UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

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

For the fiscal year ended July 31, 2019

OR

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

For the transition period from __________ to __________

Commission File Number: 001-37883

NUTANIX, INC.
(Exact name of registrant as specified in its charter)

Delaware	**27-0989767**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1740 Technology Drive, Suite 150
San Jose, CA 95110
(Address of principal executive offices, including zip code)

(408) 216-8360
(Registrant's telephone number, including area code)

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

Title of each class	Trading symbol(s)	Name of each exchange on which registered
Class A common stock, $0.000025 par value per share	NTNX	NASDAQ Global Select Market

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

Indicate by check mark whether the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. 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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T 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. (Check one):

Large Accelerated Filer	☒	Accelerated Filer	☐
Non-accelerated Filer	☐ (Do not check if a smaller reporting company)	Smaller Reporting Company	☐
Emerging Growth Company	☐	If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial	☐

accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of January 31, 2019 (the last business day of the registrant's most recently completed second fiscal quarter) was approximately $7.9 billion, based upon the closing sale price of such stock on the NASDAQ Stock Market. The registrant has no non-voting common equity.

As of August 31, 2019, the registrant had 170,416,856 shares of Class A common stock, $0.000025 par value per share, and 18,440,200 shares of Class B common stock, $0.000025 par value per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

As noted herein, the information called for by Parts II and III is incorporated by reference to specified portions of the registrant’s definitive proxy statement to be filed in conjunction with the registrant’s 2019 annual meeting of stockholders, which is expected to be filed not later than 120 days after the registrant's fiscal year ended July 31, 2019.

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended ("Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended ("Exchange Act"), which statements involve substantial risks and uncertainties. Other than statements of historical fact, all statements contained in this Annual Report on Form 10-K including statements regarding our future results of operations 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," "plan," "intend," "could," "would," "expect," or words or expressions of similar substance or the negative thereof, that convey uncertainty of future events or outcomes are intended to identify forward-looking statements. Forward-looking statements included in this Annual Report on Form 10-K include, but are not limited to, statements regarding:

- our future billings, revenue, cost of revenue and operating expenses, as well as changes in the cost of product revenue, component costs, product gross margins and support, entitlements and other services revenue and changes in research and development, sales and marketing and general and administrative expenses;
- our business plans, initiatives and objectives, our ability to execute such plans, initiatives and objectives in a timely manner, and the impact of such plans, initiatives and objectives on our business, operations, and financial results;
- our plans for, and the timing of, changes to our business model, including our ongoing transition to a subscription-based business model, our ability to manage, complete or realize the benefits of such transitions successfully and in a timely manner, and the short-term and long-term impacts of such transitions on our business, operations and financial results;
- the benefits and capabilities of our platform, products, services and technology;
- our growth strategy, our ability to effectively achieve and manage our growth, and the amount, timing and impact of any investments to grow our business, including plans to continue to increase demand generation and marketing spending, and continue to invest in our global engineering, research and development and sales and marketing teams;
- anticipated trends, growth rates and challenges in our business and in the markets in which we operate, including the segmentation and productivity of our sales team;
- our ability to develop new solutions, product features and technology and bring them to market in a timely manner, as well as the impact of including additional solutions in our product portfolio;
- market acceptance of new technology and recently introduced solutions;
- the interoperability and availability of our solutions with and on third-party hardware platforms;
- our ability to increase sales of our solutions, particularly to large enterprise customers;
- our ability to attract new end customers and retain and grow sales from our existing end customers;
- our ability to maintain and strengthen our relationships with our channel partners and OEMs, and the impact of any changes to such relationships on our business, operations and financial results;
- the effects of seasonal trends on our results of operations;
- our expectations concerning relationships with third parties, including our ability to compress and stabilize sales cycles;
- our ability to maintain, protect and enhance our intellectual property;
- our exposure to and ability to guard against cyber attacks and other actual or perceived security breaches;
- our ability to continue to expand internationally;
- the effects of increased competition in our market and our ability to compete effectively;
- anticipated capital expenditures;
- future acquisitions or investments in complementary companies, products, services or technologies and the ability to successfully integrate completed acquisitions;
- our ability to stay in compliance with laws and regulations that currently apply or become applicable to our business both in the United States and internationally, including recent changes in global tax laws;
- macroeconomic and industry trends, projected growth or trend analysis;

- our ability to attract and retain qualified employees and key personnel; and

- the sufficiency of cash balances to meet cash needs for at least the next 12 months.

We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives and financial needs in light of the information currently available to us. These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in Part I, Item 1A. "Risk Factors" in this Annual Report on Form 10-K. Moreover, we operate in a very competitive and rapidly changing environment and new risks emerge from time to time. It is not possible for us to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained or implied in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and trends discussed in this Annual Report on Form 10-K may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. The forward-looking statements in this Annual Report on Form 10-K relate only to events as of the date on which the statements are made. We undertake no obligation, and expressly disclaim any obligation, to update, alter or otherwise revise or publicly release the results of any revision to these forward-looking statements to reflect new information or the occurrence of unanticipated or subsequent events, except as required by law. We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements and you should not place undue reliance on our forward-looking statements.

PART I

ITEM 1. Business

Overview

Nutanix, Inc. ("we," "us," "our" or "Nutanix") provides a leading enterprise cloud platform that consists of software solutions that power many of the world's business applications by digitizing the traditional silos of enterprise computing. Founded in 2009, we pioneered hyperconverged infrastructure ("HCI"), initially combining the disparate IT silos of compute, storage and networking into a single on-premises product. As the market realized the power, scalability and customer choice that HCI provides, we continued to innovate, and Acropolis Hypervisor ("AHV") - our hypervisor that provides free virtualization designed to run all virtualized applications - was born. To give our customers even more choice, we engineered our software solutions to run on a variety of underlying hardware platforms, decoupling our software from our Nutanix-branded hardware appliances and creating a true enterprise cloud operating system that can power a variety of on-premises private cloud deployments; a significant step in our transition from a hardware to a software company. That transition has continued with the adoption of "cloud" as a mainstream IT paradigm, which has caused enterprises to move toward hybrid cloud architectures that allow businesses to simultaneously utilize a private cloud powered by Nutanix software, leverage third-party public cloud solutions where applicable, and distribute their IT architecture to the edge where their businesses increasingly engage with devices and users. We continue to transform our software solutions into a comprehensive enterprise cloud platform, based on web-scale engineering and operational simplicity, which allows our customers to take advantage of the paradigm shift by providing simple-to-use and integrated solutions that can power nearly any scale IT deployment, while giving customers the freedom of choice to connect their Nutanix powered on-premises deployments with, and to run applications across, various cloud environments, utilizing various hardware platforms and taking advantage of various virtualization solutions. Today, our enterprise cloud platform natively converges compute, virtualization, storage, networking, desktop and security services into one integrated, simple-to-consume solution. Further, although our customers primarily use our enterprise cloud platform to power their on-premises private cloud deployments, our solutions also allow enterprises to simplify the complexities of a multi-cloud environment with automation, cost governance and compliance. The end result will be an enterprise cloud platform that empowers our customers to unify various clouds - on-premises private, public and distributed - into one seamless cloud, allowing enterprises to choose the right cloud for each application.

In addition to our transition to a software-centric business model, and in order to further capitalize on the hybrid cloud paradigm shift and provide our customers with additional freedom to choose the best way to consume our enterprise cloud platform based on their specific business needs, we are also reshaping our licensing models in order to better meet changing customer demands by moving toward a subscription-based business model over the long term. A subscription-based business model means one in which our products, including associated support and entitlement arrangements, are sold with a defined term. For more information, see the section titled "Components of Our Results of Operations" included in Part II, Item 7, as well as Note 3 of Notes to Consolidated Financial Statements included in Part II, Item 8, of this Annual Report on Form 10-K. That transition will result in our traditional life-of-device licensing models being increasingly replaced by term-based licenses, providing our customers with a subscription consumption option that matches the way they consume third-party public cloud services, and will provide true license portability across hybrid cloud deployments. We believe that these transitions - from hardware to software solutions, and from life-of-device to subscription models - will contribute to our long-term growth, although they may have an adverse impact on our business and financial performance in the near term. In fiscal 2019, our subscription billings increased to 60.5% of total billings, up 19 percentage points from fiscal 2018, and our subscription revenue reached $648.4 million, representing a year-over-year increase of 96.1%.

Our Enterprise Cloud Platform

Our enterprise cloud platform, which includes the software features, products and services described below, allows our customers to meld their on-premises private clouds with both third-party public clouds and distributed cloud operating infrastructures and uses powerful distributed systems architecture that natively converges compute, virtualization, storage, networking, desktop and security services into a single, integrated, simple-to-consume solution for our customers at each key stage of their enterprise cloud journey.

Our product portfolio is designed to track our customers' journey to a full enterprise cloud, providing a turnkey solution at each key stage of the customer journey. Nutanix Core, which includes our foundational HCI products, is the first leg of the customer journey and seeks to bring simplicity and operational efficiency by facilitating the customer's initial migration from the traditional siloed infrastructure to a simpler on-premises HCI platform. We expect sales of Nutanix Core solutions to continue to make up a majority of our revenue for the foreseeable future. Nutanix Essentials, which provides capabilities for our customers who want to build on our Core offerings and enhance security, automation, storage management and operational efficiencies, is the next step in the customer journey. Finally, Nutanix Enterprise provides a suite of offerings to accompany our customers as they advance into the hybrid and multi-cloud deployment stage of their enterprise cloud transition journey.

Nutanix Core

Our customers begin their enterprise cloud journey-modernizing their IT infrastructures and migrating from traditional infrastructure to a simpler and integrated on-premises enterprise cloud platform-with Nutanix Core. Nutanix Core is comprised of our HCI products, which form the foundation of our enterprise cloud platform: Acropolis ("AOS"), our software-defined HCI product; Prism, our HCI control plane and management console; and AHV, our hypervisor that provides free virtualization.

Acropolis (AOS). Acropolis is the foundation of our enterprise cloud platform, converging virtualization, enterprise storage services, virtual networking and platform services, including application mobility and security, into a single turnkey solution. It is an open platform designed to address all needs for a wide range of workloads that can be run at nearly any scale and centrally managed. Acropolis is comprised of four foundational components:

- *Virtualization.* Acropolis supports all major hypervisors, including our native, free AHV.
- *Platform Services.* Acropolis delivers software-defined platform services that allow enterprises to consolidate and run all of their workloads on our enterprise cloud platform and manage them centrally.
- *Enterprise Storage Capabilities.* Building on a distributed data fabric, Acropolis enables robust enterprise storage services across multiple storage protocols. Enterprise storage capabilities include performance acceleration capabilities, such as caching, data tiering and data locality and storage optimization, such as deduplication, compression and erasure coding, along with data protection and disaster recovery features.
- *Networking Services.* Acropolis provides a comprehensive set of services to visualize the network, automate common network operations, secure the network through native services, such as micro-segmentation, and integrate with various third-party networking and security products.

Prism. Nutanix Prism is our consumer-grade control plane providing management and analytics across the entire enterprise cloud platform. It delivers integrated virtualization and infrastructure management, robust operational analytics, self-service capabilities and one-click administration. Prism allows routine IT operations that are typically manual and cumbersome to be fully automated or completed with just one click, including capacity planning, provisioning of new applications and resources, troubleshooting and software upgrades. Prism enables efficient management of enterprise-wide deployments by serving as a central administration point to manage multiple clusters and hypervisors within a datacenter or across multiple sites. Prism is also built using a distributed, scale-out architecture and software updates and patches can be executed non-disruptively without requiring the cluster to be brought offline. Further, Prism offers a broad set of Application Programming Interfaces ("APIs") for integration with third-party products.

Acropolis Hypervisor. AHV is a native, enterprise-grade virtualization solution that is included with our enterprise cloud platform with no additional software components to license, install or manage. AHV is built upon a widely-used open source hypervisor technology, known as KVM and extends its base functionality to include additional features such as virtual machine ("VM") high availability and live migration. AHV also includes such features as flexible migrations, automated workload placement, security hardening, network virtualization, data protection and disaster recovery and rich analytics, while allowing for integrated management via Nutanix Prism to streamline the provisioning, placing and managing of VMs, thereby providing our customers with a high-performance virtualization solution while eliminating third-party virtualization costs.

Nutanix Essentials

Nutanix Essentials builds on our Core offerings and enhances security, automation, data management and operational efficiencies. Composed of *Calm*, *Files*, *Flow*, *Prism Pro* and *Mine*, Nutanix Essentials is primarily focused on providing additional capabilities for our customers so that they can consume our Core solutions in a comprehensive and fully integrated private cloud environment.

Calm. Nutanix Calm adds native application orchestration, automation and lifecycle management to our enterprise cloud platform. Calm automates the provisioning, scaling and updating of applications using easy-to-use blueprints that can be published for internal consumption across enterprises.

Files. Nutanix Files is a software-defined file storage consolidation solution for unstructured file data that is easily scalable for a wide range of deployments and applications. Files is natively integrated into our enterprise cloud platform and eliminates the need for a separate network-attached storage appliance by providing unified management for VM and enterprise file services.

Flow. Nutanix Flow, an application-centric network and policy management solution supported by AHV, allows users to deploy microsegmentation to secure individual applications or groups of applications with minimal changes to the existing network, enabling applications and environments to be governed independent of the physical infrastructure. Flow also delivers advanced networking and security services that allow customers to gain greater visibility and granular control over applications.

Prism Pro. Prism Pro is a set of features providing customers with advanced analytics and intelligent insights into their Nutanix environments. These features include performance anomaly detection, capacity planning, custom dashboards, reporting and advanced search capabilities. Powered by X-Fit, a purpose-built machine learning technology, and X-Play, a codeless task-automation engine, Prism Pro analyzes large volumes of system data to generate actionable insights and automate remediation and everyday tasks.

Nutanix Enterprise

Nutanix Enterprise provides a suite of products and services that give our customers additional choice, enabling new capabilities as customers advance from on-premises deployments into the hybrid and multi-cloud deployment stage of their enterprise cloud journey. Nutanix Enterprise is composed of *Objects*, *Karbon*, *Move*, *Era, Volumes and Xi Cloud Services*.

Objects. Nutanix Objects is a scalable, software-defined object storage solution designed to support data archival and cloud native services that is managed as part of our enterprise cloud platform and is accessible via S3-compatible applications.

Karbon. Nutanix Karbon is a turnkey, enterprise-grade Kubernetes service offering that simplifies the provisioning, operations and lifecycle management of Kubernetes.

Move. Nutanix Move simplifies and streamlines the enterprise cloud transition by enabling the mobility of applications across both public and private cloud environments.

Era. Nutanix Era is a database services software suite that automates and simplifies database provisioning and lifecycle management. Era supports complex database environments, automatically maximizing infrastructure efficiency, and enables our customers to provision, clone, refresh and restore their databases to any point in time.

Volumes. Nutanix Volumes provides a scale-out storage solution for non-virtualized workloads, allowing virtualized guest operating systems and physical hosts to directly access Distributed Storage Fabric storage resources.

Xi Cloud Services. Nutanix Xi Cloud Services is our new suite of cloud-based services designed for multi-cloud management, and includes the following offerings:

- *Xi IoT* is a cloud-agnostic edge computing platform that delivers local compute and artificial intelligence for the Internet of things ("IoT") edge devices, converging the edge platform and the customer’s choice of cloud infrastructure into a single data processing platform.

- *Xi Leap* is a hybrid cloud disaster recovery service that enables enterprises to protect on-premises workloads and data without the need to set up a secondary datacenter by seamlessly extending their on-premises environment to the Xi Cloud. Xi Leap is natively integrated into our enterprise cloud platform and can be deployed directly from Prism.

- *Xi Frame* is a cloud-native and infrastructure-independent, desktop-as-a-service platform that combines the consumer-grade simplicity and web-scale design of cloud applications with the functionality of traditional virtual desktop applications. It enables the delivery of applications and desktops from public clouds, as well as from private cloud deployments with AOS and AHV.

- *Xi Beam* is a multi-cloud cost and security compliance optimization service that provides organizations with deep visibility into, and analytics on, their cloud consumption patterns, as well as cost optimization recommendations that can reduce a customer’s cost of ownership. Xi Beam can also automate compliance with over 250 health checks and security best practices.

- *Xi Clusters*, which is in development as of the date of this Annual Report, will allow deployment of AOS on Amazon Web Services ("AWS") infrastructure, giving customers the option of consuming Nutanix software via AWS.

Delivery of Our Solutions

Our enterprise cloud platform can be deployed on-premises running on a variety of qualified hardware platforms or, in the case of our cloud-based software and software-as-a-service ("SaaS") offerings, via hosted service. Non-portable software licenses for our platform are delivered or sold alongside configured-to-order appliances, with a license term equal to the life of the associated appliance. Our subscription term-based licenses are sold separately, or can also be sold alongside configured-to-order appliances. Our subscription term-based licenses typically have a term of one to five years. Our cloud-based SaaS subscriptions have terms extending up to five years. As we continue our transition toward a subscription-based business model, we expect a greater portion of our products to be delivered through subscription term-based licenses or cloud-based SaaS subscriptions.

Configured-to-order appliances, including our Nutanix-branded NX hardware line, can be purchased from one of our channel partners, original equipment manufacturers ("OEMs"), or directly from Nutanix. Super Micro Computer, Inc. ("Super Micro") and Flextronics Systems Limited ("Flextronics") pre-install our software on our Nutanix-branded NX series appliances. Dell Technologies ("Dell"), Lenovo Group Ltd. ("Lenovo"), International Business Machines Corporation ("IBM"), Fujitsu Technology Solutions GmbH ("Fujitsu"), Hewlett Packard Enterprise ("HPE") and Inspur Group ("Inspur") pre-install our software on their hardware to create the Dell XC Series, Lenovo Converged HX Series, IBM CS Series, Fujitsu XF Series, HPE DX Series and Inspur inMerge 1000 Series appliances, respectively. Some of our OEM partners also sell associated support offerings.

Our enterprise cloud platform is typically purchased with one or more years of support and entitlements, which includes the right to software upgrades and enhancements as well as technical support. Purchases of non-portable software typically come with an accompanying support and entitlement agreement with a term that matches the software license term. Purchases of term-based licenses and SaaS subscriptions have support and entitlements built into the license.

Our Support Programs

Product Support. We offer varying levels of product support to our customers based on their needs. We also offer premium support programs through our technical account managers and designated support engineers.

Professional Services. We provide consulting and implementation services to customers through our professional services team for assessment, design, deployment and optimizing of their Nutanix environments. We typically provide these services at the time of initial installation to help the customer with configuration and implementation.

Our End Customers

Our solutions serve a broad range of workloads, including enterprise applications, databases, virtual desktop infrastructure, unified communications and big data analytics, and we support both virtualized and container-based applications. We have end customers across a broad range of industries, such as automotive, consumer goods, education, energy, financial services, healthcare, manufacturing, media, public sector, retail, technology and telecommunications. We also sell to service providers, who utilize our enterprise cloud platform to provide a variety of cloud-based services to their customers. We had a broad and diverse base of approximately 14,180 end customers as of July 31, 2019, including approximately 810 Global 2000 enterprises. We define the number of end customers as the number of end customers for which we have received an order by the last day of the period, excluding partners to which we have sold products for their own demonstration purposes. A single organization or customer may represent multiple end customers for separate divisions, segments or subsidiaries. The number of end customers grew from approximately 10,610 as of July 31, 2018 to approximately 14,180 as of July 31, 2019.

Our enterprise cloud platform is primarily sold through channel partners, including distributors, resellers and OEMs, and delivered directly to our end customers. Arrow Electronics, Inc., a distributor to our end customers, represented

16%, 18% and 24% of our total revenue for fiscal 2017, 2018 and 2019, respectively. Tech Data Corporation, another distributor to our end customers, represented 14%, 13% and 13% of our total revenue for fiscal 2017, 2018 and 2019, respectively.

Growth Strategy

Key elements of our growth strategy include:

- ***Continually innovate and maintain technology leadership.*** Since inception, we have rapidly innovated from supporting limited applications and a single hypervisor to a full enterprise cloud platform that is designed to support a wide variety of workloads across private, public and multi-cloud deployments. We intend to continue to invest heavily in developing our enterprise cloud platform with new features, services and products to expand our market opportunity.

- ***Invest to acquire new end customers.*** We completed our first end customer sale in October 2011 and have since grown to approximately 14,180 end customers. We intend to grow our base of end customers by continuing to invest in sales and marketing, leveraging our network of channel partners and OEMs, furthering our international expansion and extending our enterprise cloud platform to address new customer segments. One area of continued focus increasing our sales to new, and expanding our sales to existing, large enterprise customers.

- ***Continue to drive follow-on sales to existing end customers.*** Our end customers typically deploy our technology initially for a specific workload. Our sales teams and channel partners then seek to systematically target follow-on sales opportunities to drive additional purchases throughout our broader product portfolio. This land and expand strategy enables us to quickly expand our footprint within our existing end customer base from follow-on orders that in the aggregate are often multiples of the initial order.

- ***Deepen engagement with current channel and OEM partners and establish additional routes to market to enhance sales leverage.*** We have established meaningful channel partnerships globally and have driven strong engagement and commercial success with several major resellers and distributors. We believe that our OEM relationships can augment our routes to market to accelerate our growth and that there is a significant opportunity to grow our sales with our channel partners and OEMs. We intend to attract and engage new channel and OEM partners around the globe while also selling our standalone software for deployment on qualified hardware or a hosted service to maximize the availability of our solutions for our customers.

- ***Invest in rapid growth while remaining focused on our overall financial health.*** We intend to continue investing in our rapid growth, while balancing such growth against our operating expenses. By maintaining this balance, we believe we can drive toward our high growth potential without sacrificing our overall financial health.

Sales and Marketing

Sales. We primarily engage our end customers through our global sales force who directly interact with key IT decision makers while also providing sales development, opportunity qualification and support to our channel partners. We have established relationships with our channel partners, who represent many of the key resellers and distributors of datacenter infrastructure software and systems in each of the geographic regions where we operate. We also engage our end customers through our OEM partners, which license our software and package it with their hardware, and sell through their direct sales forces and channel partners.

Technology Alliances**.** We have developed relationships with a number of leading technology companies that help us deliver world-class solutions to our customers. Through our Elevate Technology Alliance Partner Program, our developer, application, hardware and infrastructure partners get access to resources that allow them to validate and integrate their products with Nutanix solutions and engage in joint sales training and enablement. In addition, we work closely with our technology partners through co-marketing and lead-generation activities in an effort to broaden our marketing reach and help us win new customers and retain existing ones.

Marketing**.** Our channel partners have joined our integrated partner program, the Nutanix Partner Network, which provides market development funds, preferred pricing through deal registration, sales enablement and product training, innovative marketing campaigns and dedicated account support. We also coordinate with our OEM partners on joint marketing activities. We supplement our sales efforts with our marketing programs that include print and online advertising, corporate and third-party events, demand generation activities, social media promotions, media and analyst relations and community programs. For example, in May 2019 we hosted our fifth annual .NEXT Conference, where nearly 6,000 attendees came to learn about our current and future products and solutions. We also establish deep integration with our ecosystem of third-party technology partners and engage in joint marketing activities with them.

Research and Development

Our research and development efforts are focused primarily on improving current technology, developing new technologies in current and adjacent markets and supporting existing end customer deployments. Our research and development teams primarily consist of distributed systems software and user interface engineers. A large portion of our research and development team is based in San Jose, California. We also maintain research and development centers in India, North Carolina, Washington, Serbia and Germany. We plan to dedicate significant resources to our continued research and development efforts, and intend to continue to grow our global research and development and engineering teams to enhance our solutions, improve integration with new and existing ecosystem partners and broaden the range of IT infrastructure technologies that we converge into our enterprise cloud platform. We believe that these investments will contribute to our long-term growth, although they may adversely affect our profitability in the near term.

Research and development expense was $288.6 million, $313.8 million and $500.7 million for fiscal 2017, 2018 and 2019, respectively.

Manufacturing

We do not manufacture any hardware. The Nutanix-branded NX series appliances, including those that are delivered by us, are manufactured for us based on our specifications by two manufacturers, Super Micro and Flextronics. Super Micro and Flextronics assemble and test the Nutanix-branded NX series appliances and they generally procure the components used in the NX series appliances directly from third-party suppliers. Our agreement with Super Micro automatically renews in May 2020 for successive one-year periods thereafter, with the option to terminate upon each annual renewal. Our agreement with Flextronics expires in November 2020 and automatically renews for successive one-year periods thereafter, with the option to terminate upon each annual renewal. Distributors handle fulfillment and shipment for certain end customers, but do not hold inventory.

Backlog

We typically accept and ship orders within a short time frame. In general, customers may cancel or reschedule orders without penalty prior to delivery, and delivery schedules requested by customers in their purchase orders vary based upon each customer’s particular needs. As a result, we do not believe that our backlog at any particular time is a reliable indicator of future revenue.

Competition

We operate in the intensely competitive enterprise infrastructure market and compete primarily with companies that sell software to build and operate enterprise clouds, integrated systems and standalone storage and servers, as well as providers of public cloud infrastructure solutions. These markets are characterized by constant change and rapid innovation. Our main competitors fall into the following categories:

- software providers, such as VMware, Inc. ("VMware"), that offer a broad range of virtualization, infrastructure and management products to build and operate enterprise and hybrid clouds;
- traditional IT systems vendors, such as Cisco Systems, Inc. ("Cisco"), Dell, HPE, Hitachi Data Systems ("Hitachi"), IBM and Lenovo, that offer integrated systems that include bundles of servers, storage and networking solutions, as well as a broad range of standalone server and storage products;
- traditional storage array vendors, such as Dell, Hitachi and NetApp, Inc. ("NetApp"), which typically sell centralized storage products; and
- providers of public cloud infrastructure and SaaS-based offerings, such as Amazon.com, Inc. ("Amazon"), Google Inc. and Microsoft Corporation.

In addition, we compete against vendors of hyperconverged infrastructure and software-defined storage products, such as Cisco, HPE, Dell, VMware and many smaller emerging companies. As our market grows, we expect it will continue to attract new companies as well as existing larger vendors. Some of our competitors may also expand their product offerings, acquire competing businesses, sell at lower prices, bundle with other products, provide closed technology platforms, partner with other companies to develop joint solutions, or otherwise attempt to gain a competitive advantage. Furthermore, as we expand our product offerings, we may expand into new markets and we may encounter additional competitors in such markets. Additionally, as companies increasingly offer competing solutions, they may be less willing to cooperate with us as an OEM or otherwise. For example, IBM recently acquired Red Hat, Inc. ("Red Hat") and they may begin to prioritize selling Red Hat products instead of our products in its global consulting business. In addition, Dell owns a majority of the outstanding voting power of VMware, and a joint Dell and VMware offering would also compete directly with our core solutions. Dell may also be incentivized to sell its own solutions over our products.

We believe the principal competitive factors in our market include:

- product features and capabilities;
- system scalability, performance and resiliency;
- management and operations, including provisioning, analytics, automation and upgrades;
- total cost of ownership over the lifetime of the technology;
- product interoperability with third-party applications, infrastructure software, infrastructure systems and platforms and public clouds;
- application mobility across disparate silos of enterprise computing, including public and private cloud infrastructure; and
- complete customer experience, including usability, support and professional services.

We believe we are positioned favorably against our competitors based on these factors. However, many of our competitors have substantially greater financial, technical and other resources, greater brand recognition, larger sales forces and marketing budgets, broader distribution and larger and more mature intellectual property portfolios.

Intellectual Property

Our success depends in part upon our ability to protect and use our core technology and intellectual property. We rely on patents, trademarks, copyrights and trade secret laws, confidentiality procedures and employee nondisclosure and invention assignment agreements to protect our intellectual property rights. As of July 31, 2019, we had 102 United States patents that have been issued and 326 non-provisional patent applications pending in the United States. Our issued U.S. patents expire between 2031 and 2037. We also leverage open source software in some of our products.

See Item 1A, "Risk Factors," for further discussion of risks related to protecting our intellectual property.

Facilities

Our corporate headquarters are located in San Jose, California where, under lease agreements that expire through May 2024, we currently lease approximately 400,000 square feet of space. We also maintain offices in North America, Europe, Asia Pacific, the Middle East, Latin America and Africa. We lease all of our facilities and do not own any real property. We expect to add facilities as we grow our employee base and expand geographically. We believe that our facilities are adequate to meet our needs for the immediate future and that, should it be needed, suitable additional space will be available to accommodate the expansion of our operations.

Employees

We had approximately 5,340 employees worldwide as of July 31, 2019. None of our employees in the United States are represented by a labor organization or is a party to any collective bargaining arrangement. In certain of the European countries in which we operate, we are subject to, and comply with, local labor law requirements in relation to the establishment of works councils. We are often required to consult and seek the consent or advice of these works councils. We have never had a work stoppage and we consider our relationship with our employees to be good.

Information about Segment and Geographic Areas

The segment and geographic information required herein is contained in Note 12 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Corporate Information

We were incorporated in Delaware in September 2009 as Nutanix, Inc. Our principal executive offices are located at 1740 Technology Drive, Suite 150, San Jose, California 95110, and our telephone number is (408) 216-8360. We have operations throughout North America, Europe, Asia Pacific, the Middle East, Latin America and Africa. Our website address is www.nutanix.com. Information contained on or accessible through our website is neither a part of this Annual Report on Form 10-K nor incorporated by reference herein, and any references to our website and the inclusion of our website address in this Annual Report on Form 10-K are intended to be inactive textual references only.

Available Information

Our website is located at www.nutanix.com and our investors relations website is located at ir.nutanix.com. We file reports with the Securities and Exchange Commission ("SEC"), which maintains an internet site (http://www.sec.gov) that contains reports, proxy and information statements and other information regarding issuers, including us, that file electronically with the SEC. This Annual Report on Form 10-K, our Quarterly Reports on Form 10-Q, our Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are made available free of charge on the investor relations portion of our website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. We also provide a link to the section of the SEC’s website at www.sec.gov that has, or will have, all of our public filings, including this Annual Report on Form 10-K and our Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, our Proxy Statements and other ownership-related filings. We use our investor relations website as well as social media as channels of distribution for important company information. For example, webcasts of our earnings calls and certain events we participate in or host with members of the investment community are on our investor relations website. Additionally, we announce investor information, including news and commentary about our business and financial performance, SEC filings, notices of investor events and our press and earnings releases, on our investor relations website. It is possible that the information we post on social media could be deemed to be material information. Therefore, we encourage investors, the media and others interested in our company to review the information we post on social media channels listed on our investor relations website. Investors and others can receive notifications of new information posted on our investor relations website in real time by signing up for email alerts and RSS feeds. Further corporate governance information, including our corporate governance guidelines, board committee charters and code of business conduct and ethics, is also available on our investor relations website under the heading "Governance." Information contained on or accessible through our websites are neither a part of nor incorporated by reference into this Annual Report on Form 10-K or any other report or document we file with or furnish to the SEC, and any references to our websites and the inclusion of our website addresses in this Annual Report on Form 10-K are intended to be inactive textual references only.

Item 1A. Risk Factors

You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this Annual Report on Form 10-K, including our consolidated financial statements and related notes, before making a decision to invest in our Class A common stock. The risks and uncertainties described below are not the only ones we face; additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that affect our business. Due to risks and uncertainties, known and unknown, our past financial results may not be a reliable indicator of future performance, and historical trends should not be used to anticipate results or trends in future periods. If any risks and uncertainties, including any of the risks described below, occur, our business, financial condition, operating results and prospects could be materially harmed. In that event, the price of our Class A common stock could decline, potentially significantly, and you could lose all or part of your investment.

Risks Related to Our Business and Industry

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

We have incurred net losses in all periods since our inception and we expect that we will continue to incur net losses for the foreseeable future. We experienced net losses of $379.6 million, $297.2 million and $621.2 million for fiscal 2017, 2018 and 2019, respectively. As of July 31, 2019, we had an accumulated deficit of $1.6 billion. In addition to the investments we expect to continue to make to grow our business, we also incur and expect to continue incurring significant additional legal, accounting and other expenses as a public company. If we fail to increase our revenue and manage our expenses, we may not achieve or sustain profitability in the future.

Our transition to a subscription-based business model has resulted in, and may continue to result in, a compression to our topline results, and if we fail to successfully manage the transition, our business, operating results and free cash flow may be adversely affected.

We are currently transitioning to a subscription-based business model and may undergo additional business model changes in the future in order to adapt to changing market demands. Such business model changes, including the current transition to a subscription-based business model, entail significant known and unknown risks and uncertainties, and we cannot assure you that we will be able to complete the transition to a subscription-based business model, or manage the transition successfully and in a timely manner. If we do not complete the transition, or if we fail to manage the transition successfully and in a timely manner, our revenues, business and operating results may be adversely affected. Moreover, we may not realize all of the anticipated benefits of the subscription transition, even if we successfully complete the transition. The transition to a subscription-based business model also means that our historical results, especially those achieved before we began the transition, may not be indicative of our future results.

Regardless of how we manage the transition, our total billings and revenue have been and will continue to be adversely impacted by the transition, particularly when compared to historical periods, due primarily to two factors. First, and most important, subscription-based sales, including sales of term-based licenses where revenue is currently recognized upfront, may in some instances have a lower total dollar value than sales of licenses for the life of the device because they may be of a shorter term than the actual or assumed life of the device. If we are unable to increase the volume of our subscription-based sales in any given period to make up for the lower total dollar value of certain subscription-based sales, our total billings and revenue for such period will be negatively impacted. Second, and of lesser significance, the revenue associated with certain SaaS subscription purchases, such as Nutanix Xi Cloud Services, will be recognized ratably over the term of the subscription, resulting in less upfront revenue as compared to our term-based licenses and historical life-of-device licenses. These factors may also make it difficult to increase our revenue in a given period through additional sales in the same period.

In addition, due to the generally shorter terms of subscription-based licenses as compared to our historical life-of-device licenses, maintaining our historically high customer renewal rates will become increasingly important. Our subscription customers have no obligation to renew their subscriptions for our solutions after the expiration of the subscription term, and may decide not to renew their subscriptions, or to renew only for a portion of our solutions or on pricing terms that are less favorable to us. Our customers' renewal rates may decline or fluctuate as a result of a number of factors, including their level of satisfaction with our solutions, their ability to continue their operations and spending levels, the pricing of our solutions and the availability of competing solutions. We anticipate that our subscription-based model will require us to dedicate additional resources toward educating our existing and potential customers as to the benefits of the subscription model and our solutions generally and to re-train our seasoned sales employees, who have historically focused on appliance sales and selling software licenses for the life of the device, on selling subscription-based licenses in order to maintain and increase their productivity. As a result, our sales and marketing costs may increase. In addition, we anticipate needing to adjust our go-to-market cost structure, particularly as it relates to how we compensate our sales teams for renewal transactions, to become more efficient as we transition to the subscription-based business model. Those adjustments may negatively affect the productivity of our sales teams and cause our renewal rates to fluctuate or decline, and there is no assurance that we will be able to successfully implement the adjustments in a timely or cost-effective manner, or that we will be able to realize all or any of the expected benefits from such adjustments. If our customers do not renew their subscriptions for our solutions, demand pricing or other concessions prior to renewal, or if our renewal rates fluctuate or decline, our total billings and revenue will fluctuate or decline, and our business and financial results will be negatively affected.

Additional risks associated with our transition to a subscription-based business model include, but are not limited to:

- if current or prospective end customers prefer our historical life-of-device licenses, adoption of our subscription-based model may not meet our expectations, or may take longer than anticipated to achieve;

- potential confusion of or creation of concerns among current or prospective end customers and channel partners, including concerns regarding changes to our pricing models;

- we may be unsuccessful in implementing or maintaining subscription-based pricing models, or we may select a pricing model that is not optimal and could negatively affect adoption, renewal rates and our business results;

- our end customers may shift purchases to our lower priced subscription offerings, which could negatively affect our overall financial results;

- when purchasing multi-year term-based subscription licenses, our customers may request to pay for only the first year of the applicable term upfront, instead of the full term as we have seen historically, which would negatively impact our operating and free cash flows, potentially significantly;

- our relationships with existing channel partners that are accustomed to selling life-of-device licenses may be damaged, and we may be required to dedicate additional time and resources to educate our channel partners about our transition, each of which may negatively affect our business and financial results;

- if we are unsuccessful in adjusting our go-to-market cost structure, or in doing so in a timely or cost-effective manner, we may incur sales compensation costs at a higher than forecasted rate, particularly if the pace of our subscription transition is faster than anticipated;

- we may face additional and/or different financial reporting obligations, or we may choose to report our financial results using new or different metrics, either of which could increase the costs associated with our financial reporting and investor relations activities; and

- investors, industry and financial analysts may have difficulty understanding the shift in our business model, resulting in changes in financial estimates or failure to meet investor expectations.

Finally, our transition to a subscription-based business model as an IT infrastructure and platform company has few, if any, precedents, and there are many risks or uncertainties that may remain unknown to us until we have gathered more information as part of the transition. If we fail to anticipate these unknowns, whether due to a lack of information, precedent, or otherwise, or if we fail to properly manage expected risks and/or execute on our transition to a subscription-based business model, our business and operating results, and our ability to accurately forecast our future operating results, may be adversely affected.

The markets in which we compete are rapidly evolving, which make it difficult to forecast end customer adoption rates and demand for our solutions.

The markets in which we compete are rapidly evolving. Accordingly, our future financial performance will depend in large part on the allocation of spending in traditional IT markets and on our ability to adapt to new market demands. Currently, sales of our solutions are dependent in large part upon replacement of spending in traditional markets, including x86 servers, storage systems and virtualization software. In addition, as we continue to develop new solutions designed to address new market demands, such as Nutanix Xi Cloud Services, sales of our solutions will in part depend on capturing new spending in these markets, including hybrid cloud services. If these markets experience a shift in customer demand, or if customers in these markets focus their new spending on, or shift their existing spending to, public cloud solutions or other solutions that do not interoperate with our solutions more quickly or more extensively than expected, our solutions may not compete as effectively, if at all. It is also difficult to predict end customer demand or adoption rates for our solutions or the future growth of our market.

If end customers do not adopt our solutions, our ability to grow our business and operating results may be adversely affected.

Traditional IT infrastructure architecture is entrenched in the datacenters of many of our end customers because of their historical financial investment in existing IT infrastructure architecture and the existing knowledge base and skillsets of their IT administrators. As a result, our sales and marketing efforts often involve extensive efforts to educate our end customers as to the benefits and capabilities of our solutions, particularly as we continue to pursue large organizations as end customers. If we fail to achieve market acceptance of our solutions, our ability to grow our business and our operating results will be adversely affected.

A shift in our relationships with our OEMs could adversely affect our results of operations.

Our relationships with our original equipment manufacturers (collectively, "OEMs" and, each, an "OEM") continue to shift as industry dynamics change, and our OEMs may be less willing to partner with us as an OEM or otherwise, or may begin to prioritize their own products over our solutions, as such shifts occur. For example, Dell is not just an OEM, but also a competitor of ours, and accounted for 8% and 6% of our total billings in fiscal 2018 and fiscal 2019, respectively. Dell owns EMC Corporation ("EMC"), as well as a majority of outstanding voting power in VMware and could combine the Dell, EMC and VMware product portfolios into unified offerings optimized for their platforms, which would compete directly with our core solutions. Also, Dell may be more likely to promote and sell its own solutions, including those from EMC's complementary product portfolio, over our products, or cease selling or promoting our products entirely. If Dell decides to sell its own solutions over our products, that could adversely impact our OEM sales and harm our business, operating results and prospects, and our stock price could decline, potentially significantly. Further, since OEM sales, including sales made by Dell, are generally recognized upon delivery under Accounting Standards Update 2014-09, Revenue from Contracts with Customers ("ASC 606"), which we adopted as of August 1, 2017, any reduction in OEM sales by any of our OEMs will have an increased impact on our reported revenue and gross margins in future periods, potentially making it more difficult for us to forecast revenue and gross margins in future quarters. Under ASC 606, revenue from Dell accounted for approximately 9% and 7% of our total revenue in fiscal 2018 and fiscal 2019, respectively.

Our financial performance, including revenue growth, in recent periods may not be indicative of our future performance.

We have experienced revenue growth in recent periods, with total revenue of $845.9 million, $1.2 billion and $1.2 billion for fiscal 2017, 2018 and 2019, respectively. While we have historically experienced significant revenue growth, our total revenue growth slowed in fiscal 2019, due in large part to our transitions from hardware to software-only sales, and from life-of-device to a subscription license model. As a result, you should not consider such revenue growth as indicative of our future performance and we may not achieve similar or any revenue growth in future periods. For example, in February 2019 we announced initiatives to increase pipeline growth through additional investments in sales and marketing activities, including increased demand generation spending, and the hiring of additional sales people. While we saw improvements in these areas in fiscal 2019, those improvements may not continue, and the returns on these initiatives may not be as high or may take longer to realize than expected, and may impact our revenue growth and profitability in the near future.

In addition, as a result of our transition toward a subscription-based model, our revenue may continue to be impacted in the short term. The revenue associated with certain subscription purchases, such as with Nutanix Xi Cloud Services, will be recognized ratably over the term of the subscription, resulting in less upfront revenue as compared to our historical life-of-device and term-based software-only transactions. Also, the revenue we recognize from subscription sales, even if recognized upfront, may in some instances have a lower total dollar value than those associated with licenses for the life of the device because they may be of a shorter term than the life of the device. This may also make it difficult to rapidly increase our revenue in any period through additional sales.

Following our transition to software-only sales and due to the ongoing transition toward a subscription-based model, our success will also depend heavily on the ability of our sales team to adjust their strategy to focus on software-only and subscription-based sales effectively and in a timely manner. Furthermore, our customers may not understand these changes to our product sales, and investors, industry and financial analysts may have difficulty understanding the changes to our business model, resulting in changes in financial estimates or failure to meet investor expectations. As our business changes, the transitions may make it more difficult to accurately project our operating results or plan for future growth. Accordingly, you should not rely on our revenue growth for any prior periods as an indication of our future revenue or revenue growth.

We have experienced rapid growth in recent periods and we may not be able to sustain or manage any future growth effectively.

We have expanded our overall business and operations significantly in recent periods. Our employee headcount increased significantly since our inception, and we may have significant headcount increases in the future. We anticipate that our operating expenses will increase in the foreseeable future as we scale our business, including in developing and improving our new and existing solutions, expanding our sales and marketing capabilities and global coverage, and in providing general and administrative resources to support our growth. As we continue to rapidly grow our business, we must effectively integrate, develop and motivate a large number of new employees, as well as existing employees who are promoted or moved into new roles, while maintaining the effectiveness of our business execution. The failure to manage these changes could significantly delay the achievement of our strategic objectives. In particular, our success depends heavily on our ability to ramp new sales teams in a fast and effective manner. We must also continue to improve and expand our IT and financial infrastructure, management systems and product management and sales processes. We expect that our future growth will continue to place a significant strain on our management, operational and financial resources. We may incur costs associated with future growth prior to or without realizing the anticipated benefits, and the return on these investments may be lower, if any, or may develop more slowly than we expect. For example, in February 2019 we announced initiatives to increase pipeline growth through additional investments in sales and marketing activities, including increased demand generation spending, and the hiring of additional sales people. While we saw improvements in these areas in fiscal 2019, those improvements may not continue, and the returns on these initiatives may not be as high or may take longer to realize than expected, and may impact our revenue growth and profitability in the near future.

If we are unable to sustain or manage our growth effectively, we may not be able to take advantage of market opportunities. We also may fail to satisfy end customers’ requirements, maintain product quality, execute on our business plan or respond to competitive pressures, any of which could adversely affect our business, operating results, financial condition and prospects.

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

Part of our business strategy is to primarily focus on our long-term growth. As a result, our profitability may be lower in the near term than it would be if our strategy was to maximize short-term profitability. Expenditures related to expanding our research and development efforts, sales and market efforts, our transition to a subscription-based business model, infrastructure and other such investments may not ultimately grow our business or cause long-term profitability. If we are ultimately unable to achieve profitability at the level anticipated by analysts and our stockholders, our stock price may decline, potentially significantly.

The enterprise IT market is rapidly changing and expanding, and we expect competition to continue to intensify in the future from both established competitors and new market entrants.

We operate in the intensely competitive enterprise infrastructure market and compete primarily with companies that sell software to build and operate enterprise clouds, integrated systems and standalone storage and servers, as well as providers of public cloud infrastructure solutions. These markets are characterized by constant change and rapid innovation. Our main competitors fall into the following categories:

- software providers, such as VMware, that offer a broad range of virtualization, infrastructure and management products to build and operate enterprise and hybrid clouds;
- traditional IT systems vendors, such as Cisco, Dell, HPE, Hitachi, IBM and Lenovo, that offer integrated systems that include bundles of servers, storage and networking solutions, as well as a broad range of standalone server and storage products;
- traditional storage array vendors, such as Dell, Hitachi and NetApp, which typically sell centralized storage products; and
- providers of public cloud infrastructure and SaaS-based offerings, such as Amazon, Google Inc. and Microsoft Corporation.

In addition, we compete against vendors of hyperconverged infrastructure and software-defined storage products, such as Cisco, HPE, Dell, VMware and many smaller emerging companies. As our market grows, we expect it will continue to attract new companies as well as existing larger vendors. Some of our competitors may also expand their product offerings, acquire competing businesses, sell at lower prices, bundle with other products, provide closed technology platforms, partner with other companies to develop joint solutions, or otherwise attempt to gain a competitive advantage. Furthermore, as we expand our product offerings, we may expand into new markets and we may encounter additional competitors in such markets. Additionally, as companies increasingly offer competing solutions, they may be less willing to cooperate with us as an OEM or otherwise. For example, IBM recently acquired Red Hat and they may begin to prioritize selling Red Hat products instead of our products in its global consulting business. In addition, Dell owns a majority of the outstanding voting power of VMware, and a joint Dell and VMware offering would also compete directly with our core solutions. Dell may also be incentivized to sell its own solutions over our products.

Many of our existing competitors have, and some of our potential competitors may have, competitive advantages over us, such as longer operating histories, significantly greater financial, technical, marketing or other resources, stronger brand awareness and name recognition, larger intellectual property portfolios and broader global presence and distribution networks. Moreover, our current or potential competitors may be acquired by third parties with greater available resources and the ability to initiate or withstand substantial price competition. Furthermore, some of our competitors have access to larger customer bases and supply a wide variety of products to, and have well-established relationships with, our current and prospective end customers. Some of these competitors have in the past and may in the future take advantage of their existing relationships with end customers, distributors or resellers to provide incentives to such current or prospective end customers that make their products more economically attractive or to interfere with our ability to offer our solutions to our end customers. Our competitors may also be able to offer products or functionality similar to ours at a more attractive price, such as by integrating or bundling their solutions with their other product offerings or those of technology partners or establishing cooperative relationships with other competitors, technology partners or other third parties. Potential end customers may prefer to purchase from their existing suppliers rather than a new supplier, especially given the significant investments that they have historically made in their legacy infrastructures. Some of our competitors may also have stronger or broader relationships with technology partners than we do, which could make their products more attractive than ours. As a result, we cannot assure you that our solutions will compete favorably, and any failure to do so could adversely affect our business, operating results and prospects.

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

We began selling our products in October 2011. We have relatively limited historical financial data, and we operate in a rapidly evolving market. Our relatively limited operating history makes it difficult to evaluate our current business and our future prospects, including our ability to plan for and model future growth. Furthermore, we have transitioned our business to focus on more software-only transactions, and are in the process of shifting to a subscription-based business model in the longer-term, which may make it more difficult to project our business growth and margins. In addition, the rapidly evolving nature of the enterprise IT infrastructure market, as well as other factors beyond our control, reduces our ability to accurately forecast quarterly or annual performance. Our solutions may never reach widespread adoption, and changes or advances in technologies could adversely affect the demand for our solutions. A reduction in demand for hybrid cloud technology caused by lack of customer acceptance, technological challenges, competing technologies and solutions or otherwise would result in lower revenue growth rates than anticipated or decreased revenue, either of which could negatively impact our business, operating results and prospects. Any predictions about future revenue and expenses may not be as accurate as they would be if we had a longer operating history. We have encountered and will continue to encounter risks and difficulties associated with rapid growth and expansion and a relatively limited operating history. If we do not address these risks successfully, our business and operating results would be adversely affected, and our stock price could decline.

Developments or improvements in enterprise IT infrastructure technologies may materially and adversely affect the demand for our solutions.

Significant developments in enterprise IT infrastructure technologies, such as advances in storage, virtualization, containers, networking, disaster recovery, edge computing, management software and public cloud and hybrid cloud infrastructure solutions, may materially and adversely affect our business, operating results and prospects in ways we do not currently anticipate. For example, improvements in hybrid cloud technologies, such as improvements in orchestration and automation tools or new or improved interoperability between historically on-premises enterprise cloud technologies with public cloud platforms, could emerge as a preferred alternative to our solutions, especially if they are introduced to the market before ours are. Any failure by us to develop new or enhanced technologies or processes, to react to changes or advances in existing technologies or to correctly anticipate these changes or advances as we create and invest in our product roadmap, could materially delay our development and introduction of new solutions, which could result in the loss of competitiveness of our solutions, decreased revenue and a loss of market share to competitors. In addition, public cloud infrastructure offers alternatives to the on-premises infrastructure deployments that our platform currently primarily supports. Various factors could cause the rate of adoption of public cloud infrastructure to increase, including continued or accelerated decreases in the price of public cloud offerings, increased interoperability with on-premises infrastructure solutions that compete with our solutions, and improvements in the ability of public cloud providers to deliver reliable performance, enhanced security, better application compatibility and more precise infrastructure control. Any of these factors could make our platform less competitive as compared to the public cloud, and could materially and adversely affect the demand for our solutions.

If other IT vendors do not cooperate with us to ensure that our solutions interoperate with their products, including by providing us with early access to their new products or information about their new products, our product development efforts may be delayed or impaired, which could adversely affect our business, operating results and prospects.

Our solutions provide a platform on which software applications and hypervisors from different software providers run. As a result, our solutions must interoperate with our end customers' existing hardware and software infrastructure, specifically their networks, servers, software and operating systems, as well as the applications that they run on this infrastructure, which may be manufactured and provided by a wide variety of vendors and OEMs. In addition to ensuring that our solutions interoperate with these hardware and software products initially, we must occasionally update our software to ensure that our solutions continue to interoperate with new or updated versions of these hardware and software products. Current or future providers of hardware, software applications, hypervisors or data management tools could make changes that would diminish the ability of our solutions to interoperate with them, and significant additional time and effort may be necessary to ensure the continued compatibility of our solutions, which might not be possible at all. Even if our solutions are compatible with those of other providers, if they do not certify or support our solutions for their systems or cooperate with us to coordinate troubleshooting and hand off of support cases, end customers may be reluctant to buy our solutions, which could decrease demand for our solutions and harm our ability to achieve a return on the investments and resources that we have dedicated to ensuring compatibility. Developing solutions that interoperate properly requires substantial partnering, capital investment and employee resources, as well as the cooperation of the vendors or developers of the software applications and hypervisors both with respect to product development and product support. Vendors may not provide us with early or any access to their technology and products, assist us in these development efforts, certify our solutions, share with or sell to us any APIs, formats, or protocols we may need, or cooperate with us to support end customers. If they do not provide us with the necessary access, assistance or proprietary technology on a timely basis or at all, we may experience product development delays or be unable to ensure the compatibility of our solutions with such new technology or products. To the extent that vendors develop products that compete with ours, they have in the past, and may again in the future, withhold their cooperation, decline to share access, certify our solutions or sell or make available to us their proprietary APIs, protocols or formats or engage in practices to actively limit the functionality, or compatibility, and certification of our products. If any of the foregoing occurs, our product development efforts may be delayed or impaired, our solutions could become less attractive to end customers resulting in a decline in sales, and our business, operating results and prospects may be adversely affected.

If we fail to successfully execute on our planned transition to selling more cloud services, which would be sold on a ratable subscription-basis, our results of operations could be adversely affected.

We are transitioning, and anticipate continuing to transition, portions of our business from on-premises products generating revenue through software licenses based on a set term or the life of the device, to selling our products and services as cloud-based offerings on a ratable subscription basis. This shift requires a considerable investment of technical, financial, legal and sales resources and will continue to divert resources and increase costs, especially in cost of license and other revenues, in any given period. We also intend to make investments in the supporting infrastructure for such cloud-based offerings and may not recoup the costs of such investments. Such investments of resources may also not improve our long-term growth and results of operations. Further, the increase in some costs associated with our cloud services may be difficult to predict over time, especially in light of our lack of historical experience with the costs of delivering cloud-based versions of our solutions.

We believe this transition has certain advantages, however, it also presents a number of risks to us including the following:

- arrangements entered into on a ratable subscription basis may delay when we can recognize revenue, even when compared to similar term-based subscription sales, which we currently recognize upfront, and can require up-front costs, which may be significant;

- since revenue is recognized ratably over the term of the customer agreement, any decrease in customer purchases of our ratable subscription-based products and services will not be fully reflected in our operating results until future periods. This will also make it difficult for us to increase our revenue through additional ratable subscription sales in any one period;

- cloud-based ratable subscription arrangements are generally under short-term agreements. Accordingly, our customers generally have no long-term obligation to us and may cancel their subscription at any time, even if our customers are satisfied with our subscription products; and

- there is no assurance that the cloud-based solutions we offer on a ratable subscription basis, including new products that we may introduce, will receive broad marketplace acceptance.

If we fail to properly execute on our transition to selling portions of our products and services as cloud-based offerings on a ratable subscription basis, our business and operating results would be adversely affected, and our stock price could decline.

If we fail to develop or introduce new or enhanced solutions on a timely or cost-effective basis, our ability to attract and retain end customers could be impaired and our brand, reputation and competitive position could be harmed.

We operate in a dynamic environment characterized by rapidly changing technologies and industry standards and technological obsolescence. We will need to continue to create valuable software solutions and integrate these solutions across hardware platforms. To compete successfully, we must design, develop, market and sell new or enhanced solutions that provide increasingly higher levels of performance, capacity, scalability, security, interoperability, application mobility and reliability and meet the cost expectations of our end customers. The introduction of new products by our competitors, the market acceptance of products based on new or alternative technologies, or the emergence of new industry standards could render our existing or future solutions obsolete or less attractive to end customers. Any failure to anticipate or develop new or enhanced solutions or technologies in a timely or cost-effective manner in response to technological shifts, could result in decreased revenue and harm to our business and prospects. Any new feature or application that we develop or acquire may not be introduced in a timely or cost-effective manner and may not achieve broad market acceptance and investments in research and development or efforts to optimize our engineering cost structure may not be successful. In particular, if we fail to timely release new products, technology or services that we previously announced, our brand and reputation could be harmed. If we fail to introduce new or enhanced solutions that meet the needs of our end customers or penetrate new markets in a timely fashion, we will lose market share and our business, operating results and prospects will be adversely affected.

If we are not successful in executing our strategy to increase sales of our solutions to new and existing large organizations, service providers and government entities, our operating results may suffer.

Our growth strategy is dependent in large part upon increasing sales of our solutions to new and existing large enterprises, service providers and government entities, particularly when such sales result in large orders for our solutions. Sales to these end customers involve risks that may not be present, or that are present to a lesser extent, with sales to smaller end customers, which can act as a disincentive to our sales team to pursue these larger end customers. These risks include:

- competition from companies that traditionally target larger enterprises, service providers and government entities and that may have pre-existing relationships or purchase commitments from such end customers;
- increased purchasing power and leverage held by large end customers in negotiating contractual arrangements with us;
- more stringent requirements in our support service contracts, including demand for quicker support response times and penalties for any failure to meet support requirements; and
- longer sales cycles and the associated risk that substantial time and resources may be spent on a potential end customer that elects not to purchase our solutions.

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

Our growth depends on our existing end customers making additional purchases of software licenses and software upgrades and renewing and upgrading their subscriptions and support and entitlement agreements, and the failure of our end customers to do so could harm our business and operating results.

Our future success depends in part on purchases by our existing end customers of additional software licenses and appliances as well as renewals and upgrades to their subscription and support and entitlement agreements. If our end customers do not purchase additional software licenses or appliances or software upgrades, or renew or upgrade their subscription and support and entitlement agreements, our revenue may decline and our operating results may be harmed. In order for us to maintain or improve our operating results, we depend on our existing end customers renewing their subscription agreements as well as their support and entitlement agreements, or purchasing additional solutions. End customers may choose not to renew their subscription agreements or support and entitlement agreements, or purchase additional solutions, because of several factors, including dissatisfaction with our prices or features relative to competitive offerings, reductions in our end customers' spending levels or other causes outside of our control. If our existing end customers do not purchase new solutions, or renew or upgrade their subscription agreements or support and entitlement agreements, our revenue may grow more slowly than expected or may decline, and our business and operating results may be adversely affected.

We rely on our key personnel, and our Chief Executive Officer in particular, to grow our business, and the loss of one or more such key employees or the inability to attract and retain qualified personnel could harm our business.

Our success and future growth depends to a significant degree on the skills and continued services of our executive officers and key personnel. In particular, we are highly dependent on the services of Dheeraj Pandey, our Chief Executive Officer and Chairman, who is critical to the development of our technology, future vision and strategic direction. We do not have life insurance policies that cover any of our executive officers or other key employees. The loss of the services of Mr. Pandey or any of our key employees or executive officers could disrupt our business and negatively impact our operating results, prospects and future growth. Our future success also depends on our ability to continue to attract, integrate and retain highly skilled personnel, especially skilled sales and engineering employees. Competition for highly skilled personnel is frequently intense, especially in the San Francisco Bay Area, where we are headquartered. Volatility or lack of performance in our stock price may also affect our ability to attract and retain our key employees. We cannot assure you that we will be able to successfully attract or retain qualified personnel. Our inability to attract and retain the necessary personnel could adversely affect our business, operating results and financial condition.

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

Although we have a channel sales model, our sales representatives typically engage in direct interaction with our prospective end customers. Therefore, we continue to be substantially dependent on our sales force to obtain new end customers and sell additional solutions to our existing end customers. There is significant competition for sales personnel with the skills and technical knowledge that we require. Our ability to achieve revenue growth will depend, in large part, on our success in recruiting, training and retaining sufficient numbers of sales personnel to support our growth. New hires require significant training and may take significant time before they achieve full productivity; we estimate based on past experience that our average sales team members typically do not fully ramp and are not fully productive until around the time of the start of their fourth quarter of employment with us. 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, particularly individuals who are focused on sales of our solutions to new and existing large enterprises, service providers and government entities, in the markets where we do business or plan to do business. Hiring sales personnel in new countries also requires additional set up, upfront and ongoing costs that we may not recover if the sales personnel fail to achieve full productivity. In addition, as a result of our rapid growth, a large percentage of our sales force is new to our company and our solutions and therefore less effective than our more seasoned employees. Moreover, as we complete our transition to focus on software-only transactions and continue our transition to a subscription-based business model, we are also re-training our seasoned sales employees, who have historically focused on appliance sales and selling software licenses for the life of the device, in order to maintain or increase their productivity.

If our new sales employees, particularly those focused on sales of our solutions to new and existing large enterprises, service providers and government entities, do not become fully productive on the timelines that we have projected, or if we are not successful in training our more seasoned sales employees as we focus on software-only and subscription-based sales, our revenue will not increase at anticipated levels and our ability to achieve long term projections may be negatively impacted. If we are unable to hire, train and maintain sufficient numbers of effective sales personnel, or our new or existing sales personnel are not successful in obtaining new end customers, convincing existing customers to renew their subscription-based purchases, or increasing sales to our existing customer base generally, our business, operating results and prospects will be adversely affected.

If we do not effectively compose and structure our sales force to focus on the end customers and activities that will primarily drive our growth strategy, our business will be adversely affected.

As indicated above, our growth is dependent in large part on increasing our sales to large enterprises, particularly when those sales result in large orders for our solutions. In fiscal 2017, we started to segment our sales force to focus on these major accounts and large deals, and have continued to further refine this segmentation as our business changes. This process has involved hiring new, and promoting existing members of our sales team into, roles that focus on large sales to major enterprise accounts. Competition for sales employees who have the knowledge and experience necessary to effectively penetrate major enterprise accounts is fierce, and we may not be successful in hiring such employees, or hiring them on the timelines we anticipate, which will negatively impact our ability to target and penetrate major enterprise accounts. In addition, we anticipate that the sales cycles associated with major accounts will be longer than our traditional sales cycles, which will increase the time it will take our new global account managers to become fully productive. The new sales processes and leadership structures for these global sales teams may also take longer than anticipated to successfully implement, further impacting productivity. In addition, as our organization continues to focus on major accounts and large deals, the productivity of our traditional sales teams may be impacted. In response to that potential impact, in fiscal 2019 we started to further segment our sales force to separate commercial sales teams, particularly in the United States, from our enterprise sales teams, with the goal of building a focused U.S. commercial sales team to serve as a counterbalance to our enterprise sales teams. This process, which we anticipate will continue for the foreseeable future, will involve hiring new, and training existing, sales teams to focus exclusively on commercial transactions, which are typically smaller and more frequent than enterprise transactions. Additionally, we have transitioned our business to focus primarily on software-only transactions, and are in the process of transitioning to a subscription-based business model. These segmentation projects and business model transitions may lead to fluctuations in sales productivity that will make it more difficult to accurately project our operating results or plan for future growth. If we are unable to effectively manage these changes or implement new sales structures in a timely manner, or if our decision to segment our sales force is not successful in obtaining large sales of our solutions, our growth and ability to achieve long-term projections may be negatively impacted, and our business and operating results will be adversely affected.

We rely primarily on indirect sales channels for the distribution of our solutions, and disruption within these channels could adversely affect our business, operating results and cash flows.

We primarily sell our solutions through indirect sales channels, including channel partners, such as distributors, our OEMs, value added resellers and system integrators. Our OEMs in turn distribute our solutions through their own networks of channel partners with whom we have no direct relationships.

We rely, to a significant degree, on our channel partners to select, screen and maintain relationships with their distribution networks and to distribute our solutions in a manner that is consistent with applicable law, regulatory requirements and our quality standards. If our channel partners or a partner in their distribution network violates applicable law or regulatory requirements or misrepresents the functionality of our solutions, our reputation and brand could be damaged and we could be subject to potential liability. Additionally, if we are unable to establish relationships with strong channel partners in key growth regions, our ability to sell our solutions in these regions may be adversely affected. Our agreements with our channel partners are non-exclusive, meaning our channel partners may offer end customers the products of several different companies, including products that compete with ours. If our channel partners do not effectively market and sell our solutions, choose to use greater efforts to market and sell their own products or those of our competitors, or fail to meet the needs of our end customers, our business, operating results and prospects may be adversely affected. Our channel partners may cease marketing our solutions with limited or no notice and with little or no penalty. The loss of a substantial number of our channel partners, together with our inability to replace them, or the failure to recruit additional channel partners or establish an alternative distribution network could materially and adversely affect our business and operating results. For example, sales through Arrow Electronics, Inc. and Tech Data Corporation to our end customers represented 24% and 13%, respectively, of our total revenue for fiscal 2019. In addition, if a channel partner offers its own products or services that are competitive to our solutions, is acquired by a competitor or reorganizes or divests its reseller business units, our revenue derived from that partner may be adversely impacted or eliminated altogether.

Recruiting and retaining qualified channel partners and training them in the use of our technologies requires significant time and resources. If we fail to devote sufficient resources to support and expand our network of channel partners, our business may be adversely affected. Maintaining strong indirect sales channels for our products and effectively leveraging our channel partners and OEMs is important to our growth strategy, and the failure to effectively manage these relationships may lead to higher costs and reduced revenue. Also, in certain international markets, we are in the process of transitioning our distribution model from contracting directly with hundreds of individual resellers to contracting with a smaller number of larger global distributors. Although we believe that this transition will make our sales channels more efficient and broader reaching in the long term in these markets, there is no guarantee that this new distribution model will increase our sales in the short term or allow us to sustain our gross margins. Any potential delays or confusion during the transition process to our new partners may negatively affect our relationship with our existing end customers and channel partners and may cause us to lose prospective end customers or additional business from existing end customers or cause a decline in renewal rates with existing end customers. Upon completion of the transition to the new sales model, we will be more reliant on fewer channel partners, which may reduce our contact with our end customers making it more difficult for us to establish brand awareness, ensure proper delivery and installation of our software, support ongoing end customer requirements, estimate end customer demand, respond to evolving end customer needs and obtain subscription renewals from end customers.

All of our sales to government entities have been made indirectly through our channel partners. Government entities may have statutory, contractual or other legal rights to terminate contracts with our channel partners for convenience or due to a default, and, in the future, if the portion of government contracts that are subject to renegotiation or termination at the election of the government are material, any such termination or renegotiation may adversely impact our future operating results. Additionally, we sometimes rely on our channel partners to satisfy certain regulatory obligations that we would otherwise have to satisfy if we sold directly to the government entities, and our channel partners may be unable or unwilling to satisfy these obligations in the future. In the event of such termination or change, it may be difficult for us to arrange for another channel partner to sell our solutions to these government entities in a timely manner, and we could lose sales opportunities during the transition. Governments routinely investigate and audit government contractors’ (including subcontractors') administrative processes, and any unfavorable audit could result in the government refusing to continue buying our solutions, our channel partners changing their business models or refusing to continue to sell our solutions under current models, a reduction of revenue or fines, or civil or criminal liability if the audit uncovers improper or illegal activities.

If our indirect distribution channel is disrupted, particularly if we are reliant on a fewer number of channel partners, or if we are required to directly satisfy certain regulatory obligations imposed by government entities as a result of our efforts to expand our sales to government entities, we may be required to devote more time and resources to distribute our solutions directly and support our end customers, which may not be as effective and could lead to higher costs, reduced revenue and growth that is slower than expected.

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

Our operating results may fluctuate due to a variety of factors, many of which are outside of our control. As a result, comparing our operating results on a period-to-period basis may not be meaningful. If our revenue or operating results in any particular period fall below investor expectations, the price of our Class A common stock would likely decline. Factors that are difficult to predict and that could cause our operating results to fluctuate include, but are not limited to:

- the timing and magnitude of orders, shipments and acceptance of our solutions in any quarter;
- our ability to attract new and retain existing end customers;
- disruptions in our sales channels or shifts in our relationships with important channel partners and OEMs;
- the timing of revenue recognition for our sales, the impact of which is heightened by our focus on

software-only sales and ongoing transition to a subscription-based model;

- reductions in end customers' budgets for information technology purchases;

- delays in end customers' purchasing cycles or deferments of end customers' purchases in anticipation of new products or updates from us or our competitors;

- fluctuations in demand and competitive pricing pressures for our solutions;

- the mix of solutions sold, including the mix between appliance and software-only sales and the mix between subscription-based and non-subscription-based transactions, and the mix of revenue between products and support, entitlements and other services, which will depend in part on whether we are successful in executing our strategy to transition our business to a subscription-based model;

- our ability to develop, introduce and ship in a timely manner new solutions and product enhancements that meet customer requirements, and market acceptance of such new solutions and product enhancements;

- the timing of product releases or upgrades or announcements by us or our competitors;

- any change in the competitive dynamics of our markets, including consolidation or partnerships among our competitors or partners, new entrants or discounting of prices;

- the amount and timing of expenses to grow our business and the extent to which we are able to take advantage of economies of scale or to leverage our relationships with OEM or channel partners;

- the costs associated with acquiring new businesses and technologies and the follow-on costs of integrating and consolidating the results of acquired businesses;

- the amount and timing of stock-based compensation expenses;

- our ability to control the costs of our solutions and their key components, or to pass along any cost increases to our end customers;

- general economic, industry and market conditions; and

- future accounting pronouncements and changes in accounting policies.

The occurrence of any one of these risks could negatively affect our operating results in any particular quarter, which could cause the price of our Class A common stock to decline.

Our gross margins are impacted by a variety of factors and may be subject to variation from period to period.

Our gross margins may be affected by a variety of factors, including shifts in the mix of whether our solutions are sold as an appliance or as software-only, fluctuations in the pricing of our products, including as a result of competitive pricing pressures or increases in component pricing, and the degree to which we are successful in selling the value of incremental feature improvements and upgrades, changes in the cost of components of our hardware appliances, changes in the mix between direct versus indirect sales, changes in the mix of products sold and the timing and amount of recognized and deferred revenue, particularly as a result of our continued transition to a subscription-based business model. If we are unable to manage these factors effectively, our gross margins may decline, and fluctuations in gross margin may make it difficult to manage our business and to achieve or maintain profitability, which could adversely affect our business and operating results.

Our sales cycles can be long and unpredictable and our sales efforts require considerable time and expense. As a result, it can be difficult for us to predict when, if ever, a particular customer will choose to purchase our solutions, which may cause our operating results to fluctuate significantly.

Our sales efforts involve educating our end customers about the uses and benefits of our solutions, including their technical capabilities and cost saving potential. End customers often undertake an evaluation and testing process that can result in a lengthy sales cycle. Increasing competition and the emergence of new hyperconverged infrastructure product offerings and consumption models often result in customers evaluating multiple vendors at the same time, which can further lengthen the sales cycle. We spend substantial time and resources on our sales efforts without any assurance that our efforts will produce any sales. Platform purchases are frequently subject to budget constraints, multiple approvals and unanticipated administrative, processing and other delays. The broad nature of the technology shift that our solutions represent and the legacy relationships our end customers have with existing IT vendors sometimes lead to unpredictable sales cycles, which make it difficult for us to predict when end customers may purchase solutions from us. The unpredictable nature of our sales cycles may be increased in future periods as we continue to focus our sales efforts more heavily on major accounts and large deals, and as we educate our customers about our ongoing transition to a subscription-based business model. Our business and operating results will be significantly affected by the degree to which and speed with which organizations adopt our solutions.

Because we depend on manufacturers of hardware to timely and cost-effectively produce and ship the hardware on which our software runs, we are susceptible to delays and pricing fluctuations, which would cause our business to be adversely affected.

We rely on manufacturers to produce the hardware appliances, both our Nutanix-branded NX series appliances and the various third-party appliances that are included on our hardware compatibility list, on which our software runs, which exposes us to direct and indirect risks, including reduced control over quality assurance, product costs, product supply and timing and potential reputational harm and brand damage. Furthermore, our orders for NX series appliances represent a relatively small percentage of the overall orders received by such hardware manufacturers from their customers. Therefore, fulfilling our orders may not be a priority in guiding their business decisions and operational commitments. If we fail to manage our relationships with these manufacturers effectively, or if any of them experience delays or increased manufacturing lead times, component lead-time disruptions, capacity constraints or quality control problems in their operations or are unable to meet our or our end customers’ requirements for timely delivery, our ability to sell our solutions to our end customers could be severely impaired due to the lack of availability of certified hardware appliances, and our customers' ability to consume out software will be delayed, which will adversely affect our business and operating results, competitive position, brand and reputation.

In particular, we rely substantially on Super Micro and Flextronics to assemble and test the Nutanix-branded NX series appliances, including those that are delivered by us. Our agreement with Super Micro automatically renews in May 2020 for successive one-year periods thereafter, with the option to terminate upon each annual renewal, and does not contain any minimum long-term commitment to manufacture NX-branded appliances. Our agreement with Flextronics expires in November 2020 and automatically renews for successive one-year periods thereafter, with the option to terminate upon each annual renewal. The agreement does not contain any minimum long-term commitment to manufacture NX-branded appliances and any orders are fulfilled only after a purchase order has been delivered and accepted. If we are required to change the manufacturer of our NX-branded appliances, we may lose revenue, incur increased costs and damage our channel partner and end customer relationships. We may also decide to switch or bring on additional contract manufacturers in order to better meet our needs. Switching to or bringing on a new contract manufacturer and commencing production is expensive and time-consuming and may cause delays in order fulfillment at our existing contract manufacturers or cause other disruptions.

Our agreements with Super Micro and Flextronics do not contain any price assurances, and any increases in component costs, without a corresponding increase in the price of our NX series solutions, could harm our gross margins. Furthermore, we may need to increase our component purchases, manufacturing capacity and internal test and quality functions if we experience increased demand. The inability of Super Micro, Flextronics or other manufacturers to produce adequate supplies of hardware appliances could cause a delay in customers’ ability to consume our software and our order fulfillment, and our business, operating results and prospects would be adversely affected. As of July 31, 2019, we had approximately $72.1 million in the form of guarantees to our contract manufacturers related to certain components.

There are a limited number of suppliers, and in some cases single-source suppliers, for several key components in the NX-branded appliances, and any disruption in the availability or quality of these components could delay shipments of the NX-branded appliances and damage our channel partner or end customer relationships.

We rely on a limited number of suppliers, and in some cases single-source suppliers, for several key hardware components of the Nutanix-branded NX series appliances. These components are generally purchased on a purchase order basis through Super Micro or Flextronics and we do not have long-term supply contracts with our suppliers. Our reliance on key suppliers exposes us to risks, including reduced control over product quality, production and component costs, timely delivery and capacity. It also exposes us to the potential inability to obtain an adequate supply of required components because we do not have long-term supply commitments, and replacing some of these components would require a lengthy product qualification process. Furthermore, we extensively test and qualify the components that are used in NX-branded appliances to ensure that they meet certain quality and performance specifications. If our supply of certain components is disrupted or delayed, or if we need to replace existing suppliers, there can be no assurance that additional supplies or components can serve as adequate replacements for the existing components, will be available when required or that supplies will be available on terms that are favorable to us, and we may be required to modify our solutions to interoperate with the replacement components. Any of these developments could extend our lead times, increase the costs of our components or costs of product development, cause us to miss market windows for product launch and adversely affect our business, operating results and financial condition.

We generally maintain minimal inventory for repairs and a number of evaluation and demonstration units, and generally acquire components only as needed. We do not enter into long-term supply contracts for these components. As a result, our ability to respond to channel partner or end customer orders efficiently may be constrained by the then-current availability, terms and pricing of these components. The technology industry has experienced component shortages and delivery delays in the past, and we may experience shortages or delays of critical components in the future as a result of strong demand in the industry, component availability constraints, or other factors. If we or our suppliers inaccurately forecast demand for our solutions or we ineffectively manage our enterprise resource planning processes, our suppliers may have inadequate inventory, which could increase the prices we must pay for substitute components or result in our inability to meet demand for our solutions, as well as damage our channel partner or end customer relationships.

If the suppliers of the components of our hardware appliances increase prices of components, experience delays, disruptions, capacity constraints, quality control problems in their manufacturing operations or adverse changes to their financial condition, our ability to ship appliances to our channel partners or end customers in a timely manner and at competitive prices could be impaired and our competitive position, brand, reputation, and operating results could be adversely affected. Qualifying a new component is expensive and time-consuming. If we are required to change key suppliers or assume internal manufacturing operations, we may lose revenue and damage our channel partner or end customer relationships which could adversely impact our revenue and operating results.

We enter into arrangements with our suppliers that could require us to purchase certain minimum levels of inventory, which could result in us incurring losses with respect to such inventory, and may negatively impact our business and operating results.

We enter into arrangements with our suppliers whereby the supplier will purchase certain quantities of components and allocate them exclusively for our use in our products. If we are unable to use the inventory within a specified period, we may be required to purchase the inventory, or to pay the supplier the difference between the price at which the supplier purchased the inventory and the price at which the supplier is ultimately able to sell the inventory to a third party. As a result, if we inaccurately or mistakenly forecast our need for any such components, or if the market price of any such components decreases after the components are purchased by a supplier, we may suffer losses with respect to such inventory, and our business and operating results could be adversely affected.

We rely upon third parties for the warehousing and delivery of appliances and replacement parts for support, and we therefore have less control over these functions than we otherwise would.

We outsource the warehousing and delivery of appliances to a third-party logistics provider for worldwide fulfillment. In addition, some of our support offerings commit us to replace defective parts in our appliances as quickly as four hours after the initial customer support call is received, which we satisfy by storing replacement parts inventory in various third-party supply depots in strategic worldwide locations. As a result of relying on third parties, we have reduced control over shipping and logistics transactions and costs, quality control, security and the supply of replacement parts for support. Consequently, we may be subject to shipping disruptions and unanticipated costs as well as failures to provide adequate support for reasons that are outside of our direct control. If we are unable to have appliances or replacement products shipped in a timely manner, end customers may cancel their contracts with us, we may suffer reputational harm and our business, operating results and prospects may be adversely affected.

Our ability to sell our solutions is dependent in part on ease of use and the quality of our technical support, and any failure to offer high-quality technical support would harm our business, operating results and financial condition.

Once our solutions are deployed, our end customers depend on our support organization to resolve any technical issues relating to our solutions. Furthermore, because of the emerging nature of our solutions, our support organization often provides support for and troubleshoots issues for products of other vendors running on our solutions, even if the issue is unrelated to our solutions. There is no assurance that we can solve issues unrelated to our solutions, or that vendors whose products run on our solutions will not challenge our provision of technical assistance to their products. Our ability to provide effective support is largely dependent on our ability to attract, train and retain personnel who are not only qualified to support our solutions, but also well versed in some of the primary applications and hypervisors that our end customers run on our solutions. Furthermore, as we expand our operations internationally, our support organization will face additional challenges, including those associated with delivering support, training and documentation in languages other than English. In addition, as we continue to expand our product portfolio to include additional solutions our ability to provide high-quality support will become more difficult and will involve more complexity. Any failure to maintain high-quality installation and technical support, or a market perception that we do not maintain high-quality support, could harm our reputation and brand, adversely affect our ability to sell our solutions to existing and prospective end customers, and could harm our business, operating results and financial condition.

Our solutions are highly technical and may contain undetected defects, which could cause data unavailability, unauthorized access to, loss, or corruption that might, in turn, result in liability to our end customers and harm to our reputation, brand and business.

Our solutions are highly technical and complex and are often used to store information critical to our end customers’ business operations. Our solutions may contain undetected errors, defects or security vulnerabilities that could result in data unavailability, unauthorized access to, loss, corruption or other harm to our end customers’ data. In addition, as we expand our platform and introduce new cloud-based products that may hold more of our customer's data, such as Xi Leap, any undetected or unresolved errors, defects or security vulnerabilities may result in material losses or corruption of our end-customers' data. Some errors or defects in our solutions may only be discovered after they have been installed and used by end customers. We previously conducted an in-field replacement of equipment manufactured by our previous outsourced manufacturer, and may be required to do so again in the future. In addition, we may make certain commitments to our OEMs regarding the time frames within which we will correct any security vulnerabilities in our software. If any hardware or software errors, defects or security vulnerabilities are discovered in our solutions after commercial release, a number of negative effects in our business could result, including but not limited to:

- lost revenue or lost OEM or other channel partners or end customers;
- increased costs, including warranty expense and costs associated with end customer support as well as development costs to remedy the errors or defects;
- delays, cancellations, reductions or rescheduling of orders or shipments;
- product returns or discounts; and

- damage to our reputation and brand.

In addition, we could face legal claims for breach of contract, product liability, tort or breach of warranty. While many of our contracts with end customers contain provisions relating to warranty disclaimers and liability limitations, these provisions might not be upheld or might not provide adequate protection if we face such legal claims. Defending a lawsuit, regardless of its merit, could be costly and may divert management's attention and adversely affect the market's perception of us and our solutions. In addition, our business liability insurance coverage could prove inadequate with respect to a claim and future coverage may be unavailable on acceptable terms or at all. These product-related issues could result in claims against us and our business could be adversely impacted.

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

We derive a portion of our revenue from contracts with federal, state, local and foreign governments, and we believe that the success and growth of our business will continue to depend on our successful procurement of government contracts. However, demand is often unpredictable from government organizations, and there can be no assurance that we will be able to maintain or grow our revenue from the public sector. Government agencies are subject to budgetary processes and expenditure constraints that could lead to delays or decreased capital expenditures in IT spending, particularly in light of continued uncertainties about government spending levels, such as the U.S. federal government shutdown which began in December 2018, and recent changes to, or failure to appoint new, government leaders. The budget and approval process for government agencies also experiences a longer sales cycle relative to our other end customers. If government organizations reduce or shift their capital spending patterns, our business, operating results and prospects may be harmed. Factors that could impede our ability to maintain or increase the amount of revenue derived from government contracts, include:

- public sector budgetary cycles and funding authorizations;
- changes in fiscal or contracting policies;
- decreases in available government funding;
- changes in government programs or applicable requirements;
- the adoption of new laws or regulations or changes to existing laws or regulations;
- potential delays or changes in the government appropriations or other funding authorization processes; and
- higher expenses associated with, or delays caused by, diligence and qualifying or maintaining qualification as a government vendor.

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, operating results and prospects.

Third-party claims that we are infringing intellectual property, whether successful or not, could subject us to costly and time-consuming litigation or expensive licenses, and our business could be harmed.

A number of companies, both within and outside of the enterprise computing infrastructure industry, hold a large number of patents covering aspects of storage, servers, networking, desktop, security and virtualization products. In addition to these patents, participants in this industry typically also protect their technology through copyrights and trade secrets. As a result, there is frequent litigation based on allegations of infringement, misappropriation or other violations of intellectual property rights. We have received, and in the future may receive, inquiries from other intellectual property holders and may become subject to claims that we infringe their intellectual property rights, particularly as we expand our presence in the market and face increasing competition. Based upon our review of these claims, we believe we have meritorious defenses to the allegations, although there can be no assurance that we will be successful in defending against these allegations or reaching a business resolution that is satisfactory to us. In addition, parties may claim that the names and branding of our solutions infringe their trademark rights in certain countries or territories. If such a claim were to prevail, we may have to change the names and branding of our solutions in the affected territories and we could incur other costs.

We currently have a number of agreements in effect pursuant to which we have agreed to defend, indemnify and hold harmless our end customers, suppliers and channel and other partners from damages and costs which may arise from the infringement by our solutions of third-party patents or other intellectual property rights. The scope of these indemnity obligations varies, but may, in some instances, include indemnification for damages and expenses, including attorneys' fees. A claim that our solutions infringe a third party's intellectual property rights, even if untrue, could harm our relationships with our end customers and/or channel partners, may deter future end customers from purchasing our solutions and could expose us to costly litigation and settlement expenses. Even if we are not a party to any litigation between a customer and a third party relating to infringement by our solutions, an adverse outcome in any such litigation could make it more difficult for us to defend our solutions against intellectual property infringement claims in any subsequent litigation in which we are a named party. Any of these results could harm our brand and operating results.

Our defense of intellectual property rights claims brought against us or our end customers, suppliers and channel partners, with or without merit, could be time-consuming, expensive to litigate or settle, divert management resources and attention and force us to acquire intellectual property rights and licenses, which may involve substantial royalty or other payments. Further, a party making such a claim, if successful, could secure a judgment that requires us to pay substantial damages. An adverse determination also could invalidate our intellectual property rights and prevent us from offering our solutions to our end customers and may require that we procure or develop substitute solutions that do not infringe, which could require significant effort and expense. We may have to seek a license for the technology, which may not be available on acceptable terms or at all, and as a result may significantly increase our operating expenses or require us to restrict our business activities in one or more respects. Any of these events could adversely affect our business, operating results, financial condition and prospects.

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

We rely on a combination of patent, copyright, service mark, trademark and trade secret laws, as well as confidentiality procedures and contractual restrictions and covenants, to establish and protect our proprietary rights, all of which provide only limited protection. 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, if at all, 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 international 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. 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 cannot be certain that the steps we have taken will prevent unauthorized use of our technology or the reverse engineering of our technology. Moreover, others may independently develop technologies that are competitive to ours or infringe our intellectual property.

Protecting against the unauthorized use of our intellectual property, solutions and other proprietary rights is expensive and difficult, particularly internationally. Litigation may be necessary in the future to enforce or defend our intellectual property rights or to determine the validity and scope of the proprietary rights of others. Any such litigation could result in substantial costs and diversion of management resources, either of which could harm our business, operating results and financial condition. Further, many of our current and potential competitors have the ability to dedicate substantially greater resources to defending intellectual property infringement claims and to enforcing their intellectual property rights than we have. 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. Effective patent, trademark, service mark, copyright and trade secret protection may not be available in every country in which our solutions are available. An inability to adequately protect and enforce our intellectual property and other proprietary rights could seriously harm our business, operating results, financial condition and prospects.

We may become subject to claims that our employees have wrongfully disclosed or we have wrongfully used proprietary information of our employees' former employers. These claims may be costly to defend and if we do not successfully do so, our business could be harmed.

Many of our employees were previously employed at current or potential competitors. Although we have processes to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may in the future become subject to claims that these employees have divulged, or we have used, proprietary information of these employees' former employers. Litigation may be necessary to defend against these claims. If we fail in defending such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. A loss of key research personnel or their work product could hamper our ability to develop new solutions and features for existing solutions, which could severely harm our business. Even if we are successful in defending against these claims, litigation efforts are costly, time-consuming and a significant distraction to management.

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

As a public company, we are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended ("Exchange Act"), the Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley Act") and the rules and regulations of the Nasdaq Stock Market. We expect that the requirements of these rules and regulations 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 that information required to be disclosed by us in the reports that we will file with the SEC, is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and that 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 that we develop may become inadequate because of changes in conditions in our business. Further, weaknesses in our internal controls may be discovered in the future. Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our operating results or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal controls also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we are required to include in our periodic reports we will file with the SEC under Section 404 of the Sarbanes-Oxley Act. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the market price of our Class A common stock.

In order to maintain and improve the effectiveness of our disclosure controls and procedures and internal control over financial reporting to comply with the SEC rules that implement Sections 302 and 404 of the Sarbanes-Oxley Act, we have expended and anticipate that we will continue to expend significant resources and undertake various actions, including incurring accounting-related costs and implementing new internal controls and procedures, and providing significant management oversight. In addition, our independent registered public accounting firm is also required to formally attest to the effectiveness of our internal control over financial reporting and may issue a report that is adverse in the event it is not satisfied with the level at which our controls are documented, designed or operating. Any failure to maintain the adequacy of our internal controls, or consequent inability to produce accurate financial statements on a timely basis, or an adverse report from our independent auditors, could increase our operating costs and could materially impair our ability to operate our business and could have a material and adverse effect on our operating results and could cause a decline in the price of our Class A common stock. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Stock Market.

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 end customers in the public sector or negatively impact our ability to contract with the public sector.

Our business is subject to regulation by various federal, state, local and foreign governmental agencies, including agencies responsible for monitoring and enforcing employment and labor laws, antitrust laws, workplace safety, product safety, environmental laws, consumer protection laws, anti-bribery laws, import/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 with applicable regulations or requirements could subject us to investigations, sanctions, mandatory product recalls, enforcement actions, disgorgement of profits, fines, damages and civil and criminal penalties or injunctions. If any governmental sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, reputation, operating results and financial condition could be adversely affected. In addition, responding to any action will likely result in a significant diversion of management’s attention and resources and an increase in third-party professional fees. Enforcement actions and sanctions could harm our business, operating results and financial condition.

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

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

We are subject to governmental regulation and other legal obligations, particularly related to privacy, data protection and information security, and our actual or perceived failure to comply with such obligations could adversely affect our business and operating results. Compliance with such laws could also impair our efforts to maintain and expand our customer base, and thereby decrease our revenue.

Personal privacy, data protection and information security are significant issues in the United States and the other jurisdictions where we offer our solutions. The regulatory framework for privacy and security issues worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Our handling of data is subject to a variety of laws and regulations, including regulation by various government agencies, including the U.S. Federal Trade Commission ("FTC") and various state, local and foreign bodies and agencies.

The U.S. federal and various state and foreign governments have adopted or proposed limitations on the collection, distribution, use and storage of personal information of individuals, including end customers and employees. In the United States, the FTC and many state attorneys general are applying federal and state consumer protection laws to the online collection, use and dissemination of data. Additionally, many foreign countries and governmental bodies, including in Australia, the European Union, India, Japan and numerous other jurisdictions in which we operate or conduct our business, have laws and regulations concerning the collection and use of personal information obtained from their residents or by businesses operating within their jurisdiction. These laws and regulations often are more restrictive than those in the United States. Such laws and regulations may require companies to implement new privacy and security policies, permit individuals 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 personal information for certain purposes. In addition, a foreign government could require that any personally identifiable information collected in a country not be disseminated outside of that country, and we are not currently equipped to comply with such a requirement.

We also expect that there will continue to be new proposed laws, regulations and industry standards concerning privacy, data protection and information security in the United States, the European Union and other jurisdictions, and we cannot yet determine the impact such future laws, regulations and standards may have on our business. For example, California has enacted the California Consumer Privacy Act ("CCPA") that will, among other things, require covered companies to provide new disclosures to California consumers and afford such consumers new abilities to opt-out of certain sales of personal information, when it goes into effect on January 1, 2020. The CCPA recently was amended, and it is possible that it will be amended again before it goes into effect. We cannot yet predict the impact of the CCPA on our business or operations, but it may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply. Additionally, the General Data Protection Regulation ("GDPR"), which became effective in May 2018, superseded prior EU data protection legislation, imposes more stringent EU data protection requirements, provides an enforcement authority which substantially increases compliance costs, and imposes large penalties for noncompliance. Moreover, as a result of current and proposed data protection and privacy laws aimed at using personal data for marketing purposes, including the ePrivacy Regulation to replace the ePrivacy Directive in the European Union, we face an increased difficulty in marketing to current and potential customers, which impacts our ability to spread awareness of our products and services and, in turn, grow a customer base in some regions. As we begin to offer more cloud-based services, we will increasingly be positioned as a data processor, which imposes additional obligations under the foregoing and other laws and regulations relating to privacy and data protection, and may increase our liability exposure by operation of law, contract, or penalties for noncompliance. Additionally, we expect that existing laws, regulations and standards may be interpreted in new manners in the future. Current or future laws, regulations, standards and other obligations, as well as changes in the interpretation of existing laws, regulations, standards and other obligations could impair our or our customers’ ability to collect, use or disclose information relating to individuals, which could decrease demand for our solutions, require us to restrict our business operations, increase our costs and impair our ability to maintain and grow our customer base and increase our revenue.

Although we are working to comply with those federal, state and foreign laws and regulations, industry standards, contractual obligations and other legal obligations that apply to us, 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, other requirements or legal obligations, our practices or the features of our solutions. As such, we cannot assure ongoing compliance with all such laws or regulations, industry standards, contractual obligations and other legal obligations. Any failure or perceived failure by us to comply with federal, state or foreign laws or regulations, industry standards, contractual obligations or other legal obligations, or any actual or suspected security incident, whether or not resulting in unauthorized access to, or acquisition, release or transfer of personal information or other data, may result in governmental enforcement actions and prosecutions, private litigation, fines and penalties or adverse publicity and could cause our customers to lose trust in us, which could have an adverse effect on our reputation, brand and business. Any inability to adequately address privacy and security concerns, even if unfounded, or comply with applicable laws, regulations, policies, industry standards, contractual obligations or other legal obligations could result in additional cost and liability to us, damage our reputation and brand, inhibit sales and adversely affect our business and operating results.

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

We are subject to the FCPA, the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, the United Kingdom Bribery Act of 2010 ("U.K. Bribery Act") and possibly other anti-bribery and anti-money laundering laws in countries in which we conduct activities. We face significant risks if we fail to comply with the FCPA and other anticorruption laws that prohibit companies and their employees and third-party intermediaries from authorizing, offering or providing, directly or indirectly, improper payments or benefits to foreign government officials, political parties and private-sector recipients for the purpose of obtaining or retaining business, directing business to any person or securing any advantage. In many foreign countries, particularly in countries with developing economies, it may be a local custom that businesses engage in practices that are prohibited by the FCPA or other applicable laws and regulations. In addition, we use various third parties to sell our solutions and conduct our business abroad. We or our third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, partners and agents, even if we do not explicitly authorize such activities. We continue to update and implement our FCPA/anti-corruption compliance program and no assurance can be given that all of our employees and agents, as well as those companies to which we outsource certain of our business operations, will not take actions in violation of our policies and applicable law, for which we may be ultimately held responsible.

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

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

Our solutions are subject to U.S. export controls, including the Export Administration Regulations and economic sanctions administered by the Office of Foreign Assets Control, and we incorporate encryption technology into certain of our solutions. These encryption products and the underlying technology may be exported outside of the United States only with the required export authorizations, including by license, a license exception or other appropriate government authorizations, including the filing of an encryption registration.

Furthermore, our activities are subject to the U.S. economic sanctions laws and regulations that prohibit the shipment of certain products and services without the required export authorizations, including to countries, governments and persons targeted by U.S. embargoes or sanctions. Additionally, the U.S. government has recently been critical of existing trade agreements and may impose more stringent export and import controls. Obtaining the necessary export license or other authorization for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities even if the export license ultimately may be granted. While we take precautions to prevent our solutions from being exported in violation of these laws, including obtaining authorizations for our encryption products, implementing IP address blocking and screenings against U.S. government and international lists of restricted and prohibited persons, we cannot guarantee that the precautions we take will prevent violations of export control and sanctions laws. Violations of U.S. sanctions or export control laws can result in significant fines or penalties and possible incarceration for responsible employees and managers could be imposed for criminal violations of these laws.

We also note that if our channel partners fail to obtain appropriate import, export or re-export licenses or permits, we may also be adversely affected, through reputational harm as well as other negative consequences including government investigations and penalties. We presently incorporate export control compliance requirements into our channel partner agreements; however, no assurance can be given that our channel partners will be able to comply with such requirements.

Also, various countries, in addition to the United States, regulate the import and export of certain encryption and other technology, including import and export licensing requirements, and have enacted laws that could limit our ability to distribute our solutions or could limit our end customers’ ability to implement our solutions in those countries. Changes in our solutions or future changes in export and import regulations may create delays in the introduction of our solutions in international markets, prevent our end customers with international operations from deploying our solutions globally or, in some cases, prevent the export or import of our solutions to certain countries, governments, or persons altogether. From time to time, various governmental agencies have proposed additional regulation of encryption technology, including the escrow and government recovery of private encryption keys. Any change in export or import regulations, economic sanctions or related legislation, increased export and import controls stemming from U.S. government policies, or change in the countries, governments, persons or technologies targeted by such regulations, could result in decreased use of our solutions by, or in our decreased ability to export or sell our solutions to, existing or potential end customers with international operations. Any decreased use of our solutions or limitation on our ability to export or sell our solutions would adversely affect our business, operating results and prospects.

Our international operations expose us to additional risks, and failure to manage those risks could adversely affect our business, operating results and cash flows.

We derive a significant portion of our revenue from end customers and channel partners outside the United States. We derived approximately 42%, 44% and 45% of our total revenue from our international customers based on bill-to-location for fiscal 2017, 2018 and 2019, respectively. We are continuing to adapt to and develop strategies to address international markets but there is no guarantee that such efforts will have the desired effect. As of July 31, 2019, approximately 49% of our full-time employees were located outside of the United States. We expect that our international activities will continue to grow over the foreseeable future as we continue to pursue opportunities in existing and new international markets, which will require significant management attention and financial resources. We are subject to risks associated with having significant worldwide operations, including, but not limited to:

- business practices may differ from those in the United States and may require us in the future to include terms other than our standard terms in customer, channel partner, employee, consultant and other contracts;
- political, economic and social instability or uncertainty around the world, including the United Kingdom's potential separation from the European Union, commonly known as "Brexit";
- potential changes in trade relations arising from policy initiatives implemented by, or statements made by, the U.S. government, which has been critical of existing and proposed trade agreements;
- the potential impact of tariffs or other trade restrictions imposed by, or threatened to be imposed by, the U.S. government, such as the recently imposed tariffs for Chinese imports to the U.S.;
- greater difficulty in enforcing contracts, judgments and arbitration awards in international courts, and in collecting accounts receivable and longer payment and collection periods;
- greater risk of unexpected changes in regulatory practices, tariffs and tax laws and treaties;
- risks associated with trade restrictions and foreign legal requirements, including the importation, certification and localization of our solutions required in foreign countries;
- greater risk of a failure of foreign employees, partners, distributors and resellers to comply with both U.S. and foreign laws, including antitrust regulations, the FCPA, the U.K. Bribery Act, U.S. or foreign sanctions regimes and export or import control laws and any trade regulations ensuring fair trade practices;
- 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;
- requirements to comply with foreign privacy, data protection and information security laws and regulations and the risks and costs of noncompliance;
- reduced or uncertain protection for intellectual property rights in some countries;

- impediments to the flow of foreign exchange capital payments and receipts due to exchange controls instituted by certain foreign governments;
- increased expenses incurred in establishing and maintaining corporate entities, office space and equipment for our international operations;
- difficulties in managing and staffing international offices and increased travel, infrastructure and legal and regulatory compliance costs associated with multiple international locations, including costs related to additional regulatory reviews or audits, financial accounting and reporting obligations and international cybersecurity requirements;
- greater difficulty in identifying, attracting and retaining local experienced personnel, and the costs and expenses associated with such activities;
- the challenge of managing a development team in geographically disparate locations;
- management communication and integration problems resulting from cultural and geographic dispersion;
- differing employment practices and labor relations issues;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business; and
- treatment of revenue from international sources for tax purposes and changes in tax laws, regulations or official interpretations, including being subject to foreign tax laws and being liable for paying withholding, income or other taxes in foreign jurisdictions.

As we expand our business globally, our success will depend, in large part, on our ability to anticipate and effectively manage these risks. These factors and other factors could harm our ability to gain future international revenue and, consequently, materially impact our business, operating results and financial condition. The expansion of our existing international operations and entry into additional international markets will require significant management attention and financial resources. Our failure to successfully manage our international operations and the associated risks effectively could limit the future growth of our business.

A number of our solutions incorporate software provided under open source licenses which may restrict or impose certain obligations on how we use or distribute our solutions or subject us to various risks and challenges, which could result in increased development expenses, delays or disruptions to the release or distribution of those solutions, inability to protect our intellectual property rights and increased competition.

Certain significant components of our solutions incorporate or are based upon open source software, and we may incorporate open source software into other solutions in the future. Such open source software is generally licensed under open source licenses, including, for example, the GNU General Public License, the GNU Lesser General Public License, "Apache-style" licenses, "BSD-style" licenses and other open source licenses. The use of open source software subjects us to a number of risks and challenges, including, but not limited to:

- If open source software programmers, most of whom we do not employ, do not continue to develop and enhance open source technologies, our development expenses could increase and our product release and upgrade schedules could be delayed.
- Open source software is open to further development or modification by anyone. As a result, others may develop such software to be competitive with our platform and may make such competitive software available as open source. It is also possible for competitors to develop their own solutions using open source software, potentially reducing the demand for, and putting price pressure on, our solutions.

- The licenses under which we license certain types of open source software may require that, if we modify the open source software we receive, we are required to make such modified software and other related proprietary software of ours publicly available without cost and on the same terms. Accordingly, we monitor our use of open source software in an effort to avoid subjecting our proprietary software to such conditions and others we do not intend. Although we believe that we have complied with our obligations under the various applicable licenses for open source software that we use, our processes used to monitor how open source software is used could be subject to error. In addition, there is little or no legal precedent governing the interpretation of terms in most of these licenses. Therefore, any improper usage of open source could result in unanticipated obligations regarding our solutions and technologies, which could have an adverse impact on our intellectual property rights and our ability to derive revenue from solutions incorporating the open source software.

- If an author or other third party that distributes such open source software were to allege that we had not complied with the conditions of one or more of these licenses, we could be required to incur legal expenses defending against such allegations, or engineering expenses in developing a substitute solution.

If we are unable to successfully address the challenges of integrating offerings based upon open source technology into our business, our business and operating results may be adversely affected and our development costs may increase.

Adverse or uncertain macroeconomic conditions or reduced IT spending may adversely impact our business, revenues and profitability.

Our business, operations and performance depend in part on worldwide economic conditions and the impact these conditions have on the overall demand for enterprise computing infrastructure solutions and on the economic health and general willingness of our current and prospective end customers to purchase our solutions and to continue spending on IT in general. The global macroeconomic environment has been, and may continue to be, inconsistent, challenging and unpredictable due to international trade disputes, tariffs, including those recently imposed by the U.S. government on Chinese imports to the U.S., uncertainties related to changes in public policies such as domestic and international regulations, taxes, or international trade agreements, elections, geopolitical turmoil, instability in the global credit markets, uncertainties regarding the effects of the United Kingdom’s potential separation from the European Union, commonly known as "Brexit," actual or potential government shutdowns and other disruptions to global and regional economies and markets.

These macroeconomic challenges and uncertainties have, and may continue to, put pressure on global economic conditions and overall IT spending and may cause our end customers to modify spending priorities or delay purchasing decisions, thereby lengthening sales cycles and potentially lowering prices for our solutions, and may make it difficult for us to forecast our sales and operating results and to make decisions about future investments, any of which could materially harm our business, operating results and financial condition.

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

Our sales contracts are denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, a relative strengthening of the U.S. dollar could increase the real cost of our solutions to our end customers outside of the United States, which could adversely affect our financial condition and operating results. In addition, an increasing portion of our operating expenses is incurred outside the United States, is denominated in foreign currencies such as the Euro, the Pound Sterling, the Indian Rupee, the Canadian Dollar and the Australian 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 operating results could be adversely affected. Furthermore, such currency fluctuations may also adversely impact our ability to accurately predict our future financial results. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative instruments.

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

We do not collect sales and use, value added or similar taxes in all jurisdictions in which we have sales, and we have been advised that such taxes are not applicable to our products and 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. The U.S. Supreme Court's recent decision in *South Dakota v. Wayfair, Inc.* increasing states' ability to assert taxing jurisdiction on out-of-state retailers could result in additional jurisdictions asserting that sales and use or other taxes apply to our products and services. The assertion that such taxes are applicable by a jurisdiction in which we do not collect such taxes could result in tax assessments, penalties and interest, to us or our end 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 end customers, we could be held liable for such costs, which may adversely affect our operating results.

Our international operations may subject us to potential adverse tax consequences.

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

Changes in global tax laws could increase our worldwide tax rate and could have a material adverse effect on our business, cash flow, results of operations or financial conditions.

In December 2017, the U.S. Congress passed and the President signed legislation commonly referred to as the Tax Cuts and Jobs Act ("TCJA"), which includes a broad range of tax reform proposals affecting businesses, including a federal corporate rate reduction from 35% to 21%; limitations on the deductibility of interest expense and executive compensation; creation of new minimum taxes such as the base erosion anti-abuse tax, Global Intangible Low Taxed Income; and a new minimum tax on certain foreign earnings. In addition, in June 2019, the U.S. Court of Appeals for the Ninth Circuit overturned the 2015 U.S. tax court decision in *Altera Corp. v. Commissioner*. The Ninth Circuit's opinion upholds Treasury Regulations requiring the inclusion of stock-based compensation costs under cost sharing agreements. Based on our preliminary analysis, we believe the impact of the court's decision would not have a material impact on our consolidated financial statements; however, additional changes to precedent or applicable law on this point could impact our financial statements or operations.

In addition, international organizations such as the Organization for Economic Cooperation and Development, have published Base Erosion and Profit Shifting, action plans that, if adopted by countries where we do business, could increase our tax obligations in these countries. We will continue to assess the ongoing impact of these current and pending changes to global tax legislation and the impact on the Company's future financial statements upon the finalization of laws, regulations and additional guidance. In addition, we have continued to evaluate our corporate structure. Any changes to the taxation of undistributed foreign earnings could change our plans regarding reinvestment of such earnings. Due to the large scale of our U.S. and international business activities, many of these enacted and proposed changes to the taxation of our activities could increase our worldwide effective tax rate and have an adverse effect on our operating results, cash flow or financial condition.

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

In general, under Section 382 of the United States Internal Revenue Code of 1986, as amended, or the Code, a corporation that undergoes an ownership change is subject to limitations on its ability to utilize its pre-change net operating losses, or NOLs, and other tax attributes to offset future taxable income. An ownership change occurs when a company’s "five-percent shareholders" (as defined in Section 382 of the Code) collectively increase their ownership in the company by more than 50 percentage points (by value) over a rolling three-year period. Similar limitations may apply for state tax purposes. If our existing NOLs are subject to limitations arising from previous ownership changes, our ability to utilize NOLs could be limited by Section 382 of the Code. In addition, we may experience ownership changes in the future as a result of subsequent shifts in our stock ownership. Moreover, the TCJA eliminates the carryback and permits the indefinite carryforward of NOLs arising in tax years ending after December 31, 2017 (whereas NOLs arising in tax years ending prior to that date continue to have a two-year carryback and twenty-year carryforward), and limits the deductibility of NOLs arising in tax years beginning after December 31, 2017 to 80% of current year taxable income. As a result, if we earn net taxable income, our ability to use our NOLs and other tax attributes to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

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

A significant natural disaster, such as an earthquake, fire, flood or significant power outage could have an adverse impact on our business and operating results. Despite the implementation of network security measures, our networks also may be vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our solutions. Both our corporate headquarters and our main contract manufacturers are located in the San Francisco Bay Area, a region known for seismic activity. In addition, natural disasters, acts of terrorism or war could cause disruptions in our or our end customers’ or channel partners’ businesses, our suppliers’ and manufacturers’ operations or the economy as a whole. We also rely on IT systems to communicate among our workforce and with third parties. Any disruption to our communications, whether caused by a natural disaster or by man-made problems, such as power disruptions, could adversely affect our business. We do not have a formal disaster recovery plan or policy in place and do not currently require that our manufacturing partners have such plans or policies in place. To the extent that any such disruptions result in delays or cancellations of orders or impede our suppliers’ or our manufacturers’ ability to timely deliver our solutions and product components, or the deployment of our solutions, our business, operating results and financial condition would be adversely affected. We do maintain what we believe are commercially reasonable levels of business interruption insurance. However, such insurance may not adequately cover our losses in the event of a significant disruption in our business.

If we are the victim of a cyber attack or other cyber security incident and our networks, computer systems or software solutions are breached or unauthorized access to sensitive or proprietary information, including employee or customer data, otherwise occurs, our business operations may be interrupted, our reputation and brand may be damaged, and we may incur significant liabilities.

Cyber attacks designed to gain access to sensitive or proprietary information by breaching mission critical systems of large organizations are constantly evolving, and high-profile electronic security breaches leading to the unauthorized release of sensitive or proprietary information, including employee and customer information, have occurred at a number of large companies in recent years. Companies in our industry have reported that they have been subject to cyber attacks, including attacks potentially from nation-state actors, and we could be subject to similar attacks. Computer malware, viruses, social engineering (predominantly spear phishing attacks) and general hacking have become more prevalent in our industry, particularly against cloud services, and companies like us can suffer security breaches from a variety of causes, whether due to third-party action, software vulnerabilities or coding errors, physical break-ins, employee error, malfeasance or otherwise. As we transition to offering more cloud-based solutions, such as Nutanix Xi Cloud Services, we may increasingly be the target of cyber threats. Because the techniques used and vulnerabilities exploited to obtain unauthorized access or to sabotage systems change frequently, and generally are not identified until they are launched against a target, we may be unable to anticipate these techniques or vulnerabilities or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. If any unauthorized access to or security breach of our solutions occurs, or is believed to have occurred, such an event or perceived event could result in the loss of data, loss of intellectual property or trade secrets, loss of business, severe reputational or brand damage adversely affecting end customer or investor confidence, regulatory investigations and orders, litigation, indemnity obligations, damages for contract breach and penalties for violation of privacy, data protection and other applicable laws, regulations or contractual obligations. We may also be subject to significant costs for remediation that may include liability for stolen assets or information and repair of system damage that may have been caused or incentives offered to end customers or other business partners in an effort to maintain business relationships after a breach and other liabilities. Additionally, any such event or perceived event could impact our reputation and brand, harm customer confidence, hurt our sales and expansion into existing and new markets or cause us to lose potential or existing end customers. Furthermore, a high-profile security breach suffered, or perceived to have been suffered, by an industry peer may entail a general loss of trust in our industry and thereby have a similar adverse impact on our business and financial performance as a direct breach suffered by us. We could be required to expend significant capital and other resources to alleviate problems caused by such actual or perceived breaches and to remediate our systems, we could be exposed to a risk of loss, litigation or regulatory action and possible liability, and our ability to operate our business may be impaired. Additionally, actual, potential or anticipated attacks may cause us to incur increasing costs, including costs to deploy additional personnel and protection technologies, train employees and engage third-party experts and consultants.

In addition, if the security measures of our end customers, partners, vendors, or suppliers are compromised, even without any actual compromise of our own systems or of our solutions used by such end customers, partners, vendors, or suppliers, we may face negative publicity, reputational harm or brand damage if our end customers, partners, vendors, or suppliers or anyone else incorrectly attributes the blame for such security breaches to us or our solutions. If end customers believe that our solutions do not provide adequate security for the storage of personal or other sensitive or proprietary information or the transmission of such information over the internet, our business will be harmed. End customers' concerns about security or privacy may deter them from using our solutions for activities that involve personal or other sensitive information, which may significantly affect our business and operating results. Moreover, we have acquired a number of companies, products, services and technologies over the years. Although we devote significant resources to address any security issues with respect to such acquisitions, we may still inherit additional risks as we integrate these companies, products, services and technologies into our business and solutions.

We have expanded and may further expand through acquisitions of, or investments in, other companies, each of which may divert our management's attention, resulting in additional dilution to our stockholders and consumption of resources that are necessary to sustain and grow our business.

Our business strategy may, from time to time, include acquiring other complementary products, technologies or businesses. For example, in August 2018 we acquired Mainframe2, Inc., in March 2018 we acquired Minjar, Inc. and Netsil Inc., in August 2016, we acquired Calm.io Pte. Ltd. and in September 2016, we acquired PernixData, Inc. We also may enter into relationships with other businesses in order to expand our solutions, which could involve preferred or exclusive licenses, additional channels of distribution or discount pricing or investments in other companies. Negotiating these transactions can be time-consuming, difficult and expensive, and our ability to close these transactions may be subject to third-party approvals, such as government regulatory approvals, which are beyond our control. Consequently, we can make no assurance that these transactions once undertaken and announced, will close.

These kinds of acquisitions or investments may result in unforeseen expenditures and operating and integration difficulties, especially if the acquisitions or investments are more complex in structure and scope, including due to the geographic location of the acquired company. In particular, we may encounter difficulties assimilating or integrating the businesses, technologies, products, personnel or operations of companies that we may acquire, particularly if the key personnel of the acquired business choose not to work for us. We may have difficulty retaining the customers of any acquired business or the acquired technologies or research and development expectations may prove unsuccessful. Acquisitions may also disrupt our ongoing business, divert our resources, require significant management attention that would otherwise be available for development of our business and may be viewed negatively by our end customers, investors or securities analysts. We may not successfully evaluate or utilize the acquired technology or personnel, or accurately forecast the financial impact of an acquisition transaction, including accounting charges. Any acquisition or investment could expose us to unknown liabilities and risks, and we may incur additional costs and expenses necessary to address an acquired company's failure to comply with laws and governmental rules and regulations. Moreover, we cannot assure you that the anticipated benefits of any acquisition or investment would be realized in a timely manner, if at all, or that we would not be exposed to unknown liabilities. In connection with these types of transactions, we may issue additional equity securities that would dilute our stockholders, use cash that we may need in the future to operate our business, incur debt on terms unfavorable to us or that we are unable to repay, incur large charges or substantial liabilities, encounter difficulties integrating diverse business cultures and become subject to adverse tax consequences, substantial depreciation or deferred compensation charges. These challenges related to acquisitions or investments could adversely affect our business, operating results, financial condition and prospects.

Regulations related to conflict minerals may cause us to incur additional expenses and could limit the supply and increase the costs of certain metals used in the manufacturing of our solutions.

We are subject to the requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") that will require us to perform due diligence and disclose and report whether our solutions contain conflict minerals. Although the SEC has recently provided guidance with respect to a portion of the conflict mineral filing requirements that may somewhat reduce our reporting practices, we have incurred and expect to incur additional costs to comply with these disclosure requirements, and the requirements could adversely affect the sourcing, availability and pricing of the materials used in the manufacture of components used in our products.

Risks Related to the Convertible Senior Notes (the "Notes")

We may not have the ability to raise the funds necessary to settle conversions of the Notes in cash or to repurchase the Notes upon a fundamental change, and our future debt may contain limitations on our ability to pay cash upon conversion or repurchase of the Notes.

Holders of the Notes will have the right to require us to repurchase all or a portion of their Notes upon the occurrence of a fundamental change before the maturity date at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid special interest, if any. In addition, upon conversion of the Notes, unless we elect to deliver solely shares of our Class A common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the Notes being converted. Moreover, we will be required to repay the Notes in cash at their maturity unless earlier converted or repurchased. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of Notes surrendered therefor or pay cash with respect to Notes being converted or at their maturity.

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

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

In the event the conditional conversion feature of the Notes is triggered, holders of the Notes will be entitled to convert their Notes at any time during specified periods at their option. If one or more holders elect to convert their Notes, unless we elect to satisfy our conversion obligation by delivering solely shares of our Class A common stock (other than paying cash in lieu of delivering any fractional share), we would be required to settle a portion or all of our conversion obligation in cash, which could adversely affect our liquidity. In addition, even if holders of Notes do not elect to convert their Notes, we could be required under applicable accounting rules to reclassify all or a portion of the outstanding principal of the Notes as a current rather than long-term liability, which would result in a material reduction of our net working capital.

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

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

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

The convertible note hedge and warrant transactions may affect the value of the Notes and our Class A common stock.

In connection with the pricing of the Notes, we entered into convertible note hedge transactions with one or more of the initial purchasers of the Notes and/or their respective affiliates or other financial institutions, or the option counterparties. We also entered into warrant transactions with the option counterparties pursuant to which we will sell warrants for the purchase of our Class A common stock. The convertible note hedge transactions are expected generally to reduce the potential dilution upon any conversion of Notes and/or offset any cash payments we are required to make in excess of the principal amount upon conversion of any Notes. The warrant transactions could separately have a dilutive effect to the extent that the market price per share of our Class A common stock exceeds the strike price of the warrants.

The option counterparties and/or their respective affiliates may modify their hedge positions by entering into or unwinding various derivatives with respect to our Class A common stock and/or purchasing or selling our Class A common stock in secondary market transactions prior to the maturity of the Notes (and are likely to do so during any observation period related to a conversion of Notes or following any repurchase of Notes by us on any fundamental change repurchase date or otherwise). This activity could also cause or avoid an increase or a decrease in the market price of our Class A common stock. In addition, if any such convertible note hedge and warrant transactions fail to become effective, the option counterparties may unwind their hedge positions with respect to our Class A common stock, which could adversely affect the value of our Class A common stock.

The potential effect, if any, of these transactions and activities on the market price of our Class A common stock will depend in part on market conditions and cannot be ascertained at this time. Any of these activities could adversely affect the value of our Class A common stock.

We are subject to counterparty risk with respect to the convertible note hedge transactions.

The option counterparties will be financial institutions or affiliates of financial institutions, and we will be subject to the risk that one or more of such option counterparties may default under the convertible note hedge transactions. Our exposure to the credit risk of the option counterparties will not be secured by any collateral. If any option counterparty becomes subject to bankruptcy or other insolvency proceedings, we will become an unsecured creditor in those proceedings with a claim equal to our exposure at that time under our transactions with that option counterparty. Our exposure will depend on many factors but, generally, an increase in our exposure will be correlated to an increase in our Class A common stock market price and in the volatility of the market price of our Class A common stock. In addition, upon a default by an option counterparty, we may suffer adverse tax consequences and dilution with respect to our Class A common stock. We can provide no assurance as to the financial stability or viability of any option counterparty.

Risks Related to Ownership of Our Class A Common Stock

The market price of our Class A common stock may be volatile and may decline.

The market price of our Class A common stock has fluctuated and may continue to fluctuate substantially. 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. 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:

- price and volume fluctuations in the overall stock market from time to time;
- volatility in the market prices and trading volumes of high technology stocks;
- changes in operating performance and stock market valuations of other technology companies generally, or those in our industry in particular;
- changes in financial estimates by any analysts who follow our company, including as a result of our plan to transition our business toward a subscription-based model, or our failure to meet these estimates or the expectations of investors;
- 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;
- public 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;
- actual or anticipated changes or fluctuations in our operating results;
- actual or anticipated developments in our business or our competitors' businesses or the competitive landscape generally;
- actual or threatened 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 or our solutions, or third-party proprietary rights;
- rumored, announced or completed acquisitions of businesses or technologies of or by us or our competitors;
- new laws or regulations or new interpretations of existing laws or regulations applicable to our business;
- changes in accounting standards, policies, guidelines, interpretations or principles;

- any major changes in our management or our Board of Directors;
- 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, have 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. For example, following our earnings release in February 2019, the price of our Class A common stock fell significantly and, as a result, multiple class action securities lawsuits have been filed against us, as well as multiple shareholder derivative claims. These securities litigation matters, as well as any additional securities litigation matters that may be instituted against us, could result in substantial costs, divert our management's attention and resources from our business, and adversely impact our reputation and brand. This could have an adverse effect on our business, operating results 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 markets, 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.

We have reserved a substantial number of shares of our Class A common stock for issuance upon vesting or exercise of our equity compensation plans, upon conversion of the Notes and in relation to warrant transactions we entered into in connection with the pricing of the Notes.

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 of 1933, as amended, pursuant to our Amended and Restated Investors' Rights Agreement. If such holders exercise their registration rights and sell a large number of shares, they could adversely affect the market price for our Class A common stock. We have also registered the offer and sale of all shares of Class A and Class B common stock that we may issue under our equity compensation plans.

We may also issue our shares of Class A common stock or additional 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.

The dual class structure of our common stock as contained in our charter documents has the effect of concentrating voting control with a limited number of stockholders that held our stock prior to our IPO, including our directors, executive officers, and employees, and their affiliates, and significant stockholders, which will limit your ability to influence corporate matters.

Our Class B common stock has 10 votes per share, and our Class A common stock has one vote per share. As of July 31, 2019, stockholders who hold shares of Class B common stock, including our investors and our directors, executive officers and employees, and their affiliates, together hold a majority of the voting power of our outstanding capital stock. As a result, for the foreseeable future, such stockholders will have significant influence over the management and affairs of our company and over the outcome of all matters submitted to our stockholders for approval, including the election of directors and significant corporate transactions, such as a merger, consolidation or sale of substantially all of our assets.

In addition, the holders of Class B common stock collectively will continue to control all matters submitted to our stockholders for approval even if their stock holdings represent less than 50% of the outstanding shares of our common stock. Because of the ten-to-one voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively will continue to control a majority of the combined voting power of our common stock so long as the shares of Class B common stock represent at least 9.1% of all outstanding shares of our Class A and Class B common stock. This concentrated control will limit your ability to influence corporate matters for the foreseeable future, and, as a result, the market price of our Class A common stock could be adversely affected. These holders of our Class B common stock 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, and, unless earlier converted at the election of the holders of 67% of our outstanding Class B common stock, our amended and restated certificate of incorporation provides for a dual class stock structure for 17 years following the completion of our IPO.

Future transfers, whether or not for value, by holders of Class B common stock will generally result in those shares converting to Class A common stock, subject to limited exceptions, such as certain transfers affected for estate planning purposes. The conversion of shares of our Class B common stock into shares of our Class A common stock 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. If one or more significant holders of our Class B common stock decides to convert or sell their shares, it could result in a different group of Class B common stock holders having the power to exert significant influence over our company, which may or may not align with the strategy and direction set by our management. Any such changes could adversely affect the market price of our Class A common stock.

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

We are subject to the reporting and corporate governance requirements of the Exchange Act, the listing requirements of the Nasdaq Stock Market and other applicable securities rules and regulations, including the Sarbanes-Oxley Act and the Dodd-Frank Act. Compliance with these rules and regulations will increase our legal and financial compliance costs, make some activities more difficult, time-consuming or costly and increase demand on our systems and resources, particularly now that we are no longer an "emerging growth company," as defined in the Jumpstart Our Business Startups Act. Among other things, the Exchange Act requires that we file annual, quarterly and current reports with respect to our business and results of operations and maintain effective disclosure controls and procedures and internal control over financial reporting. In order to improve our disclosure controls and procedures and internal control over financial reporting to meet this standard, significant resources and management oversight may be required. As a result, management’s attention may be diverted from other business concerns, which could harm our business, financial condition, results of operations and prospects. Although we have already hired additional employees to help comply with these requirements, we may need to further expand our legal and finance departments in the future, which will increase our costs and expenses.

In addition, changing laws, regulations and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs and making some activities more time-consuming. These laws, regulations and standards are subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest resources to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expense and a diversion of management’s time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us and our business and prospects may be harmed. As a result of our required public disclosures of information, our business and financial condition are more visible, which may result in threatened or actual litigation, including by competitors and other third parties. If such claims are successful, our business, financial condition, results of operations and prospects could be harmed, and even if the claims do not result in litigation or are resolved in our favor, these claims, and the time and resources necessary to resolve them, could divert the resources of our management and harm our business, financial condition, results of operations and prospects.

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

If financial or industry analysts do not publish research or reports about our business, if they have a difficulty understanding the changes to our business model, 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. In addition, we are in a period of transition to a subscription-based business model in the long term, which analysts may not have historically reflected, or may not accurately in the future reflect, in their research. The foregoing factors could affect analysts' ability to accurately forecast our results and make it more likely that we fail to meet their estimates. In the event we obtain industry or financial analyst coverage, if any of the analysts who cover us issue 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 high technology industry have declined significantly after those companies have failed to meet, or often times significantly exceeded, 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, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline, potentially significantly.

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 amended and restated certificate of incorporation provides for a dual class common stock structure for 17 years following the completion of our IPO;

- 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;

- upon the conversion of our Class A common stock and Class B common stock into a single class of common stock, 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;

- upon the conversion of our Class A common stock and Class B common stock into a single class of common stock, a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;

- the requirement that a special meeting of stockholders may be called only by the chairman of our Board of Directors, our lead independent director, our president, our secretary or a majority vote of our Board of Directors, which could delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors;

- the requirement for the affirmative vote of holders of at least 66 2⁄3% of the voting power of all of the then outstanding shares of the voting stock, voting together as a single class, to amend the provisions of our amended and restated certificate of incorporation relating to the issuance of preferred stock and management of our business or our amended and restated bylaws, which may inhibit the ability of an acquirer to effect such amendments to facilitate an unsolicited takeover attempt;

- the ability of our Board of Directors, by majority vote, to amend our amended and restated bylaws, which may allow our Board of Directors to take additional actions to prevent an unsolicited takeover and inhibit the ability of an acquirer to amend our amended and restated bylaws to facilitate an unsolicited takeover attempt; and

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

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time.

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

Item 1B. Unresolved Staff Comments

Not Applicable.

Item 2. Properties

Our corporate headquarters are located in San Jose, California where, under lease agreements that expire through May 2024, we currently lease approximately 400,000 square feet of space. We also maintain offices in North America, Europe, Asia Pacific, the Middle East, Latin America and Africa. We lease all of our facilities and do not own any real property. We expect to add facilities as we grow our employee base and expand geographically. We believe that our facilities are adequate to meet our needs for the immediate future and that, should it be needed, suitable additional space will be available to accommodate the expansion of our operations.

Item 3. Legal Proceedings

The information set forth under the "Legal Proceedings" subheading in Note 7 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K is incorporated herein by reference.

Item 4. Mine Safety Disclosures

Not Applicable.

PART II

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

Market Information for Common Stock

Our Class A common stock began trading publicly on the NASDAQ Stock Market under the ticker symbol "NTNX" on September 30, 2016. Prior to that time, there was no public market for our Class A common stock. The following table sets forth, for the periods indicated, the high and low sale prices of our Class A common stock as reported on the NASDAQ Global Select Market.

	Fiscal 2018		Fiscal 2019	
Fiscal Quarter:	**High**	**Low**	**High**	**Low**
First quarter	$ 28.50	$ 20.70	$ 61.13	$ 35.95
Second quarter	$ 38.41	$ 27.33	$ 52.23	$ 36.13
Third quarter	$ 55.51	$ 30.34	$ 54.14	$ 33.51
Fourth quarter	$ 63.71	$ 48.88	$ 42.98	$ 22.70

Our Class B common stock is not listed nor traded on any stock exchange.

Holders of Record

As of July 31, 2019, there were 141 holders of record of our Class A common stock. This figure does not include a substantially greater number of "street name" holders or beneficial holders of our common stock whose shares are held of record by banks, brokers and other financial institutions. As of July 31, 2019, there were approximately 47 stockholders of record of our Class B common stock.

Dividend Policy

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

Unregistered Sales of Equity Securities and Use of Proceeds

None.

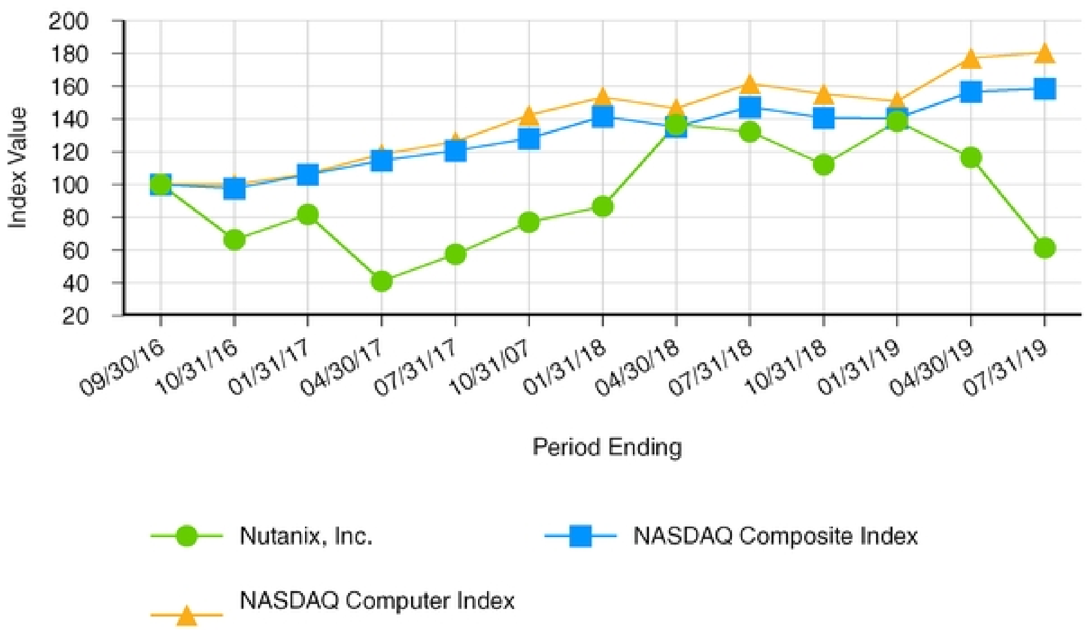
Purchases of Equity Securities by the Issuer

None.

Stock Performance Graph

The following graph shows a comparison from September 30, 2016 (the date our Class A common stock commenced trading on the NASDAQ Stock Market) through July 31, 2019 of the cumulative total return for our Class A common stock based on the closing price on the last day of each respective period. The graph assumes an initial investment of $100 on September 30, 2016 in the common stock of Nutanix, Inc., the NASDAQ Composite Index and NASDAQ Computer Index and assumes reinvestment of any dividends. The stock price performance on the following graph is not necessarily indicative of future stock price performance.

NUTANIX, INC. COMPARISON OF 34 MONTH CUMULATIVE TOTAL RETURN PERFORMANCE



	Fiscal Quarter												
	9/30/16	10/31/16	1/31/17	4/30/17	7/31/17	10/31/17	1/31/18	4/30/18	7/31/18	10/31/18	1/31/19	4/30/19	7/31/19
Nutanix, Inc.	$ 100	$ 66.22	$ 81.81	$ 41.05	$ 57.42	$ 77.03	$ 86.76	$ 136.73	$ 132.14	$ 112.19	$ 138.46	$ 116.73	$ 61.35
NASDAQ Composite Index	$ 100	$ 97.73	$ 106.07	$ 114.58	$ 120.60	$ 128.15	$ 141.54	$ 135.30	$ 147.29	$ 140.63	$ 140.57	$ 156.70	$ 158.70
NASDAQ Computer Index	$ 100	$ 100.24	$ 106.62	$ 118.53	$ 126.31	$ 142.43	$ 153.29	$ 146.66	$ 161.52	$ 155.46	$ 151.01	$ 177.43	$ 180.56

The information on the above graph shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or otherwise subject to the liabilities of that section or Sections 11 and 12(a)(2) of the Securities Act, and shall not be incorporated by reference into any registration statement or other document filed by us with the SEC, whether made before or after the date of this Annual Report on Form 10-K, regardless of any general incorporation language in such filing, except as shall be expressly set forth by specific reference in such filing.

Securities Authorized for Issuance Under Equity Compensation Plans

The information required by this item is incorporated herein by reference to our definitive proxy statement for our 2019 annual meeting of stockholders, which will be filed no later than 120 days after the end of our fiscal year ended July 31, 2019.

Item 6. Selected Consolidated Financial and Other Data

The selected consolidated statement of operations data for fiscal 2017, 2018 and 2019 and the consolidated balance sheet data as of July 31, 2018 and 2019 are derived from our audited consolidated financial statements included elsewhere in this Annual Report on Form 10-K. The selected consolidated statement of operations data for fiscal 2016 and fiscal 2015 and the consolidated balance sheet data as of July 31, 2015, 2016 and 2017 were derived from audited financial statements not included in this Annual Report on Form 10-K. Our historical results are not necessarily indicative of the results that may be expected in the future. The selected consolidated financial data below should be read in conjunction with the section entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" included in Part II, Item 7 of this Annual Report on Form 10-K and our consolidated financial statements and related notes included in Part II, Item 8 of this Annual Report on Form 10-K.

We adopted Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASC 606"), effective August 1, 2017. For the fiscal years ended July 31, 2016 and 2017, we have recast certain of our financial data, as disclosed in our Annual Report on Form 10-K for the fiscal year ended July 31, 2018. Financial data for the fiscal year ended July 31, 2015 has not been adjusted to reflect the adoption of ASC 606.

	Fiscal Year Ended July 31,				
	2015	2016	2017	2018	2019
	(in thousands, except share and per share data)				
Consolidated Statement of Operations Data:					
Revenue:					
Product	$ 200,833	$ 413,910	$ 673,297	$ 887,989	$ 832,419
Support, entitlements and other services	40,599	89,500	172,606	267,468	403,724
Total revenue	241,432	503,410	845,903	1,155,457	1,236,143
Cost of revenue:					
Product (1)(2)	80,900	133,541	249,393	276,127	143,078
Support, entitlements and other services (1)	20,059	37,246	77,938	109,903	161,050
Total cost of revenue	100,959	170,787	327,331	386,030	304,128
Gross profit	140,473	332,623	518,572	769,427	932,015
Operating expenses:					
Sales and marketing (1)(2)	161,829	286,584	501,021	649,657	909,750
Research and development (1)	73,510	116,400	288,619	313,777	500,719
General and administrative (1)	23,899	34,265	77,341	86,401	119,587
Total operating expenses	259,238	437,249	866,981	1,049,835	1,530,056
Loss from operations	(118,765)	(104,626)	(348,409)	(280,408)	(598,041)
Other expense, net	(5,818)	(1,290)	(26,377)	(9,306)	(15,019)
Loss before provision for income taxes	(124,583)	(105,916)	(374,786)	(289,714)	(613,060)
Provision for income taxes	1,544	2,317	4,852	7,447	8,119
Net loss	$ (126,127)	$ (108,233)	$ (379,638)	$ (297,161)	$ (621,179)
Net loss per share attributable to Class A and Class B common stockholders—basic and diluted	$ (3.11)	$ (2.46)	$ (2.96)	$ (1.81)	$ (3.43)
Weighted average shares used in computing net loss per share attributable to Class A and Class B common stockholders—basic and diluted	40,509,481	43,970,381	128,295,563	164,091,302	181,030,964

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

	Fiscal Year Ended July 31,				
	2015	2016	2017	2018	2019
	(in thousands)				
Cost of revenue:					
Product	$ 363	$ 391	$ 3,066	$ 2,580	$ 3,535
Support, entitlements and other services	718	968	10,411	8,945	15,326
Total cost of revenue	1,081	1,359	13,477	11,525	18,861
Sales and marketing	6,474	8,006	78,117	65,060	107,751
Research and development	5,411	6,259	109,044	74,389	140,519
General and administrative	4,174	4,432	30,853	26,894	39,598
Total stock-based compensation expense	$ 17,140	$ 20,056	$ 231,491	$ 177,868	$ 306,729

During the three months ended October 31, 2016, we recorded approximately $83.0 million of stock-based compensation expense related to performance stock awards, as we determined that the performance conditions (certain liquidity events, including our IPO, and the achievement of specified performance targets) were probable of achievement.

(2) Includes amortization of intangible assets as follows:

	Fiscal Year Ended July 31,				
	2015	2016	2017	2018	2019
	(in thousands)				
Product cost of revenue	$ —	$ —	$ 1,314	$ 5,641	$ 14,248
Sales and marketing	—	—	915	914	2,528
Total amortization of intangible assets	$ —	$ —	$ 2,229	$ 6,555	$ 16,776

	As of July 31,				
	2015	2016	2017	2018	2019
	(in thousands)				
Consolidated Balance Sheet Data:					
Cash, cash equivalents and short-term investments	$ 150,539	$ 185,200	$ 349,053	$ 934,303	$ 908,834
Total assets	$ 249,831	$ 411,715	$ 738,212	$ 1,599,880	$ 1,786,042
Deferred revenue (current and non-current portion)	$ 103,598	$ 218,481	$ 369,056	$ 631,207	$ 910,044
Long-term debt	$ —	$ 73,260	$ —	$ 429,598	$ 458,910
Preferred stock warrant liability	$ 11,683	$ 9,679	$ —	$ —	$ —
Convertible preferred stock	$ 310,379	$ 310,379	$ —	$ —	$ —
Total stockholders' (deficit) equity	$ (234,734)	$ (285,827)	$ 217,063	$ 326,779	$ 186,893

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

The following discussion and analysis of our financial condition, results of operations and cash flows should be read in conjunction with the consolidated financial statements and the related notes thereto included elsewhere in this Annual Report on Form 10-K. The last day of our fiscal year is July 31. Our fiscal quarters end on October 31, January 31, April 30 and July 31. This discussion contains forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" or in other parts of this Annual Report on Form 10-K. See also "Special Note Regarding Forward-Looking Statements" above.

Overview

Nutanix, Inc. ("we," "us," "our" or "Nutanix") provides a leading enterprise cloud platform that consists of software solutions that power many of the world’s business applications by digitizing the traditional silos of enterprise computing. We seek to provide an enterprise cloud platform that empowers our customers to unify various clouds - private, public, distributed - into one seamless cloud, allowing enterprises to choose the right cloud for each application. Our enterprise cloud platform natively converges compute, virtualization, storage, networking, desktop and security services into one integrated, simple to consume solution, which allows enterprises to simplify the complexities of a multi-cloud environment with automation, cost governance and compliance.

Our enterprise cloud platform can be deployed on a variety of qualified hardware platforms or, in the case of our cloud-based software and software as a service ("SaaS") offerings, via hosted service or delivered pre-installed on an appliance that is configured to order. Non-portable software is delivered or sold alongside configured-to-order appliances with a license term equal to the life of the associated appliance. Our subscription term-based licenses are sold separately, or can be sold alongside configured-to-order appliances. Configured-to-order appliances, including our Nutanix-branded NX hardware line, can be purchased from one of our channel partners, original equipment manufacturers ("OEMs") or directly from Nutanix. Our enterprise cloud platform is typically purchased with one or more years of support and entitlements, which includes the right to software upgrades and enhancements as well as technical support.

Product revenue is generated primarily from the licensing of our solutions. Support, entitlements and other services revenue is primarily derived from the related support and maintenance contracts. Prior to fiscal 2019, we delivered most of our solutions on an appliance, thus our revenue included the revenue associated with the appliance and the included non-portable software, which lasts for the life of the associated appliance. However, starting in fiscal 2018, as a result of our business model transition toward software-only sales, more of our customers began buying appliances directly from our OEMs while separately buying licenses for our software solutions from us or one of our channel partners. In addition, starting in fiscal 2019, as a result of our transition towards a subscription-based business model, more of our customers began purchasing separately sold subscription term-based licenses that could be deployed on a variety of hardware platforms. As we continue our transition to a subscription-based business model, we expect a greater portion of our products to be delivered through subscription term-based licenses or cloud-based SaaS subscriptions.

We had a broad and diverse base of approximately 14,180 end customers as of July 31, 2019, including approximately 810 Global 2000 enterprises. We define the number of end customers as the number of end customers for which we have received an order by the last day of the period, excluding partners to which we have sold products for their own demonstration purposes. A single organization or customer may represent multiple end customers for separate divisions, segments or subsidiaries. Since shipping our first product in fiscal 2012, our end customer base has grown rapidly. The number of end customers grew from approximately 10,610 as of July 31, 2018 to approximately 14,180 as of July 31, 2019.

Our solutions are primarily sold through channel partners, including distributors, resellers and OEMs, and delivered directly to our end customers. Our solutions serve a broad range of workloads, including enterprise applications, databases, virtual desktop infrastructure, unified communications and big data analytics, and we support both virtualized and container-based applications. We have end customers across a broad range of industries, such as automotive, consumer goods, education, energy, financial services, healthcare, manufacturing, media, public sector, retail, technology and telecommunications. We also sell to service providers, who utilize our enterprise cloud platform to provide a variety of cloud-based services to their customers.

We continue to invest heavily in the growth of our business, including the development of our solutions, build-out of our global sales force, projects to increase the demand for our solutions and other sales and marketing initiatives. The number of our full-time employees increased from approximately 4,010 as of July 31, 2018 to approximately 5,340 as of July 31, 2019. We have an engineering team focused on distributed systems and IT infrastructure technologies at our San Jose, California headquarters and at our research and development centers in India, North Carolina, Washington, Serbia and Germany. We have also expanded our international sales and marketing presence by continuing to build out our global teams and continuing to invest in sales and marketing initiatives, such as additional demand generation spending to increase pipeline growth. We intend to continue to invest in our global engineering team to enhance the functionality of our enterprise cloud platform, including our newer subscription-based products, introduce new products and features and build upon our technology leadership, as well as continue to expand our global sales and marketing teams.

Our total revenue was $845.9 million, $1.2 billion and $1.2 billion for fiscal 2017, 2018 and 2019, respectively, representing increases of 36.6% and 7.0% in fiscal 2018 and 2019, as compared to the respective prior year periods. Our software and support revenue was $609.6 million, $898.1 million and $1.1 billion for fiscal 2017, 2018 and 2019, respectively, representing increases of 47.3% and 25.9% in fiscal 2018 and 2019, as compared to the respective prior year periods. Our subscription revenue was $172.5 million, $330.6 million and $648.4 million for fiscal 2017, 2018 and 2019, respectively, representing increases of 91.6% and 96.1% in fiscal 2018 and 2019, as compared to the respective prior year periods.

Our net losses were $379.6 million, $297.2 million and $621.2 million for fiscal 2017, 2018 and 2019, respectively. Net cash provided by operating activities was $14.8 million, $92.5 million and $42.2 million for fiscal 2017, 2018 and 2019, respectively. Free cash flow, which is calculated as net cash provided by operating activities less purchases of property and equipment, was an outflow of $35.4 million for fiscal 2017, an inflow of $30.2 million for fiscal 2018 and an outflow of $76.3 million for fiscal 2019. As of July 31, 2019, we had an accumulated deficit of $1.6 billion.

Key Financial and Performance Metrics

We monitor the following key financial and performance metrics:

	As of and for the Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands, except percentages)		
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143
Year-over-year percentage increase	68.0%	36.6%	7.0%
Subscription revenue	$ 172,530	$ 330,645	$ 648,415
Software and support revenue	$ 609,587	$ 898,143	$ 1,130,822
Total billings	$ 990,467	$ 1,417,484	$ 1,514,660
Subscription billings	$ 311,913	$ 581,923	$ 916,000
Software and support billings	$ 754,151	$ 1,160,170	$ 1,409,339
Gross profit	$ 518,572	$ 769,427	$ 932,015
Adjusted gross profit	$ 533,363	$ 786,593	$ 965,287
Gross margin	61.3%	66.6%	75.4%
Adjusted gross margin	63.1%	68.1%	78.1%
Total deferred revenue	$ 369,056	$ 631,207	$ 910,044
Net cash provided by operating activities	$ 14,779	$ 92,540	$ 42,168
Free cash flow	$ (35,402)	$ 30,168	$ (76,284)
Non-GAAP operating expenses	$ 645,456	$ 883,244	$ 1,239,567
Total end customers	7,050	10,610	14,180

Disaggregation of Revenue and Billings

The following table depicts the disaggregation of revenue and billings by type, consistent with how we evaluate our financial performance:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands, except percentages)		
Disaggregation of revenue:			
Subscription revenue	$ 172,530	$ 330,645	$ 648,415
Non-portable software revenue	421,048	543,952	449,131
Hardware revenue	236,316	257,314	105,321
Professional services revenue	16,009	23,546	33,276
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143
Disaggregation of billings:			
Subscription billings	$ 311,913	$ 581,923	$ 916,000
Non-portable software billings	421,048	543,952	449,131
Hardware billings	236,316	257,314	105,321
Professional services billings	21,190	34,295	44,208
Total billings	$ 990,467	$ 1,417,484	$ 1,514,660

Subscription — Subscription revenue includes any performance obligation which has a defined term, and is generated from the sales of software entitlement and support subscriptions, subscription software licenses and cloud-based SaaS offerings.

- Ratable — We recognize revenue from software entitlement and support subscriptions and SaaS offerings ratably over the contractual service period, the substantial majority of which relate to software entitlement and support subscriptions. These offerings represented approximately $156.6 million, $243.9 million and $376.4 million of our subscription revenue for fiscal 2017, 2018 and 2019, respectively.

- Upfront — Revenue from our subscription software licenses is generally recognized upfront upon transfer of control to the customer, which happens when we make the software available to the customer. These subscription software licenses represented approximately $15.9 million, $86.7 million and $272.0 million of our subscription revenue for fiscal 2017, 2018 and 2019, respectively. For fiscal 2017, 2018 and 2019, the weighted average term for these subscription term-based licenses was approximately 2.9 years, 3.7 years and 3.8 years, respectively.

Non-portable software — Non-portable software revenue includes sales of our enterprise cloud platform when delivered on a configured-to-order appliance by us or one of our OEM partners. The software licenses associated with these sales are typically non-portable and have a term equal to the life of the appliance on which the software is delivered. Revenue from our non-portable software products is generally recognized upon transfer of control to the customer.

Hardware — In transactions where we deliver the hardware appliance, we consider ourselves to be the principal in the transaction and we record revenue and costs of goods sold on a gross basis. We consider the amount allocated to hardware revenue to be equivalent to the cost of the hardware procured. Hardware revenue is generally recognized upon transfer of control to the customer.

Professional services — We also sell professional services with our products. We recognize revenue related to professional services as they are performed.

Non-GAAP Financial Measures and Key Performance Measures

We regularly monitor total billings, subscription billings, professional services billings, software and support billings, adjusted gross profit, adjusted gross margin, free cash flow and non-GAAP operating expenses, which are non-GAAP financial measures and key performance measures, to help us evaluate our growth and operational efficiencies, measure our performance, identify trends in our sales activity and establish our budgets. We evaluate these measures because they:

- are used by management and the Board of Directors to understand and evaluate our performance and trends, as well as to provide a useful measure for period-to-period comparisons of our core business;

- are widely used as a measure of financial performance to understand and evaluate companies in our industry; and

- are used by management to prepare and approve our annual budget and to develop short-term and long-term operational and compensation plans, as well as to assess our actual performance against our goals.

Total billings, subscription billings, professional services billings and software and support billings are performance measures which management believes provide useful information to investors, as they represent the dollar value under binding purchase orders received and billed during a given period. Free cash flow is a performance measure that provides useful information to management and investors about the amount of cash used in or generated by the business after necessary capital expenditures. Adjusted gross profit, adjusted gross margin and non-GAAP operating expenses are performance measures which management believes provide useful information to investors, as they provide meaningful supplemental information regarding our performance and liquidity by excluding certain expenses and expenditures, such as stock-based compensation expense, that may not be indicative of our ongoing core business operating results. We use these non-GAAP financial and key performance measures for financial and operational decision-making and as a means to evaluate period-to-period comparisons.

Total billings, subscription billings, professional services billings, software and support billings, adjusted gross profit, adjusted gross margin, free cash flow and non-GAAP operating expenses have limitations as analytical tools and they should not be considered in isolation or as substitutes for analysis of our results as reported under generally accepted accounting principles in the United States. Total billings, subscription billings, professional services billings, software and support billings, adjusted gross profit, adjusted gross margin, free cash flow and non-GAAP operating expenses are not substitutes for total revenue, subscription revenue, professional services revenue, software and support revenue, gross profit, gross margin, cash provided by (used in) operating activities, or GAAP operating expenses, respectively. In addition, other companies, including companies in our industry, may calculate non-GAAP financial measures and key performance measures differently or may use other measures to evaluate their performance, all of which could reduce the usefulness of our non-GAAP financial measures and key performance measures as tools for comparison. We urge you to review the reconciliation of our non-GAAP financial measures and key performance measures to the most directly comparable GAAP financial measures included below and not to rely on any single financial measure to evaluate our business.

We calculate our non-GAAP measures as follows:

Total billings — We calculate total billings by adding the change in deferred revenue, net of acquisitions, between the start and end of the period to total revenue recognized in the same period.

Subscription billings— We calculate subscription billings by adding the change in subscription deferred revenue, net of acquisitions, between the start and end of the period to subscription revenue recognized in the same period.

Professional services billings— We calculate professional services billings by adding the change in professional services deferred revenue, net of acquisitions, between the start and end of the period to professional services revenue recognized in the same period.

Software and support billings— We calculate software and support billings by adding the change in software and support deferred revenue, net of acquisitions, between the start and end of the period to software and support revenue recognized in the same period. Software and support revenue and billings include software and support, entitlements and other services revenue and billings.

Adjusted gross profit and adjusted gross margin — We calculate adjusted gross margin as adjusted gross profit divided by total revenue. We define adjusted gross profit as gross profit adjusted to exclude stock-based compensation expense and the amortization of acquired intangible assets. Our presentation of adjusted gross profit should not be construed as implying that our future results will not be affected by any recurring expenses or any unusual or non-recurring items that we exclude from our calculation of this non-GAAP financial measure.

Free cash flow — We calculate free cash flow as net cash provided by (used in) operating activities less purchases of property and equipment, which measures our ability to generate cash from our business operations after our capital expenditures.

Non-GAAP operating expenses — We define non-GAAP operating expenses as total operating expenses adjusted to exclude stock-based compensation expense, costs associated with business combinations, such as amortization of acquired intangible assets, revaluation of contingent consideration and other acquisition-related costs and costs associated with other non-recurring transactions. Our presentation of non-GAAP operating expenses should not be construed as implying that our future results will not be affected by any recurring expenses or any unusual or non-recurring items that we exclude from our calculation of this non-GAAP financial measure.

The following table presents a reconciliation of total billings, adjusted gross profit, adjusted gross margin, free cash flow and non-GAAP operating expenses to the most directly comparable GAAP financial measures, for each of the periods indicated:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands, except percentages)		
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143
Change in deferred revenue, net of acquisitions (1)	144,564	262,027	278,517
Total billings (non-GAAP)	$ 990,467	$ 1,417,484	$ 1,514,660
Gross profit	$ 518,572	$ 769,427	$ 932,015
Stock-based compensation	13,477	11,525	18,861
Amortization of intangible assets	1,314	5,641	14,248
Other	—	—	163
Adjusted gross profit (non-GAAP)	$ 533,363	$ 786,593	$ 965,287
Gross margin	61.3%	66.6%	75.4%
Stock-based compensation	1.6%	1.0%	1.5%
Amortization of intangible assets	0.2%	0.5%	1.2%
Other	—%	—%	—%
Adjusted gross margin (non-GAAP)	63.1%	68.1%	78.1%
Operating expenses	$ 866,981	$ 1,049,835	$ 1,530,056
Stock-based compensation	(218,014)	(166,343)	(287,868)
Change in fair value of contingent consideration	(1,924)	2,423	832
Amortization of intangible assets	(915)	(914)	(2,528)
Acquisition-related costs	(672)	(1,757)	(721)
Other	—	—	(204)
Operating expenses (non-GAAP)	$ 645,456	$ 883,244	$ 1,239,567
Net cash provided by operating activities	$ 14,779	$ 92,540	$ 42,168
Purchases of property and equipment	(50,181)	(62,372)	(118,452)
Free cash flow (non-GAAP)	$ (35,402)	$ 30,168	$ (76,284)

(1) Excludes deferred revenue assumed in acquisitions of approximately $6.0 million, $0.1 million and $0.3 million for fiscal 2017, 2018 and 2019, respectively.

The following table presents a reconciliation of subscription billings, professional services billings and software and support billings to the most directly comparable GAAP financial measures, for each of the periods indicated:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands, except percentages)		
Subscription revenue	$ 172,530	$ 330,645	$ 648,415
Change in subscription deferred revenue, net of acquisitions (2)	139,383	251,278	267,585
Subscription billings	$ 311,913	$ 581,923	$ 916,000
Professional services revenue	$ 16,009	$ 23,546	$ 33,276
Change in professional services deferred revenue	5,181	10,749	10,932
Professional services billings	$ 21,190	$ 34,295	$ 44,208
Software revenue	$ 436,981	$ 630,675	$ 727,098
Hardware revenue	236,316	257,314	105,321
Product revenue	673,297	887,989	832,419
Support, entitlements and other services revenue	172,606	267,468	403,724
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143
Total software and support revenue (1)	$ 609,587	$ 898,143	$ 1,130,822
Change in software and support deferred revenue, net of acquisitions (2)	144,564	262,027	278,517
Software and support billings (1)	$ 754,151	$ 1,160,170	$ 1,409,339

(1) Software and support revenue and billings include software and support, entitlements and other services revenue and billings.
(2) Excludes deferred revenue assumed in acquisitions of approximately $6.0 million, $0.1 million and $0.3 million for fiscal 2017, 2018 and 2019, respectively.

Factors Affecting Our Performance

We believe that our future success will depend on many factors, including those described below. While these areas present significant opportunity, they also present risks that we must manage to achieve successful results. See the section titled "Risk Factors" for details. If we are unable to address these challenges, our business and operating results could be adversely affected.

Investment in Growth

We plan to continue to invest in sales and marketing so that we can capitalize on our market opportunity, including growing our sales and marketing teams, continuing our focus on opportunities with major accounts and large deals, which we define as transactions over $500,000, expanding our focus on opportunities in commercial accounts, as well as other sales and marketing initiatives, such as additional demand generation spending to increase our pipeline growth. We have significantly increased our sales and marketing personnel, which grew by approximately 36% from July 31, 2018 to July 31, 2019. We estimate, based on past experience, that our average sales team members typically become fully ramped up around the start of their fourth quarter of employment with us, and as our newer employees ramp up, we expect their increased productivity to contribute to our revenue growth. As of July 31, 2019, we considered approximately 57% of our global sales team members to be fully ramped, while the remaining approximately 43% of our global sales team members are in the process of ramping up. As we continue to focus some of our new and existing sales team members on major accounts and large deals, and as we continue our transition toward a subscription-based business model, it may take longer, potentially significantly, for these sales team members to become fully productive, and there may also be an impact to the overall productivity of our sales team. We are focused on actively managing these realignments. We intend to continue to grow our global sales and marketing team and continue to invest in sales and marketing initiatives to acquire new end customers and to increase sales to existing end customers.

We also intend to continue to grow our global research and development and engineering teams to enhance our solutions, including our newer subscription-based products, improve integration with new and existing ecosystem partners and broaden the range of technologies and features available through our platform.

We believe that these investments will contribute to our long-term growth, although they may adversely affect our profitability in the near term.

Transition to Subscription

Starting in fiscal 2019, as a result of our transition towards a subscription-based business model, more of our customers began purchasing separately sold subscription term-based licenses that could be deployed on a variety of hardware platforms. As we continue our transition to a subscription-based business model, we expect a greater portion of our products to be delivered through subscription term-based licenses or cloud-based SaaS subscriptions. Shifts in the mix of whether our solutions are sold on a subscription basis could result in fluctuations in our billings and revenue. Subscription sales consist of subscription term-based licenses and offerings with ongoing performance obligations, including software entitlement and support subscriptions and cloud-based SaaS offerings. Since revenue is recognized as performance obligations are delivered, sales with ongoing performance obligations may reflect lower revenue in a given period. In addition, other factors relating to our shift to selling more subscription term-based licenses may impact our billings and revenue. For example, our term-based licenses generally have an average term of less than four years and thus result in lower billings and revenue in a given period when compared to our historical life of device license sales, which have a duration equal to the life of the associated appliance, which we estimate to be approximately five years.

Revenue for our solutions, whether or not sold a subscription term-based license, is generally recognized upon transfer of control to the customer. For additional information on revenue recognition, see Note 3 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K and "Critical Accounting Estimates" later in this "Management’s Discussion and Analysis of Financial Condition and Results of Operations" section.

Market Adoption of Our Products

The public cloud and more recently, hybrid cloud paradigms, have changed IT buyer expectations about the simplicity, agility, scalability, portability and pay-as-you-grow economics of IT resources, which represent a major architectural shift and business model evolution. A key focus of our sales and marketing efforts is creating market awareness about the benefits of our enterprise cloud platform, both as compared to traditional datacenter architectures as well as the public cloud, particularly as we continue to pursue large enterprises and mission critical workloads and transition toward a subscription-based business model. The broad nature of the technology shift that our enterprise cloud platform represents, the relationships our end customers have with existing IT vendors and our transition toward a subscription-based consumption model sometimes lead to unpredictable sales cycles, which we hope to compress and stabilize as market adoption increases, as we gain leverage with our channel partners, as we continue to educate the market about our subscription-based business model and as our sales and marketing efforts expand. Our business and operating results will be significantly affected by the degree to and speed with which organizations adopt our enterprise cloud platform.

Leveraging Channel Partners and OEMs

We plan to continue to strengthen and expand our network of channel partners and OEMs to increase sales to both new and existing end customers. We believe that increasing channel leverage, particularly as we expand our focus on opportunities in commercial accounts, by investing aggressively in sales enablement and co-marketing with our partners and OEMs will extend and improve our engagement with a broad set of end customers. Our business and results of operations will be significantly affected by our success in leveraging and expanding our network of channel partners and OEMs.

Customer Retention and Expansion

Our end customers typically deploy our technology for a specific workload initially. After a new end customer's initial order, which includes the product and associated software entitlement and support subscription and services, we focus on expanding our footprint by serving more workloads. We also generate recurring revenue from our software entitlement and support subscription renewals. We view continued purchases and upgrades as critical drivers of our success, as the sales cycles are typically shorter as compared to new end customer deployments, and selling efforts are typically less. As of July 31, 2019, approximately 65% of our end customers who have been with us for 18 months or longer have made a repeat purchase, which is defined as any purchase activity, including renewals of term-based licenses or software entitlement and support subscription renewals, after the initial purchase. Additionally, end customers who have been with us for 18 months or longer have total lifetime orders, including the initial order, in an amount that is more than 4.0x greater, or 4.4x greater excluding the value of hardware purchases, on average, than their initial order. This number increases to approximately 10.4x, or 11.7x excluding hardware, on average, for Global 2000 end customers who have been with us for 18 months or longer as of July 31, 2019. These multiples exclude the effect of one end customer who had a very large and irregular purchase pattern that we believe is not representative of the purchase patterns of all of our other end customers.

Our business and operating results will depend on our ability to retain and sell additional products to our existing and future base of end customers. Our ability to retain existing customers and expand our customer base will in turn depend in part on our ability to effectively maintain existing and future customer relationships, continue to innovate by adding new functionality and improving usability of our solutions in a manner that addresses our end customers' needs and requirements, and optimally price our solutions in light of marketplace conditions, competition, our costs and customer demand. Furthermore, our ongoing transition to a subscription-based business model may cause concerns among our customer base, including concerns regarding changes to pricing over time, and may also result in confusion among new and existing end customers, for example, regarding our pricing models. Such concerns and/or confusion can slow adoption and renewal rates among our current and future customer base. Therefore, as we continue our transition, we may need to enhance our efforts to educate our end customers and as a result incur higher sales and marketing costs.

Components of Our Results of Operations

Revenue

We generate revenue primarily from the sale of our enterprise cloud platform, which can be deployed on a variety of qualified hardware platforms or, in the case of our cloud-based SaaS offerings, via hosted service or delivered pre-installed on an appliance that is configured to order. Non-portable software is delivered or sold alongside configured-to-order appliances with a license term equal to the life of the associated appliance.

Our subscription term-based licenses are sold separately, or can be sold alongside configured-to-order appliances. Our subscription term-based licenses typically have a term of one to five years. Our cloud-based SaaS subscriptions have terms extending up to five years.

Configured-to-order appliances, including our Nutanix-branded NX hardware line, can be purchased from one of our channel partners, OEMs or directly from Nutanix. Our enterprise cloud platform is typically purchased with one or more years of support and entitlements, which includes the right to software upgrades and enhancements as well as technical support. Our platform is primarily sold through channel partners, including distributors, resellers and OEMs.

Product revenue — Product revenue consists of software and hardware revenue. A majority of our product revenue is generated from the sale of our enterprise cloud operating system. We also sell renewals of previously purchased software licenses and SaaS offerings. Revenue from our software products is generally recognized upon transfer of control to the customer, which is typically upon shipment for sales including a hardware appliance, upon making the software available to the customer when not sold with an appliance or as services are performed with SaaS offerings. In transactions where we deliver the hardware appliance, we consider ourselves to be the principal in the transaction and we record revenue and costs of goods sold on a gross basis. We consider the amount allocated to hardware revenue to be equivalent to the cost of the hardware procured. Hardware revenue is generally recognized upon transfer of control to the customer.

Support, entitlements and other services revenue — We generate our support, entitlements and other services revenue primarily from software entitlement and support subscriptions, which include the right to software upgrades and enhancements as well as technical support. The majority of our product sales are sold in conjunction with software entitlement and support subscriptions, with terms ranging from one to five years. Occasionally, we also sell professional services with our products. We recognize revenue from software entitlement and support contracts ratably over the contractual service period. The service period typically commences upon transfer of control of the corresponding products to the customer. We recognize revenue related to professional services as they are performed.

Cost of Revenue

Cost of product revenue — Cost of product revenue consists of costs paid to third-party contract manufacturers, hardware costs, personnel costs associated with our operations function, consisting of salaries, benefits, bonuses and stock-based compensation, cloud-based costs associated with our SaaS offerings, and allocated costs, consisting of certain facilities, depreciation and amortization, recruiting and information technology costs allocated based on headcount.

Cost of support, entitlements and other services revenue — Cost of support, entitlements and other services revenue includes personnel and operating costs associated with our global customer support organization, as well as allocated costs. We expect our cost of support, entitlements and other services revenue to increase in absolute dollars as our support, entitlements and other services revenue increases.

Operating Expenses

Our operating expenses consist of sales and marketing, research and development and general and administrative expenses. The largest component of our operating expenses is personnel costs. Personnel costs consist of wages, benefits, bonuses and, with respect to sales and marketing expenses, sales commissions.

Sales and marketing — Sales and marketing expense consists primarily of personnel costs. Sales and marketing expense also includes sales commissions, costs for promotional activities and other marketing costs, travel costs and costs associated with demonstration units, including depreciation and allocated costs. Commissions are deferred and recognized as we recognize the associated revenue. We expect sales and marketing expense to continue to increase in absolute dollars as we increase the size of our global sales and marketing organizations. Sales and marketing expense may fluctuate as a percentage of total revenue.

Research and development — Research and development ("R&D") expense consists primarily of personnel costs, as well as other direct and allocated costs. We have devoted our product development efforts primarily to enhancing the functionality and expanding the capabilities of our solutions. R&D costs are expensed as incurred. We expect R&D expense to increase in absolute dollars as we continue to invest in our future products and services, including our newer subscription-based products, although R&D expense may fluctuate as a percentage of total revenue.

General and administrative — General and administrative ("G&A") expense consists primarily of personnel costs, which include our executive, finance, human resources and legal organizations. G&A expense also includes outside professional services, which consists primarily of legal, accounting and other consulting costs, as well as insurance and other costs associated with being a public company and allocated costs. We expect G&A expense to increase in absolute dollars, particularly due to additional legal, accounting, insurance and other costs associated with our growth, although G&A expense may fluctuate as a percentage of total revenue.

Other Income (Expense), Net

Other income (expense), net consists primarily of interest income and expense, which includes the amortization of the debt discount and issuance costs associated with our 0% Convertible Senior Notes, due in 2023 (the "Notes"), interest income related to our short-term investments and foreign currency exchange gains or losses. During fiscal 2018 and fiscal 2019, we recognized $14.7 million and $29.3 million, respectively, of interest expense related to the amortization of the debt discount and issuance costs associated with the Notes.

Provision for Income Taxes

Provision for income taxes consists primarily of income taxes for certain foreign jurisdictions in which we conduct business and state income taxes in the United States. We have recorded a full valuation allowance related to our federal and state net operating losses and other net deferred tax assets and a partial valuation allowance related to our foreign net deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Results of Operations

The following tables set forth our consolidated results of operations in dollars and as a percentage of total revenue for the fiscal years presented. The period-to-period comparison of results is not necessarily indicative of results for future periods.

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Revenue:			
Product	$ 673,297	$ 887,989	$ 832,419
Support, entitlements and other services	172,606	267,468	403,724
Total revenue	845,903	1,155,457	1,236,143
Cost of revenue:			
Product (1)(2)	249,393	276,127	143,078
Support, entitlements and other services (1)	77,938	109,903	161,050
Total cost of revenue	327,331	386,030	304,128
Gross profit	518,572	769,427	932,015
Operating expenses:			
Sales and marketing (1)(2)	501,021	649,657	909,750
Research and development (1)	288,619	313,777	500,719
General and administrative (1)	77,341	86,401	119,587
Total operating expenses	866,981	1,049,835	1,530,056
Loss from operations	(348,409)	(280,408)	(598,041)
Other expense, net	(26,377)	(9,306)	(15,019)
Loss before provision for income taxes	(374,786)	(289,714)	(613,060)
Provision for income taxes	4,852	7,447	8,119
Net loss	$ (379,638)	$ (297,161)	$ (621,179)

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

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Cost of revenue:			
Product	$ 3,066	$ 2,580	$ 3,535
Support, entitlements and other services	10,411	8,945	15,326
Total cost of revenue	13,477	11,525	18,861
Sales and marketing	78,117	65,060	107,751
Research and development	109,044	74,389	140,519
General and administrative	30,853	26,894	39,598
Total stock-based compensation expense	$ 231,491	$ 177,868	$ 306,729

(2) Includes amortization of intangible assets as follows:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Product cost of revenue	$ 1,314	$ 5,641	$ 14,248
Sales and marketing	915	914	2,528
Total amortization of intangible assets	$ 2,229	$ 6,555	$ 16,776

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(as a percentage of total revenue)		
Revenue:			
Product	79.6 %	76.9 %	67.3 %
Support, entitlements and other services	20.4 %	23.1 %	32.7 %
Total revenue	100.0 %	100.0 %	100.0 %
Cost of revenue:			
Product	29.5 %	23.9 %	11.6 %
Support, entitlements and other services	9.2 %	9.5 %	13.0 %
Total cost of revenue	38.7 %	33.4 %	24.6 %
Gross profit	61.3 %	66.6 %	75.4 %
Operating expenses:			
Sales and marketing	59.2 %	56.2 %	73.6 %
Research and development	34.1 %	27.2 %	40.5 %
General and administrative	9.2 %	7.5 %	9.7 %
Total operating expenses	102.5 %	90.9 %	123.8 %
Loss from operations	(41.2)%	(24.3)%	(48.4)%
Other expense, net	(3.1)%	(0.8)%	(1.2)%
Loss before provision for income taxes	(44.3)%	(25.1)%	(49.6)%
Provision for income taxes	0.6 %	0.6 %	0.7 %
Net loss	(44.9)%	(25.7)%	(50.3)%

Revenue

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Product	$ 673,297	$ 887,989	$ 214,692	32%	$ 887,989	$ 832,419	$ (55,570)	(6)%
Support, entitlements and other services	172,606	267,468	94,862	55%	267,468	403,724	136,256	51 %
Total revenue	$ 845,903	$ 1,155,457	$ 309,554	37%	$ 1,155,457	$ 1,236,143	$ 80,686	7 %

Total revenue by bill-to-location was as follows:

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
U.S.	$ 488,079	$ 648,805	$ 160,726	33%	$ 648,805	$ 682,340	$ 33,535	5%
Asia Pacific	186,864	240,247	53,383	29%	240,247	271,712	31,465	13%
Europe, the Middle East and Africa	138,815	224,392	85,577	62%	224,392	238,356	13,964	6%
Other Americas	32,145	42,013	9,868	31%	42,013	43,735	1,722	4%
Total revenue	$ 845,903	$ 1,155,457	$ 309,554	37%	$ 1,155,457	$ 1,236,143	$ 80,686	7%

Product revenue increased year-over-year for fiscal 2018 due primarily to increased domestic and international demand for our solutions through penetration and expansion in global markets through increased sales and marketing activities. Our product revenue during fiscal 2018 was also impacted by the reduction of hardware revenue from transactions where the hardware was not sold by us.

Product revenue decreased year-over-year for fiscal 2019 due primarily to the reduction of hardware revenue from transactions where the hardware was not sold by us. In addition, our product revenue has been impacted by our continued transition to selling subscription term-based licenses, as these licenses generally have an average term of less than four years, while those with a duration equal to the life of the associated appliance have an estimated life of approximately five years. We continue to focus on more software-only transactions and therefore anticipate selling less hardware in future periods.

Support, entitlements and other services revenue increased year-over-year for both fiscal 2018 and fiscal 2019 in conjunction with the growth of our end customer base and the related software entitlement and support subscriptions. Our total end customer count increased from approximately 7,050 as of July 31, 2017 to approximately 10,610 as of July 31, 2018 and to approximately 14,180 as of July 31, 2019.

Cost of Revenue and Gross Margin

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Cost of product revenue	$ 249,393	$ 276,127	$ 26,734	11%	$ 276,127	$ 143,078	$ (133,049)	(48)%
Product gross margin	*63.0%*	*68.9%*			*68.9%*	*82.8%*		
Cost of support, entitlements and other services revenue	$ 77,938	$ 109,903	$ 31,965	41%	$ 109,903	$ 161,050	$ 51,147	47 %
Support, entitlements and other services gross margin	*54.8%*	*58.9%*			*58.9%*	*60.1%*		
Total gross margin	*61.3%*	*66.6%*			*66.6%*	*75.4%*		

Cost of product revenue

The year-over-year fluctuations in cost of product revenue are in line with the corresponding fluctuations in hardware revenue. For fiscal 2018, as compared to the respective prior year period, cost of product revenue was impacted by increases in the cost of certain of our hardware components, specifically DRAM and NAND, due to supply constraints. The total cost of our DRAM and NAND components represented approximately 22% and 30% of cost of product revenue for the fiscal years ended July 31, 2017 and 2018, respectively. DRAM and NAND component prices increased by approximately 51% for fiscal 2018, as compared to the prior year period. For fiscal 2019, as compared to the respective prior year period, the decrease in cost of product revenue was due primarily to our continued focus on software-only transactions, which have a higher margin as compared to hardware sales.

Product gross margin increased by 5.9 percentage points, from 63.0% in fiscal 2017 to 68.9% in fiscal 2018, and by 13.9 percentage points, to 82.8% in fiscal 2019, due primarily to the higher mix of software revenue, as we continue to focus on more software-only transactions.

Cost of support, entitlements and other services revenue

Cost of support, entitlements and other services revenue increased year-over-year for both fiscal 2018 and fiscal 2019 due primarily to higher personnel-related costs relating to the expansion of our global customer support organization. The increases in personnel-related costs were due primarily to increases in our customer support, entitlements and other services headcount of 56% from July 31, 2017 to July 31, 2018 and 40% from July 31, 2018 to July 31, 2019.

Support, entitlements and other services gross margin increased by 4.1 percentage points, from 54.8% in fiscal 2017 to 58.9% in fiscal 2018, and by 1.2 percentage points to 60.1% in fiscal 2019, due primarily to efficiencies gained in our support organization and personnel-related costs growing at a slower rate than support, entitlements and other services revenue, as well as the ramp up for new products, specifically cloud services.

Operating Expenses

Sales and marketing

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Sales and marketing	$ 501,021	$ 649,657	$ 148,636	30%	$ 649,657	$ 909,750	$ 260,093	40%
Percent of total revenue	*59.2%*	*56.2%*			*56.2%*	*73.6%*		

Sales and marketing expense increased year-over-year both for fiscal 2018 and fiscal 2019 due primarily to higher personnel-related costs and sales commissions, as our sales and marketing headcount increased year-over-year by 42% in fiscal 2018 and 36% in fiscal 2019. Additionally, as part of our continued efforts to penetrate and expand in global markets and increase our pipeline growth through additional demand generation, we continue to increase our sales and marketing activities related to brand awareness, promotions, trade shows and partner programs. We expect sales and marketing expense to increase as we continue to grow.

Research and development

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Research and development	$ 288,619	$ 313,777	$ 25,158	9%	$ 313,777	$ 500,719	$ 186,942	60%
Percent of total revenue	*34.1%*	*27.2%*			*27.2%*	*40.5%*		

Research and development expense increased year-over-year both for fiscal 2018 and fiscal 2019 due primarily to higher personnel-related costs, as our R&D headcount increased year-over-year by 42% in fiscal 2018 and 27% in fiscal 2019 in an effort to continue the expansion of our product development activities, including new products. This increase includes additional headcount and stock-based compensation expense related to employees who joined the Company through acquisitions.

General and administrative

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
General and administrative	$ 77,341	$ 86,401	$ 9,060	12%	$ 86,401	$ 119,587	$ 33,186	38%
Percent of total revenue	*9.2%*	*7.5%*			*7.5%*	*9.7%*		

General and administrative expense increased year-over-year both for fiscal 2018 and fiscal 2019 due primarily to higher personnel-related costs, as our G&A headcount increased year-over-year by 29% in fiscal 2018 and 30% in fiscal 2019 in order to support our growing business.

Other Expense, Net

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Other expense, net	$ (26,377)	$ (9,306)	$ (17,071)	(65)%	$ (9,306)	$ (15,019)	$ 5,713	61%

The fluctuations in other expense, net for fiscal 2018 and fiscal 2019 were primarily related to the amortization of the debt discount and issuance costs for the Notes, as the Notes were issued during the second quarter of fiscal 2018, as well as interest earned on short-term investments. The decrease in other expense, net for fiscal 2018 was also due to $23.1 million of expense in fiscal 2017 related to changes in the fair value of our convertible preferred stock warrant liability.

Provision for Income Taxes

	Fiscal Year Ended July 31,		Change		Fiscal Year Ended July 31,		Change	
	2017	2018	$	%	2018	2019	$	%
	(in thousands, except percentages)							
Provision for income taxes	$ 4,852	$ 7,447	$ 2,595	53%	$ 7,447	$ 8,119	$ 672	9%

The year-over-year increase in the provision for income taxes in fiscal 2018 was due primarily to the alternative minimum tax related to the migration of certain intangible assets and foreign taxes as a result of higher taxable earnings in foreign jurisdictions, as we continued our global expansion. The increase was partially offset by a $3.9 million partial release of the U.S. valuation allowance related to acquisitions completed during fiscal 2018.

The year-over-year increase in the provision for income taxes in fiscal 2019 was due primarily to higher foreign taxes as a result of higher taxable earnings in foreign jurisdictions, as we continued our global expansion, partially offset by a $5.8 million partial release of the U.S. valuation allowance related to an acquisition completed during fiscal 2019 and a tax benefit related to the change in tax law. We continue to maintain a full valuation allowance on our U.S. federal and state deferred tax assets and a partial valuation allowance related to our foreign net deferred tax assets.

In December 2017, the U.S. Congress passed and the President signed the Tax Cuts and Jobs Act ("TCJA"), which includes a broad range of tax reform proposals affecting businesses. For additional details, refer to Note 11 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Liquidity and Capital Resources

As of July 31, 2019, we had $396.7 million of cash and cash equivalents, $2.8 million of restricted cash and $512.2 million of short-term investments, which were held for general corporate purposes. Our cash, cash equivalents and short-term investments primarily consist of bank deposits, money market accounts and highly rated debt instruments of the U.S. government and its agencies and debt instruments of highly rated corporations. We do not anticipate that we will need funds generated from foreign operations to fund our domestic operations.

In January 2018, we issued Convertible Senior Notes with a 0% interest rate for an aggregate principal amount of $575.0 million. There are no required principal payments prior to the maturity of the Notes. For additional information, see Note 6 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

We believe that our cash and cash equivalents and short-term investments will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least the next 12 months. Our future capital requirements will depend on many factors, including our growth rate, the timing and extent of spending to support development efforts, the expansion of sales and marketing activities, the introduction of new and enhanced product and service offerings and the continuing market acceptance of our products. In the event that additional financing is required from outside sources, we may not be able to raise such financing on terms acceptable to us or at all. If we are unable to raise additional capital when desired, our business, operating results and financial condition would be adversely affected.

Cash Flows

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

	Fiscal Year Ended July 31,		
	2017	2018	2019
		(in thousands)	
Net cash provided by operating activities	$ 14,779	$ 92,540	$ 42,168
Net cash used in investing activities	(176,094)	(503,555)	(16,850)
Net cash provided by financing activities	201,422	578,616	67,104
Net increase in cash, cash equivalents and restricted cash	$ 40,107	$ 167,601	$ 92,422

We retrospectively adopted Accounting Standards Update ("ASU") 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents, effective August 1, 2018. Our statement of cash flows for the fiscal year ended July 31, 2018 has been adjusted to conform to the new standard. See Note 1 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information on this new standard.

Cash Flows from Operating Activities

Net cash generated from operating activities was $14.8 million, $92.5 million and $42.2 million for fiscal 2017, 2018 and 2019, respectively, representing increases of $11.0 million and $77.8 million and a decrease of $50.4 million, respectively, as compared to the prior year periods. The generation of cash during each fiscal year was due primarily to higher billings and collections, partially offset by higher operating expenses as we continue to invest in the long-term growth of our business.

Cash Flows from Investing Activities

Net cash used in investing activities of $176.1 million for fiscal 2017 primarily consisted of $242.5 million of short-term investment purchases, using a significant portion of the proceeds from our initial public offering ("IPO"), and $50.2 million of purchases of property and equipment, partially offset by $84.2 million of maturities of short-term investments and $32.6 million of sales of short-term investments.

Net cash used in investing activities of $503.6 million for fiscal 2018 primarily consisted of $716.4 million of short-term investment purchases, using a significant portion of the proceeds from the Notes, $62.4 million of purchases of property and equipment and $22.2 million of net payments for business combinations, partially offset by $297.5 million of maturities of short-term investments.

Net cash used in investing activities of $16.9 million for fiscal 2019 primarily consisted of $468.1 million of short-term investment purchases, $118.5 million of purchases of property and equipment and $19.0 million of net payments for business combinations, partially offset by $588.8 million of maturities of short-term investments.

Cash Flows from Financing Activities

Net cash provided by financing activities of $201.4 million for fiscal 2017 primarily consisted of net IPO proceeds of $254.5 million, after deducting underwriting discounts and commissions, and $32.3 million of net proceeds from sales of shares through employee equity incentive plans, partially offset by the $76.6 million of repayment of senior notes in September 2016, including debt extinguishment costs, a $7.1 million debt payment in conjunction with a business combination and $1.7 million in payments for IPO costs.

Net cash provided by financing activities of $578.6 million for fiscal 2018 primarily consisted of $563.6 million of net proceeds from the Notes, after deducting the initial purchasers' discount and debt issuance costs, $88.0 million of proceeds from the sale of the warrants in connection with the Notes and $72.0 million of net proceeds from sales of shares through employee equity incentive plans, partially offset by $143.2 million of cash used to purchase bond hedges in connection with the Notes and a $1.7 million debt payment in conjunction with a business combination.

Net cash provided by financing activities of $67.1 million for fiscal 2019 primarily consisted of $69.2 million of net proceeds from sales of shares through employee equity incentive plans, partially offset by a $1.0 million acquisition-related contingent consideration payment and a $1.0 million debt payment in conjunction with a business combination.

Contractual Obligations

The following table summarizes our contractual obligations as of July 31, 2019:

	Payments Due by Period				
	Total	Less than 1 Year	1 Year to 3 Years	3 to 5 Years	More than 5 Years
	(in thousands)				
Principal amount payable on convertible senior notes (1)	$ 575,000	$ —	$ —	$ 575,000	$ —
Operating lease obligations	197,227	39,540	83,241	70,935	3,511
Other commitments (2)	64,808	62,827	1,981	—	—
Guarantees with contract manufacturers and OEMs	144,929	72,054	72,875	—	—
Total	$ 981,964	$ 174,421	$ 158,097	$ 645,935	$ 3,511

(1) For additional information regarding our convertible senior notes, refer to Note 6 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.
(2) Purchase obligations and other commitments pertaining to our normal operations.

As of July 31, 2019, payments related to our above outstanding non-cancelable lease obligations will be made through fiscal 2026.

From time to time in the normal course of business, we make commitments with our contract manufacturers and OEMs to ensure them a minimum level of financial consideration for their investment in our joint solutions. These commitments are based on revenue targets or on-hand inventory and non-cancelable purchase orders for non-standard components. We record a charge related to these items when we determine that it is probable a loss will be incurred and we are able to estimate the amount of the loss. Our historical charges have not been material.

As of July 31, 2019, we had $15.8 million of accrued liabilities related to uncertain tax positions, which are reflected on our consolidated balance sheet. These accrued liabilities are not reflected in the contractual obligations disclosed in the table above, as it is uncertain if or when such amounts will ultimately be settled. Uncertain tax positions are further discussed in Note 11 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

As of July 31, 2019, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Critical Accounting Policies and Estimates

Our consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these consolidated financial statements requires management to make estimates, assumptions and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the applicable periods. We evaluate our estimates, assumptions and judgments on an ongoing basis. Our estimates, assumptions and judgments are based on historical experience and various other factors that we believe to be reasonable under the circumstances. Different assumptions and judgments would change the estimates used in the preparation of our consolidated financial statements, which, in turn, could change the results from those reported.

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

Some of our contracts with customers contain multiple performance obligations. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment. For these contracts, we account for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price ("SSP") basis. For deliverables that we routinely sell separately, such as software entitlement and support subscriptions on our core offerings, we determine SSP by evaluating the standalone sales over the trailing 12 months. For those that are not sold routinely, we determine SSP based on our overall pricing trends and objectives, taking into consideration market conditions and other factors, including the value of our contracts, the products sold and geographic locations.

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 SSP. We determine SSP based on the price at which the performance obligation is sold separately. If the SSP is not observable through past transactions, we estimate the SSP, taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations. Refer to Note 1 and Note 3 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for additional information on revenue recognition.

Income Taxes

The objectives of accounting for income taxes are to recognize the amount of taxes payable or refundable for the current year and deferred tax liabilities and assets for the future tax consequences of events that have been recognized in an entity’s financial statements or tax returns. We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. We recognize uncertain tax positions only if it is more likely than not to be sustained based solely on its technical merits as of the reporting date. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and which may not accurately anticipate actual outcomes. Judgment is required in assessing the future tax consequences of events that have been recognized in our consolidated financial statements or tax returns. Variations in the actual outcome of these future tax consequences could materially impact our consolidated financial statements.

The TCJA significantly changed existing U.S. tax law and included and continues to include numerous provisions that affect our business. Refer to Note 11 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K for further discussion.

Stock-Based Compensation

We measure and recognize compensation expense for all stock-based awards, including stock options and purchase rights issued to employees under our 2016 Employee Stock Purchase Plan ("2016 ESPP"), based on the estimated fair value of the awards on the grant date. We use the Black-Scholes-Merton ("Black-Scholes") option pricing model to estimate the fair value of stock options and 2016 ESPP purchase rights. The fair value of restricted stock units ("RSUs"), is measured using the fair value of our common stock on the date of the grant. The fair value of stock options and RSUs is recognized as expense on a straight-line basis over the requisite service period, which is generally four years. For stock-based awards granted to employees with a performance condition, we recognize stock-based compensation expense using the accelerated attribution method over the requisite service period when management determines it is probable that the performance condition will be satisfied. The fair value of the 2016 ESPP purchase rights is recognized as expense on a straight-line basis over the offering period. We account for forfeitures of all share-based awards when they occur.

Our use of the Black-Scholes option pricing model requires the input of highly subjective assumptions, including the fair value of the underlying common stock, expected term of the option, expected volatility of the price of our common stock, risk-free interest rates and the expected dividend yield of our common stock. The assumptions used in our option pricing model represent management’s best estimates. These estimates involve inherent uncertainties and the application of management’s judgment. If factors change and different assumptions are used, our stock-based compensation expense could be materially different in the future.

Business Combinations

We account for our acquisitions using the acquisition method. Goodwill is measured at the acquisition date as the excess of the purchase price over the fair value of the assets acquired and liabilities assumed. Significant estimates and assumptions are made by management to value such assets and liabilities. Although we believe that those estimates and assumptions are reasonable and appropriate, they are inherently uncertain and subject to refinement. Additional information related to the acquisition date fair value of acquired assets and assumed liabilities obtained during the measurement period, not to exceed one year, may result in changes to the recorded values of such assets and liabilities, resulting in an offsetting adjustment to the goodwill associated with the business acquired.

Uncertain tax positions and tax-related valuation allowances are initially established in connection with a business combination as of the acquisition date. We continue to collect information and reevaluate these estimates and assumptions quarterly. We will record any adjustments to our preliminary estimates to goodwill, provided that we are within the one-year measurement period.

Any contingent consideration payable is recognized at fair value at the acquisition date. Liability-classified contingent consideration is remeasured each reporting period, with changes in fair value recognized in earnings until the contingent consideration is settled.

Goodwill, Intangible Assets and Impairment Assessment

Goodwill represents the excess of the purchase price over the fair value of the assets acquired and liabilities assumed, if any, in a business combination, and is allocated to our single reporting unit. We review our goodwill and other intangible assets determined to have an indefinite useful life for impairment at least annually, during the fourth quarter, or more frequently whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. Goodwill is tested for impairment by comparing the reporting unit's carrying value, including goodwill, to the fair value of the reporting unit. We operate under one reporting unit and for our annual goodwill impairment test, we determine the fair value of our reporting unit based on our enterprise value. We may elect to utilize a qualitative assessment to determine whether it is more likely than not that the fair value of our reporting unit is less than its carrying value. If, after assessing the qualitative factors, we determine that it is more likely than not that the fair value of our reporting unit is less than its carrying value, an impairment analysis will be performed. We will compare the fair value of our reporting unit with its carrying amount and if the carrying value of the reporting unit exceeds its fair value, an impairment loss will be recognized.

Assessing whether impairment indicators exist or if events or changes in circumstances have occurred, including market conditions, operating fundamentals, competition and general economic conditions, requires significant judgment. Additionally, changes in the technology industry occur frequently and quickly. Therefore, there can be no assurance that a charge to operating expenses will not occur as a result of future goodwill, intangible assets and other long-lived assets impairment tests. To date, we have not recorded any impairment charges related to our goodwill and intangible assets.

Legal and Other Contingencies

The outcomes of legal proceedings and claims brought against us are subject to significant uncertainty. An estimated loss from a loss contingency such as a legal proceeding or claim is accrued by a charge to income if it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. In determining whether a loss should be accrued, we evaluate, among other factors, the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. Changes in these factors could materially impact our consolidated financial statements.

Recent Accounting Pronouncements

Refer to "Recent Accounting Pronouncements" in Note 1 of Notes to Consolidated Financial Statements included in Part II, Item 8 of this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We have operations both within the United States and internationally and we are exposed to market risk in the ordinary course of business. Market risk represents the risk of loss that may impact our financial position due to adverse changes in financial market prices and rates. Our market risk exposure is primarily a result of fluctuations in foreign currency exchange rates and interest rates.

Foreign Currency Risk

Our consolidated results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. Historically, our revenue contracts have been denominated in U.S. dollars. Our expenses are generally denominated in the currencies in which our operations are located. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative instruments. In the event our foreign sales and expenses increase, our operating results may be more significantly affected by foreign currency exchange rate fluctuations, which can affect our operating income or loss. The effect of a hypothetical 10% change in foreign currency exchange rates on our non-U.S. dollar monetary assets and liabilities would not have had a material impact on our historical consolidated financial statements. Foreign currency transaction gains and losses and exchange rate fluctuations have not been material to our consolidated financial statements.

A hypothetical 10% decrease in the U.S. dollar against other currencies would result in an increase in our operating loss of approximately $19.3 million, $31.2 million and $38.4 million for fiscal 2017, 2018 and 2019, respectively. The increase in this hypothetical change is due to an increase in our expenses denominated in foreign currencies due to of our continued global expansion. This analysis disregards the possibilities that rates can move in opposite directions and that losses from one geographic area may be offset by gains from another geographic area.

Interest Rate Risk

Our investment objective is to conserve capital and maintain liquidity to support our operations; therefore, we generally invest in highly liquid securities, consisting primarily of bank deposits, money market funds, commercial paper, U.S. government securities and corporate bonds. Such fixed and floating interest-earning instruments carry a degree of interest rate risk. The fair market value of fixed income securities may be adversely impacted by a rise in interest rates, while floating rate securities may produce less income than predicted if interest rates fall. Due to the short-term nature of our investment portfolio, we do not believe an immediate 10% increase or decrease in interest rates would have a material effect on the fair market value of our portfolio. Therefore, we do not expect our operating results or cash flows to be materially affected by a sudden change in interest rates.

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 the Stockholders of Nutanix, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Nutanix, Inc. and subsidiaries (the "Company") as of July 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, stockholders' equity, and cash flows, for each of the three years in the period ended July 31, 2019, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of July 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended July 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated September 24, 2019, expressed an unqualified opinion on the Company's internal control over financial reporting.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current-period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Valuation of Developed Technology from Mainframe2, Inc. Acquisition — Refer to Note 2 to the financial statements

Critical Audit Matter Description

On August 24, 2018, the Company completed the acquisition of Mainframe2, Inc. ("Frame"). The Company accounted for this acquisition under the acquisition method of accounting for business combinations. Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based on their respective fair values, including developed technology of $31.8 million related to Frame's cloud-based Windows desktop and application delivery service. The determination of the fair value of the developed technology required management to make significant estimates and assumptions related to forecasted revenue growth, cost of sales, and operating expenses as well as the discount rate. To estimate the fair value of the developed technology, management was required to make significant estimates and assumptions related to the forecasted information.

We identified valuation of the developed technology as a critical audit matter because of the significant judgments made by management to estimate its fair value especially considering the technology is recently developed with limited historical sales information. This required a high degree of auditor judgment and an increased extent of effort, including the need to involve our fair value specialists, when performing audit procedures to evaluate the reasonableness of management's estimates and assumptions related to forecasted revenue growth, costs of sales, and operating expenses, as well as the selection of the discount rate.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to forecasted revenue growth, cost of sales, and operating expenses, as well as the selection of the discount rate for Frame's developed technology included the following, among others:

- We tested the effectiveness of controls over the fair value of developed technology, including managements forecast and operating plan review control over the forecasted revenue growth, cost of sales, and operating expenses. We further tested management's control over the valuation report, including key inputs such as forecasts and the discount rate.

- With the assistance of our fair value specialists, we evaluated the valuation methodologies and valuation assumptions used by management to develop fair value estimates for developed technology, including:

  – Testing the mathematical accuracy of the calculation.

  – Developing a range of independent discount rate estimates and comparing those to the discount rate selected by management.

  – Assessing the source information underlying the Company's determination of the discount rate.

  – Evaluating whether the fair value model being used is appropriate considering the Company's circumstances and valuation premise identified.

- We performed a comparison of management's forecasted revenue growth, cost of sales, and operating expenses against various other sources, including:

  – Historical performance of Frame.

  – Industry data and analyst reports.

  – Internal communications to management and the Board of Directors.

  – Forecasted information as well as analyst and industry reports for the Company and certain of its peer companies.

Revenue Recognition — Refer to Notes 1 and 3 to the financial statements

Critical Audit Matter Description

The Company recognizes revenue upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those products or services. The Company offers customers an enterprise cloud platform, which can be pre-installed on hardware or delivered separately, as well as related support subscriptions and professional services. Product revenue was $832.4 million and support, entitlements, and other services was $403.7 million for the year ended July 31, 2019.

Significant judgment is exercised by the Company in determining revenue recognition for the Company's customer contracts, and includes the following:

- Determination of whether promised goods or services, such as hardware and software licenses, are capable of being distinct and are distinct in the context of the Company's customer contracts which leads to whether they should be accounted for as individual or combined performance obligations.

- Determination of standalone selling prices for each distinct performance obligation and for products and services that are not sold separately.

- Determination of the timing of when revenue is recognized for each distinct performance obligation either over time or at a point in time.

We identified revenue recognition as a critical audit matter because of these significant judgments required by management. This required a high degree of auditor judgment and an increased extent of effort when performing audit procedures to evaluate whether revenue was recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration the Company expects to be entitled to in exchange for those goods or services.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the Company's revenue recognition for the Company's customer contracts included the following, among others:

- We tested the effectiveness of controls related to the identification of distinct performance obligations, determination of the standalone selling prices, and the determination of the timing of revenue recognition.

- We evaluated management's significant accounting policies related to revenue recognition for reasonableness.

- We selected a sample of recorded revenue transactions and performed the following procedures:

    - Obtaining and reading customer source documents and the contract for each selection, including master agreements and related amendments to evaluate if relevant contractual terms have been appropriately considered by management.

    - Evaluating management's application of their accounting policy and tested revenue recognition for specific performance obligations by comparing management's conclusions to the underlying master agreement and any related amendments.

    - Testing the mathematical accuracy of management's calculations of revenue and the associated timing of revenue recognized in the financial statements.

- For a selection of arrangements with original equipment manufacturers ("OEMs"), we confirmed accounts receivable and total billings as of and for the year ended July 31, 2019, respectively, directly with the OEM. In addition, we confirmed a sample of individual revenue orders for the year ended July 31, 2019, to evaluate the accuracy of management's records.

- We evaluated the reasonableness of management's estimate of standalone selling prices for products and services that are not sold separately by performing the following:

    - Assessing the appropriateness of the Company's methodology and mathematical accuracy of the determined standalone selling prices.

    - Testing the completeness and accuracy of the source data utilized in management's calculations.

/s/ *DELOITTE & TOUCHE LLP*

San Jose, California
September 24, 2019

We have served as the Company's auditor since 2013.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and the Stockholders of Nutanix, Inc.

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Nutanix, Inc. and subsidiaries (the "Company") as of July 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of July 31, 2019, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended July 31, 2019, of the Company and our report dated September 24, 2019, expressed an unqualified opinion on those financial statements.

Basis for Opinion

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

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

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

/s/ *DELOITTE & TOUCHE LLP*

San Jose, California
September 24, 2019

Table of Contents

NUTANIX, INC.

CONSOLIDATED BALANCE SHEETS

	As of July 31,	
	2018	2019
	(in thousands, except share and per share data)	
Assets		
Current assets:		
Cash and cash equivalents	$ 305,975	$ 396,678
Short-term investments	628,328	512,156
Accounts receivable, net of allowance of $815 and $379 as of July 31, 2018 and 2019	258,289	245,475
Deferred commissions—current	33,691	46,238
Prepaid expenses and other current assets	36,818	74,665
Total current assets	1,263,101	1,275,212
Property and equipment, net	85,111	136,962
Deferred commissions—non-current	80,688	107,474
Intangible assets, net	45,366	66,773
Goodwill	87,759	185,180
Other assets—non-current	37,855	14,441
Total assets	$ 1,599,880	$ 1,786,042
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 65,503	$ 74,047
Accrued compensation and benefits	85,398	99,804
Accrued expenses and other current liabilities	31,682	28,797
Deferred revenue—current	275,648	396,667
Total current liabilities	458,231	599,315
Deferred revenue—non-current	355,559	513,377
Convertible senior notes, net	429,598	458,910
Other liabilities—non-current	29,713	27,547
Total liabilities	1,273,101	1,599,149
Commitments and contingencies (Note 7)		
Stockholders' equity:		
Preferred stock, par value of $0.000025 per share— 200,000,000 shares authorized as of July 31, 2018 and 2019; no shares issued and outstanding as of July 31, 2018 and 2019	—	—
Common stock, par value of $0.000025 per share— 1,200,000,000 (1,000,000,000 Class A, 200,000,000 Class B) shares authorized as of July 31, 2018 and 2019; 172,858,082 (135,109,672 Class A, 37,748,410 Class B) and 188,595,314 (168,155,308 Class A, 20,440,006 Class B) shares issued and outstanding as of July 31, 2018 and 2019	4	5
Additional paid-in capital	1,355,907	1,835,528
Accumulated other comprehensive (loss) income	(1,002)	669
Accumulated deficit	(1,028,130)	(1,649,309)
Total stockholders' equity	326,779	186,893
Total liabilities and stockholders' equity	$ 1,599,880	$ 1,786,042

See the accompanying notes to the consolidated financial statements.

NUTANIX, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

	Fiscal Year Ended July 31,		
	2017	**2018**	**2019**
	(in thousands, except share and per share data)		
Revenue:			
Product	$ 673,297	$ 887,989	$ 832,419
Support, entitlements and other services	172,606	267,468	403,724
Total revenue	845,903	1,155,457	1,236,143
Cost of revenue:			
Product	249,393	276,127	143,078
Support, entitlements and other services	77,938	109,903	161,050
Total cost of revenue	327,331	386,030	304,128
Gross profit	518,572	769,427	932,015
Operating expenses:			
Sales and marketing	501,021	649,657	909,750
Research and development	288,619	313,777	500,719
General and administrative	77,341	86,401	119,587
Total operating expenses	866,981	1,049,835	1,530,056
Loss from operations	(348,409)	(280,408)	(598,041)
Other expense, net	(26,377)	(9,306)	(15,019)
Loss before provision for income taxes	(374,786)	(289,714)	(613,060)
Provision for income taxes	4,852	7,447	8,119
Net loss	$ (379,638)	$ (297,161)	$ (621,179)
Net loss per share attributable to Class A and Class B common stockholders—basic and diluted	$ (2.96)	$ (1.81)	$ (3.43)
Weighted average shares used in computing net loss per share attributable to Class A and Class B common stockholders—basic and diluted	128,295,563	164,091,302	181,030,964

See the accompanying notes to the consolidated financial statements.

NUTANIX, INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

	Fiscal Year Ended July 31,		
	2017	**2018**	**2019**
		(in thousands)	
Net loss	$ (379,638)	$ (297,161)	$ (621,179)
Other comprehensive (loss) income, net of tax:			
Change in unrealized (loss) gain on available-for-sale securities, net of tax	(94)	(896)	1,671
Comprehensive loss	$ (379,732)	$ (298,057)	$ (619,508)

See the accompanying notes to the consolidated financial statements.

NUTANIX, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total Stockholders' (Deficit) Equity
	Shares	Amount	Shares	Amount				
	(in thousands, except share data)							
Balance - July 31, 2016	76,319,511	$ 310,379	46,083,651	$ 1	$ 65,629	$ (12)	$ (351,445)	$ (285,827)
Conversion of convertible preferred stock to common stock upon IPO	(76,319,511)	(310,379)	76,319,511	2	310,377	—	—	310,379
Issuance of class A common stock upon IPO, net of issuance costs	—	—	17,100,500	1	249,169	—	—	249,170
Reclassification of convertible preferred stock warrant liability to APIC upon IPO	—	—	—	—	30,812	—	—	30,812
Issuance of common stock upon exercise of common stock warrants	—	—	775,554	—	77	—	—	77
Stock-based compensation	—	—	—	—	231,491	—	—	231,491
Issuance of common stock through employee equity incentive plans, net of repurchases	—	—	10,871,714	—	14,956	—	—	14,956
Issuance of common stock from ESPP purchase	—	—	1,246,054	—	16,946	—	—	16,946
Issuance of common stock in connection with business combinations	—	—	2,239,536	—	27,063	—		27,063
Vesting of early exercised stock options	—	—	—	—	1,614	—	—	1,614
Cumulative effect adjustment from adoption of ASU 2016-09	—	—	—	—	—	—	114	114
Other comprehensive loss	—	—	—	—	—	(94)		(94)
Net loss	—	—	—	—	—	—	(379,638)	(379,638)
Balance - July 31, 2017	—	—	154,636,520	4	948,134	(106)	(730,969)	217,063
Issuance of common stock through employee equity incentive plans, net of repurchases	—	—	14,492,922	—	33,037	—	—	33,037
Issuance of common stock from ESPP purchase	—	—	2,417,850	—	39,009	—	—	39,009
Issuance of common stock in connection with business combinations	—	—	1,310,790	—	63,780	—	—	63,780
Vesting of early exercised stock options	—	—	—	—	681	—	—	681
Stock-based compensation	—	—	—	—	177,868	—	—	177,868
Equity component of convertible senior notes, net	—	—	—	—	148,598	—	—	148,598
Purchase of bond hedges related to the convertible senior notes	—	—	—	—	(143,175)	—	—	(143,175)
Sale of warrants related to the convertible senior notes	—	—	—	—	87,975	—	—	87,975
Other comprehensive loss	—	—	—	—	—	(896)	—	(896)
Net loss	—	—	—	—	—	—	(297,161)	(297,161)
Balance - July 31, 2018	—	—	172,858,082	4	1,355,907	(1,002)	(1,028,130)	326,779
Issuance of common stock through employee equity incentive plans	—	—	11,272,083	—	12,187	—	—	12,187
Issuance of common stock from ESPP purchase	—	—	2,008,082	1	57,217	—	—	57,218
Issuance of common stock in connection with a business combination	—	—	2,457,067	—	103,305	—	—	103,305
Stock-based compensation	—	—	—	—	306,729	—	—	306,729
Vesting of early exercised stock options	—	—	—	—	183	—	—	183
Other comprehensive income	—	—	—	—	—	1,671	—	1,671
Net loss	—	—	—	—	—	—	(621,179)	(621,179)
Balance - July 31, 2019	—	$ —	188,595,314	$ 5	$ 1,835,528	$ 669	$ (1,649,309)	$ 186,893

See the accompanying notes to the consolidated financial statements.

NUTANIX, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Cash flows from operating activities:			
Net loss	$ (379,638)	$ (297,161)	$ (621,179)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation and amortization	38,399	50,302	77,612
Stock-based compensation	231,491	177,868	306,729
Amortization of debt discount and issuance cost	—	14,685	29,313
Change in fair value of contingent consideration	1,924	(2,423)	(832)
Change in fair value of convertible preferred stock warrant liability	21,133	—	—
Loss on debt extinguishment	3,320	—	—
Other	764	(962)	(2,786)
Changes in operating assets and liabilities:			
Accounts receivable, net	(67,382)	(79,273)	15,704
Deferred commissions	(24,006)	(40,852)	(39,333)
Prepaid expenses and other assets [1]	(14,873)	(37,374)	(12,037)
Accounts payable	21,280	(16,469)	13,508
Accrued compensation and benefits	32,687	27,877	14,406
Accrued expenses and other liabilities	5,116	34,295	(17,454)
Deferred revenue	144,564	262,027	278,517
Net cash provided by operating activities [1]	14,779	92,540	42,168
Cash flows from investing activities:			
Purchases of investments	(242,525)	(716,417)	(468,144)
Maturities of investments	84,156	297,461	588,763
Sales of investments	32,640	—	—
Purchases of property and equipment	(50,181)	(62,372)	(118,452)
Payments for business combinations, net of cash acquired	(184)	(22,227)	(19,017)
Net cash used in investing activities	(176,094)	(503,555)	(16,850)
Cash flows from financing activities:			
Proceeds from sales of shares through employee equity incentive plans, net of repurchases	32,254	72,010	69,210
Payment of contingent consideration associated with a business acquisition	—	—	(1,040)
Payment of debt in conjunction with business combinations	(7,124)	(1,696)	(991)
Proceeds from issuance of convertible senior notes, net	—	563,587	(75)
Payments for convertible note hedges	—	(143,175)	—
Proceeds from issuance of warrants	—	87,975	—
Payments of offering costs	(1,717)	(85)	—
Proceeds from initial public offering, net of underwriting discounts and commissions	254,455	—	—
Repayment of senior notes	(75,000)	—	—
Debt extinguishment costs	(1,580)	—	—
Other	134	—	—
Net cash provided by financing activities	201,422	578,616	67,104
Net increase in cash, cash equivalents and restricted cash [1]	$ 40,107	$ 167,601	$ 92,422
Cash, cash equivalents and restricted cash—beginning of period [1]	99,390	139,497	307,098
Cash, cash equivalents and restricted cash—end of period [1]	$ 139,497	$ 307,098	$ 399,520

NUTANIX, INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Restricted cash (1)(2)	1,138	1,123	2,842
Cash and cash equivalents—end of period	$ 138,359	$ 305,975	$ 396,678
Supplemental disclosures of cash flow information:			
Cash paid for income taxes	$ 5,213	$ 10,116	$ 28,999
Cash paid for interest	$ 1,271	$ —	$ —
Supplemental disclosures of non-cash investing and financing information:			
Issuance of common stock for business combinations	$ 27,063	$ 63,780	$ 103,305
Purchases of property and equipment included in accounts payable and accrued liabilities	$ 5,591	$ 13,444	$ 8,074
Vesting of early exercised stock options	$ 1,614	$ 681	$ 183
Offering costs included in accounts payable	$ 85	$ —	$ —
Conversion of convertible preferred stock to common stock, net of issuance costs	$ 310,379	$ —	$ —
Reclassification of convertible preferred stock warrant liability to additional paid-in capital	$ 30,812	$ —	$ —

(1) During the first quarter of fiscal 2019, we adopted Accounting Standards Update ("ASU") No. 2016-18, which requires that the statement of cash flows explain the change during the period in the total of cash, cash equivalents and restricted cash. We adopted the standard retrospectively for the prior period presented. Our adoption of ASU 2016-18 did not have any significant impact on our consolidated statements of cash flows.

(2) Included within other assets—non-current in the consolidated balance sheets.

See the accompanying notes to the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1. OVERVIEW AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Description of Business

Nutanix, Inc. was incorporated in the state of Delaware in September 2009. Nutanix, Inc. is headquartered in San Jose, California and together with its wholly-owned subsidiaries (collectively, "we," "us," "our" or "Nutanix") has operations throughout North America, Europe, Asia Pacific, the Middle East, Latin America and Africa.

We provide a leading enterprise cloud platform that digitizes the traditional silos of enterprise computing, converging compute, virtualization, storage, networking, desktop, governance and security services into one integrated solution. We primarily sell our products and services to end customers through distributors, resellers and original equipment manufacturers ("OEMs") (collectively, "Partners").

Principles of Consolidation

The accompanying consolidated financial statements, which include the accounts of Nutanix, Inc. and its wholly-owned subsidiaries, have been prepared in conformity with accounting principles generally accepted in the United States ("U.S. GAAP"). All intercompany accounts and transactions have been eliminated in consolidation. Certain reclassifications have been made to the prior year financial statements to conform to the current year presentation. These reclassifications had no impact on the previously reported net loss or accumulated deficit.

Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Such management estimates include, but are not limited to, the best estimate of selling prices for products and related support; useful lives of intangible assets and property and equipment; allowance for doubtful accounts; determination of fair value of stock-based awards; accounting for income taxes, including the valuation allowance on deferred tax assets and uncertain tax positions; warranty liability; fair value of contingent consideration in a business combination; sales commissions expense; and contingencies and litigation. Management evaluates these estimates and assumptions on an ongoing basis using historical experience and other factors and makes adjustments when facts and circumstances dictate. As future events and their effects cannot be determined with precision, actual results could materially differ from those estimates and assumptions.

Concentration Risk

Credit Risk—Financial instruments that potentially subject us to concentrations of credit risk consist of cash and cash equivalents and accounts receivable. We invest only in high-quality credit instruments and maintain our cash and cash equivalents and available-for-sale investments in fixed income securities. Management believes that the financial institutions that hold our investments are financially sound and, accordingly, are subject to minimal credit risk. Our deposits are with multiple institutions, however such deposits may exceed federally insured limits. We provide credit, in the normal course of business, to a number of companies and perform credit evaluations of our customers.

Concentration of Revenue and Accounts Receivable — We sell our products primarily through Partners and occasionally directly to end customers. For the fiscal years ended July 31, 2017, 2018 and 2019, no end customer accounted for more than 10% of total revenue or accounts receivable.

For each significant Partner, revenue as a percentage of total revenue and accounts receivable as a percentage of total accounts receivable, net are as follows:

	Revenue			Accounts Receivable as of July 31,	
	Fiscal Year Ended July 31,				
Partners	2017	2018	2019	2018	2019
Partner A	(1)	10%	10%	16%	(1)
Partner B	19%	20%	10%	13%	(1)
Partner C	16%	18%	24%	15%	27%
Partner D	10%	(1)	(1)	(1)	(1)
Partner E	14%	13%	13%	12%	18%

(1) Less than 10%

Summary of Significant Accounting Policies

Cash, Cash Equivalents and Short-Term Investments

We classify all highly liquid investments with original maturities of three months or less from the date of purchase as cash equivalents and all highly liquid investments with stated maturities of greater than three months as marketable securities.

We determine the appropriate classification of our marketable securities at the time of purchase and reevaluate such designation as of each balance sheet date. We classify and account for our marketable securities as available-for-sale securities. We classify our marketable securities with stated maturities greater than twelve months as short-term investments due to our intent and ability to use these securities to support our current operations.

Our marketable securities are recorded at their estimated fair value. Unrealized gains or losses on available-for-sale securities are reported in other comprehensive income (loss). We periodically review whether our securities may be other-than-temporarily impaired, including whether or not (i) we have the intent to sell the security or (ii) it is more likely than not that we will be required to sell the security before its anticipated recovery. If one of these factors is met, we will record an impairment loss associated with our impaired investment. The impairment loss will be recorded as a write-down of investments in the consolidated balance sheets and a realized loss within other expense in the consolidated statements of operations.

Fair Value Measurement

We define fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities, which are required to be recorded at fair value, we consider the principal or most advantageous market in which to transact and the market-based risk. We apply fair value accounting for all assets and liabilities that are recognized or disclosed at fair value in the consolidated financial statements on a recurring basis. The carrying amounts reported in the consolidated financial statements for cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities approximate their fair values due to their short-term nature. The fair value of the Notes is determined based on the closing trading price per $100 of the Notes as of the last day of trading for the period.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded at the invoiced amount, net of an allowance for doubtful accounts. Credit is extended to customers based on an evaluation of their financial condition and other factors. We generally do not require collateral or other security to support accounts receivable. We perform ongoing credit evaluations of our customers and maintain an allowance for doubtful accounts.

The allowance for doubtful accounts is based on the best estimate of the amount of probable credit losses in existing accounts receivable. We evaluate the collectability of our accounts receivable based on known collection risks and historical experience. In circumstances where we are aware of a specific customer's inability to meet its financial obligations (e.g., bankruptcy filings or substantial downgrading of credit ratings), we record an allowance for doubtful accounts in order to reduce the net recognized receivable to the amount we reasonably believe will be collected. For all other customers, we record an allowance for doubtful accounts based on the length of time the receivable is past due and our historical experience of collections and write-offs.

The changes in the allowance for doubtful accounts are as follows:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Allowance for doubtful accounts—beginning balance	$ 132	$ 132	$ 815
Charged to allowance for doubtful accounts	—	815	437
Recoveries	—	—	(290)
Write-offs	—	(132)	(583)
Allowance for doubtful accounts—ending balance	$ 132	$ 815	$ 379

Property and Equipment

Property and equipment, including leasehold improvements, are stated at cost, less accumulated depreciation and amortization. We include the cost to acquire demonstration units and the related accumulated depreciation in property and equipment as such units are generally not available for sale. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the related assets.

Business Combinations

We account for our acquisitions using the acquisition method. Goodwill is measured at the acquisition date as the excess of the purchase price over the fair value of the assets acquired and liabilities assumed. Significant estimates and assumptions are made by management to value such assets and liabilities. Although we believe that those estimates and assumptions are reasonable and appropriate, they are inherently uncertain and subject to refinement. Additional information related to the acquisition date fair value of acquired assets and assumed liabilities obtained during the measurement period, not to exceed one year, may result in changes to the recorded values of such assets and liabilities, resulting in an offsetting adjustment to the goodwill associated with the business acquired.

Uncertain tax positions and tax-related valuation allowances are initially established in connection with a business combination as of the acquisition date. We continue to collect information and reevaluate these estimates and assumptions quarterly. We will record any adjustments to our preliminary estimates to goodwill, provided that it is within the one-year measurement period. Any contingent consideration payable is recognized at fair value at the acquisition date. Liability-classified contingent consideration is remeasured each reporting period, with changes in fair value recognized in earnings until the contingent consideration is settled.

Acquisition related costs incurred in connection with a business combination, other than those associated with the issuance of debt or equity securities, are expensed as incurred.

Goodwill, Intangible Assets and Other Long-Lived Assets

Goodwill represents the future economic benefits arising from other assets acquired in a business combination or an acquisition that are not individually identified and separately recorded. The excess of the purchase price over the estimated fair value of net assets of businesses acquired in a business combination is recognized as goodwill.

Intangible assets consist of identifiable intangible assets, including developed technology, customer relationships and trade names, resulting from business combinations. Finite-lived intangible assets are recorded at fair value, net of accumulated amortization. Finite-lived intangible assets are amortized on a straight-line basis over their estimated useful lives. Amortization expense is included as a component of cost of product revenue and sales and marketing expense in the accompanying consolidated statements of operations. Amounts included in sales and marketing expense relate to customer relationships.

Goodwill and other intangible assets acquired in a business combination and determined to have an indefinite useful life, such as IPR&D, are not amortized, but instead tested for impairment at least annually, as of May 1 of each year. Such goodwill and other intangible assets may also be tested for impairment between annual tests in the presence of impairment indicators such as, but not limited to: (i) a significant adverse change in legal factors or in the business climate; (ii) a substantial decline in our market capitalization; (iii) an adverse action or assessment by a regulator; (iv) unanticipated competition; (v) loss of key personnel; (vi) a more likely-than-not expectation of the sale or disposal of a reporting unit or a significant portion thereof; (vii) a realignment of our resources or restructuring of our existing businesses in response to changes to industry and market conditions; (viii) testing for recoverability of a significant asset group within a reporting unit; or (ix) a higher discount rate used in the impairment analysis as impacted by an increase in interest rates.

Goodwill is tested for impairment by comparing the reporting unit's carrying value, including goodwill, to the fair value of the reporting unit. We operate under one reporting unit and for our annual goodwill impairment test, we determine the fair value of our reporting unit based on our enterprise value. We may elect to utilize a qualitative assessment to determine whether it is more likely than not that the fair value of our reporting unit is less than its carrying value. If, after assessing the qualitative factors, we determine that it is more likely than not that the fair value of our reporting unit is less than its carrying value, an impairment analysis will be performed. We compare the fair value of our reporting unit with its carrying amount and if the carrying value of the reporting unit exceeds its fair value, an impairment loss will be recognized.

Long-lived assets, such as property and equipment and finite-lived intangible assets subject to depreciation and amortization, are evaluated for impairment whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. Among the factors and circumstances we consider in determining recoverability are: (i) a significant decrease in the market price of a long-lived asset; (ii) a significant adverse change in the extent or manner in which a long-lived asset is being used or in its physical condition; (iii) a significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset, including an adverse action or assessment by a regulator; (iv) an accumulation of costs significantly in excess of the amount originally expected for the acquisition; and (v) current-period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the asset.

There have been no indicators of impairment of goodwill, intangible assets or other long-lived assets and we did not record any impairment losses during fiscal 2017, 2018 or 2019.

Revenue Recognition

The core principle of ASC 606 is to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration the entity expects to be entitled to in exchange for those goods or services. This principle is achieved by applying the following five-step approach:

- *Identification of the contract, or contracts, with a customer* — A contract with a customer exists when (i) we enter into an enforceable contract with a customer that defines each party’s rights regarding the goods or services to be transferred and identifies the payment terms related to these goods or services, (ii) the contract has commercial substance and (iii) we determine that collection of substantially all consideration for goods or services that are transferred is probable based on the customer’s intent and ability to pay the promised consideration. We apply judgment in determining the customer’s ability and intention 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, published credit and financial information pertaining to the customer.

- *Identification of the performance obligations in the contract* — Performance obligations promised in a contract are identified based on the goods or services that will be transferred to the customer that are both capable of being distinct, whereby the customer can benefit from the goods or services either on their own or together with other resources that are readily available from third parties or from us, and are distinct in the context of the contract, whereby the transfer of the goods or services is separately identifiable from other promises in the contract. To the extent a contract includes multiple promised goods or services, we apply judgment to determine whether promised goods or services are capable of being distinct and distinct in the context of the contract. If these criteria are not met, the promised goods or services are accounted for as a combined performance obligation.

- *Determination of the transaction price* — The transaction price is determined based on the consideration to which we will be entitled in exchange for transferring goods or services to the customer.

- *Allocation of the transaction price to the performance obligations in the contract* — If the contract contains a single performance obligation, the entire transaction price is allocated to the single performance obligation. Contracts that contain multiple performance obligations require an allocation of the transaction price to each performance obligation based on a relative standalone selling price ("SSP"). We determine SSP based on the price at which the performance obligation is sold separately. If the SSP is not observable through past transactions, we estimate the SSP, taking into account available information such as market conditions and internally approved pricing guidelines related to the performance obligations.

- *Recognition of revenue when, or as, performance obligations are satisfied* — We satisfy performance obligations either over time or at a point in time. Revenue is recognized at the time the related performance obligation is satisfied with the transfer of a promised good or service to a customer. For additional details on revenue recognition, refer to Note 3 of Notes to Consolidated Financial Statements.

Contracts with multiple performance obligations — Some of our contracts with customers contain multiple performance obligations. For these contracts, we account for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative SSP basis. For deliverables that we routinely sell separately, such as software entitlement and support subscriptions on our core offerings, we determine SSP by evaluating the standalone sales over the trailing 12 months. For those that are not sold routinely, we determine SSP based on our overall pricing trends and objectives, taking into consideration market conditions and other factors, including the value of our contracts, the products sold and geographic locations.

Contract balances — The timing of revenue recognition may differ from the timing of invoicing to customers. Accounts receivable are recorded at the invoiced amount, net of an allowance for doubtful accounts. A receivable is recognized in the period we deliver goods or provide services, or when our right to consideration is unconditional. In situations where revenue recognition occurs before invoicing, an unbilled receivable is created, which represents a contract asset. Unbilled accounts receivable, included in accounts receivable, net on the consolidated balance sheets, was not material for any of the periods presented.

Payment terms on invoiced amounts are typically 30 days. The balance of accounts receivable, net of allowance for doubtful accounts, as of July 31, 2018 and 2019 is presented in the accompanying consolidated balance sheets.

Costs to obtain and fulfill a contract — We capitalize commissions paid to sales personnel and the related payroll taxes when customer contracts are signed. These costs are recorded as deferred commissions in the consolidated balance sheets, current and non-current. We determine whether costs should be deferred based on our sales compensation plans, if the commissions are incremental and would not have been incurred absent the execution of the customer contract. Commissions paid upon the initial acquisition of a contract are amortized over the estimated period of benefit, which may exceed the term of the initial contract if the commissions expected to be paid upon renewal are not commensurate with that of the original contract. Accordingly, the amortization of deferred costs is recognized on a systematic basis that is consistent with the pattern of revenue recognition allocated to each performance obligation and included in sales and marketing expense in the consolidated statements of operations. We determine the estimated period of benefit by evaluating the expected renewals of customer contracts, the duration of relationships with our customers, customer retention data, our technology development lifecycle and other factors. Deferred costs are periodically reviewed for impairment.

Deferred revenue — Deferred revenue primarily consists of amounts that have been invoiced but not yet recognized as revenue and primarily pertain to support subscriptions and professional services. The current portion of deferred revenue represents the amounts that are expected to be recognized as revenue within one year of the consolidated balance sheet date.

Cost of Revenue

Cost of revenue consists of cost of product revenue and cost of support, entitlements and other services revenue. Personnel costs associated with our operations and global customer support organizations consist of salaries, benefits and stock-based compensation. Allocated costs consist of certain facilities, depreciation and amortization, recruiting and information technology costs allocated based on headcount.

Warranties

We generally provide a one-year warranty on hardware and a 90-day warranty on software licenses. The hardware warranty provides for parts replacement for defective components and the software warranty provides for bug fixes. With respect to the hardware warranty obligation, we have a warranty agreement with our contract manufacturers under which the contract manufacturers are generally required to replace defective hardware within three years of shipment. Furthermore, our post-contract customer support ("PCS") agreements provide for the same parts replacement that customers are entitled to under the warranty program, except that replacement parts are delivered according to targeted response times to minimize disruption to the customers' critical business applications. Substantially all customers purchase PCS agreements.

Given the warranty agreement with our contract manufacturers and considering that substantially all products are sold together with PCS agreements, we generally have very limited exposure related to warranty costs and therefore no warranty reserve has been recognized.

Research and Development

Our research and development expense consists primarily of product development personnel costs, including salaries and benefits, stock-based compensation and allocated facilities costs. Research and development costs are expensed as incurred.

Stock-Based Compensation

Stock-based compensation expense is measured based on the grant date fair value of share-based awards. The fair value of the purchase rights under our 2016 Employee Stock Purchase Plan ("2016 ESPP") is estimated using the Black-Scholes-Merton ("Black-Scholes") option pricing model, which is impacted by the fair value of our common stock, as well as changes in assumptions regarding a number of subjective variables. These variables include the expected common stock price volatility over the term of the awards, the expected term of the awards, risk-free interest rates and expected dividend yield. The fair value of restricted stock units ("RSUs") is determined using the fair value of our common stock on the date of grant.

We grant stock awards with service conditions only and with both service and performance conditions. We recognize stock-based compensation expense for employee stock awards with a service condition only using the straight-line method over the requisite service period of the awards, which is generally the vesting period. We use the accelerated attribution method to recognize stock-based compensation expense related to employee stock awards that contain both service and performance conditions. The fair value of the 2016 ESPP purchase rights is recognized as expense on a straight-line basis over the offering period. We account for forfeitures of all share-based awards when they occur.

Foreign Currency

The functional currency of our foreign subsidiaries is the U.S. dollar. Transactions denominated in currencies other than the functional currency are remeasured at the average exchange rate in effect during the reporting period. At the end of each reporting period all monetary assets and liabilities of our subsidiaries are remeasured at the current U.S. dollar exchange rate at the end of the reporting period. Remeasurement gains and losses are included within other expense, net in the accompanying consolidated statements of operations. During the fiscal years ended July 31, 2017, 2018 and 2019, we recognized foreign currency losses of $2.6 million, $3.6 million and $2.5 million, respectively. To date, we have not undertaken any hedging transactions related to foreign currency exposure.

Segments

Our chief operating decision maker is a group which is comprised of our Chief Executive Officer and Chief Financial Officer. This group allocates resources and assesses financial performance based upon discrete financial information at the consolidated level. Accordingly, we have determined that we operate as a single operating and reportable segment.

Income Taxes

We account for income taxes using the asset and liability method. Deferred income taxes are recognized by applying enacted statutory tax rates applicable to future years to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carryforwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. The measurement of deferred tax assets is reduced, if necessary, by a valuation allowance on amounts that are more likely than not to be realized.

We record a liability for uncertain tax positions if it is not more likely than not to be sustained based solely on its technical merits as of the reporting date. We consider many factors when evaluating and estimating our tax positions and tax benefits, which may require periodic adjustments and may not accurately anticipate actual outcomes.

Advertising Costs

Advertising costs are charged to sales and marketing expenses as incurred in the consolidated statements of operations. During the fiscal years ended July 31, 2017, 2018 and 2019, advertising expense was $13.0 million, $14.6 million and $26.7 million, respectively.

Recently Adopted Accounting Pronouncements

In October 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory, which requires us to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. The new standard was effective for fiscal years beginning after December 15, 2017, with early adoption permitted, including interim reporting periods within those fiscal years. We adopted this ASU effective August 1, 2018 using a modified retrospective approach. The adoption of the new standard did not have a material impact on our consolidated financial statements.

In November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash, which requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash or restricted cash equivalents should be included with cash and cash equivalents when reconciling beginning-of-period and end-of-period amounts shown on the statement of cash flows. The new standard was effective for fiscal years beginning after December 15, 2017, with early adoption permitted, including interim reporting periods within those fiscal years. We adopted the new standard effective August 1, 2018, using the retrospective transition approach. The reclassified restricted cash balances from operating activities to changes in cash, cash equivalents and restricted cash on the consolidated statements of cash flows were not material for any period presented.

In January 2018, the FASB released guidance on the accounting for the GILTI provisions of the TCJA. The GILTI provisions impose a tax on foreign income in excess of a deemed return on tangible assets of foreign corporations. During the second quarter of fiscal 2019, we elected to treat any potential GILTI inclusions as a period cost. Our adoption of this guidance has not had a material impact on our consolidated financial statements.

In June 2018, the FASB issued ASU 2018-07, Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting, which aligns the accounting for share-based payment awards issued to nonemployees with the guidance applicable to grants to employees. Under the new standard, equity-classified share-based payment awards issued to nonemployees will be measured on the grant date, instead of the current requirement to remeasure the awards through the performance completion date. The new standard is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, including interim reporting periods within those fiscal years. We early adopted the standard effective August 1, 2018, using the prospective approach, and our adoption did not have a material impact on the consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles-Goodwill and Other (Topic 350): Internal-Use Software, which aligns the requirements for capitalizing implementation costs incurred in a cloud computing arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The new standard is effective for fiscal years beginning after December 15, 2019, with early adoption permitted, including interim reporting periods within those fiscal years. We early adopted the standard effective August 1, 2018, using the prospective approach, and our adoption did not have a material impact on our consolidated financial statements.

In August 2018, the SEC issued Securities Act Release No. 33-10532, which amends certain disclosure requirements, including extending to interim periods the annual requirement to disclose changes in stockholders’ equity. Under the new requirements, registrants must now analyze changes in stockholders’ equity, in the form of a reconciliation, for the current and comparative year-to-date interim periods, with subtotals for each interim period. The final rule was effective in November 2018. We adopted this new guidance during the first quarter of fiscal 2019 and have included a reconciliation of the changes in stockholders' equity in our Quarterly Reports on Form 10-Q.

Recently Issued and Not Yet Adopted Accounting Pronouncements

In February 2016, the FASB issued ASU 2016-02, Leases ("ASC 842"), which requires lessees to generally recognize on the balance sheet operating and financing lease liabilities and corresponding right-of-use assets, and to recognize on the statement of operations the expenses in a manner similar to current practice. The new standard, including related amendments subsequently issued by the FASB, is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, including interim reporting periods within those fiscal years. We intend to elect the package of transition expedients and the transition option that allows us not to restate the comparative periods in our consolidated financial statements in the year of adoption. In addition, we intend to elect to account for lease and non-lease components as a single lease component. We also intend to make an accounting policy election not to record leases that, at the lease commencement date, have a lease term of 12 months or less on the balance sheet.

We have substantially completed our review of existing vendor arrangements for embedded leases and we expect that all of our operating leases, except those with a lease term of 12 months or less, disclosed in Note 7 will be subject to the new standard. The present value of these operating lease commitments will be recognized as right-of-use assets and lease liabilities at the later to occur of (i) the adoption date of August 1, 2019 or (ii) the time we take possession of the leased asset, which will have a material impact on our consolidated balance sheets. We have made significant progress in validating the accuracy of the new ASC 842 reports generated from our existing lease accounting system and are in the process of finalizing our accounting policy and disclosures. We expect the adoption of this standard to result in the recognition of right-of-use assets between $115 million and $125 million and lease liabilities between $140 million and $150 million. As of the adoption date, we have additional operating lease commitments of approximately $32 million on an undiscounted basis for certain office leases that have not yet commenced. We do not anticipate that the adoption of this standard will have a material impact on our consolidated statements of operations or our consolidated statements of cash flows, as the expense recognition under this new standard will be similar to current practice.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which requires the measurement and recognition of expected credit losses for financial assets held at amortized cost, including trade receivables. ASU 2016-13 replaces the existing incurred loss impairment model with an expected loss model that requires the use of forward-looking information to calculate credit loss estimates. It also eliminates the concept of other-than-temporary impairment and requires credit losses related to available-for-sale debt securities to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. The new standard is effective for fiscal years beginning after December 15, 2019, with early adoption permitted, including interim reporting periods within those fiscal years. ASU 2016-13 is effective for us in the first quarter of fiscal 2021. We do not expect the adoption of this new standard to have a material impact on our consolidated financial statements and related disclosures.

In February 2018, the FASB issued ASU 2018-02, Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, which provides companies with an option to reclassify stranded tax effects resulting from the enactment of the Tax Cuts and Jobs Act ("TCJA") from accumulated other comprehensive income to retained earnings. The new standard is effective for fiscal years beginning after December 15, 2018, with early adoption permitted, including interim reporting periods within those fiscal years. ASU 2018-02 is effective for us in the first quarter of fiscal 2020. The implementation of this new standard will not have a material impact on our consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework-Changes to the Disclosure Requirements for Fair Value Measurement, which eliminates, adds and modifies certain disclosure requirements for fair value measurements as part of the FASB's disclosure framework project. The new standard is effective for fiscal years beginning after December 15, 2019, with early adoption permitted, including interim reporting periods within those fiscal years. ASU 2018-13 is effective for us in the first quarter of fiscal 2021. We do not expect the adoption of this new standard to have a material impact on our quarterly or annual disclosures.

NOTE 2. BUSINESS COMBINATIONS

We completed two acquisitions in fiscal 2018 and one acquisition in fiscal 2019. The purchase price allocation for these acquisitions, discussed in detail below, reflects various preliminary fair value estimates and analyses, including certain tangible assets acquired and liabilities assumed, the valuation of intangible assets acquired, income taxes and goodwill, which are subject to change within the measurement period as preliminary valuations are finalized. Measurement period adjustments are recorded in the reporting period in which the estimates are finalized and adjustment amounts are determined. We determined the fair values of the intangible assets with the assistance of a valuation firm. The estimation of the fair value of the intangible assets required the use of valuation techniques and entailed consideration of all the relevant factors that might affect the fair value, such as present value factors and estimates of future revenues and costs.

Our consolidated financial statements for the fiscal years ended July 31, 2018 and 2019 include the operations of the acquired companies from the dates the deals closed. Pro forma results of operations have not been presented because they are not material to our consolidated financial statements, either individually or in the aggregate. Goodwill represents the excess of the purchase price over the fair value of the net tangible and intangible assets acquired. The goodwill recognized in these acquisitions is primarily attributable to the synergies expected from the expanded market opportunities with our offerings and the knowledgeable and experienced workforce that joined us as part of the acquisitions. Goodwill will not be amortized, but will instead be tested for impairment annually, or more frequently if certain indicators of impairment are present.

Fiscal 2018 Acquisitions

Minjar Acquisition

On March 16, 2018, we completed the acquisition of Minjar, Inc. ("Minjar"), a privately held Delaware corporation with its offices in Bangalore, India ("Minjar Acquisition"). Minjar was a cloud technology solutions company, and the acquisition was expected to complement and enhance our products, allowing us to offer customers new capabilities to better manage their multi-cloud deployments. At the close of the acquisition, all outstanding shares of Minjar capital stock and all in-the-money options and warrants to purchase Minjar capital stock were purchased or canceled in exchange for an aggregate purchase price of approximately $19.3 million, consisting of $18.8 million in cash and approximately $0.5 million of holdback liability. The holdback liability represents deferred payments to Minjar's former key employees to be released in installments during the two years following the date of acquisition. As the release of these deferred payments was not contingent upon the future and continued service, the $0.5 million holdback liability, which approximated fair value, was considered as part of the purchase price.

Certain portions of the consideration for the acquisition had been placed in escrow to secure the indemnification obligations of certain Minjar security holders. In addition to the $19.3 million purchase price, we also entered into employee holdback or deferred payment arrangements with former employees of Minjar who joined us after the acquisition, totaling approximately $4.4 million. As payment of these deferred payments is contingent upon the continuous service of the employees, they are being accounted for as compensation over the required service period of two years.

The purchase price allocation primarily included $18.0 million of goodwill, $7.0 million of intangible assets, which primarily consisted of $5.6 million related to developed technology and $1.4 million related to customer relationships, both of which are being amortized over an estimated economic life of five years, and $5.7 million of deferred income tax and other tax liabilities. Goodwill was not deductible for income tax purposes.

We recognized approximately $0.8 million of acquisition-related costs, which were expensed as incurred, as general and administrative expenses in the consolidated statement of operations.

Netsil Acquisition

On March 22, 2018, we completed the acquisition of Netsil Inc. ("Netsil"), a privately held Delaware corporation headquartered in San Francisco, California ("Netsil Acquisition"). This acquisition represented an opportunity for us to accelerate our ability to deliver native multi-cloud operations with the addition of application discovery and operations management. The aggregate purchase price of approximately $67.5 million consisted of approximately $3.7 million in cash and 1,206,364 unregistered shares of our Class A common stock with an aggregate fair value of approximately $63.8 million. The fair value of the shares of common stock issued was determined to be $52.87 per share, the closing price of our stock on March 22, 2018. Certain portions of the consideration for the acquisition, both cash and shares of our Class A common stock, have been placed in escrow to secure the indemnification obligations of certain Netsil security holders.

We also entered into employee holdback or deferred payment arrangements with the founders of Netsil who joined us after the acquisition, whereby we issued 104,426 unregistered shares of our Class A common stock to the founders subject to their continuous employment with us for two years. The fair value of the Class A common stock issued pursuant to the holdback arrangements was approximately $5.5 million, or $52.87 per share, the closing price of our Class A common stock on March 22, 2018. This holdback is being accounted for as stock-based compensation over the required 2-year service period.

The purchase price allocation primarily included $53.1 million of goodwill, $19.0 million of intangible assets, primarily related to developed technology, which is being amortized over an estimated economic life of seven years, $2.6 million of deferred income tax liabilities and $1.4 million of assumed debt. Goodwill was not deductible for income tax purposes.

We recognized approximately $0.6 million of acquisition-related costs, which were expensed as incurred, as general and administrative expenses in the consolidated statement of operations.

Fiscal 2019 Acquisition

Mainframe2, Inc.

On August 24, 2018, we completed the acquisition of Mainframe2, Inc. ("Frame"), a privately held Delaware corporation with its principal offices in San Mateo, California ("Frame Acquisition"). Frame provides a cloud-based Windows desktop and application delivery service. The aggregate purchase price of approximately $130.0 million consisted of approximately $26.7 million in cash and 1,813,321 shares of our Class A common stock, with an aggregate fair value of approximately $103.3 million. The fair value of the shares of common stock issued was determined to be $56.97 per share, the closing price of our stock on August 24, 2018. Certain portions of the consideration for the acquisition, both cash and shares of our Class A common stock, have been placed in escrow to secure the indemnification obligations of certain Frame security holders.

We also entered into employee holdback or deferred payment arrangements with certain employees of Frame who joined Nutanix after the acquisition, totaling approximately $43.3 million, of which $6.6 million will be paid in cash ("cash holdback") and $36.7 million will be satisfied by issuing shares of our Class A common stock ("share holdback"). As the earning of the share holdback and payment of the cash holdback are contingent upon the continuous service of the employees, they are being accounted for as post-combination compensation expense over the required service period of three years. The 643,746 shares of our Class A common stock related to the $36.7 million share holdback have a fair value of $56.97 per share, the closing price of our Class A common stock on August 24, 2018, and had been issued at closing and are currently being held in escrow. This holdback is being accounted for as stock-based compensation over the required three-year service period. On September 21, 2018, we filed a Form S-3 registration statement with the SEC for the 2,451,322 shares of our Class A common stock that were issued as partial consideration in the Frame Acquisition.

The purchase price allocation primarily includes approximately $97.3 million of goodwill and $38.2 million of intangible assets, including $31.8 million related to developed technology and $2.2 million related to customer relationships, which are being amortized over an estimated economic life of five years, and $4.2 million related to trade name, which is being amortized over an estimated economic life of four years. Goodwill was not deductible for income tax purposes.

Acquisition-related costs were expensed as incurred as general and administrative expenses on our consolidated statement of operations. We recognized approximately $1.1 million of acquisition-related costs in connection with the Frame Acquisition, of which approximately $0.4 million was recognized during the fiscal year ended July 31, 2019.

The following table presents the aggregate purchase price allocation related to the acquisitions completed during fiscal 2018 and fiscal 2019:

	As of July 31,	
	2018	2019
	(in thousands)	
Goodwill	$ 71,087	$ 97,328
Amortizable intangible assets	25,920	38,180
Tangible assets acquired	842	10,811
Liabilities assumed	(11,041)	(16,293)
Total consideration	$ 86,808	$ 130,026

NOTE 3. REVENUE, DEFERRED REVENUE AND DEFERRED COMMISSIONS

Disaggregation of Revenue and Revenue Recognition

We generate revenue primarily from the sale of our enterprise cloud platform, which can be delivered pre-installed on an appliance that is configured to order or delivered separately to be utilized on a variety of certified hardware platforms. Software can be delivered separately or on a configured-to-order appliance. When the software is not portable to other appliances, it generally has a term equal to the life of the associated appliance, while subscription term-based licenses typically have a term of one to five years. Configured-to-order appliances, including our Nutanix-branded NX hardware line, are typically sold through Partners and can be purchased from one of our OEMs or directly from Nutanix. Our enterprise cloud platform is typically purchased with one or more years of support and entitlements, which includes the right to software upgrades and enhancements as well as technical support. A substantial portion of sales are made through channel partners and OEM relationships.

The following table depicts the disaggregation of revenue by revenue type, consistent with how we evaluate our financial performance:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Subscription	$ 172,530	$ 330,645	$ 648,415
Non-portable software	421,048	543,952	449,131
Hardware	236,316	257,314	105,321
Professional services	16,009	23,546	33,276
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143

Prior to the first quarter of fiscal 2019, we disaggregated revenue into the following categories: software revenue, hardware revenue and support, entitlements and other services revenue. Software revenue included non-portable software and term-based software licenses. Under the new disaggregated revenue categories, included in the table above, term-based software licenses are included within subscription revenue and non-portable software is presented separately. Support, entitlements and other services revenue included software entitlement and support subscriptions and professional services. Under the new disaggregated revenue categories, software entitlement and support subscriptions are included within subscription revenue and professional services revenue is presented separately. There was no change to the presentation of hardware revenue.

Subscription revenue — Subscription revenue includes any performance obligation which has a defined term, and is generated from the sales of software entitlement and support subscriptions, subscription software licenses and cloud-based software as a service ("SaaS") offerings.

- Ratable — We recognize revenue from software entitlement and support subscriptions and SaaS offerings ratably over the contractual service period, the substantial majority of which relate to software entitlement and support subscriptions. These offerings represented approximately $156.6 million, $243.9 million and $376.4 million of our subscription revenue for fiscal 2017, 2018 and 2019, respectively.

- Upfront — Revenue from our subscription software licenses is generally recognized upfront upon transfer of control to the customer, which happens when we make the software available to the customer. These subscription software licenses represented approximately $15.9 million, $86.7 million and $272.0 million of our subscription revenue for fiscal 2017, 2018 and 2019, respectively. For fiscal 2017, 2018 and 2019, the weighted average term for these subscription term-based licenses was approximately 2.9 years, 3.7 years and 3.8 years, respectively.

Non-portable software — Non-portable software revenue includes sales of our enterprise cloud platform when delivered on a configured-to-order appliance by us or one of our OEM partners. The software licenses associated with these sales are typically non-portable and have a term equal to the life of the appliance on which the software is delivered. Revenue from our non-portable software products is generally recognized upon transfer of control to the customer.

Hardware revenue — In transactions where we deliver the hardware appliance, we consider ourselves to be the principal in the transaction and we record revenue and costs of goods sold on a gross basis. We consider the amount allocated to hardware revenue to be equivalent to the cost of the hardware procured. Hardware revenue is generally recognized upon transfer of control to the customer.

Professional services revenue — We also sell professional services with our products. We recognize revenue related to professional services as they are performed.

Significant changes in the balance of deferred revenue (contract liability) and total deferred commissions (contract asset) for the periods presented are as follows:

	Deferred Revenue	Deferred Commissions
	(in thousands)	
Balance as of July 31, 2017	$ 369,056	$ 73,527
Additions	529,495	150,122
Revenue/commissions recognized	(267,468)	(109,270)
Assumed in a business combination	124	—
Balance as of July 31, 2018	631,207	114,379
Additions	682,241	158,062
Revenue/commissions recognized	(403,724)	(118,729)
Assumed in a business combination	320	—
Balance as of July 31, 2019	$ 910,044	$ 153,712

During the fiscal year ended July 31, 2018, we recognized revenue of approximately $170.1 million pertaining to amounts deferred as of July 31, 2017. During the fiscal year ended July 31, 2019, we recognized revenue of approximately $275.0 million pertaining to amounts deferred as of July 31, 2018.

The majority of our contracted but not invoiced performance obligations are subject to cancellation terms. Revenue allocated to remaining performance obligations represents contracted revenue that has not yet been recognized ("contracted not recognized"), which includes deferred revenue and non-cancelable amounts that will be invoiced and recognized as revenue in future periods and excludes performance obligations that are subject to cancellation terms. Contracted not recognized revenue was approximately $941.4 million as of July 31, 2019, of which we expect to recognize approximately 44% over the next 12 months, and the remainder thereafter.

NOTE 4. FAIR VALUE MEASUREMENTS

The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy based on the observability of the inputs available in the market used to measure fair value as follows:

- *Level I* — Inputs are unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;
- *Level II* — Inputs are observable, unadjusted quoted prices in active markets for similar assets or liabilities, unadjusted quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and
- *Level III* — Unobservable inputs that are significant to the measurement of the fair value of the assets or liabilities that are supported by little or no market data.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Cash equivalents and short-term investments

Our money market funds are classified within Level I due to the highly liquid nature of these assets and have unadjusted inputs, quoted prices in active markets for these assets at the measurement date from the financial institution that carries these investment securities. Our investments in available-for-sale debt securities such as commercial paper, corporate bonds and U.S. government securities are classified within Level II. The fair value of these securities is priced by using inputs based on non-binding market consensus prices that are corroborated by observable market data, quoted market prices for similar instruments, or pricing models such as discounted cash flow techniques.

The fair value of our financial assets and liabilities measured on a recurring basis is as follows:

	As of July 31, 2018			
	Level I	Level II	Level III	Total
	(in thousands)			
Financial Assets:				
Cash equivalents:				
Money market funds	$ 41,763	$ —	$ —	$ 41,763
Commercial paper	—	77,818	—	77,818
U.S. government securities	—	4,985	—	4,985
Short-term investments:				
Corporate bonds	—	448,458	—	448,458
Commercial paper	—	120,772	—	120,772
U.S. government securities	—	59,098	—	59,098
Total measured at fair value	$ 41,763	$ 711,131	$ —	$ 752,894
Cash				181,409
Total cash, cash equivalents and short-term investments				$ 934,303
Financial Liabilities:				
Contingent consideration	$ —	$ —	$ 1,872	$ 1,872

	As of July 31, 2019			
	Level I	Level II	Level III	Total
	(in thousands)			
Financial Assets:				
Cash equivalents:				
Money market funds	$ 33,156	$ —	$ —	$ 33,156
Commercial paper	—	103,029	—	103,029
U.S. government securities	—	119,933	—	119,933
Corporate bonds	—	9,996	—	9,996
Short-term investments:				
Corporate bonds	—	354,549	—	354,549
Commercial paper	—	92,851	—	92,851
U.S. government securities	—	64,756	—	64,756
Total measured at fair value	$ 33,156	$ 745,114	$ —	$ 778,270
Cash				130,564
Total cash, cash equivalents and short-term investments				$ 908,834

Financial Instruments Not Recorded at Fair Value on a Recurring Basis

We report our financial instruments at fair value, with the exception of the 0% Convertible Senior Notes, due in 2023 (the "Notes"). Financial instruments that are not recorded at fair value are measured at fair value on a quarterly basis for disclosure purposes. The carrying values and estimated fair values of financial instruments not recorded at fair value are as follows:

	As of July 31, 2018		As of July 31, 2019	
	Carrying Value	Estimated Fair Value	Carrying Value	Estimated Fair Value
	(in thousands)			
Convertible senior notes, net	$ 429,598	$ 685,527	$ 458,910	$ 527,275

The carrying value of the Notes as of July 31, 2018 and 2019 was net of the unamortized debt discount of $137.7 million and $110.0 million, respectively, and unamortized debt issuance costs of $7.7 million and $6.1 million, respectively.

The total estimated fair value of the Notes was determined based on the closing trading price per $100 of the Notes as of the last day of trading for the period. We consider the fair value of the Notes to be a Level 2 measurement due to the limited trading activity.

A summary of the changes in the fair value of our contingent consideration, characterized as Level 3 in the fair value hierarchy, is as follows:

	Fiscal Year Ended July 31,	
	2018	2019
	(in thousands)	
Contingent consideration—beginning balance	$ 4,295	$ 1,872
Change in fair value (1)	(2,423)	(832)
Payment	—	(1,040)
Contingent consideration—ending balance	$ 1,872	$ —

(1) Recognized in the consolidated statements of operations within general and administrative expenses.

We remeasured the fair value of our Level 3 contingent consideration liability using a Monte Carlo simulation on projected future payments. The fair value was determined by calculating the net present value of the expected payments using significant inputs that were not observable in the market, including the probability of achieving the milestone, estimated bookings and discount rates. The change in fair value of the contingent consideration was due to the movement of the inputs. During the quarter ended April 30, 2019, the contingent consideration was paid out in full.

NOTE 5. BALANCE SHEET COMPONENTS

Short-Term Investments

The amortized cost of our short-term investments approximates their fair value. As of July 31, 2018 and 2019, unrealized gains and losses from our short-term investments were not material. As of July 31, 2018 and 2019, unrealized losses from securities that were in an unrealized loss position for more than 12 months were not material. Unrealized losses related to short-term investments are due to interest rate fluctuations, as opposed to credit quality. In addition, unless we need cash to support our current operations, we do not intend to sell and it is not likely that we would be required to sell these investments before recovery of their amortized cost basis, which may be at maturity. As a result, at July 31, 2018 and 2019, there were no other-than-temporary impairments for these investments.

The following table summarizes the estimated fair value of our investments in marketable debt securities by their contractual maturity dates:

	As of July 31, 2019
	(in thousands)
Due within one year	$ 408,459
Due in one to two years	103,697
Total	$ 512,156

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consists of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Prepaid operating expenses	$ 23,169	$ 37,864
Prepaid income taxes	1,629	19,690
VAT receivables	2,281	5,068
Other current assets	9,739	12,043
Total prepaid expenses and other current assets	$ 36,818	$ 74,665

The increase in prepaid expenses and other current assets from July 31, 2018 to July 31, 2019 was due primarily to the reclassification of an $18.0 million corporate income tax receivable from other assets—non-current to prepaid expenses and other current assets, as the refund was expected to be received within the next 12 months, as well as an increase in prepayments for sales and marketing events and higher expenses related to subscription contract renewals. The $18.0 million corporate income tax receivable was received in August 2019.

Property and Equipment, Net

Property and equipment, net consists of the following:

	Estimated Useful Life	As of July 31,	
		2018	2019
	(in months)	(in thousands)	
Computer, production, engineering and other equipment	36	$ 131,805	$ 200,762
Demonstration units	12	53,547	59,981
Leasehold improvements	(1)	19,916	46,520
Furniture and fixtures	60	7,636	12,868
Total property and equipment, gross		212,904	320,131
Less: accumulated depreciation		(127,793)	(183,169)
Total property and equipment, net		$ 85,111	$ 136,962

(1) Leasehold improvements are amortized over the shorter of the estimated useful lives of the improvements or the remaining lease term.

Depreciation expense related to our property and equipment was $36.2 million, $43.7 million and $60.8 million for the fiscal years ended July 31, 2017, 2018 and 2019, respectively.

Intangible Assets, Net

Intangible assets, net consists of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Developed technology	$ 47,500	$ 79,300
Customer relationships	6,650	8,860
Trade name	—	4,170
Total intangible assets, gross	54,150	92,330
Less:		
Accumulated amortization of developed technology	(6,956)	(21,210)
Accumulated amortization of customer relationships	(1,828)	(3,392)
Accumulated amortization of trade name	—	(955)
Total accumulated amortization	(8,784)	(25,557)
Total intangible assets, net	$ 45,366	$ 66,773

Amortization expense related to our intangible assets is being recognized in the consolidated statements of operations within product cost of revenue for developed technology and sales and marketing expense for customer relationships and trade name.

The changes in the net book value of intangible assets, net are as follows:

	As of July 31,	
	2018	2019
	(in thousands)	
Intangible assets, net—beginning balance	$ 26,001	$ 45,366
Acquired intangible assets	25,920	38,180
Amortization of intangible assets (1)	(6,555)	(16,773)
Intangible assets, net—ending balance	$ 45,366	$ 66,773

(1) Represents amortization expense related to intangible assets recognized during the year in the consolidated statements of operations, within product cost of revenue and sales and marketing expense.

The estimated future amortization expense of our intangible assets is as follows:

Fiscal Year Ending July 31:	Amount
	(in thousands)
2020	$ 17,380
2021	17,380
2022	16,183
2023	10,856
2024	3,210
Thereafter	1,764
Total	$ 66,773

Goodwill

The changes in the carrying amount of goodwill are as follows:

	Carrying Amount
	(in thousands)
Balance at July 31, 2017	$ 16,672
Acquired in Netsil Acquisition	53,085
Acquired in Minjar Acquisition	18,002
Balance at July 31, 2018	87,759
Acquired in Frame Acquisition	97,328
Other	93
Balance at July 31, 2019	$ 185,180

Other Assets—Non-Current

Other assets—non-current consists of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Other tax assets—non-current	$ 30,927	$ —
Deferred tax assets—non-current	2,860	4,607
Other	4,068	9,834
Total other assets—non-current	$ 37,855	$ 14,441

The decrease in other tax assets—non-current from July 31, 2018 to July 31, 2019 was due primarily to the reclassification of an $18.0 million corporate income tax receivable to prepaid expenses and other current assets, as the refund was expected to be received within the next 12 months, as well as the reversal of an uncertain tax position resulting from a change in tax election during the third quarter of fiscal 2019.

Accrued Compensation and Benefits

Accrued compensation and benefits consists of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Accrued commissions	$ 21,660	$ 31,703
Contributions to ESPP withheld	21,931	20,778
Accrued vacation	10,548	15,475
Accrued bonus	12,129	11,413
Payroll taxes payable	9,563	8,504
Other	9,567	11,931
Total accrued compensation and benefits	$ 85,398	$ 99,804

Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consists of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Income taxes payable	$ 20,863	$ 9,651
Accrued professional services	5,838	2,996
Other	4,981	16,150
Total accrued expenses and other current liabilities	$ 31,682	$ 28,797

The decrease in income taxes payable during the fiscal year ended July 31, 2019 was due primarily to an $18.0 million estimated corporate income tax payment made during the second quarter of fiscal 2019, partially offset by additional foreign corporate income tax accruals recorded during fiscal 2019.

NOTE 6. CONVERTIBLE SENIOR NOTES

In January 2018, we issued Convertible Senior Notes with a 0% interest rate for an aggregate principal amount of $575.0 million, due in 2023 (the "Notes"), in a private placement to qualified institutional buyers pursuant to Rule 144A under the Securities Act of 1933, as amended. This included $75.0 million in aggregate principal amount of the Notes that we issued resulting from initial purchasers fully exercising their option to purchase additional notes. There are no required principal payments prior to the maturity of the Notes. The total net proceeds from the Notes are as follows:

	Amount
	(in thousands)
Principal amount	$ 575,000
Less: initial purchasers' discount	(10,781)
Less: cost of the bond hedges	(143,175)
Add: proceeds from the sale of warrants	87,975
Less: other issuance costs	(707)
Net proceeds	$ 508,312

The Notes do not bear any interest and will mature on January 15, 2023, unless earlier converted or repurchased in accordance with their terms. The Notes are unsecured and do not contain any financial covenants or any restrictions on the payment of dividends, or the issuance or repurchase of securities by us.

Each $1,000 of principal of the Notes will initially be convertible into 20.4705 shares of our Class A common stock, which is equivalent to an initial conversion price of approximately $48.85 per share, subject to adjustment upon the occurrence of specified events. Holders of these Notes may convert their Notes at their option at any time prior to the close of the business day immediately preceding October 15, 2022, only under the following circumstances:

1) during any fiscal quarter commencing after the fiscal quarter ending on April 30, 2018 (and only during such fiscal quarter), if the last reported sale price of our Class A common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding fiscal quarter, is greater than or equal to 130% of the conversion price on each applicable trading day;

2) during the five business day period after any five consecutive trading day period (the "measurement period") in which the trading price per $1,000 principal amount of Notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our Class A common stock and the conversion rate for the Notes on each such trading day; or

3) upon the occurrence of certain specified corporate events.

Based on the closing price of our Class A common stock of $22.70 on July 31, 2019, the if-converted value of the Notes was lower than the principal amount. The price of our Class A common stock was not greater than or equal to 130% of the conversion price for 20 or more trading days during the 30 consecutive trading days ending on the last trading day of the quarter ended July 31, 2019, the Notes are not convertible for the fiscal quarter commencing after July 31, 2019.

On or after October 15, 2022, holders may convert all or any portion of their Notes at any time prior to the close of business on the second scheduled trading day immediately preceding the maturity date, regardless of the foregoing conditions.

Upon conversion of the Notes, we will pay or deliver, as the case may be, cash, shares of our Class A common stock or a combination of cash and shares of Class A common stock, at our election. We intend to settle the principal of the Notes in cash.

The conversion rate will be subject to adjustment in some events, but will not be adjusted for any accrued or unpaid interest. A holder who converts their Notes in connection with certain corporate events that constitute a "make-whole fundamental change" per the indenture governing the Notes are, under certain circumstances, entitled to an increase in the conversion rate. In addition, if we undergo a fundamental change prior to the maturity date, holders may require us to repurchase for cash all or a portion of their Notes at a repurchase price equal to 100% of the principal amount of the repurchased Notes, plus accrued and unpaid interest.

We may not redeem the Notes prior to the maturity date, and no sinking fund is provided for the Notes.

In accounting for the issuance of the Notes, we separated the Notes into liability and equity components. The carrying amount of the liability component of approximately $423.4 million was calculated by measuring the fair value of a similar liability that does not have an associated convertible feature. The carrying amount of the equity component of approximately $151.6 million, representing the conversion option, was determined by deducting the fair value of the liability component from the par value of the Notes. The difference between the principal amount of the Notes and the liability component (the "debt discount") is amortized to interest expense using the effective interest method over the term of the Notes. The equity component of the Notes is included in additional paid-in capital in the consolidated balance sheets and is not remeasured as long as it continues to meet the conditions for equity classification.

We incurred transaction costs related to the issuance of the Notes of approximately $11.5 million, consisting of an initial purchasers' discount of $10.8 million and other issuance costs of approximately $0.7 million. In accounting for the transaction costs, we allocated the total amount incurred to the liability and equity components using the same proportions as the proceeds from the Notes. Transaction costs attributable to the liability component were approximately $8.5 million, recorded as debt issuance costs (presented as contra debt in the consolidated balance sheets), and are being amortized to interest expense over the term of the Notes. The transaction costs attributable to the equity component were approximately $3.0 million and were net with the equity component within stockholders’ equity.

The Notes consisted of the following:

	As of July 31,	
	2018	2019
	(in thousands)	
Principal amounts:		
Principal	$ 575,000	$ 575,000
Unamortized debt discount (1)	(137,719)	(109,956)
Unamortized debt issuance costs (1)	(7,683)	(6,134)
Net carrying amount	$ 429,598	$ 458,910
Carrying amount of equity component (2)	$ 148,598	$ 148,598

(1) Included in the consolidated balance sheets within "convertible senior notes, net" and amortized over the remaining life of the Notes using the effective interest rate method. The effective interest rate is 6.62%.
(2) Included in the consolidated balance sheets within additional paid-in capital, net of $3.0 million in equity issuance costs.

As of July 31, 2019, the remaining life of the Notes was approximately 41 months.

The following table sets forth the total interest expense recognized related to the Notes:

	Fiscal Year Ended July 31,	
	2018	2019
	(in thousands)	
Interest expense related to amortization of debt discount	$ 13,909	$ 27,764
Interest expense related to amortization of debt issuance costs	776	1,549
Total interest expense	$ 14,685	$ 29,313

Note Hedges and Warrants

Concurrently with the offering of the Notes in January 2018, we entered into convertible note hedge transactions with certain bank counterparties, whereby we have the initial option to purchase a total of approximately 11.8 million shares of our Class A common stock at a conversion price of approximately $48.85 per share, subject to adjustment for certain specified events. The total cost of the convertible note hedge transactions was approximately $143.2 million. In addition, we sold warrants to certain bank counterparties, whereby the holders of the warrants have the initial option to purchase a total of approximately 11.8 million shares of our Class A common stock at a price of $73.46 per share, subject to adjustment for certain specified events. We received approximately $88.0 million in cash proceeds from the sale of these warrants.

Taken together, the purchase of the convertible note hedges and the sale of warrants are intended to offset any actual dilution from the conversion of the Notes and to effectively increase the overall conversion price from $48.85 to $73.46 per share. As these transactions meet certain accounting criteria, the convertible note hedges and warrants are recorded within stockholders’ equity and are not accounted for as derivatives. The net cost incurred in connection with the convertible note hedge and warrant transactions of approximately $55.2 million was recorded as a reduction to additional paid-in capital in the consolidated balance sheets as of July 31, 2018 and 2019. The fair value of the note hedges and warrants are not remeasured each reporting period. The amounts paid for the note hedges were tax deductible expenses, while the proceeds received from the warrants were not taxable.

Impact to Earnings per Share

The Notes will have no impact to diluted earnings per share ("EPS") until they meet the criteria for conversion, as discussed above, as we intend to settle the principal amount of the Notes in cash upon conversion. Under the treasury stock method, in periods when we report net income, we are required to include the effect of additional shares that may be issued under the Notes when the price of our Class A common stock exceeds the conversion price. Under this method, the cumulative dilutive effect of the Notes would be approximately 3.9 million shares if the average price of our Class A common stock was $73.46. However, upon conversion, there will be no economic dilution from the Notes, as exercise of the note hedges eliminate any dilution that would have otherwise occurred. The note hedges are required to be excluded from the calculation of diluted earnings per share, as they would be antidilutive under the treasury stock method.

The warrants will have a dilutive effect when the average share price exceeds the warrant strike price of $73.46 per share. As the price of our Class A common stock continues to increase above the warrant strike price, additional dilution would occur at a declining rate so that a $10 increase from the warrant strike price would yield a cumulative dilution of approximately 4.9 million diluted shares for EPS purposes. However, upon conversion, the note hedges would neutralize the dilution from the Notes so that there would only be dilution from the warrants, which would result in an actual dilution of approximately 1.4 million shares at a common stock price of $83.46.

NOTE 7. COMMITMENTS AND CONTINGENCIES

Operating Leases

We have commitments for future payments related to our office facility leases and other contractual obligations. We lease our office facilities under non-cancelable operating lease agreements expiring through 2026. Certain of these lease agreements have free or escalating rent payments. We recognize rent expense under such agreements on a straight-line basis over the lease term, with any free or escalating rent payments amortized as a reduction or addition of rent expense over the lease term.

Future minimum payments due under operating leases as of July 31, 2019 are as follows:

Fiscal Year Ending July 31:	Amount
	(in thousands)
2020	$ 39,540
2021	41,909
2022	41,332
2023	40,695
2024	30,240
Thereafter	3,511
Total	$ 197,227

Rent expense incurred under operating leases was $12.7 million, $19.0 million and $37.0 million for the fiscal years ended July 31, 2017, 2018 and 2019, respectively.

Purchase Commitments

In the normal course of business, we make commitments with our contract manufacturers and OEMs to ensure them a minimum level of financial consideration for their investment in our joint solutions. These commitments are based on revenue targets or on-hand inventory and non-cancelable purchase orders for non-standard components. We record a charge related to these items when we determine that it is probable a loss will be incurred and we are able to estimate the amount of the loss. Our historical charges have not been material. As of July 31, 2019, we had up to approximately $64.8 million of non-cancelable purchase obligations and other commitments pertaining to our normal operations, and up to approximately $144.9 million in the form of guarantees to certain of our contract manufacturers and OEMs.

Guarantees and Indemnifications

We have entered into agreements with some of our Partners and customers that contain indemnification provisions in the event of claims alleging that our products infringe the intellectual property rights of a third party. The scope of such indemnification varies, and may include, in certain cases, the ability to cure the indemnification by modifying or replacing the product at our own expense, requiring the return and refund of the infringing product, procuring the right for the partner and/or customer to continue to use or distribute the product, as applicable, and/or defending the partner or customer against and paying any damages from third-party actions based upon claims of infringement. Other guarantees or indemnification arrangements include guarantees of product and service performance.

We have also agreed to indemnify our directors, executive officers and certain other 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 us, arising out of that person’s services as a director or officer of our company or that person’s services provided to any other company or enterprise at our request. We maintain director and officer insurance coverage that may enable us to recover a portion of any future amounts paid.

The fair value of liabilities related to indemnifications and guarantee provisions are not material and have not had any material impact on the consolidated financial statements to date.

Legal Proceedings

Beginning on March 29, 2019, several purported securities class actions were filed in the United States District Court for the Northern District of California against us and two of our officers. The initial complaints generally alleged that the defendants made false and misleading statements in violation of Sections 10(b) and 20(a) of the Exchange Act and SEC Rule 10b-5. In July 2019, the court consolidated the actions into a single action, and appointed a lead plaintiff who, per the court-approved schedule, filed a consolidated amended complaint on September 9, 2019. The action is brought on behalf of those who purchased or otherwise acquired our stock between November 30, 2017 and May 30, 2019, inclusive. The consolidated amended complaint seeks monetary damages in an unspecified amount. This case is in the very early stages and we are not able to determine what, if any, liabilities will attach to these complaints.

Beginning on July 1, 2019, several shareholder derivative complaints were filed in each of the U.S. District Court for the Northern District of California, the Superior Court of California for the County of San Mateo, and the Superior Court of California for the County of Santa Clara, naming (i) fourteen of Nutanix’s current and former officer and directors as defendants and (ii) the Company as a nominal defendant. The complaints generally allege claims for breach of fiduciary duty, waste of corporate assets, and unjust enrichment, all based on the same general underlying allegations that are contained in the securities class actions described above. The Superior Court complaints additionally allege insider trading and violation of California Corporations Code Section 25402 and the Santa Clara County Superior Court complaints further include additional claims for "abuse of control" and "gross mismanagement." The defendants have not responded to any of the derivative actions to date. These cases are in the very early stages and we are not able to determine what, if any, liabilities will attach to these complaints.

We are not currently a party to any other legal proceedings that we believe to be material to our business or financial condition. From time to time, we may become party to various litigation matters and subject to claims that arise in the ordinary course of business.

NOTE 8. STOCKHOLDERS’ EQUITY

We have two classes of authorized common stock, Class A common stock and Class B common stock. As of July 31, 2019, we had 1,000,000,000 shares of Class A common stock authorized with a par value of $0.000025 per share and 200,000,000 shares of Class B common stock authorized with a par value of $0.000025 per share. As of July 31, 2019, we had 168,155,308 shares of Class A common stock issued and outstanding and 20,440,006 shares of Class B common stock issued and outstanding.

Holders of Class A common stock are entitled to one vote for each share of Class A common stock held on all matters submitted to a vote of stockholders. Holders of Class B common stock are entitled to 10 votes for each share of Class B common stock held on all matters submitted to a vote of stockholders. Except with respect to voting, the rights of the holders of Class A and Class B common stock are identical. Shares of Class B common stock are voluntarily convertible into shares of Class A common stock at the option of the holder and are generally automatically converted into shares of our Class A common stock upon a sale or transfer. Shares issued in connection with exercises of stock options, vesting of restricted stock units, or shares purchased under the employee stock purchase plan are generally automatically converted into shares of our Class A common stock. Shares issued in connection with an exercise of common stock warrants are converted into shares of our Class B common stock.

Common Stock Reserved for Issuance

As of July 31, 2019, we had reserved shares of common stock for future issuance as follows:

	As of July 31, 2019
Shares reserved for future equity grants	12,594,167
Shares underlying outstanding stock options	8,740,309
Shares underlying outstanding restricted stock units	22,136,072
Shares reserved for future employee stock purchase plan awards	1,402,959
Shares underlying outstanding common stock warrants	34,180
Total	44,907,687

NOTE 9. EQUITY INCENTIVE PLANS

Stock Plans

We have three equity incentive plans, the 2010 Stock Plan ("2010 Plan"), 2011 Stock Plan ("2011 Plan") and 2016 Equity Incentive Plan ("2016 Plan"). Our stockholders approved the 2016 Plan in March 2016 and it became effective in connection with our initial public offering ("IPO"). As a result, at the time of the IPO, we ceased granting additional stock awards under the 2010 Plan and 2011 Plan and both plans were terminated. Any outstanding stock awards under the 2010 Plan and 2011 Plan will remain outstanding, subject to the terms of the applicable plan and award agreements, until such shares are issued under those stock awards, by exercise of stock options or settlement of RSUs, or until those stock awards become vested or expired by their terms.

Under the 2016 Plan, we may grant incentive stock options ("ISOs"), non-statutory stock options ("NSOs"), restricted stock, RSUs and stock appreciation rights to employees, directors and consultants. We initially reserved 22,400,000 shares of our Class A common stock for issuance under the 2016 Plan. The number of shares of Class A common stock available for issuance under the 2016 Plan will also include an annual increase on the first day of each fiscal year, beginning in fiscal 2018, equal to the lesser of: 18,000,000 shares, 5% of the outstanding shares of all classes of common stock as of the last day of our immediately preceding fiscal year, or such other amount as may be determined by the Board. Accordingly, on August 1, 2017 and 2018, the number of shares of Class A common stock available for issuance under the 2016 Plan increased by 7,731,826 and 8,642,904 shares, respectively, pursuant to these provisions. As of July 31, 2019, we had reserved a total of 43,504,728 shares for the issuance of equity awards under the Stock Plans, of which 12,594,167 shares were still available for grant. On August 1, 2019, the number of shares of Class A common stock available for issuance under the 2016 Plan increased by 9,429,765 shares pursuant to the automatic increase provisions.

Restricted Stock Units

Performance RSUs — We grant RSUs that have both service and performance conditions to our executives and employees ("Performance RSUs"). Vesting of Performance RSUs is subject to continuous service and the satisfaction of certain performance targets. While we recognize cumulative stock-based compensation expense for the portion of the awards for which both the service condition has been satisfied and it is probable that the performance conditions will be met, the actual vesting and settlement of Performance RSUs are subject to the performance conditions actually being met.

Market Stock Units — In October 2018, the Compensation Committee of our Board of Directors approved the grant of 100,000 RSUs subject to certain market conditions ("MSUs") to our Chief Executive Officer ("CEO"), with a weighted average grant date fair value per unit of $25.16. The MSUs will vest based upon the achievement of an average stock price of $80 over a performance period of approximately 4.5 years (the "Performance Period"), subject to his continuous service on each vesting date. The average stock price is calculated based on the average closing price of one share of our Class A common stock, as reported on the NASDAQ Stock Market during the 180-day period ending on the last trading day prior to each measurement date (as applicable, the "Average Stock Price"). The Average Stock Price is measured once per quarter during the Performance Period, and:

- If the Average Stock Price on any given quarterly measurement date does not equal or exceed $80, then none of the MSUs will vest that quarter, and any unvested MSUs will carry over to the next quarter (the "Carryover MSUs");
- If the Average Stock Price on any given quarterly measurement date equals or exceeds $80, then 1/18th of the MSUs plus the applicable Carryover MSUs, if any, would vest; and/or
- If the Average Stock Price never equals or exceeds $80 during the Performance Period, the MSUs would terminate at the end of the Performance Period.

We used a Monte Carlo simulation to calculate the fair value of the award on the grant date. A Monte Carlo simulation requires the use of various assumptions, including the stock price volatility and risk free interest rate as of the valuation date corresponding to the length of time remaining in the performance period and expected dividend yield. We recognize stock-based compensation expense related to these MSUs using the graded vesting attribution method over the Performance Period. As of July 31, 2019, 100,000 MSUs remained outstanding.

Below is a summary of RSU activity, including MSUs, under the Stock Plans:

	Fiscal Year Ended July 31,			
	2018		2019	
	Number of Shares	Grant Date Fair Value per Share	Number of Shares	Grant Date Fair Value per Share
Outstanding at beginning of period	17,376,090	$ 18.85	23,597,499	$ 31.20
Granted	14,947,403	$ 39.44	11,204,016	$ 42.23
Released	(5,823,800)	$ 19.96	(8,716,764)	$ 30.15
Forfeited	(2,902,194)	$ 22.34	(3,948,679)	$ 33.86
Outstanding at end of period	23,597,499	$ 31.20	22,136,072	$ 36.72

Stock Options

The Board determines the period over which stock options become exercisable and stock options generally vest over a four-year period. Stock options generally expire 10 years from the date of grant. The term of an ISO grant to a 10% stockholder will not exceed five years from the date of the grant. The exercise price of an ISO will not be less than 100% of the estimated fair value of the shares of common stock underlying the stock option (or 110% of the estimated fair value in the case of an ISO granted to a 10% stockholder) on the date of grant. The exercise price of an NSO is determined by the Board at the time of grant and is generally not less than 100% of the estimated fair value of the shares of common stock underlying the stock option on the date of grant.

Below is a summary of stock option activity under the Stock Plans:

	Fiscal Year Ended July 31,							
	2018				2019			
	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Aggregate Intrinsic Value
			(in years)	(in thousands)			(in years)	(in thousands)
Outstanding at beginning of period	20,334,531	$ 4.59	6.4	$ 338,787	11,332,554	$ 5.12	5.6	$ 496,022
Options granted	—	$ —			—	$ —		
Options exercised	(8,672,623)	$ 3.81			(2,554,706)	$ 4.77		
Options canceled/forfeited	(329,354)	$ 6.63			(37,539)	$ 10.09		
Outstanding at end of period	11,332,554	$ 5.12	5.6	$ 496,022	8,740,309	$ 5.20	4.6	$ 153,000
Exercisable at end of period	11,159,045	$ 5.01	5.5	$ 489,682	8,720,993	$ 5.18	4.6	$ 152,837
Vested and expected to vest at end of period	11,332,554	$ 5.12	5.6	$ 496,022	8,740,309	$ 5.20	4.6	$ 153,000

Stock options exercisable as of July 31, 2018 includes 9,660,757 vested options and 1,498,288 unvested options with an early exercise provision. Stock options exercisable as of July 31, 2019 includes 8,048,364 vested options and 672,629 unvested options with an early exercise provision. The weighted average grant date fair value per share for stock options granted during the fiscal year ended July 31, 2017 was $6.41. There were no options granted during fiscal 2018 or 2019.

The aggregate intrinsic value of stock options exercised during the fiscal years ended July 31, 2017, 2018 and 2019 was $73.9 million, $289.4 million and $90.3 million, respectively. Aggregate intrinsic value represents the difference between the exercise price of the options and the estimated fair value of our common stock. Cash received from option exercises was $15.6 million, $33.1 million and $12.2 million for the fiscal years ended July 31, 2017, 2018 and 2019, respectively.

The total grant date fair value of stock options vested was $16.1 million, $11.5 million and $4.4 million for the fiscal years ended July 31, 2017, 2018 and 2019, respectively. The number of shares vested and expected to vest included in the table above excludes 47,691 shares of early exercised stock options as of July 31, 2018.

Employee Stock Purchase Plan

In December 2015, the Board adopted the 2016 ESPP, which was subsequently amended in January 2016 and September 2016 and approved by our stockholders in March 2016. The 2016 ESPP became effective in connection with our IPO. A total of 3,800,000 shares of Class A common stock were initially reserved for issuance under the 2016 ESPP. The number of shares of Class A common stock available for sale under the 2016 ESPP also includes an annual increase on the first day of each fiscal year, beginning in fiscal 2018, equal to the lesser of: 3,800,000 shares, 1% of the outstanding shares of all classes of common stock as of the last day of our immediately preceding fiscal year, or such other amount as may be determined by the Board. Accordingly, on August 1, 2017 and 2018, the number of shares of Class A common stock available for issuance under 2016 ESPP increased by 1,546,365 and 1,728,580 shares, respectively, pursuant to these provisions. On August 1, 2019, the number of shares of Class A common stock available for issuance under the 2016 ESPP increased by 1,885,953 shares pursuant to the automatic increase provisions.

The 2016 ESPP allows eligible employees to purchase shares of our Class A common stock at a discount through payroll deductions of up to 15% of eligible compensation, subject to caps of $25,000 in any calendar year and 1,000 shares on any purchase date. The 2016 ESPP provides for 12-month offering periods generally beginning in March and September of each year, and each offering period consists of two six-month purchase periods. The first offering period began in September 2016.

On each purchase date, participating employees will purchase Class A common stock at a price per share equal to 85% of the lesser of the fair market value of our Class A common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of each purchase period in the applicable offering period. If the stock price of our Class A common stock on any purchase date in an offering period is lower than the stock price on the enrollment date of that offering period, the offering period will immediately reset after the purchase of shares on such purchase date and automatically roll into a new offering period.

During the fiscal year ended July 31, 2019, 2,008,082 shares of common stock were purchased under the 2016 ESPP for an aggregate amount of $57.2 million. As of July 31, 2019, 1,402,959 shares were available for future issuance under the 2016 ESPP.

We use the Black-Scholes option pricing model to determine the fair value of shares purchased under the 2016 ESPP with the following weighted average assumptions on the date of grant:

	Fiscal Year Ended July 31,		
	2017	2018	2019
Expected term (in years)	0.75	0.75	0.84
Risk-free interest rate	0.6%	1.4%	2.5%
Volatility	51.0%	49.8%	69.0%
Dividend yield	—%	—%	—%

Stock-Based Compensation

Total stock-based compensation expense recognized in the consolidated statements of operations is as follows:

	Fiscal Year Ended July 31,		
	2017	2018	2019
		(in thousands)	
Cost of revenue:			
Product	$ 3,066	$ 2,580	$ 3,535
Support, entitlements and other services	10,411	8,945	15,326
Sales and marketing	78,117	65,060	107,751
Research and development	109,044	74,389	140,519
General and administrative	30,853	26,894	39,598
Total stock-based compensation expense	$ 231,491	$ 177,868	$ 306,729

Stock-based compensation expense for the fiscal year ended July 31, 2017 included cumulative stock-compensation expense related to stock awards with performance conditions, for which vesting was deemed probable in the first quarter of fiscal 2017 upon the successful completion of our IPO. Prior to fiscal 2017, no expense was recognized related to these stock awards, as vesting was not deemed probable. The cumulative stock-based compensation expense recorded in the first quarter of fiscal 2017 related to the portion of the awards for which the relevant service condition had been satisfied and we have continued to recognize the expense over the remaining service period. Stock-based compensation expense related to stock awards without performance conditions is recognized on a straight-line basis over the requisite service period.

As of July 31, 2019, unrecognized stock-based compensation expense related to outstanding stock awards was approximately $744.9 million and is expected to be recognized over a weighted average period of approximately 2.5 years.

Determination of Fair Value

The fair value of options granted to employees is estimated on the grant date using the Black-Scholes option pricing model.

The valuation model for stock-based compensation expense requires us to make assumptions and judgments about the variables used in the calculation, including the expected term, expected volatility of our common stock, risk-free interest rate and expected dividend yield.

The fair value of our stock options was estimated using the following weighted average assumptions:

	Fiscal Year Ended July 31, 2017
Fair value of common stock	$ 12.14
Expected term (in years)	6.1
Risk-free interest rate	1.3%
Volatility	52%
Dividend yield	—%

We did not grant any stock options during fiscal 2018 or 2019. The fair value of each grant of stock options was determined using the Black-Scholes option pricing model and the assumptions discussed below. Each of these inputs is subjective and generally requires significant judgment to determine.

Fair Value of Common Stock — Prior to our IPO, the fair value of the common stock underlying our stock options was determined by our Board. The Board, with input from management, exercised significant judgment and considered numerous objective and subjective factors to determine the fair value of our common stock at each grant date. Subsequent to our IPO, we use the market closing price for our Class A common stock as reported on the NASDAQ Stock Market on the date of grant.

Expected Term — The expected term represents the period that the stock-based awards are expected to be outstanding. For option grants that are considered to be "plain vanilla," we determine the expected term using the simplified method as provided by the Securities and Exchange Commission. The simplified method deems the term to be the average of the time-to-vesting and the contractual life of the options.

Risk-Free Interest Rate — The risk-free interest rate is based on U.S. Treasury yield curve in effect at the time of grant for zero-coupon U.S. Treasury notes with maturities approximately equal to the option's expected term.

Expected Volatility — Since we do not have a long trading history of our common stock, the expected volatility was derived from the average historical stock volatilities of several unrelated public companies within the industry that we consider to be comparable to our business over a period equivalent to the expected term of the stock option grants.

Dividend Rate — The expected dividend was assumed to be zero, as we have never paid dividends and have no current plans to do so.

NOTE 10. NET LOSS PER SHARE

Basic and diluted net loss per share attributable to common stockholders is presented in conformity with the two-class method required for participating securities. Our Convertible Preferred Stock is considered a participating security. Participating securities do not have a contractual obligation to share in our losses. As such, for the periods we incur net losses, there is no impact on the calculated net loss per share attributable to common stockholders in applying the two-class method.

Basic net income (loss) per share is computed using the weighted average number of common shares outstanding during the period. Diluted net income (loss) per share is computed by giving effect to potentially dilutive common stock equivalents outstanding during the period, as their effect would be dilutive. Potentially dilutive common shares include participating securities and shares issuable upon the exercise of stock options, the exercise of common stock warrants, the exercise of convertible preferred stock warrants, the vesting of RSUs and each purchase under the 2016 ESPP, under the treasury stock method.

In loss periods, basic net loss per share and diluted net loss per share are the same, as the effect of potential common shares is antidilutive and therefore excluded.

The rights, including the liquidation and dividend rights, of the holders of our Class A and Class B common stock are identical, except with respect to voting. As the liquidation and dividend rights are identical, our undistributed earnings or losses are allocated on a proportionate basis among the holders of both Class A and Class B common stock. As a result, the net income (loss) per share attributed to common stockholders will, therefore, be the same for both Class A and Class B common stock on an individual or combined basis.

The computation of basic and diluted net loss per share attributable to Class A and Class B common stockholders is as follows:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands, except share and per share data)		
Numerator:			
Net loss	$ (379,638)	$ (297,161)	$ (621,179)
Denominator:			
Weighted average shares—basic and diluted	128,295,563	164,091,302	181,030,964
Net loss per share attributable to common stockholders—basic and diluted	$ (2.96)	$ (1.81)	$ (3.43)

The potential shares of common stock that were excluded from the computation of diluted net loss per share attributable to common stockholders for the fiscal years presented because including them would have been antidilutive are as follows:

	As of July 31,		
	2017	2018	2019
Outstanding stock options and RSUs	37,710,621	34,930,053	30,876,381
Employee stock purchase plan	1,447,385	1,310,653	1,659,233
Common stock subject to repurchase	243,148	47,691	—
Contingently issuable shares pursuant to business combinations	—	276,625	748,172
Common stock warrants	34,180	34,180	34,180
Total	39,435,334	36,599,202	33,317,966

Shares that will be issued in connection with our stock awards and shares that will be purchased under the employee stock purchase plan are generally automatically converted into shares of our Class A common stock. Shares issued in connection with an exercise of the common stock warrants are converted into shares of our Class B common stock and are voluntarily convertible into shares of Class A common stock at the option of the holder.

NOTE 11. INCOME TAXES

Income Taxes

Loss before provision for income taxes by fiscal year consisted of the following:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
Domestic	$ (304,363)	$ (201,666)	$ (658,938)
Foreign	(70,423)	(88,048)	45,878
Loss before provision for income taxes	$ (374,786)	$ (289,714)	$ (613,060)

Provision for income taxes by fiscal year consisted of the following:

	Fiscal Year Ended July 31,		
	2017	2018	2019
		(in thousands)	
Current:			
U.S. federal	$ —	$ 2,059	$ (1,998)
State and local	193	429	312
Foreign	8,196	8,541	17,270
Total current taxes	8,389	11,029	15,584
Deferred:			
U.S. federal	(1,342)	(3,387)	(4,949)
State and local	13	(718)	(770)
Foreign	(2,208)	523	(1,746)
Total deferred taxes	(3,537)	(3,582)	(7,465)
Provision for income taxes	$ 4,852	$ 7,447	$ 8,119

The income tax provision differs from the amount of income tax determined by applying the applicable U.S. federal statutory income tax rate of 21% to pre-tax loss. The reconciliation of the statutory federal income tax and our effective income tax is as follows:

	Fiscal Year Ended July 31,		
	2017	2018	2019
		(in thousands)	
U.S. tax reform impact	$ —	$ 93,352	$ —
U.S. federal income tax at statutory rate	(127,427)	(75,779)	(128,680)
Stock-based compensation	6,701	(73,631)	(23,378)
Effect of foreign operations	16,891	26,117	14,305
Change in valuation allowance	86,941	25,274	142,273
Transfer pricing adjustments	11,822	4,584	(3)
Intangible asset migration	—	4,461	(2,027)
Non-deductible expenses	1,693	2,115	4,651
State income taxes	206	(290)	(458)
Warrant revaluation	7,185	—	—
Other	840	1,244	1,436
Total	$ 4,852	$ 7,447	$ 8,119

During the fiscal year ended July 31, 2017, our provision for income taxes was primarily attributable to foreign tax provisions in certain foreign jurisdictions in which we conduct business.

During the fiscal year ended July 31, 2018, our provision for income taxes was primarily attributable to the alternative minimum tax in the U.S. related to the migration of certain intangible assets and foreign tax provisions in certain foreign jurisdictions in which we conduct business, partially offset by a partial valuation allowance release in the U.S. due to acquisitions completed during fiscal 2018.

During the fiscal year ended July 31, 2019, our provision for income taxes was primarily attributable to foreign tax provisions in certain foreign jurisdictions in which we conduct business, partially offset by a partial valuation release in the U.S. due to an acquisition completed during fiscal 2019 and a tax benefit related to the change in tax law.

In December 2017, the U.S. Congress passed, and the President signed, the Tax Cuts and Jobs Act, which includes a broad range of tax reform proposals affecting businesses, including a federal corporate rate reduction from 35% to 21%, effective January 1, 2018, limitations on the deductibility of interest expense and executive compensation, the creation of new minimum taxes, such as the base erosion anti-abuse tax ("BEAT") and Global Intangible Low Taxed Income ("GILTI") tax and a new minimum tax on certain foreign earnings. Additionally, in December 2017, the SEC staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which allowed us to record provisional amounts during a measurement period not to extend beyond one year from the enactment date. We completed our accounting for income tax effects of the TCJA during the second quarter of fiscal 2019 and did not have any significant adjustments to our provisional amounts. Although our analysis of the tax effects of the TCJA is complete, there may be additional tax effects that could impact our future consolidated financial statements upon the finalization of any laws, regulations or additional TCJA guidance. We have elected to record taxes associated with our GILTI as period costs when incurred.

The temporary differences that give rise to significant portions of deferred tax assets and liabilities are as follows:

	As of July 31,	
	2018	2019
	(in thousands)	
Deferred tax assets:		
Net operating loss carryforward	$ 162,914	$ 294,577
Tax credit carryforward	47,839	109,921
Deferred revenue	27,577	71,859
Intangible assets	—	35,764
Stock-based compensation expense	21,252	27,493
Other assets	—	24,258
Accruals and reserves	8,370	14,825
Total deferred tax assets	267,952	578,697
Deferred tax liabilities:		
Deferred commission expense	(27,829)	(35,814)
Acquisition-related	(5,909)	(11,515)
Property and equipment	(3,870)	(8,541)
Foreign branch taxes	—	(4,607)
Prepaid expenses	—	(2,303)
Other	(497)	(1,621)
Total deferred tax liabilities	(38,105)	(64,401)
Valuation allowance	(226,987)	(509,764)
Net deferred tax assets	$ 2,860	$ 4,532

Management believes that based on available evidence, both positive and negative, it is more likely than not that the U.S. deferred tax assets will not be utilized and as such, a full valuation allowance has been recorded.

The valuation allowance for deferred tax assets was $509.8 million as of July 31, 2019. The net increase in the total valuation allowance for the fiscal years ended July 31, 2018 and 2019 was $65.8 million and $282.8 million, respectively.

As of July 31, 2019, we had approximately $1.4 billion of federal net operating loss carryforwards and $764.3 million of state net operating loss carryforwards available to reduce future taxable income, which will begin to expire in fiscal 2029. In addition, we had approximately $75.8 million of federal research credit carryforwards, $49.5 million of state research credit carryforwards and $14.1 million of foreign tax credit carryforwards. The federal credits will begin to expire in fiscal 2029 and the state credits can be carried forward indefinitely. The foreign credits will begin to expire in fiscal 2027.

Utilization of the net operating loss and tax credit carryforwards may be subject to an annual limitation due to the ownership change limitations provided by the Internal Revenue Code of 1986, as amended, and similar state provisions. Any annual limitation may result in the expiration of net operating losses and credits before utilization. If an ownership change occurred, utilization of the net operating loss and tax credit carryforwards could be significantly reduced.

As of July 31, 2019, we held an aggregate of $218.0 million in cash and cash equivalents in our foreign subsidiaries, of which $182.6 million was denominated in U.S. dollars. We attribute net revenue, costs and expenses to domestic and foreign components based on the terms of our agreements with our subsidiaries. We do not provide for federal income taxes on the undistributed earnings of our foreign subsidiaries, as such earnings are to be reinvested offshore indefinitely. The income tax liability would be insignificant if these earnings were to be repatriated.

The income tax benefit and provision for the fiscal year ended July 31, 2019 are based on the assumption that foreign undistributed earnings are indefinitely reinvested. We will continue to evaluate whether or not to continue to assert indefinite reinvestment on part or all of our foreign undistributed earnings. In the event we determine not to continue to assert the permanent reinvestment of part or all of our foreign undistributed earnings, such a determination could result in the accrual and payment of additional foreign, state and local taxes.

We recognize uncertain tax positions in our financial statements if that position will more likely than not be sustained on audit, based on the technical merits of the position. A reconciliation of our unrecognized tax benefits, excluding accrued interest and penalties, is as follows:

	Fiscal Year Ended July 31,	
	2018	2019
	(in thousands)	
Balance at the beginning of the year	$ 42,655	$ 91,716
Increases related to current year tax positions	58,727	13,736
Increases related to prior year tax positions	4,893	301
Decreases related to prior year tax positions	(14,559)	(23,782)
Settlements with tax authorities	—	(721)
Balance at the end of the year	$ 91,716	$ 81,250

During the fiscal year ended July 31, 2019, the net decrease in uncertain tax positions was primarily attributable to a tax election made during the third quarter of fiscal 2019, as well as the change in tax law, partially offset by uncertain tax positions related to an acquisition during fiscal 2019.

As of July 31, 2019, if uncertain tax positions are fully recognized in the future, it would result in a $14.5 million impact to our effective tax rate, and the remaining amount would result in adjustments to deferred tax assets and corresponding adjustments to the valuation allowance.

We recognize interest and/or penalties related to income tax matters as a component of income tax expense. As of July 31, 2019, we had recognized $1.3 million accrued interest and penalties related to uncertain tax positions.

We file income tax returns in the U.S. federal jurisdiction as well as various U.S. states and foreign jurisdictions. The tax years 2009 and forward remain open to examination by the major jurisdictions in which we are subject to tax. These fiscal years outside the normal statute of limitation remain open to audit by tax authorities due to tax attributes generated in those early years, which have been carried forward and may be audited in subsequent years when utilized. We are subject to the continuous examination of income tax returns by various tax authorities. We regularly assess the likelihood of adverse outcomes resulting from these examinations to determine the adequacy of the provision for income taxes. We believe that adequate amounts have been reserved for any adjustments that may ultimately result from these examinations and do not anticipate a significant impact to the gross unrecognized tax benefits within the next 12 months related to these years.

NOTE 12. SEGMENT INFORMATION

Our chief operating decision maker is a group which is comprised of our Chief Executive Officer and Chief Financial Officer. This group reviews financial information presented on a consolidated basis for purposes of allocating resources and evaluating financial performance. Accordingly, we have a single reportable segment.

The following table sets forth revenue by geographic location based on bill-to location:

	Fiscal Year Ended July 31,		
	2017	2018	2019
	(in thousands)		
U.S.	$ 488,079	$ 648,805	$ 682,340
Asia Pacific	186,864	240,247	271,712
Europe, the Middle East and Africa	138,815	224,392	238,356
Other Americas	32,145	42,013	43,735
Total revenue	$ 845,903	$ 1,155,457	$ 1,236,143

As of July 31, 2018 and 2019, $130.0 million and $161.9 million, respectively, of our long-lived assets, net were located in the United States.

NOTE 13. RELATED-PARTY TRANSACTIONS

We enter into various transactions with related parties in the normal course of business. During the fiscal years ended July 31, 2017, 2018 and 2019, we did not have any material related party transactions.

In connection with the acquisition of PernixData in the first quarter of fiscal 2017, entities affiliated with Lightspeed Venture Partners, which owned approximately 36.7% of our outstanding Convertible Preferred Stock as of July 31, 2016, owned approximately 26.4% of the outstanding capital stock of PernixData immediately prior to the completion of the PernixData acquisition. One member of our Board is affiliated with Lightspeed Venture Partners. As of July 31, 2019, entities affiliated with Lightspeed Venture Partners owned approximately 2.3% of our total outstanding Class A and Class B common stock.

NOTE 14. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

The following sets forth selected unaudited quarterly consolidated statements of operations data for each of the eight quarters in the period ended July 31, 2019. The information for each of these quarters has been prepared on a basis consistent with our audited annual consolidated financial statements included elsewhere in this report and, in the opinion of management, includes all adjustments of a normal, recurring nature that are necessary for the fair presentation of the results of operations for these periods in accordance with U.S. GAAP. This data should be read in conjunction with our audited consolidated financial statements and related notes included elsewhere in this report. These historical quarterly operating results are not necessarily indicative of the results that may be expected for a full fiscal year or any future period.

	Three Months Ended							
	October 31, 2017	January 31, 2018	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019
	(unaudited, in thousands, except per share amounts)							
Revenue:								
Product	$ 219,052	$ 223,170	$ 221,117	$ 224,650	$ 224,346	$ 236,932	$ 184,794	$ 186,347
Support, entitlements and other services	56,500	63,574	68,296	79,098	88,937	98,428	102,830	113,529
Total revenue	275,552	286,744	289,413	303,748	313,283	335,360	287,624	299,876
Cost of revenue:								
Product (2)(3)	85,162	83,217	66,680	41,068	39,261	45,966	29,528	28,323
Support, entitlements and other services (2)	23,460	25,311	28,935	32,197	34,845	40,016	45,549	40,640
Total cost of revenue	108,622	108,528	95,615	73,265	74,106	85,982	75,077	68,963
Gross profit	166,930	178,216	193,798	230,483	239,177	249,378	212,547	230,913
Operating expenses:								
Sales and marketing (2)(3)	145,405	151,201	169,860	183,191	196,497	213,707	245,703	253,843
Research and development (2)	64,512	70,924	81,291	97,050	110,531	123,037	137,982	129,169
General and administrative (2)	16,052	15,948	24,929	29,472	27,339	28,788	33,040	30,420
Total operating expenses	225,969	238,073	276,080	309,713	334,367	365,532	416,725	413,432
Loss from operations	(59,039)	(59,857)	(82,282)	(79,230)	(95,190)	(116,154)	(204,178)	(182,519)
Other expense, net	(189)	(861)	(4,235)	(4,021)	(2,703)	(4,399)	(3,212)	(4,705)
Loss before provision for income taxes	(59,228)	(60,718)	(86,517)	(83,251)	(97,893)	(120,553)	(207,390)	(187,224)
Provision for (benefit from) income taxes	2,259	1,913	(843)	4,118	(3,628)	2,210	2,423	7,114
Net loss	$ (61,487)	$ (62,631)	$ (85,674)	$ (87,369)	$ (94,265)	$ (122,763)	$ (209,813)	$ (194,338)
Net loss per share attributable to Class A and Class B common stockholders—basic and diluted (1)	$ (0.39)	$ (0.39)	$ (0.51)	$ (0.51)	$ (0.54)	$ (0.68)	$ (1.15)	$ (1.04)

(1) Basic and diluted earnings per share are computed independently for each of the quarters presented. Therefore, the sum of quarterly basic and diluted per share amounts may not equal annual basic and diluted per share amounts.

NUTANIX, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(2) Includes stock-based compensation as follows:

	Three Months Ended							
	October 31, 2017	January 31, 2018	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019
	(unaudited, in thousands)							
Product cost of sales	$ 570	$ 684	$ 634	$ 692	$ 698	$ 872	$ 953	$ 1,012
Support, entitlements and other services cost of sales	2,072	2,133	1,951	2,789	3,157	3,373	4,542	4,254
Sales and marketing	13,766	15,942	18,051	17,301	22,606	23,462	35,257	26,426
Research and development	15,542	17,023	16,474	25,350	31,009	34,679	42,265	32,566
General and administrative	3,565	6,229	7,836	9,264	8,455	10,179	11,815	9,149
Total	$ 35,515	$ 42,011	$ 44,946	$ 55,396	$ 65,925	$ 72,565	$ 94,832	$ 73,407

(3) Includes amortization of intangible assets as follows:

	Three Months Ended							
	October 31, 2017	January 31, 2018	April 30, 2018	July 31, 2018	October 31, 2018	January 31, 2019	April 30, 2019	July 31, 2019
	(unaudited, in thousands)							
Product cost of sales	$ 895	$ 1,164	$ 1,447	$ 2,135	$ 3,168	$ 3,692	$ 3,694	$ 3,694
Sales and marketing	211	192	222	289	550	666	661	651
Total	$ 1,106	$ 1,356	$ 1,669	$ 2,424	$ 3,718	$ 4,358	$ 4,355	$ 4,345

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

Our management, with the participation of our Chief Executive Officer and our Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended ("Exchange Act")) prior to the filing of this Annual Report on Form 10-K. Based on such evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this Annual Report on Form 10-K, our disclosure controls and procedures were, in design and operation, 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) of the Exchange Act. Internal control over financial reporting consists of policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) are designed and operated to provide reasonable assurance regarding the reliability of our financial reporting and our process for the preparation of financial statements for external purposes in accordance with generally accepted accounting principles and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements. Our management evaluated the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework (2013). Based on the results of our evaluation, our management has concluded that our internal control over financial reporting was effective as of July 31, 2019.

The effectiveness of our internal control over financial reporting as of July 31, 2019 has been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which appears in Part II, Item 8 of this Annual Report on Form 10-K.

Limitations on the Effectiveness of Controls

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements and 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.

Changes in Internal Control over Financial Reporting

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

Item 9B. Other Information

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this item is incorporated herein by reference to our definitive proxy statement for our 2019 annual meeting of stockholders ("2019 Proxy Statement"), which will be filed not later than 120 days after the end of our fiscal year ended July 31, 2019.

Item 11. Executive Compensation

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

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

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

Item 13. Certain Relationships and Related Transactions and Director Independence

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this item is incorporated herein by reference to our 2019 Proxy Statement.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)(1) Consolidated Financial Statements

We have filed the consolidated financial statements listed in the Index to Consolidated Financial Statements included in Part II, Item 8, "Financial Statements and Supplementary Data" of this Annual Report on Form 10-K.

(a)(2) Financial Statement Schedules

All financial statement schedules have been omitted because they are not applicable, not material, or the required information is shown in the consolidated financial statements or the notes thereto.

(a)(3) Exhibits

See the Exhibit Index below in this Annual Report on Form 10-K.

Item 16. Form 10-K Summary

None.

EXHIBIT INDEX

		Incorporated by Reference				
Number	Exhibit Title	Form	File No.	Exhibit	Filing Date	Filed Herewith
3.1	Amended and Restated Certificate of Incorporation.	10-Q	001-37883	3.1	12/8/2016	
3.2	Amended and Restated Bylaws.	S-1/A	333-208711	3.4	5/27/2016	
4.1	Amended and Restated Investors' Rights Agreement, dated as of August 26, 2014, as amended, by and among the Registrant and certain of its stockholders.	S-1	333-208711	4.1	12/22/2015	
4.2	Specimen Class A Common Stock Certificate of the Registrant.	S-1/A	333-208711	4.2	4/4/2016	
4.3	Form of Warrant to Purchase Shares of Capital Stock by and between the Registrant and certain of its investors.	S-1	333-208711	4.3	12/22/2015	
4.4	Indenture, dated as of January 22, 2018, by and between the Registrant and U.S. Bank National Association and Form of 0% Convertible Senior Notes due 2023.	8-K	001-37883	4.1	1/23/2018	
4.5	Description of Class A Common Stock.					X
10.1†	Memorandum of Understanding by and between the Registrant and Flextronics Telecom Systems Limited, executed on March 13, 2017.	10-Q	001-37883	10.1	6/5/2019	
10.2	Form of Indemnification Agreement by and between the Registrant and each of its directors and executive officers.	S-1	333-208711	10.1	12/22/2015	
10.3+	2010 Stock Plan and forms of equity agreements thereunder.	S-1/A	333-208711	10.2	8/16/2016	
10.4+	2011 Stock Plan and forms of equity agreements thereunder.	S-1	333-208711	10.3	12/22/2015	
10.5+	2016 Equity Incentive Plan and forms of equity agreements thereunder.	S-1/A	333-208711	10.4	9/19/2016	
10.6+	2016 Employee Stock Purchase Plan and forms of equity agreements thereunder.	S-1/A	333-208711	10.5	9/19/2016	
10.7+	Employment Agreement, dated as of February 26, 2015, by and between the Registrant and Dheeraj Pandey.	S-1	333-208711	10.6	12/22/2015	
10.8+	Offer Letter, dated as of April 26, 2014, by and between the Registrant and Duston Williams.	S-1	333-208711	10.7	12/22/2015	
10.9+	Offer Letter, dated as of October 15, 2017, by and between the Registrant and Lou Attanasio.	10-Q	001-37883	10.1	12/13/2017	
10.10+	Offer Letter, dated as of January 2, 2015, by and between the Registrant and Sunil Potti.	S-1	333-208711	10.9	12/22/2015	
10.11+	Offer Letter, dated as of October 17, 2011, by and between the Registrant and David Sangster.	S-1	333-208711	10.11	12/22/2015	
10.12+	Offer Letter, dated as of December 11, 2013, by and between the Registrant and Michael P. Scarpelli.	S-1	333-208711	10.12	12/22/2015	
10.13+	Offer Letter, dated as of July 24, 2015, by and between the Registrant and John McAdam.	S-1	333-208711	10.13	12/22/2015	
10.14+	Executive Incentive Compensation Plan.	S-1	333-208711	10.14	12/22/2015	
10.15	Office Lease, dated as of August 5, 2013, as amended to date, by and between the Registrant and CA-1740 Technology Drive Limited Partnership.	S-1/A	333-208711	10.15	8/16/2016	
10.16	Office Lease, dated as of April 23, 2014, as amended to date, by and between the Registrant and CA-Metro Plaza Limited Partnership.	S-1/A	333-208711	10.16	8/16/2016	
10.17†	Original Equipment Manufacturer (OEM) Purchase Agreement, dated as of May 16, 2014, by and among the Registrant, Nutanix Netherlands B.V. and Super Micro Computer Inc., as amended by Amendment One to Original Equipment Manufacturer (OEM) Purchase Agreement, dated as of November 13, 2017 and Amendment Two to Original Equipment Manufacturer (OEM) Purchase Agreement dated as of October 31, 2018.	10-Q	001-37883	10.2	6/5/2019	
10.18†	Amendment Two to Original Equipment Manufacturer (OEM) Purchase Agreement, dated as of October 31, 2018, by and between the Registrant and Super Micro Computer, Inc.	10-Q	001-37883	10.3	12/10/2018	
10.19+	Change of Control and Severance Policy.	S-1/A	333-208711	10.21	9/12/2016	
10.20†	Integration Services Agreement, dated as of May 19, 2016, by and among the Registrant, Nutanix Netherlands B.V., Avnet, Inc. and Avnet Europe Comm. VA.	S-1/A	333-208711	10.18	5/27/2016	
10.21+	Amended and Restated Outside Director Compensation Policy.	10-Q	001-37883	10.4	12/10/2018	
10.22+	Offer Letter, dated as of November 20, 2017, by and between the Registrant and Tyler Wall	10-Q	001-37883	10.1	3/15/2018	
10.23†	Manufacturing Services Agreement, by and among the Registrant, Nutanix Netherlands B.V. and Flextronics Telecom Systems Limited, entered into on November 1, 2017, as amended by Amendment #1 to Manufacturing Services Agreement entered into on December 19, 2017.	10-Q	001-37883	10.3	6/5/2019	
10.24	Sixth Amendment to the Office Lease dated as of January 29, 2018, by and between the Registrant and Hudson 1740 Technology, LLC.	10-Q	001-37883	10.1	6/12/2018	
10.25	Seventh Amendment to the Office Lease dated as of April 4, 2018, by and	10-Q	001-37883	10.2	6/12/2018	

	between the Registrant and Hudson 1740 Technology, LLC.					
10.26	Fourth Amendment to the Office Lease dated as of April 4, 2018, by and between the Registrant and Hudson Metro Plaza, LLC.	10-Q	001-37883	10.3	6/12/2018	
10.27	Fifth Amendment to the Office Lease dated as of October 1, 2018, by and between the Registrant and Hudson Metro Plaza, LLC.	10-Q	001-37883	10.1	12/10/2018	
10.28	Sixth Amendment to the Office Lease dated as of April 5, 2019, by and between the Registrant and Hudson Metro Plaza, LLC.					X
10.29	Seventh Amendment to the Office Lease dated as of April 25, 2019, by and between the Registrant and Hudson Metro Plaza, LLC.					X
10.30	Office Lease, dated as of April 4, 2018, by and between the Registrant and Hudson Concourse, LLC.	10-Q	001-37883	10.4	6/12/2018	
10.31††	First Amendment to the Office Lease dated as of September 5, 2018, by and between the Registrant and the Hudson Concourse, LLC.					X
10.32	Office Lease, dated as of September 5, 2018, by and between the Registrant and Hudson Concourse, LLC.	10-Q	001-37883	10.2	12/10/2018	
10.33	Purchase Agreement, dated January 17, 2018, by and among the Registrant and Morgan Stanley & Co. LLC, Merrill Lynch, Pierce, Fenner & Smith Incorporated and Goldman Sachs & Co. LLC, as representatives of the initial purchasers named therein, Form of Convertible Note Hedge Confirmation and Form of Warrant Confirmation.	8-K	001-37883	10.1	1/23/2018	
21.1	List of subsidiaries of the Registrant.					X
23.1	Consent of Deloitte & Touche LLP, Independent Registered Accounting Firm.					X
24.1	Power of Attorney (included on the Signatures page of this Annual Report on Form 10-K).					X
31.1	Certification of Chief Executive Officer pursuant to Exchange Act Rules 13a-14a and 15d-14a, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Chief Financial Officer pursuant to Exchange Act Rules 13a-14a and 15d-14a, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*					X
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*					X
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.	XBRL Taxonomy Extension Definition.					X
101.	XBRL Taxonomy Extension Label Linkbase					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X

† Confidential treatment has been requested for portions of this exhibit. These portions have been omitted and have been filed separately with the Securities and Exchange Commission.

†† Certain confidential information contained in this Exhibit was omitted by means of marking such portions with brackets because the identified confidential information (i) is not material and (ii) would be competitively harmful if publicly disclosed.

* These exhibits are furnished with this Annual Report on Form 10-K and are not deemed filed with the Securities and Exchange Commission and are not incorporated by reference in any filing of Nutanix, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date hereof and irrespective of any general incorporation language contained in such filings.

+Indicates a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereto duly authorized.

NUTANIX, INC.

Date: September 24, 2019	By:	/s/ Dheeraj Pandey Dheeraj Pandey *Chief Executive Officer and Chairman*

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Dheeraj Pandey and Duston M. Williams, jointly and severally, his attorneys-in-fact, each with the power of substitution, for him in any and all capacities, to sign any amendments to this report, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Dheeraj Pandey Dheeraj Pandey	Chief Executive Officer and Chairman *(Principal Executive Officer)*	September 24, 2019
/s/ Duston M. Williams Duston M. Williams	Chief Financial Officer *(Principal Financial Officer and Principal Accounting Officer)*	September 24, 2019
/s/ Susan L. Bostrom Susan L. Bostrom	Director	September 24, 2019
/s/ Craig Conway Craig Conway	Director	September 24, 2019
/s/ Steven J. Gomo Steven J. Gomo	Director	September 24, 2019
/s/ John McAdam John McAdam	Director	September 24, 2019
/s/ Ravi Mhatre Ravi Mhatre	Director	September 24, 2019
/s/ Jeffrey T. Parks Jeffrey T. Parks	Director	September 24, 2019
/s/ Michael P. Scarpelli Michael P. Scarpelli	Director	September 24, 2019
/s/ Brian M. Stevens Brian M. Stevens	Director	September 24, 2019

Exhibit 4.5

DESCRIPTION OF CLASS A COMMON STOCK

The following description of the capital stock of Nutanix, Inc. ("us", "our", "we" or the "Company") is a summary. This summary is not complete and is subject to and qualified in its entirety by reference to the complete text of our amended and restated certificate of incorporation and our amended and restated bylaws, each previously filed with the Securities and Exchange Commission and incorporated by reference as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.5 is a part, as well as to the relevant provisions of the general corporation law of the state of Delaware (the "DGCL"). We encourage you to read our certificate of incorporation, bylaws and the applicable provisions of the DGCL carefully.

General

Our authorized capital stock consists of 1,400,000,000 shares, with a par value of $0.000025 per share, of which:

- 1,000,000,000 shares are designated as Class A common stock;
- 200,000,000 shares are designated as Class B common stock; and
- 200,000,000 shares are designated as preferred stock.

Our board of directors is authorized, without stockholder approval, except as required by the listing standards of the NASDAQ Stock Market, to issue additional shares of our capital stock.

Voting Rights

Holders of our Class A common stock and Class B common stock have identical rights, provided however that, except as otherwise expressly provided in our certificate of incorporation or required by applicable law, on any matter that is submitted to a vote of our stockholders, holders of Class A common stock are entitled to one vote per share of Class A common stock and holders of Class B common stock are entitled to 10 votes per share of Class B common stock. Holders of shares of Class A common stock and Class B common stock vote together as a single class on all matters (including the election of directors) submitted to a vote of stockholders, unless otherwise required by Delaware law or our amended and restated certificate of incorporation. Delaware law could require either holders of our Class A common stock or Class B common stock to vote separately as a single class in the following circumstances:

- if we were to seek to amend our amended and restated certificate of incorporation to increase or decrease the par value of a class of our capital stock, then that class would be required to vote separately to approve the proposed amendment; and
- if we were to seek to amend our amended and restated certificate of incorporation in a manner that alters or changes the powers, preferences or special rights of a class of our capital stock in a manner that affected its holders adversely, then that class would be required to vote separately to approve the proposed amendment.

We have not provided for cumulative voting for the election of directors in our certificate of incorporation. Our amended and restated certificate of incorporation and amended and restated bylaws provide for a classified board of directors consisting of three classes of approximately equal size, each class serving staggered three-year terms. Only one will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms.

No Preemptive or Similar Rights

Our common stock is not entitled to preemptive rights and is not subject to conversion, redemption or sinking fund provisions.

Economic Rights

Except as otherwise expressly provided in our certificate of incorporation or required by applicable law, shares of Class A common stock and Class B common stock have the same rights and privileges and rank equally, share ratably and are identical in all respects as to all matters, including, without limitation those described below.

Dividends and Distributions

Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of Class A common stock and Class B common stock are entitled to share equally, identically and ratably, on a per share basis, with respect to any dividend or distribution of cash, property or shares of our capital stock paid or distributed by us, unless different treatment of the shares of each such class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting separately as a class. In the event a dividend or distribution is paid in the form of shares of Class A common stock or Class B common stock or rights to acquire shares of such stock, the holders of Class A common stock shall receive Class A common stock, or rights to acquire Class A common stock, as the case may be, and the holders of Class B common stock shall receive Class B common stock, or rights to acquire Class B common stock, as the case may be.

Liquidation Rights

Upon our liquidation, dissolution or winding-up, the holders of Class A common stock and Class B common stock are entitled to share equally, identically and ratably in all assets remaining after the payment of any liabilities and the liquidation preferences and any accrued or declared but unpaid dividends, if any, with respect to any outstanding preferred stock, unless different treatment of the shares of each class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting separately as a class.

Change of Control Transactions

Upon (A) the closing of the sale, transfer or other disposition of all or substantially all of our assets, (B) the consummation of a merger, reorganization, consolidation or share transfer which results in our voting securities outstanding immediately prior to the transaction (or the voting securities issued with respect to our voting securities outstanding immediately prior to the transaction) representing less than a majority of the combined voting power of our voting securities or the voting securities of the surviving or acquiring entity, (C) the closing of the transfer (whether by merger, consolidation or otherwise), in one transaction or a series of related transactions, to a person or group of affiliated persons of securities of the company if, after closing, the transferee person or group would hold 50% or more of our outstanding voting stock (or the outstanding voting stock of the surviving or acquiring entity), (D) any voluntary or involuntary liquidation, dissolution or winding-up, or (E) the issuance by us of voting securities representing more than 2% of our total voting power to a person who held 50% or less of our total voting power immediately prior to such transaction and who following such transaction holds more than 50% of our total voting power, the holders of Class A common stock and Class B common stock will be treated equally and identically with respect to shares of Class A common stock or Class B common stock owned by them, unless different treatment of the shares of each class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting separately as a class.

Subdivisions and Combinations

If we subdivide or combine in any manner outstanding shares of Class A common stock or Class B common stock, the outstanding shares of the other class will be subdivided or combined in the same manner, unless different treatment of the shares of each class is approved by the affirmative vote of the holders of a majority of the outstanding shares of Class A common stock and Class B common stock, each voting as a separate class.

Anti-Takeover Effects of Delaware Law and Our Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions and certain provisions of Delaware law, which are summarized below, could discourage takeovers, coercive or otherwise.

These provisions are also designed, in part, to encourage persons seeking to acquire control of us to negotiate first with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with an unfriendly or unsolicited acquirer outweigh the disadvantages of discouraging a proposal to acquire us.

Dual Class Stock. Our amended and restated certificate of incorporation provides for a dual class common stock structure, which provides certain of our investors and certain of our executive officers, employees, directors and their affiliates with significant influence over all matters requiring stockholder approval, including the election of directors and significant corporate transactions, such as a merger or other sale of our company or its assets.

Issuance of Undesignated Preferred Stock. Our board of directors has the ability to designate and issue preferred stock with voting or other rights or preferences that could deter hostile takeovers or delay changes in our control or management.

Limits on Ability of Stockholders to Act by Written Consent or Call a Special Meeting. Our amended and restated certificate of incorporation provides that, upon the conversion of our Class A common stock and Class B common stock into a single class of common stock, our stockholders may not act by written consent. This limit on the ability of stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, the holders of a majority of our capital stock would not be able to amend the amended and restated bylaws or remove directors without holding a meeting of stockholders called in accordance with the amended and restated bylaws.

In addition, our amended and restated bylaws provide that special meetings of the stockholders may be called only by the chief executive officer, the president (in the absence of a chief executive officer), the lead independent director or a majority of our board of directors. A stockholder may not call a special meeting, which may delay the ability of our stockholders to force consideration of a proposal or for holders controlling a majority of our capital stock to take any action, including the removal of directors.

Advance Requirements for Advance Notification of Stockholder Nominations and Proposals. Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of the board of directors. These advance notice procedures may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed and may also discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempt to obtain control of our company.

Board Classification. Our amended and restated certificate of incorporation provides that our board of directors will be divided into three classes, one class of which is elected each year by our stockholders. The directors in each class will serve for a three-year term. Our classified board of directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us because it generally makes it more difficult for stockholders to replace a majority of the directors.

Election and Removal of Directors. Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that establish specific procedures for appointing and removing members of our board of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, upon the conversion of our Class A common stock and Class B common stock into a single class of common stock, vacancies and newly created directorships on our board of directors may be filled only by a majority of the directors then serving on our board of directors. Under our amended and restated certificate of incorporation and amended and restated bylaws, directors may be removed only for cause and, in addition to any other vote required by law, upon the affirmative vote of the holders of at least two-thirds of the shares then entitled to vote at an election of directors.

No Cumulative Voting. The Delaware General Corporation Law provides that stockholders are not entitled to the right to cumulate votes in the election of directors unless our amended and restated certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation and amended and restated bylaws do not expressly provide for cumulative voting. Without cumulative voting, a minority stockholder may not be able to gain as many seats on our board of directors as the stockholder would be able to gain if cumulative voting were permitted. The absence of cumulative voting makes it more difficult for a minority stockholder to gain a seat on our board of directors to influence our board of directors’ decision regarding a takeover.

Amendment of Charter Provision. Any amendment of the above provisions in our amended and restated certificate of incorporation would require approval by holders of at least two-thirds of our then outstanding Class A and Class B common stock.

Delaware Anti-Takeover Statute. We will be subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not the outstanding voting stock owned by the interested stockholder, (1) shares owned by persons who are directors and also officers and (2) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- at or subsequent to the date of the transaction, the business combination is approved by our board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation’s outstanding voting stock. We expect the existence of this provision to have an anti-takeover effect with respect to transactions our board of directors does not approve in advance. We also anticipate that Section 203 may discourage attempts that might result in a premium over the market price for the shares of Class A common stock held by stockholders.

Exhibit 10.28

SIXTH AMENDMENT

(METRO PLAZA)

THIS SIXTH AMENDMENT (this "**Sixth Amendment**") is made and entered into as of April 5, 2019, by and between **HUDSON METRO PLAZA, LLC**, a Delaware limited liability company ("**Landlord**"), and **NUTANIX, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord (as successor in interest to CA-Metro Plaza Limited Partnership, a Delaware limited partnership) and Tenant are parties to that certain lease dated April 23, 2014, as previously amended by that certain First Amendment dated March 23, 2015, by that certain Second Amendment dated January 28, 2016, by that certain Third Amendment dated July 28, 2016, by that certain Fourth Amendment dated April 4, 2018, and by that certain Fifth Amendment dated October 1, 2018 (as amended, the "**Lease**").

B. Pursuant to the Lease, Landlord has leased to Tenant the "**Premises**" comprised of: (i) approximately **28,121** rentable square feet in the building located at 181 Metro Drive, San Jose, California 95110 comprised of (a) 9,716 rentable square feet described as Suite No. 280 located on the second (2nd) floor, and (b) approximately 18,405 rentable square feet described as Suite No. 300 located on the third (3rd) floor; and (ii) a total of approximately **80,489** rentable square feet in the building located at 25 Metro Drive, San Jose, California 95110 comprised of (a) approximately 7,396 rentable square feet described as Suite No. 220 on the second (2nd) floor, (b) approximately 23,135 rentable square feet described as the sixth (6th) floor, (c) approximately 24,337 rentable square feet described as the 5th floor, and (d) approximately 25,621 rentable square feet described as the 4th floor.

C. By this Sixth Amendment, Landlord and Tenant desire to modify the Lease as provided herein.

D. Unless otherwise defined herein, capitalized terms as used herein shall have the same meanings as given thereto in the Lease.

NOW, THEREFORE, in consideration of the above recitals which by this reference are incorporated herein, the mutual covenants and conditions contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Building-Top Signage**. The reference to "82,989 rentable square feet" contained in 23rd line of Section 6 of the Fifth Amendment is hereby deleted and a reference to "80,489 rentable square feet" is substituted in lieu thereof.

2. **No Further Modification**. Except as set forth in this Sixth Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect. Effective as of the date hereof, all references to the "Lease" shall refer to the Lease as amended by this Sixth Amendment.

[Signatures are on the following page]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Sixth Amendment as of the day and year first above written.

LANDLORD:

HUDSON METRO PLAZA, LLC,
a Delaware limited liability company

By: Hudson Pacific Properties, L.P.,
a Maryland limited partnership,
its sole member

By: Hudson Pacific Properties, Inc.,
a Maryland corporation,
its general partner

By: /s/ Mark. T. Lammas

Name: Mark. T. Lammas

Title: Chief Operating Officer,
Chief Financial Officer & Treasurer

TENANT:

NUTANIX, INC.,
a Delaware corporation,

By: /s/ Duston Williams

Name: Duston Williams

Title: CFO

Exhibit 10.29

SEVENTH AMENDMENT

(METRO PLAZA)

THIS SEVENTH AMENDMENT (this "**Seventh Amendment**") is made and entered into as of April 25, 2019, by and between **HUDSON METRO PLAZA, LLC**, a Delaware limited liability company ("**Landlord**"), and **NUTANIX, INC.**, a Delaware corporation ("**Tenant**").

RECITALS

A. Landlord (as successor in interest to CA-Metro Plaza Limited Partnership, a Delaware limited partnership) and Tenant are parties to that certain lease dated April 23, 2014, as previously amended by that certain First Amendment dated March 23, 2015, by that certain Second Amendment dated January 28, 2016, by that certain Third Amendment dated July 28, 2016, by that certain Fourth Amendment dated April 4, 2018, by that certain Fifth Amendment dated October 1, 2018, and by that certain Sixth Amendment dated April 5, 2019 (as amended, the "**Lease**").

B. Pursuant to the Lease, Landlord has leased to Tenant the "**Premises**" comprised of: (i) approximately **28,121** rentable square feet in the building located at 181 Metro Drive, San Jose, California 95110 comprised of (a) 9,716 rentable square feet described as Suite No. 280 located on the second (2nd) floor, and (b) approximately 18,405 rentable square feet described as Suite No. 300 located on the third (3rd) floor; and (ii) a total of approximately **80,489** rentable square feet in the building located at 25 Metro Drive, San Jose, California 95110 comprised of (a) approximately 7,396 rentable square feet described as Suite No. 220 on the second (2nd) floor, (b) approximately 23,135 rentable square feet described as the sixth (6th) floor, (c) approximately 24,337 rentable square feet described as the 5th floor, and (d) approximately 25,621 rentable square feet described as the 4th floor.

C. By this Seventh Amendment, Landlord and Tenant desire to modify the Lease as provided herein.

D. Unless otherwise defined herein, capitalized terms as used herein shall have the same meanings as given thereto in the Lease.

NOW, THEREFORE, in consideration of the above recitals which by this reference are incorporated herein, the mutual covenants and conditions contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Allowance Sunset Date**. The reference to "December 31, 2019" contained in 10th line of Section 1.6(B) and Section 2.6(B) of the Fifth Amendment is hereby deleted and a reference to "August 31, 2020" is substituted in lieu thereof.

2. **Second Expansion Space - Abatement of Base Rent**. The reference to "April and May 2019" contained in the last paragraph of Section 2.3 of the Fifth Amendment is hereby deleted in its entirety and a reference to "April 2019 and January 2121" is substituted in lieu thereof.

3. **No Further Modification**. Except as set forth in this Seventh Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect. Effective as of the date hereof, all references to the "Lease" shall refer to the Lease as amended by this Seventh Amendment.

[Signatures are on the following page]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Seventh Amendment as of the day and year first above written.

LANDLORD:

HUDSON METRO PLAZA, LLC,
a Delaware limited liability company

By: Hudson Pacific Properties, L.P.,
a Maryland limited partnership,
its sole member

By: Hudson Pacific Properties, Inc.,
a Maryland corporation,
its general partner

By: /s/ Mark. T. Lammas

Name: Mark. T. Lammas

Title: Chief Operating Officer,
Chief Financial Officer & Treasurer

TENANT:

NUTANIX, INC.,
a Delaware corporation,

By: /s/ Duston Williams

Name: Duston Williams

Title: CFO

Exhibit 10.31

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY BRACKETS ([***]), HAS BEEN OMITTED BECAUSE
THE INFORMATION (I) IS NOT MATERIAL AND
(II) WOULD BE COMPETITIVELY HARMFUL IF PUBLICLY DISCLOSED.

FIRST AMENDMENT

(1745 TECHNOLOGY DRIVE)

THIS FIRST AMENDMENT (this "**First Amendment**") is made and entered into as of September 5, 2018, by and between **HUDSON CONCOURSE, LLC, a Delaware limited liability company** ("**Landlord**"), and **NUTANIX, INC., a Delaware corporation** ("**Tenant**").

RECITALS

A. Landlord and Tenant are parties to that certain Office Lease dated April 4, 2018 (the "**Lease**"). Pursuant to the Lease, Landlord has leased to Tenant space containing a total of approximately **58,714** rentable square feet (collectively, the "**Premises**") on the fifth (5^{th}) and sixth (6^{th}) floors of the building commonly known as 1745 Technology Drive located at 1745 Technology Drive, San Jose, California 95110 (the "**Building**").

B. The parties wish to expand the Premises to include that certain space containing approximately **29,357** rentable square feet and known as Suite No. 700 located on the seventh (7^{th}) floor of the Building and shown on **Exhibit A** attached hereto (the "**Suite 700 Must Take Space**"), on the following terms and conditions.

NOW, THEREFORE, in consideration of the above recitals which by this reference are incorporated herein, the mutual covenants and conditions contained herein and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant agree as follows:

1. **Suite 700 Must Take Space.**

6.1 **Effective Date of Suite 700 Must Take.** Effective as of the Suite 700 Expansion Effective Date (defined in Section 1.2 below), the Premises shall be increased by the addition of the Suite 700 Must Take Space. The term of the Lease for the Suite 700 Must Take Space (the "**Suite 700 Expansion Term**") shall commence on the Suite 700 Expansion Effective Date and, unless extended (pursuant to Section 2 of Exhibit "E" to the Lease) or sooner terminated in accordance with the Lease, end on the Expiration Date (i.e., May 31, 2024). From and after the Suite 700 Expansion Effective Date, the Suite 700 Must Take Space shall be subject to all the terms and conditions of the Lease except as provided herein. Except as may be expressly provided herein, (1) no representation or warranty made by Landlord with respect to the Premises shall apply to the Suite 700 Must Take Space, (2) Tenant shall not be entitled to receive, with respect to the Suite 700 Must Take Space, any allowance, free rent or other financial concession granted with respect to the Premises, and (3) the Suite 700 Must Take Space shall be accepted by Tenant in its configuration and condition existing on the date hereof (or, subject to Section 1.10 below, in such other configuration and condition as the existing tenant thereof may cause to exist in accordance with its lease), without any obligation of Landlord to perform or pay for any alterations to the Suite 700 Must Take Space, and without any representation or warranty regarding the configuration or condition of the Suite 700 Must Take Space.

6.2 **Suite 700 Expansion Effective Date.** As used in this Section 1, "**Suite 700 Expansion Effective Date**" means the date upon which Landlord delivers possession (if ever and pursuant to the Lease, as amended hereby) of the Suite 700 Must Take Space to Tenant free from occupancy by any party (including, without limitation, free of any such parties' personal property), which delivery date is anticipated to be no later than April 1, 2019 (the "**Suite 700 Target Delivery Date**"). The adjustment of the Suite 700 Expansion Effective Date and, accordingly, the postponement of Tenant's obligation to pay rent for the Suite 700 Must Take Space, shall be Tenant's sole remedy if the Suite 700 Must Take Space is not delivered to Tenant in accordance with the terms hereof as of the Suite 700 Target Delivery Date. Notwithstanding any contrary provision of the Lease, any delay or failure to deliver the Suite 700 Must Take Space shall not be a Landlord default nor subject Landlord to any liability for any loss or damage resulting therefrom or entitle Tenant to any credit, abatement or adjustment of rent or other sums payable under the Lease; provided, however, that Landlord shall not lease the Suite 700 Must Take Space to anyone other than Tenant and Landlord shall not extend the Suite 700 Existing Lease (defined below).

6.3 **Confirmation Letter.** At any time after the Suite 700 Expansion Effective Date, Landlord may deliver to Tenant a notice substantially in the form of **Exhibit B** attached hereto, as a confirmation of the information set forth therein. Tenant shall execute and return (or, by written notice to Landlord, reasonably object to) such notice within ten (10) business days after receiving it.

6.4 **Base Rent**. With respect to the Suite 700 Must Take Space, commencing on the Suite 700 Expansion Effective Date and continuing during the Suite 700 Expansion Term, Tenant shall pay Base Rent at the same then applicable annual rate per square foot as described in the rent table depicted in Section 1.4 of the Lease (as thereafter increased annually pursuant to such rent table). Notwithstanding the foregoing, Base Rent for the Suite 700 Must Take Space shall be abated for the first (2) full months of the Suite 700 Expansion Term; provided, however, that if a Default exists when any such abatement would otherwise apply, such abatement shall be deferred until the date, if any, on which such Default is cured. All such Base Rent shall be payable monthly by Tenant in accordance with the terms of the Lease provided, however, that the installment of Base Rent for the third full calendar month for which Base Rent is payable hereunder and the installment of Additional Rent for Expenses and Taxes for the third full calendar month for which such Additional Rent is payable hereunder shall be paid upon Tenant's execution and delivery of this First Amendment.

6.5 **Tenant's Share**. With respect to the Suite 700 Must Take Space during the Suite 700 Expansion Term, Tenant's Share shall be 12.8584%.

6.6 **Expenses and Taxes**. With respect to the Suite 700 Must Take Space during the Suite 700 Expansion Term, Tenant shall pay for Tenant's Share of Expenses and Taxes in accordance with the terms of the Lease.

6.7 **Improvements to the Suite 700 Must Take Space**. Following the Suite 700 Expansion Effective Date, Tenant shall be entitled to perform improvements to the Suite 700 Must Take Space, in accordance with the Work Letter attached to the Lease as **Exhibit B**, provided that (i) the Allowance for the Suite 700 Must Take Space shall be $733,925.00 (based upon $25.00 per rentable square foot of the Suite 700 Must Take Space) and may be used at Tenant's election for improvements to the Suite 700 Must Take Space and/or to the original Premises (i.e., Suite 500 and Suite 600), and (ii) if Tenant fails to use the entire Allowance (as calculated under this Section 1.7) by December 31, 2020, the unused amount shall revert to Landlord and Tenant shall have no further rights with respect thereto.

6.8 **Parking**. During the Suite 700 Expansion Term with respect to the Suite 700 Must Take Space, Tenant shall be entitled to use an additional eighty-eight (88) unreserved parking spaces in the Parking Facility in accordance with the terms of the Lease.

6.9 **Existing Tenant**. The parties acknowledge and agree that Landlord has previously leased the Suite 700 Must Take Space to a third party (such party, and any successor or assignee thereto, the "**Suite 700 Existing Tenant**") for a lease term extending through March 31, 2019 (the "**Suite 700 Existing Lease**"). If the Suite 700 Existing Tenant fails to surrender possession of the Suite 700 Must Take Space by the expiration of the Suite 700 Existing Lease, then Landlord shall use commercially reasonable efforts to recover possession of the Suite 700 Must Take Space from the Suite 700 Existing Tenant as soon thereafter as reasonably possible (including, if necessary in Landlord's reasonable judgement, by commencing and pursuing an unlawful detainer).

6.10 **Walk Through of the Suite 700 Must Take Space**. Landlord shall use commercially reasonable efforts, subject to the rights of the Suite 700 Existing Tenant under the Suite 700 Existing Lease, to schedule and perform, at least 90 days before the Suite 700 Target Delivery Date, a walk-through of the Suite 700 Must Take Space during which representatives of Landlord and Tenant may identify any leasehold improvements in the Suite 700 Must Take Space that (a) Landlord may have the right, under the Suite 700 Existing Lease, to require the Suite 700 Existing Tenant to remove, and (b) Tenant wishes not to be removed or to be removed. If Tenant provides to Landlord, within 15 days after the walk-through, a notice (a "**Non-Removal Notice**") identifying any leasehold improvements in the Suite 700 Must Take Space that Tenant does not wish to be removed before the Suite 700 Expansion Effective Date, then Landlord shall use commercially reasonable efforts to enforce any rights it may have under the Suite 700 Existing Lease to require the Suite 700 Existing Tenant to not perform such removal obligations, or, if applicable, to waive any such rights to cause the Suite 700 Existing Tenant to perform such removal obligations. Landlord shall within 10 business days after receiving Tenant's Non-Removal Notice, notify Tenant whether removal of the item(s) specified in Tenant's Non-Removal Notice shall be required of Tenant upon the expiration or earlier termination of the Lease; provided that in any event, Landlord shall not require the removal of Building-standard office improvements.

6.11 **Increased Security Deposit**. Concurrently with Tenant's execution of this First Amendment, Tenant shall deposit with Landlord an additional $90,713.13, for a total Security Deposit under the Lease, as amended herein, of $301,035.89. Landlord shall continue to hold the Security Deposit, as increased herein, in accordance with the terms and conditions of Section 21 of the Lease.

2. **California Civil Code Section 1938.** Pursuant to California Civil Code § 1938, Landlord hereby states that the Suite 700 Must Take Space has not undergone inspection by a Certified Access Specialist (CASp) (defined in California Civil Code § 55.52). Accordingly, pursuant to California Civil Code § 1938(e), Landlord hereby further states as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises". In accordance with the foregoing, Landlord and Tenant agree that if Tenant requests a CASp inspection of the Suite 700 Must Take Space, then Tenant shall pay (i) the fee for such inspection, and (ii) the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the Suite 700 Must Take Space; provided, that, if Tenant is required to obtain such CASp inspection by applicable Law or to avoid any penalty imposed under applicable Law, then the cost of and obligation for making any repairs necessary to correct violations of construction-related accessibility standards within the Premises shall be governed by the provisions of the Lease.

3. **Package HVAC Units.** In the event Tenant desires to utilize any existing dedicated heating, ventilation and air conditioning units ("**Package Units**") within the Premises, or installs, as an Alteration, new Package Units within the Premises, the plans and specifications for any Package Units shall be subject to Landlord's reasonable approval. If Tenant elects to utilize or install Package Units within the Premises, Tenant shall also install, at Tenant's sole cost and expense, separate meters or at Landlord's option, sub-meters, in order to measure the amount of electricity furnished to such Package Units and Tenant shall be responsible for Landlord's actual cost of supplying electricity to such units as reflected by such meters or sub-meters, which amounts shall be payable on a monthly basis as Additional Rent. Tenant shall be responsible for maintenance and repair of the Package Units pursuant to Section 25.5 of the Lease and such units may be subject to removal by Tenant upon the expiration or earlier termination of the Lease pursuant to Section 25.5 of the Lease.

4. **Signage.** Landlord, at Landlord's sole expense, shall include Tenant's name in any tenant directory located in the lobby on the first floor of the Building.

5. **Surrender**. Except as required under Section 23 of the Original Lease (regarding removal of Lines) and except as required under Section 25.5 of the Original Lease and Section 3 above (regarding Units and Package Units), upon the expiration or earlier termination of the Lease, as amended hereby, Tenant shall surrender possession of the original Premises (i.e., Suite 500 and Suite 600) to Landlord in as good condition and repair as exists

as of the date of this First Amendment, except for reasonable wear and tear, casualty, condemnation and repairs that are Landlord's express responsibility hereunder. Additionally, (a) in the event any Alterations are installed by Tenant in the Premises (i.e., in the original Premises or in the Suite 700 Must Take Space) after the date of this First Amendment which are not approved by Landlord, Tenant shall remove such non-approved Alterations upon the expiration or earlier termination of the Lease and repair any damage associated with such removal, and (b) in the event Alterations are installed by Tenant in the Premises after the date of this First Amendment (including, without limitation, any Tenant Improvement Work to be installed in the original Premises and/or the Suite 700 Must Take Space by Tenant in accordance with the Work Letter attached to the Lease as **Exhibit B**), which are approved by Landlord, Tenant shall not be required to remove such Tenant Improvement Work or Alterations upon the expiration or earlier termination of the Lease (other than non-Building standard office improvements identified by Landlord at the time of Landlord's approval of such Tenant Improvement Work or Alterations). Furthermore, with regard to the Suite 700 Must Take Space, Tenant shall remove any non-Building standard office improvements specified by Landlord for removal in Section 1.10 above. For clarity, nothing contained in this Section 5 shall be construed to limit Tenant's obligation to remove the Lines, Units, or Package Units upon the expiration or earlier termination of the Lease.

6. **Miscellaneous.**

6.1 This First Amendment and the attached exhibits, which are hereby incorporated into and made a part of this First Amendment, set forth the entire agreement between the parties with respect to the matters set forth herein. There have been no additional oral or written representations or agreements. Tenant shall not be entitled, in connection with entering into this First Amendment, to any free rent, allowance, alteration, improvement or similar economic incentive to which Tenant may have been entitled in connection with entering into the Lease, except as may be otherwise expressly provided in this First Amendment.

6.2 Except as herein modified or amended, the provisions, conditions and terms of the Lease shall remain unchanged and in full force and effect.

6.3 In the case of any inconsistency between the provisions of the Lease and this First Amendment, the provisions of this First Amendment shall govern and control.

6.4 Submission of this First Amendment by Landlord is not an offer to enter into this First Amendment but rather is a solicitation for such an offer by Tenant. Landlord shall not be bound by this First Amendment until Landlord has executed and delivered it to Tenant.

6.5 Capitalized terms used but not defined in this First Amendment shall have the meanings given in the Lease.

6.6 Tenant shall indemnify and hold Landlord, its trustees, members, principals, beneficiaries, partners, officers, directors, employees, mortgagee(s) and agents, and the respective principals and members of any such agents harmless from all claims of any brokers in connection with this First Amendment other than Savills Studley, claiming to have represented Tenant in connection with this First Amendment. Tenant acknowledges that any assistance rendered by any agent or employee of any affiliate of Landlord in connection with this First Amendment has been made as an accommodation to Tenant solely in furtherance of consummating the transaction on behalf of Landlord, and not as agent for Tenant.

6.7 This First Amendment may be executed in any number of duplicate originals, all of which shall be of equal legal force and effect. Additionally, this First Amendment may be executed in counterparts, but shall become effective only after each party has executed a counterpart hereof; all said counterparts when taken together, shall constitute the entire single agreement between the parties. This First Amendment may be executed by a party’s signature transmitted by portable document format ("pdf") or email or by a party's electronic signature (collectively, "pdf Signatures"), and copies of this First Amendment executed and delivered by electronic means or originals of this First Amendment executed by pdf Signature shall have the same force and effect as copies hereof executed and delivered with original wet signatures. All parties hereto may rely upon emailed or pdf Signatures as if such signatures were original wet signatures. Any party executing and delivering this First Amendment by pdf or email shall promptly thereafter deliver a counterpart signature page of this First Amendment containing said party's original signature. All parties hereto agree that a pdf or emailed signature page or a pdf Signature may be introduced into evidence in any proceeding arising out of or related to this First Amendment as if it were an original wet signature page.

6.8 Landlord and Tenant hereby acknowledge that in the event the Lease terminates pursuant to Section 2.3 of the Lease, this First Amendment shall likewise be terminated.

[Signatures are on the following page]

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this First Amendment as of the day and year first above written.

LANDLORD:

HUDSON CONCOURSE, LLC,
a Delaware limited liability company

By: Hudson Pacific Properties, L.P.,
a Maryland limited partnership,
its sole member

By: Hudson Pacific Properties, Inc.,
a Maryland corporation,
its general partner

By: /s/ Mark. T. Lammas

Name: Mark. T. Lammas

Title: Chief Operating Officer,
Chief Financial Officer & Treasurer

TENANT:

NUTANIX, INC., a Delaware corporation,

By: /s/ Kenneth Long

Name: Kenneth Long

Title: VP, Corporate Controller
Chief Accounting Officer

EXHIBIT A

THE SUITE 700 MUST TAKE SPACE

[***]

EXHIBIT B

CONFIRMATION LETTER

_____________________, 20__

To: ________________________

____

____

____

Re: First Amendment (the "**First Amendment**") dated ______________, 2018, between **HUDSON CONCOURSE, LLC,** a Delaware limited liability company ("**Landlord**"), and **NUTANIX, INC.**, a Delaware corporation ("**Tenant**"), concerning Suite 700 on the seventh (7th) floor (the "**Premises**") of the building located at 1745 Technology Drive, San Jose, California.

Dear _________________:

In accordance with the Lease, Tenant accepts possession of the Suite 700 Must Take Space and confirms the following:

1. The Suite 400 Expansion Delivery Date is _____________ and the Expiration Date is May 31, 2024.

2. The exact number of rentable square feet within the Suite 700 Must Take Space is _________ square feet, subject to Section 2.1.1 of the Lease.

3. Tenant's Share, based upon the exact number of rentable square feet within the entire Premises, is ____________%, subject to Section 2.1.1 of the Lease.

Please acknowledge the foregoing by signing all three (3) counterparts of this letter in the space provided below and returning two (2) fully executed counterparts to my attention.

"Landlord":

________________________________,

a ________________________

By: ___________________________

Name: ___________________________

Title: ___________________________

Agreed and Accepted as of _________, 20 _.

"Tenant":

________________________________,

a ________________________

By: ___________________________

Name: ___________________________

Title: ___________________________

Exhibit 21.1

SUBSIDIARIES OF NUTANIX, INC.

Name	Jurisdiction
Nutanix Netherlands B. V.	Netherlands
Nutanix Cayman Islands Ltd.	Cayman Islands

Form 10-K

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement Nos. 333-227491and 333-227513 on Form S-3 and Registration Statement Nos. 333-213888, 333-220517, 333-227490, and 333-233499 on Form S-8 of our report dated September 24, 2019, relating to the consolidated financial statements of Nutanix, Inc. and its subsidiaries (the “Company”), and the effectiveness of the Company’s internal control over financial reporting, appearing in this Annual Report on Form 10-K of Nutanix, Inc. for the year ended July 31, 2019.

/s/ DELOITTE & TOUCHE LLP

San Jose, California
September 24, 2019

Exhibit 31.1

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Dheeraj Pandey, certify that:

1. I have reviewed this Annual Report on Form 10-K of Nutanix, 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

   (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 officers 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: September 24, 2019

/s/ Dheeraj Pandey
Dheeraj Pandey
Chairman and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Duston M. Williams, certify that:

1. I have reviewed this Annual Report on Form 10-K of Nutanix, 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 officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

   (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 officers 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: September 24, 2019

/s/ Duston M. Williams
Duston M. Williams
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Dheeraj Pandey, certify pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of Nutanix, Inc. for the year ended July 31, 2019, fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act 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 Nutanix, Inc.

Date: September 24, 2019

/s/ Dheeraj Pandey
Dheeraj Pandey
Chairman and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

**CERTIFICATIONS OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

I, Duston M. Williams, certify pursuant to Rule 13a-14(b) of the Securities Exchange Act of 1934, as amended, (the “Exchange Act”) and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. §1350), as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of Nutanix, Inc. for the year ended July 31, 2019, fully complies with the requirements of Section 13(a) or 15(d) of the Exchange Act 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 Nutanix, Inc.

Date: September 24, 2019

/s/ Duston M. Williams
Duston M. Williams
Chief Financial Officer
(Principal Financial Officer)