the notes; 2) at any time on or after February 15, 2024 at a prepayment price equal to 101.50% of the principal amount; 3) at any time on or after February 15, 2025 at a prepayment price equal to 100.75% of the principal amount; and 4) at any time on or after February 15, 2026 at a prepayment price equal to 100.00% of the principal amount; in each case, plus accrued and unpaid interest, if any, to but excluding, the date of redemption.

The net proceeds from the debt offering were $739.6 million after deducting the underwriting commissions of $9.4 million and $1.0 million of issuance costs, which were paid as of January 31, 2021. An additional $1.6 million of issuance costs are expected to be paid in the first quarter of fiscal 2022. Debt issuance costs of $2.6 million are being amortized to interest expense using the effective interest method over the term of the Senior Notes. Interest expense related to contractual interest expense and amortization of debt issuance costs was $0.7 million and $0.1 million, respectively, during the fiscal year ended January 31, 2021.

In certain circumstances involving a change of control events, the Company will be required to make an offer to repurchase all or, at the holder's option, any part, of each holder's notes of that series at 101% of the aggregate principal amount thereof, plus accrued and unpaid interest, if any, to, but excluding, the repurchase date.

The indenture governing the Senior Notes (the "Indenture") contain covenants limiting the Company's ability and the ability of its subsidiaries to create liens on certain assets to secure debt; grant a subsidiary guarantee of certain debt without also providing a guarantee of the Senior Notes; declare dividends; and consolidate or merge with or into, or sell or otherwise dispose of all or substantially all of its assets to, another person. These covenants are subject to a number of limitations and exceptions. Certain of these covenants will not apply during any period in which the notes are rated investment grade by Fitch Ratings, Inc. ("Fitch"), Moody's Investors Service, Inc. ("Moody's") and Standard & Poor's Ratings Services ("S&P").

As of January 31, 2021, the Company was in compliance with all of its financial covenants under the Indenture associated with the Senior Notes.

Based on the trading prices of the Senior Notes, the fair value of the Senior Notes as of January 31, 2021 was approximately $760.2 million. While the Senior Notes are recorded at cost, the fair value of the Senior Notes was determined based on quoted prices in markets that are not active; accordingly, the Senior Notes is categorized as Level 2 for purposes of the fair value measurement hierarchy.

6. Income Taxes

The Company's geographical breakdown of its loss before provision for income taxes for the years ended January 31, 2021, January 31, 2020, and January 31, 2019 is as follows:

	Year Ended January 31,		
	2021	**2020**	**2019**
		(in thousands)	
Domestic	$ (94,713)	$ (149,807)	$ (143,308)
International	6,844	10,025	4,598
Loss before provision for income taxes	$ (87,869)	$ (139,782)	$ (138,710)

The components of the provision for income taxes as of January 31, 2021, January 31, 2020, and January 31, 2019 are as follows:

	Year Ended January 31,		
	2021	2020	2019
	(in thousands)		
Current			
Federal	$ —	$ —	$ —
State	401	104	304
Foreign	5,811	2,574	1,481
Total current	6,212	2,678	1,785
Deferred			
Federal	(136)	(362)	—
State	(317)	(57)	—
Foreign	(999)	(262)	(418)
Total deferred	(1,452)	(681)	(418)
Provision for income taxes	$ 4,760	$ 1,997	$ 1,367

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, 2021, January 31, 2020, and January 31, 2019:

	Year Ended January 31,		
	2021	2020	2019
	(in thousands)		
Provision for income taxes at statutory rate	$ (18,453)	$ (29,354)	$ (29,129)
State income taxes, net of federal benefit	—	25	245
Foreign earnings at different rates	1,994	207	97
Research and other credits	(9,373)	(1,534)	(3,769)
Stock-based compensation	(140,489)	(43,477)	2,414
Non-deductible expenses	2,212	1,773	1,833
Change in unrecognized tax benefits	—	(2,659)	—
Valuation allowance	168,869	77,016	29,676
Provision for income taxes	$ 4,760	$ 1,997	$ 1,367

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, 2021 and January 31, 2020 are as follows:

	Year Ended January 31,	
	2021	2020
	(in thousands)	
Deferred tax assets		
Net operating loss carryforwards	$ 289,889	$ 166,083
Research and other credit carryforwards	22,778	15,355
Intangible assets	—	78
Stock-based compensation	20,154	8,716
Deferred revenue	21,595	21,012
Accrued expenses	7,791	2,555
Operating lease liabilities	10,718	—
Capitalized research and development	63,158	—
Other, net	—	950
Gross deferred assets	436,083	214,749
Less: Valuation allowance	(413,828)	(207,596)
Total deferred tax assets	22,255	7,153
Deferred tax liabilities		
Property and equipment, net	(4,446)	(2,534)
Capitalized Commissions	(2,960)	(4,456)
Intangible assets	(3,697)	—
Operating right-of-use assets	(9,610)	—
Other, net	(302)	—
Total deferred tax liabilities	(21,015)	(6,990)
Net deferred tax assets (liabilities)	$ 1,240	$ 163

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, 2021, January 31, 2020 and January 31, 2019, the valuation allowance increased by $206.2 million, $87.2 million, and $36.0 million, respectively. The increase in the valuation allowance during the years ended January 31, 2021, January 31, 2020 and January 31, 2019 was primarily driven by losses generated in the United States and the United Kingdom.

During the years ended January 31, 2021, January 31, 2020, and January 31, 2019, the valuation allowance for deferred taxes balance was $413.8 million, $207.6 million, and $120.4 million, respectively.

As of January 31, 2021, the Company had aggregate federal and California net operating loss carryforwards of $1.1 billion and $122.6 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 2041. In addition, for federal losses generated after December 31, 2017, the Tax Cuts and Jobs Act of 2017 (“Tax Act”) modified the maximum deduction of net operating loss, eliminated carryback, and provided an indefinite carryforward. As of January 31, 2021, net operating loss carryforwards for other states total $660.7 million which begin to expire in fiscal 2024 through fiscal 2041. As of January 31, 2021, net operating loss carryforwards for United Kingdom total $50.2 million which are carried forward indefinitely.

As of January 31, 2021, the Company had federal and California research and development (“R&D”) credit carryforwards of $38.7 million and $8.7 million, respectively. The federal R&D credit carryforwards will begin to expire in fiscal 2035 though fiscal 2041. 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.

The total gross unrecognized tax benefit as of January 31, 2021, January 31, 2020 and January 31, 2019 were $24.4 million, $5.5 million, and $8.1 million, respectively. As of January 31, 2021, the Company had $0.6 million of unrecognized tax benefits, which, if recognized, would affect the Company's effective tax rate due to the 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, 2021, January 31, 2020 or January 31, 2019. During the year ended January 31, 2021, the uncertain tax benefits balance increased as a result of additional guidance released by the IRS. During the year ended January 31, 2020, the uncertain tax benefits balance decreased due to the application of the IRS' simplified approach for determining research credits. 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, 2021, January 31, 2020, and January 31, 2019 (in thousands):

Balance as of February 1, 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
Increases in prior period tax positions		6,926
Increase in current period tax positions		12,052
Balance as of January 31, 2021	$	24,447

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.

The Company attributes net revenue, costs, and expenses to domestic and foreign components based on the terms of its agreements with its subsidiaries. The Company does not provide for federal and state income taxes on the undistributed earnings of its foreign subsidiaries as such earnings are to be reinvested offshore indefinitely. As a result of the Tax Act, if the Company repatriated these earnings, the tax impact of future distributions of foreign earnings would generally be limited to withholding tax from local jurisdictions, and the resulting income tax liability would be insignificant.

On March 27, 2020, the United States enacted the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), as a response to the economic uncertainty resulting from the global COVID-19 pandemic. The CARES Act did not have a material impact on the Company's condensed consolidated financial statements for the fiscal year ended January 31, 2021. The Company continues to monitor any effects that may result from the CARES Act.

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 sheets.

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. Leases

Operating Leases

The Company has entered into non-cancelable operating lease agreements with various expiration dates through fiscal 2027. Certain lease agreements include options to renew or terminate the lease, which are not reasonably certain to be exercised and therefore are not factored into the determination of lease payments.

For the fiscal year ended January 31, 2021, cash paid for amounts included in the measurement of operating lease liabilities were $11.0 million. Operating lease liabilities arising from obtaining operating right of-use assets was $6.2 million during the fiscal year ended January 31, 2021.

As of January 31, 2021, the weighted-average remaining lease term is 4.1 years, and the weighted-average discount rate is 5.9%.

The component of lease costs was as follows:

	January 31, 2021 (in thousands)
Lease cost	
Operating lease cost	$ 10,308
Short-term lease cost	1,957
Variable lease cost	3,007
Total lease cost	$ 15,272

There was no sublease income for the fiscal year ended January 31, 2021. Total lease expense recognized prior to the adoption of Topic 842 were $10.3 million and $6.9 million for the year ended January 31, 2020 and January 31, 2019, respectively.

The maturities of the Company's non-cancelable operating lease liabilities are as follows:

	January 31, 2021 (in thousands)
Fiscal 2022	$ 10,187
Fiscal 2023	10,879
Fiscal 2024	10,816
Fiscal 2025	9,973
Fiscal 2026	4,050
Thereafter	279
Total operating lease payments	46,184
Less: imputed interest	(5,221)
Present value of operating lease liabilities	$ 40,963

Future minimum payments under non-cancelable operating leases determined using the prior accounting guidance consisted of the following as of January 31, 2020:

	Real Estate Arrangements (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	$ 50,686

10. 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,		
	2021	2020	2019
Expected term (in years)	3.17-6.05	6.05	6.05-7.52
Risk-free interest rate	0.2% - 0.4%	2.0% - 2.4%	2.6% - 3.1%
Expected stock price volatility	35.8% - 37.3%	37.7% - 37.9%	37.8% - 38.9%
Dividend yield	— %	— %	— %

The following table is a summary of stock option activity for the year ended January 31, 2021:

	Number of Shares	Weighted-Average Exercise Price Per Share
	(in thousands)	
Options outstanding at January 31, 2020	14,689	$ 5.52
Granted	97	$ 64.64
Exercised	(7,752)	$ 3.72
Canceled	(388)	$ 9.66
Options outstanding at January 31, 2021	6,646	$ 8.24
Options vested and expected to vest at January 31, 2021	6,646	$ 8.24
Options exercisable at January 31, 2021	3,377	$ 5.13

Options outstanding include 424,906 options that were unvested as of January 31, 2021.

The aggregate intrinsic value of options vested and exercisable was $711.4 million, $469.6 million, and $181.1 million as of January 31, 2021, January 31, 2020, and January 31, 2019, respectively. The weighted-average remaining contractual term of options vested and exercisable was 6.4 years, 6.7 years, and 7.1 years as of January 31, 2021, January 31, 2020, and January 31, 2019, respectively.

The weighted-average grant date fair values of all options granted was $66.31, $9.51, and $5.70 per share during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively. The total intrinsic value of all options exercised was $847.5 million, $407.9 million, and $26.9 million during the years ended January 31, 2021, January 31, 2020, and January 31, 2019, respectively.

The aggregate intrinsic value of stock options outstanding as of January 31, 2021, January 31, 2020, and January 31, 2019 was $1.4 billion, $816.3 million, and $286.1 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 7.0 years, 7.4 years, and 7.9 years as of January 31, 2021, January 31, 2020, and January 31, 2019, respectively.

Total unrecognized stock-based compensation expense related to unvested options was $24.3 million as of January 31, 2021. This expense is expected to be amortized on a straight-line basis over a weighted-average vesting period of 1.7 years. 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.

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. There were no issued shares of common stock related to early exercised stock option during the fiscal year ended January 31, 2021. During the fiscal 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, 2021, the number of shares of common stock related to early exercised stock options subject to repurchase was 548,028 shares for $5.4 million. 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. 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).

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 service-based vesting 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 vesting condition only are being amortized on a straight-line basis. Expense for RSUs that have both a service-based and a performance-based vesting condition are being amortized under the accelerated attribution method. Total unrecognized stock-based compensation expense related to unvested RSUs was $393.9 million as of January 31, 2021. This expense is expected to be amortized (subject to acceleration or straight-line basis) over a weighted-average vesting period of 2.6 years. 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 on an accelerated attribution method over a weighted-average vesting period of 2.5 years.

Performance-based Stock Units

Performance-based stock units ("PSUs") granted under the 2019 Plan are generally subject to both a service-based vesting condition and a performance-based vesting condition. PSUs will vest upon the achievement of specified performance targets 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. During fiscal 2021, the Company's compensation committee granted PSUs for certain employees. The performance goal for certain grants primarily relate to the revenue growth percentage for the fiscal year ended January 31, 2021, with the number of PSUs earned corresponding to the performance period of fiscal 2021, which can range between 0% and 130% of the target number of shares granted depending on the Company's actual performance. The performance goal for other grants primarily relate to the achievement of product related deliverables or other engineering objectives.

Expense for PSUs are being amortized under the accelerated attribution method and may be adjusted over the vesting period based on interim estimates of performance against pre-set objectives. Total unrecognized stock-based compensation expense related to unvested PSUs was $24.8 million as of January 31, 2021. This expense is expected to be amortized over a weighted-average vesting period of 1.3 years. 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 year ended January 31, 2021:

	Number of Shares	Weighted-Average Grant Date Fair Value Per Share
	(in thousands)	
RSUs and PSUs outstanding at January 31, 2020	6,063	$ 29.82
Granted	4,743	$ 85.13
Released	(1,994)	$ 34.15
Forfeited	(363)	$ 43.31
RSUs and PSUs outstanding at January 31, 2021	8,449	$ 59.27
RSUs and PSUs expected to vest at January 31, 2021	8,449	$ 59.27

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. The ESPP allows for up to one increase in contribution during each purchase period. If an employee elects to increase his or her contribution, the Company treats this as an accounting modification. The pre- and post-modification fair values are calculated on the date of the modification, and the incremental expense is then amortized over the remaining purchase period. Incremental expense as a result of such modification was $3.5 million for year ended January 31, 2021.

Employee payroll contributions ultimately used to purchase shares are reclassified to stockholders' equity on the purchase date. ESPP employee payroll contributions accrued of $11.0 million and $6.6 million as of January 31, 2021 and January 31, 2020, respectively, and are included within accrued payroll and benefits in the consolidated balance sheets.

The following table summarizes the assumptions used in the Black-Scholes option-pricing model to determine fair value of the Company's common shares to be issued under the ESPP for the offering periods beginning in June 2019:

	Year Ended January 31,	
	2021	2020
Expected term (in years)	0.5-2.0	0.5-2.0
Risk-free interest rate	0.1 - 2.0%	1.6 - 2.2%
Expected stock price volatility	30.1 - 54.3%	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,		
	2021	2020	2019
	(in thousands)		
Subscription cost of revenue	$ 11,705	$ 5,226	$ 689
Professional services cost of revenue	6,005	2,486	205
Sales and marketing	50,557	23,919	5,175
Research and development	40,274	15,403	7,815
General and administrative	41,134	32,906	6,621
Total stock-based compensation expense	$ 149,675	$ 79,940	$ 20,505

11. Revenue, Deferred Revenue and Remaining Performance Obligations

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

	Year Ended January 31,					
	2021		2020		2019	
	Amount	% Revenue	Amount	% Revenue	Amount	% Revenue
	(in thousands, except percentages)					
Channel Partners	$ 655,031	75 %	$ 331,279	69 %	$ 172,141	69 %
Direct Customers	219,407	25 %	150,134	31 %	77,683	31 %
Total revenue	$ 874,438	100 %	$ 481,413	100 %	$ 249,824	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 platform or service:

	Year Ended January 31,					
	2021		2020		2019	
	Amount	% Revenue	Amount	% Revenue	Amount	% Revenue
	(in thousands, except percentages)					
United States	$ 627,402	72 %	$ 356,513	74 %	$ 192,057	77 %
Europe, Middle East, and Africa	123,900	14 %	67,428	14 %	29,721	12 %
Asia Pacific	80,185	9 %	37,672	8 %	17,213	7 %
Other	42,951	5 %	19,800	4 %	10,833	4 %
Total revenue	$ 874,438	100 %	$ 481,413	100 %	$ 249,824	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, 2021, January 31, 2020 or January 31, 2019.

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. The Company recognized revenue of $410.7 million and $217.9 million for the years ended January 31, 2021 and January 31, 2020, respectively, 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 were as follows (in thousands):

	Carrying Amount	
	Year Ended January 31,	
	2021	2020
Beginning Balance	$ 571,168	$ 290,067
Additions to deferred revenue	1,215,165	762,514
Recognition of deferred revenue	(874,438)	(481,413)
Ending Balance	$ 911,895	$ 571,168

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, 2021, the aggregate amount of the transaction price allocated to remaining performance obligations was $1.4 billion. The Company expects to recognize 72% of the remaining performance obligations in the 12 months following January 31, 2021, 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, current and deferred contract acquisition costs, noncurrent 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, earned upon the initial acquisition of a contract or subsequent upsell are amortized over an estimated period of benefit of 4 years while commissions earned 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, 2021.

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

	Year Ended January 31,	
	2021	2020
	(in thousands)	
Beginning balance	$ 114,206	$ 38,765
Adjustment due to adoption of ASU 606	—	24,306
Capitalization of contract acquisition costs	150,975	86,594
Amortization of deferred contract acquisition costs	(66,425)	(35,459)
Ending balance	$ 198,756	$ 114,206
Deferred contract acquisition costs, current	$ 80,850	$ 42,971
Deferred contract acquisition costs, noncurrent	117,906	71,235
Total deferred contract acquisition costs	$ 198,756	$ 114,206

12. Commitments and Contingencies

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, 2021, the Company is committed to spend $96.8 million on such agreements through fiscal 2028. 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 noncancellable purchase obligations in excess of one year as of January 31, 2021 with expected date of payment is as follows:

	Total Commitments
	(In thousands)
Fiscal 2022	$ 94,422
Fiscal 2023	35,133
Fiscal 2024	31,941
Fiscal 2025	5,429
Fiscal 2026	3,012
Thereafter	1,433
Total purchase commitments	$ 171,370

Letters of Credit

As of January 31, 2021 and January 31, 2020, the Company had an unused standby letter of credit for $0.4 million and $0.6 million, respectively, securing its headquarters facility in Sunnyvale, California. As of January 31, 2021 and January 31, 2020, the Company had an unused standby letter of credit for $1.0 million securing its facility in Austin, Texas.

Litigation

In November 2016, Fair Isaac Corporation ("FICO") filed a petition before the Trademark Trial and Appellate Board ("TTAB") at the U.S. Patent and Trademark Office, seeking cancellation of the Company's registration of its "CrowdStrike Falcon" trademark, and a notice of opposition of the Company's trademark application for "Falcon OverWatch." The Company denies that any of the relief FICO seeks is appropriate, and has itself moved to cancel, or in the alternative amend, FICO's "Falcon" trademark registrations before the TTAB. The proceedings have been consolidated and are in the discovery phase with trial periods scheduled to begin in October 2021. 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, 2021 or January 31, 2020.

In addition, the Company is involved in various other legal proceedings and subject to claims that arise in the ordinary course of business, including a letter demand from a former employee purportedly on behalf of himself and similarly situated employees alleging various wage and hour violations. The Company is vigorously defending the claim, but given the early stage, although a loss may reasonably be possible, the Company is unable to predict the likelihood of the claim's success or estimate a loss or range of loss. 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 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 certain 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, 2021 or January 31, 2020.

13. Geographic Information

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

	January 31,	
	2021	2020
	(in thousands)	
United States	$ 174,889	$ 125,409
International	28,609	10,669
Total property and equipment, net and operating lease right-of-use assets	$ 203,498	$ 136,078

No single country other than the United States represented 10% or more of the Company's total long-lived assets as of January 31, 2021 and January 31, 2020.

14. Related Party Transactions

Subscription and Professional Services Revenue from Related Parties

During the years ended January 31, 2021, January 31, 2020 and January 31, 2019, 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 $4.3 million, $9.0 million, and $6.6 million during the years ended January 31, 2021, January 31, 2020 and January 31, 2019, respectively. Accounts receivable associated with these related parties was $1.3 million, and $0.2 million during the years ended January 31, 2021 and January 31, 2020, respectively.

Accounts Payable to Related Parties

During the years ended January 31, 2021, January 31, 2020 and January 31, 2019, the Company purchased goods and services totaling $8.8 million, $3.2 million, and $2.2 million, respectively, from certain investors and companies with whom its Board of Directors are affiliated with. There were no accounts payable to such vendors as of January 31, 2021 or January 31, 2020.

15. Acquisitions

On September 30, 2020, the Company acquired 100% of the equity interest of Preempt Security, Inc. (“Preempt Security”), a privately-held Delaware corporation that developed real-time access control and threat prevention technology (the “Acquisition”). The Acquisition has been accounted for a business combination. The total consideration transferred was $91.2 million which consisted of $87.4 million in cash and $3.8 million representing the fair value of replacement equity awards attributable to pre-acquisition service. The purchase price was allocated, on a preliminary basis, to identified intangible assets, which include developed technology, customer relationships and trade names, of $16.4 million, net tangible assets acquired of $(0.5) million and goodwill of $75.3 million allocated to the Company’s one reporting segment, representing the excess of the purchase price over the fair value of net tangible and intangible assets acquired. The goodwill was primarily attributable to the assembled workforce of Preempt Security, planned growth in new markets and synergies expected to be achieved from the integration of Preempt Security. Goodwill is not deductible for income tax purposes.

Per the terms of the merger agreement with Preempt Security, certain unvested stock options held by Preempt Security employees were canceled and exchanged for replacement stock options under the 2019 Plan. Additionally, certain shares of stock issued pursuant to share-based compensation awards to key employees of Preempt Security were canceled and exchanged for replacement RSUs of the Company, which are subject to future vesting. The portion of the fair value of the replacement equity awards associated with pre-acquisition service of Preempt Security’s employees represented a component of the total purchase consideration. The remaining fair value of these issued awards is subject to the recipients’ continued service with the Company and the achievement of specified performance targets, and thus were excluded from the purchase price. The awards which are subject to continued service will be recognized ratably as stock-based compensation expense over the requisite service period. The awards which are based on specified performance targets will be recognized under the accelerated attribution method. The Company is still finalizing the allocation of the purchase price, which may be subject to change as additional information becomes available.

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

	Fair Value (in thousands)	Useful Life (in months)
Developed technology	$ 13,200	60
Customer relationships	3,100	60
Trade names	85	12
Total intangible assets acquired	$ 16,385	

The Company incurred acquisition expense of $2.5 million for the year ended January 31, 2021. The acquisition costs are recorded in general and administrative expenses on the Company’s consolidated statement of operations.

The results of operations of Preempt Security have been included in the Company’s consolidated financial statements from the date of acquisition. The acquisition of Preempt Security did not have a material impact on the Company’s consolidated financial statements, and therefore historical and pro forma disclosures have not been presented.

16. 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,		
	2021	2020	2019
	(in thousands, except per share data)		
Common Stock			
Net loss	$ —	$ —	$ (140,077)
Net loss attributable to common stockholders	—	—	(140,077)
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	—	—	44,863
Net loss per share attributable to common stockholders, basic and diluted	$ —	$ —	$ (3.12)
Class A Common Stock			
Net loss attributable to common stockholders	$ (71,226)	$ (23,369)	$ —
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	167,442	24,405	—
Net loss per share attributable to common stockholders, basic and diluted	$ (0.43)	$ (0.96)	$ —
Class B Common Stock			
Net loss attributable to common stockholders	$ (21,403)	$ (118,410)	$ —
Weighted-average shares used in computing net loss per share attributable to common stockholders, basic and diluted	50,314	123,657	—
Net loss per share attributable to common stockholders, basic and diluted	$ (0.43)	$ (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,		
	2021	2020	2019
	(in thousands)		
Shares of common stock issuable upon conversion of redeemable convertible preferred stock	—	—	131,268
Shares of common stock issuable upon conversion of redeemable convertible preferred stock warrants	—	—	336
Shares of common stock subject to repurchase from outstanding stock options	548	984	546
RSUs and PSUs subject to future vesting	8,449	6,063	—
Shares of common stock issuable from stock options	6,646	14,689	26,535
Share purchase rights under the employee stock purchase plan	872	1,458	—
Potential common shares excluded from diluted net loss per share	16,515	23,194	158,685

The above table excludes founder holdbacks related to business combinations. A variable number of shares will be issued upon vesting to settle a fixed monetary amount of $5.3 million which are contingent upon continued employment with the Company for two years. One-half of the founder holdbacks will vest after one year of continued employment, with the remainder vesting monthly during the second year. The share price will be determined based on the Company’s average stock price 5 days prior to each vesting date.

Note 17. Subsequent Events

On March 5, 2021, the Company announced that it completed its acquisition of Humio, a leading provider of high-performance cloud log management and observability technology. The Company paid approximately $352.0 million in cash (net of cash acquired) and $40.0 million in stock and options, subject to vesting conditions, to acquire Humio. Due to the proximity of the acquisition date to the Company's filing of its annual report on Form 10-K for the year ended January 31, 2021, the initial accounting for the acquisition of Humio is incomplete, and therefore the Company is unable to disclose certain information required by ASC 805, Business Combinations at this time, including the provisional amounts recognized as of the acquisition date for each major class of assets acquired, liabilities assumed, and goodwill.

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 us in the reports that we file or submit 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 us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures as of January 31, 2021. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate "internal control over financial reporting," as defined in Rule 13a-15(f) and Rule 15d-15(f) under the Exchange Act. Our management conducted an evaluation of the effectiveness of our internal control over financial reporting as of January 31, 2021 based on the criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on the results of its evaluation, management concluded that our internal control over financial reporting was effective as of January 31, 2021. The effectiveness of our internal control over financial reporting as of January 31, 2021 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report which is included in Item 8 of this Form 10-K.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and Rule 15d-15(d) of the Exchange Act that occurred during the fiscal quarter ended January 31, 2021 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

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 Select Market.

Certain information required by this Item with respect to our executive officers is set forth under Item 1 of Part I of this Annual Report on Form 10-K under the section entitled “Executive Officers.”

The information otherwise required by this Item will be included in our definitive proxy statement for our 2021 annual meeting of stockholders (the “2021 Proxy Statement”), which will be filed with the SEC within 120 days after the end of our fiscal year ended January 31, 2021, and is incorporated herein by reference.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to our 2021 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 2021 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 2021 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to our 2021 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.	10-K	001-38933	4.4	March 23, 2020	
4.5	Indenture dated as of January 20, 2021, between CrowdStrike Holdings, Inc. and U.S. Bank National Association, as trustee	8-K	001-38933	4.1	January 20, 2021	
4.6	First Supplemental Indenture, dated as of January 20, 2021, between CrowdStrike Holdings, Inc. and U.S. Bank National Association, as trustee	8-K	001-38933	4.2	January 20, 2021	
4.7	Form of 3.000% Senior Notes due 2029 (included in Exhibit 4.9)	8-K	001-38933	4.2	January 20, 2021	
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	Form of Global Restricted Stock Unit Agreement Outside Directors – Annual Grant under the Company’s 2019 Equity Incentive Plan	10-Q	001-38933	10.1	September 3, 2020	
10.4	Form of Global Restricted Stock Unit Agreement Outside Directors – Initial Grant under the Company’s 2019 Equity Incentive Plan					X
10.5	CrowdStrike Holdings, Inc. 2019 Equity Incentive Plan Global Performance Unit Agreement	10-Q	001-38933	10.1	June 3, 2020	
10.6†	Amended and Restated 2011 Stock Incentive Plan and related form agreements.	S-1	333-231461	10.4	May 14, 2019	
10.7†	2019 Employee Stock Purchase Plan and related form agreements.	S-1/A	333-231461	10.3	May 29, 2019	
10.8†	CrowdStrike Corporate Incentive Plan.	8-K	001-38933	99.1	March 12, 2021	
10.9†	Outside Director Compensation Plan.	S-1/A	333-231461	10.5	May 29, 2019	
10.10†	Employment Agreement between the Registrant and George Kurtz, dated as of November 18, 2011.	S-1	333-231461	10.6	May 14, 2019	
10.11†	Offer Letter between the Registrant and Colin Black, dated as of October 3, 2015.	S-1	333-231461	10.7	May 14, 2019	
10.12†	Offer Letter between the Registrant and Burt W. Podbere, dated as of August 10, 2015.	S-1	333-231461	10.8	May 14, 2019	
10.13†	Offer Letter between the Registrant and Roxanne S. Austin dated as of September 10, 2018.	S-1	333-231461	10.9	May 14, 2019	
10.14†	Offer Letter between the Registrant and Godfrey R. Sullivan, undated.	S-1	333-231461	10.10	May 14, 2019	
10.15	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	

10.16	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	
10.17	Fifth Amendment to Office Lease between SPF Mathilda, LLC and CrowdStrike, Inc., dated October 2, 2019	10-K	001-38933	10.14	March 23, 2020	
10.18	Sublease by and between CrowdStrike, Inc. and Knowles Electronics, LLC, dated December 17, 2015.	S-1	333-231461	10.13	May 14, 2019	
10.19	Amended and Restated Credit Agreement dated as of January 4, 2021 among CrowdStrike Holdings, Inc., as guarantor, CrowdStrike, Inc. as borrower, and Silicon Valley Bank and the other lenders party thereto.	8-K	001-38933	10.1	January 5, 2021	
21.1	List of subsidiaries of the Registrant.					X
22.1	List of Subsidiary Guarantors	S-3ASR	333-252007	22.1	January 11, 2021	
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 18, 2021.

CROWDSTRIKE HOLDINGS, INC.

By: /s/ George Kurtz

George Kurtz
President, Chief Executive Officer and Director (Principal Executive Officer)

POWER OF ATTORNEY

KNOW ALL THESE PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints George Kurtz, Burt W. Podbere, and Abhishek Maheshwari, 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 18, 2021
/s/ Burt W. Podbere Burt W. Podbere	Chief Financial Officer (Principal Financial Officer)	March 18, 2021
/s/ Abhishek Maheshwari Abhishek Maheshwari	Chief Accounting Officer (Principal Accounting Officer)	March 18, 2021
/s/ Gerhard Watzinger Gerhard Watzinger	Chairman of the Board of Directors	March 18, 2021
/s/ Cary J. Davis Cary J. Davis	Director	March 18, 2021
/s/ Denis J. O'Leary Denis J. O'Leary	Director	March 18, 2021
/s/ Godfrey R. Sullivan Godfrey R. Sullivan	Director	March 18, 2021
/s/ Joseph E. Sexton Joseph E. Sexton	Director	March 18, 2021
/s/ Laura J. Schumacher Laura J. Schumacher	Director	March 18, 2021
/s/ Roxanne S. Austin Roxanne S. Austin	Director	March 18, 2021
/s/ Sameer K. Gandhi Sameer K. Gandhi	Director	March 18, 2021

CROWDSTRIKE HOLDINGS, INC.
2019 EQUITY INCENTIVE PLAN
GLOBAL RESTRICTED STOCK UNIT AGREEMENT

OUTSIDE DIRECTORS – INITIAL GRANT

Unless otherwise defined herein, the terms defined in the CrowdStrike Holdings, Inc. 2019 Equity Incentive Plan (the "Plan") will have the same defined meanings in this Global Restricted Stock Unit Agreement, which includes the Notice of Restricted Stock Unit Grant (the "Notice of Grant"), the Terms and Conditions of Restricted Stock Unit Grant, and all other exhibits and appendices (all together, the "Award Agreement").

NOTICE OF RESTRICTED STOCK UNIT GRANT

Participant: [_]

Address: [_]

CrowdStrike Holdings, Inc. (the "Company") has granted Participant the right to receive an Award of Restricted Stock Units, subject to the terms and conditions of the Plan and this Award Agreement, as follows:

Grant Number: [_]

Date of Grant: [_]

Number of Restricted Stock Units: [_]

Vesting Schedule:

Subject to any acceleration provisions contained in the Plan or set forth below, the Restricted Stock Units will vest in accordance with the following schedule:

1/3 of the Restricted Stock Units will vest on each of the first three anniversaries of [_], in each case subject to the Participant's continued service on the Board through the applicable vesting date.

Notwithstanding anything to the contrary herein, in the event of a Change in Control, 100% of the Restricted Stock Units shall fully vest as of the date of such Change in Control, subject to the Participant's continued service on the Board through the date of such Change in Control.

In the event Participant ceases to be a Service Provider for any or no reason before Participant vests in the Restricted Stock Units (or a portion thereof), the unvested Restricted Stock Units (or the unvested portion thereof) and Participant's right to acquire any Shares hereunder will immediately terminate.

If Participant does <u>not</u> wish to accept this Award Agreement and the Restricted Stock Units granted hereunder, Participant must inform the Company in writing (by writing to stockadmin@crowdstrike.com) within forty-five (45) days after the Date of Grant, in which case the Company will cancel this Award and the Restricted Stock Units granted hereunder will be immediately forfeited and canceled in their entirety without any payment or consideration being due from the Company. <u>If, during such period, Participant does not inform the Company in writing of his or her refusal to accept this Award of Restricted Stock Units, then Participant will be deemed to have accepted this Award of Restricted Stock Units and, by accepting, to</u>:

- **agree that this Award of Restricted Stock Units is granted under and governed by the terms and conditions of the Plan and this Award Agreement, including the Terms and Conditions of Restricted Stock Unit Grant, attached hereto as <u>Exhibit A</u>, all of which are made a part of this document;**
- **acknowledge receipt of a copy of the Plan;**
- **acknowledge that Participant has reviewed the Plan and this Award Agreement in their entirety, has had an opportunity to obtain the advice of counsel prior to executing this Award Agreement, and fully understands all provisions of the Plan and this Award Agreement;**
- **agree to accept as binding, conclusive, and final all decisions or interpretations of the Administrator upon any questions relating to the Plan and the Award Agreement; and**
- **agree to notify the Company upon any change in his or her residence address.**

EXHIBIT A

TERMS AND CONDITIONS OF RESTRICTED STOCK UNIT GRANT

a. Grant of Restricted Stock Units. The Company hereby grants to the individual (the "Participant") named in the Notice of Restricted Stock Unit Grant of this Award Agreement (the "Notice of Grant") under the Plan an Award of Restricted Stock Units, subject to all of the terms and conditions in this Award Agreement and the Plan, which is incorporated herein by reference. Subject to Section 21(c) of the Plan, in the event of a conflict between the terms and conditions of the Plan and the terms and conditions of this Award Agreement, the terms and conditions of the Plan shall prevail.

b. Company's Obligation to Deliver and Settle. Each Restricted Stock Unit represents the right to receive a Share on the date it vests. Unless and until the Restricted Stock Units will have vested in the manner set forth in Section 3 or 4, Participant will have no right to settlement of any such Restricted Stock Units. Prior to actual settlement of any vested Restricted Stock Units, such Restricted Stock Unit will represent an unsecured obligation of the Company, payable (if at all) only from the general assets of the Company.

c. Vesting Schedule. Except as provided in Section 4, and subject to Section 5, the Restricted Stock Units awarded by this Award Agreement will vest in accordance with the vesting schedule set forth in the Notice of Grant, subject to Participant continuing to be a Service Provider through each applicable vesting date.

d. Settlement after Vesting.

i. General Rule. Subject to Section 8, any Restricted Stock Units that vest will be settled to Participant (or in the event of Participant's death, to his or her properly designated beneficiary or estate) in whole Shares. Subject to the provisions of Section 4(b), such vested Restricted Stock Units shall be settled in whole Shares as soon as practicable after vesting, but in each such case within sixty (60) days following the vesting date. In no event will Participant be permitted, directly or indirectly, to specify the taxable year of payment of any Restricted Stock Units payable under this Award Agreement.

ii. Discretionary Acceleration. The Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Restricted Stock Units at any time, subject to the terms of the Plan. If so accelerated, such Restricted Stock Units will be considered as having vested as of the date specified by the Administrator. If Participant is a U.S. taxpayer, the payment of Shares vesting pursuant to this Section 4(b) shall in all cases be paid at a time or in a manner that is exempt from, or complies with, Section 409A of the Code. The prior sentence may be superseded in a future agreement or amendment to this Award Agreement only by direct and specific reference to such sentence.

e. Forfeiture Upon Termination as a Service Provider. Notwithstanding any contrary provision of this Award Agreement, if Participant ceases to be a Service Provider for any or no reason, the then-unvested Restricted Stock Units awarded by this Award Agreement will thereupon be forfeited at no cost to the Company and Participant will have no further rights thereunder.

f. Death of Participant. Any distribution or delivery to be made to Participant under this Award Agreement will, if Participant is then deceased, be made to Participant's designated beneficiary (to the extent such designation is permitted by the Company and the Company has determined it to be valid under applicable law), or if no beneficiary has been validly designated or no beneficiary survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

g. Change in Control. Subject to the terms set forth in the Notice of Grant, in the event of a Change in Control, the Administrator will have full discretion, subject to any applicable regulatory approvals, to take whatever actions it deems necessary or appropriate with respect to the Restricted Stock Units, in accordance with Section 15 of the Plan.

h. Tax Obligations. Participant acknowledges that, regardless of any action taken by the Company (or any of its affiliates), the ultimate liability for any income tax, social insurance, excise tax, payroll tax, fringe benefits tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant (collectively, the "Tax Obligations"), is and remains Participant's responsibility, and Participant shall be solely responsible for any and all such applicable taxes and penalties, and any interest that accrues thereon, that the Participant incurs in connection with participation in the Plan and the receipt, vesting or settlement of any Restricted Stock Units granted hereunder. Further, if Participant is subject to Tax Obligations in more than one jurisdiction, Participant acknowledges that the Company (or its applicable affiliate) may be required to withhold or account for Tax Obligations in more than one jurisdiction. If Participant fails to make satisfactory arrangements for the payment of any required Tax Obligations hereunder at the time of the applicable taxable event, Participant acknowledges and agrees that the Company may refuse to issue or deliver the Shares.

i. Rights as Stockholder. Neither Participant nor any person claiming under or through Participant will have any of the rights or privileges of a stockholder of the Company in respect of any Shares deliverable hereunder unless and until certificates representing such Shares (which may be in book entry form) will have been issued, recorded on the records of the Company or its transfer agents or registrars, and delivered to Participant (including through electronic delivery to a brokerage account). After such issuance, recordation, and delivery, Participant will have all the rights of a stockholder of the Company with respect to voting such Shares and receipt of dividends and distributions on such Shares.

j. Grant Is Not Transferable. Except to the limited extent provided in Section 6, Section 14 of the Plan will govern the transferability of the Restricted Stock Units.

k. Nature of Grant. In accepting the grant, Participant acknowledges, understands and agrees that:

i. the grant of Restricted Stock Units is exceptional, voluntary and occasional and does not create any contractual right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units, even if Restricted Stock Units have been granted in the past;

ii. all decisions with respect to future grants of Awards, if any, will be at the sole discretion of the Company;

iii. Participant is voluntarily participating in the Plan;

iv. the future value of the Shares underlying the Restricted Stock Units is unknown, indeterminable and cannot be predicted with certainty;

v. for purposes of the Restricted Stock Units, Participant's status as a Service Provider will be considered terminated as of the date Participant is no longer actively providing services to the Company or any Parent or Subsidiary (regardless of the reason for such termination and whether or not later found to be invalid or in breach of employment or similar laws in the jurisdiction where Participant is a Service Provider or the terms of Participant's service agreement, if any), and unless otherwise expressly provided in this Award Agreement (including by reference in the Notice of Grant to other arrangements or contracts) or determined by the Administrator, Participant's right to vest in the Restricted Stock Units under the Plan, if any, will terminate as of such date and will not be extended by any notice period (*e.g.*, Participant's period of service would not include any contractual notice period or similar period mandated under laws in the jurisdiction where Participant is a Service Provider or the terms of Participant's service agreement, if any, unless Participant is providing bona fide services during such time); the Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services for purposes of the Restricted Stock Units grant (including whether Participant may still be considered to be providing services while on a leave of absence and consistent with local law);

vi. unless otherwise agreed with the Company, the Restricted Stock Units and Shares subject to the Restricted Stock Units, and the income from and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as a director of a Subsidiary; and

vii. for Participants who reside outside the United States, the following additional provisions shall apply:

1. the Restricted Stock Units and any Shares acquired under the Plan are not intended to replace any pension rights or compensation;

2. the Restricted Stock Units and any Shares acquired under the Plan, and the income from and value of same, are not part of normal or expected compensation for any purpose, including, without limitation, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement, or welfare benefits or similar payments;

3. no claim or entitlement to compensation or damages shall arise from the forfeiture of the Restricted Stock Units resulting from the termination of Participant's status as a Service Provider (for any reason whatsoever, whether or not later found to be invalid or in breach of employment or similar laws in the jurisdiction where Participant is engaged or the terms of his or her service agreement, if any); and

4. neither the Company nor any of its affiliates shall be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Restricted Stock Units or of any amounts due to Participant pursuant to the settlement of Restricted Stock Units or subsequent sale of Shares acquired upon settlement.

l. Tax Consequences and Acknowledgements.

i.Participant has reviewed with his or her own tax advisors the U.S. federal, state, local and non-U.S. tax consequences of this investment and the transactions contemplated by this Award Agreement. With respect to such matters, Participant relies solely on such advisors and not on any statements or representations of the Company or any of its agents, written or oral. Participant understands that Participant (and not the Company) shall be responsible for Participant's own tax liability that may arise as a result of this investment or the transactions contemplated by this Award Agreement.

ii.Participant acknowledges that the Company and its affiliates (i) make no representations or undertakings regarding the treatment of any Tax Obligations in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant, vesting or settlement of the Restricted Stock Units, the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends or other distributions, and (ii) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Restricted Stock Units to reduce or eliminate Participant's liability for Tax Obligations or achieve any particular tax result.

m. ***Data Protection.***

i.Data Processing. By participating in the Plan, Participant understands and acknowledges that it is necessary for the Company, Parent and any of their Subsidiaries or affiliates to collect, use, disclose, hold, transfer and otherwise process certain personal information about Participant as described in Section 28 of the Plan. This personal data (hereinafter "Data") includes but is not limited to, Participant's name, home address, email address and telephone number, date of birth, social insurance number, passport or other identification number, salary, nationality, job title, any Shares or directorships held in the Company, details of all Restricted Stock Units or any other entitlement to Shares awarded, canceled, vested, unvested or outstanding in Participant's favor, which the Company receives from Participant or any applicable affiliate of the Company. This may include the international transfer of Participant's Data to a jurisdiction that might have enacted data privacy laws that are less protective or otherwise different from those applicable in the Participant's country of residence.

ii.Necessary Disclosure of Data. Participant understands that providing the Company with Data is necessary for performance of the Award Agreement and that Participant's refusal to provide the Data would make it impossible for the Company to perform its contractual obligations and legitimate interests and may affect Participant's ability to participate in the Plan.

iii.Data Processing and Transfer Consent. Notwithstanding the foregoing, if Participant is located in a jurisdiction for which the lawful bases for processing and transferring personal data described in the Plan are not recognized, then, to the extent applicable, Participant hereby unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her Data, as described above and in any other grant materials, by and among, as applicable, the Company and any affiliate for the exclusive purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that he or she may, at any time, refuse or withdraw the consents herein, in any case without cost, by contacting in writing his or her human resources representative. If Participant does not consent or later seeks to revoke his or her consent, Participant's service with the Company or its applicable affiliate will not be affected; the only consequence of refusing or withdrawing consent is that the Company would not be able to grant Restricted Stock Units or other Awards to Participant under the Plan or administer or maintain such Awards. Therefore, Participant understands that refusing or withdrawing consent may affect his or her ability to participate in the Plan. For more information on the consequences of refusal to consent or withdrawal of consent, Participant should contact his or her local human resources representative.

n. No Advice Regarding Grant. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding Participant's participation in the Plan, or Participant's acquisition or sale of the underlying Shares. Participant should consult with his or her own personal tax, legal and financial advisors regarding his or her participation in the Plan before taking any action related to the Plan.

o. Address for Notices. Any notice to be given to the Company under the terms of this Award Agreement will be addressed to the Company at CrowdStrike Holdings, Inc., 150 Mathilda Place, Suite 300, Sunnyvale, CA 94086 United States or at such other address as the Company may hereafter designate in writing.

p. Language. Participant acknowledges that he or she is sufficiently proficient in English, or has consulted with an advisor who is sufficiently proficient in English, so as to allow Participant to understand the terms and conditions of the Award Agreement. If Participant has received the Award Agreement or any other document related to the Plan translated into a language other than English, and if the meaning of the translated version is different than the English version, the English version will control.

q. Successors and Assigns. The Company may assign any of its rights under this Award Agreement to single or multiple assignees, and this Award Agreement shall be binding upon and inure to the benefit of any assignee or successor of the Company. Subject to the restrictions on transfer set forth herein and in the Plan, this Award Agreement shall be binding upon Participant and his or her heirs, executors, administrators, successors and assigns. The rights and obligations of

Participant under this Award Agreement may only be assigned with the prior written consent of the Company.

r. Interpretation. The Administrator will have the power to interpret the Plan and this Award Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). The Administrator's decisions, determinations and interpretations will be final and binding on Participant and any other holders of the Restricted Stock Units or other interested persons. Neither the Administrator nor any person acting on behalf of the Administrator will be personally liable for any action, determination, or interpretation made in good faith with respect to the Plan or this Award Agreement.

s. Captions. Captions provided herein are for convenience only and are not to serve as a basis for interpretation or construction of this Award Agreement.

t. Agreement Severable. In the event that any provision in this Award Agreement will be held invalid or unenforceable, such provision will be severable from, and such invalidity or unenforceability will not be construed to have any effect on, the remaining provisions of this Award Agreement.

u. Imposition of Other Requirements. The Company reserves the right to impose other requirements on Participant's participation in the Plan, on the Restricted Stock Units and on any Shares acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require Participant to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

v. Insider Trading Restrictions/Market Abuse Laws. Participant may be subject to insider trading restrictions and/or market abuse laws in applicable jurisdictions including, but not limited to the United States and Participant's country, the broker's country or the country in which the Shares are listed (if different), which may affect his or her ability to accept, acquire, sell or otherwise dispose of Shares or rights to Shares or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws or regulations in applicable jurisdictions). Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under any applicable Company insider trading policy. Participant acknowledges that it is Participant's responsibility to comply with any applicable restrictions and Participant should consult his or her personal legal advisor on this matter.

w. Foreign Asset/Account, Exchange Control and Tax Requirements. Participant acknowledges that, depending on his or her country, there may be certain foreign asset and/or account reporting requirements or exchange control restrictions which may affect Participant's ability to acquire or hold Shares or cash received from participating in the Plan (including proceeds from the sale of Shares and dividends paid on Shares) in, to and/or from a brokerage or bank account or legal entity outside Participant's country. Participant may be required to report such accounts, assets or related transactions to the tax or other authorities in his or her country. Participant also may be required to repatriate sale proceeds or other funds received as a result of participating in the Plan to Participant's country through a designated bank or broker and/or within a certain time after receipt. Participant acknowledges that he or she is responsible for ensuring compliance with any applicable foreign asset/account, exchange control and tax reporting requirements and should consult his or her personal legal and tax advisors on this matter.

x. Amendment, Suspension or Termination of the Plan. By accepting this Award, Participant expressly warrants that he or she has received an Award of Restricted Stock Units under the Plan, and has received, read, and understood a description of the Plan. Participant understands that the Plan is discretionary in nature and may be amended, suspended or terminated by the Company at any time.

y. Modifications to the Award Agreement. Participant expressly warrants that he or she is not accepting this Award Agreement in reliance on any promises, representations, or inducements other than those contained herein. Subject to Sections 15 and 21 of the Plan, modifications to this Award Agreement or the Plan can be made only in an express written contract executed by a duly authorized officer of the Company. Notwithstanding anything to the contrary in the Plan or this Award Agreement, the Company reserves the right to revise this Award Agreement as it deems necessary or advisable, in its sole discretion and without the consent of Participant, to comply with Section 409A of the Code or to otherwise avoid imposition of any additional tax or income recognition under Section 409A of the Code in connection with this Award of Restricted Stock Units.

z. No Waiver. Either party's failure to enforce any provision or provisions of this Award Agreement shall not in any way be construed as a waiver of any such provision or provisions, nor prevent that party from thereafter enforcing each and every other provision of this Award Agreement. The rights granted to both parties herein are cumulative and shall not constitute a waiver of either party's right to assert all other legal remedies available to it under the circumstances.

aa. Governing Law and Venue. This Award Agreement and the Restricted Stock Units will be governed by the laws of the State of Delaware, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under these Restricted Stock Units or this Award Agreement, the parties hereby submit to and consent to the jurisdiction of the State of Delaware, and agree that such litigation will be conducted in any United States federal court located in the State of Delaware or any other state court in the State of Delaware, and no other courts.

ab. Waiver of Jury Trial. Each of the parties hereto hereby irrevocably waives any and all right to trial by jury in any legal proceeding arising out of or related to this Award Agreement or the transactions contemplated hereby.

ac. Entire Agreement. The Plan is incorporated herein by reference. The Plan and this Award Agreement (including the appendices and exhibits referenced herein) constitute the entire agreement of the parties with respect to the subject matter hereof and supersede in their entirety all prior undertakings and agreements of the Company and Participant with respect to the subject matter hereof, and may not be modified adversely to Participant’s interest except by means of a writing signed by the Company and Participant.

Exhibit 21.1

LIST OF SUBSIDIARIES
OF
CROWDSTRIKE HOLDINGS, INC.

Name of Subsidiary	Jurisdiction of Incorporation
Crowdstrike, Inc.	Delaware
CrowdStrike UK LTD	United Kingdom

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-252007) and on Form S-8 (Nos. 333-237343 and 333-232084) of CrowdStrike Holdings, Inc. of our report dated March 18, 2021 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Jose, California
March 18, 2021

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) 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

   (d) 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 18, 2021

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)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) 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) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) 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

   (d) 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 18, 2021

CROWDSTRIKE HOLDINGS, INC.

By:	/s/ Burt W. Podbere
Name:	Burt W. Podbere
Title:	Chief Financial Officer (Principal Financial 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 fiscal year ended January 31, 2021 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 18, 2021

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 fiscal year ended January 31, 2021 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 18, 2021

By:	/s/ Burt W. Podbere
Name:	Burt W. Podbere
Title:	Chief Financial Officer (Principal Financial Officer)