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 September 30, 2020

or

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

For the transition period from to .

Commission File Number 000-26041

F5 Networks, Inc.

(Exact name of Registrant as specified in its charter)

Washington	91-1714307
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

801 5th Avenue
Seattle, Washington 98104
(Address of principal executive offices, including zip code)

(206) 272-5555
(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
Common stock, no par value	FFIV	NASDAQ Global Select Market

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

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

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

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See 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 Exchange Act). Yes ☐ No ☒

As of March 31, 2020, the aggregate market value of the Registrant's Common Stock held by non-affiliates of the Registrant was $6,445,848,331 based on the closing sales price of the Registrant's Common Stock on the NASDAQ Global Select Market on that date.

As of November 9, 2020, the number of shares of the Registrant's common stock outstanding was 61,603,102.

DOCUMENTS INCORPORATED BY REFERENCE

Information required in response to Part III of this Form 10-K (Items 10, 11, 12, 13 and 14) is hereby incorporated by reference to the specified portions of the Registrant's Definitive Proxy Statement for the Annual Shareholders Meeting for fiscal year 2020, which Definitive Proxy Statement shall be filed with the Securities and Exchange Commission pursuant to Regulation 14A within 120 days of the end of the fiscal year to which this Report relates.

F5 NETWORKS, INC.

ANNUAL REPORT ON FORM 10-K
For the Fiscal Year Ended September 30, 2020

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Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and Section 27A of the Securities Act of 1933. These statements include, but are not limited to, statements about our plans, objectives, expectations, strategies, intentions or other characterizations of future events or circumstances and are generally identified by the words “expects,” “anticipates,” “intends,” “plans,” “believes,” “seeks,” “estimates,” and similar expressions. These forward-looking statements are based on current information and expectations and are subject to a number of risks and uncertainties. Our actual results could differ materially and adversely from those expressed or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed under “Item 1A. Risk Factors” below and in other documents we file from time to time with the Securities and Exchange Commission. We assume no obligation to revise or update any such forward-looking statements.

Unless the context otherwise requires, in this Annual Report on Form 10-K, the terms “F5,” “the Company,” “we,” “us,” and “our” refer to F5 Networks, Inc. and its subsidiaries. Our fiscal year ends on September 30, and fiscal years are referred to by the calendar year in which they end. For example, “fiscal year 2020” and “fiscal 2020” refer to the fiscal year ended September 30, 2020.

In December 2019, a novel strain of coronavirus (“COVID-19“) was first identified, and in March 2020, the World Health Organization categorized COVID-19 as a pandemic. We assessed the impact that COVID-19 had on our results of operations, including, but not limited to an assessment of our allowance for doubtful accounts, the carrying value of short-term and long-term investments, the carrying value of goodwill and other long-lived assets, and the impact to revenue recognition and cost of revenues. We are actively monitoring the impact to the results of our business operations, and may make decisions required by federal, state or local authorities, or that are determined to be in the best interests of our employees, customers, partners, suppliers and stockholders. As of the filing date, the extent to which the COVID-19 pandemic may impact our financial condition or results of operations remains uncertain.

Item 1. *Business*

General

F5 is a multi-cloud application security and delivery company. We see a world where our customers’ applications adapt to changing environments, automating redundant processes for greater efficiencies, expanding and contracting based on performance needs, protecting themselves, and securing points of vulnerability. By mining all of these data points, applications get smarter, insightful, become self-healing, and evolve even more quickly.

Our enterprise-grade solutions are available in a range of consumption models, from on-premises to managed services, optimized for multi-cloud environments. In connection with our solutions, we offer a broad range of professional services, including consulting, training, installation, maintenance, and other technical support services.

On January 24, 2020, we completed the acquisition of Shape Security ("Shape"), a leader in online fraud and abuse prevention, adding protection against automated attacks, bots, and targeted fraud to F5’s world-class portfolio of application delivery and security solutions. The acquisition delivers value to customers by combining F5’s expertise in powering over half of the world’s applications across multi-cloud environments, with Shape’s insight from mitigating one billion application attacks per day through sophisticated AI, cloud-based analytics, and anti-fraud technologies. Together, F5 and Shape represent an end-to-end application security solution, reducing infrastructure complexity, protecting our customers against losses from online fraud, reputational damage, and disruptions to critical online services.

Our customers include large enterprise businesses, public sector institutions, governments, and service providers. We conduct our business globally and manage our business by geography. Our business is organized into the following three geographic regions: Americas; Europe, Middle East, and Africa (EMEA); and the Asia Pacific region (APAC).

Our revenue is comprised of services revenue and product revenue. While the majority of our product revenue today is derived from appliance sales, we are actively managing a transformation to a software- and SaaS-driven business with software revenue growing 52% in fiscal year 2020 and representing 35% of product revenue.

F5 was incorporated on February 26, 1996 in the state of Washington. Our headquarters is in Seattle, Washington, and our mailing address is 801 5th Avenue, Seattle, Washington 98104-1663. The telephone number at that location is (206) 272-5555. Our website is www.f5.com. We have 71 subsidiaries, branch offices, or representative offices worldwide. Through a link on the Investor Relations section of our website, we make available the following filings as soon as reasonably possible after they are electronically filed with or furnished to the Securities and Exchange Commission (SEC): our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and any amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act. All such filings are available free of charge. The information posted on our website is not incorporated into this report.

Strategy and Priorities

F5 is focused on solving our customers' most important application challenges. We have successfully evolved our business as the needs of our customers have changed. Today, our customers need to cost effectively deliver extraordinary digital experiences to their end users. F5's portfolio of multi-cloud application security and delivery technologies enables our customers to scale, secure and optimize both traditional and modern applications, making those amazing digital experiences possible. By creating adaptive applications, capable of adapting to changing environments, automating redundant processes for greater efficiencies, expanding and contracting based on performance needs, protecting themselves, and securing points of vulnerability, we are reducing operating complexity associated with delivering a mix of traditional and modern applications while also enabling consistent security for every application, regardless of its environment. Our ability to mine and analyze data from applications helps customers unlock valuable application insights while making applications smarter, enabling self-healing and automation to evolve them more quickly.

Key components of our strategy include:

Bringing our adaptive application vision to life

F5 is uniquely positioned to deliver adaptive applications. Through our organic investments and the acquisitions of NGINX in May 2019 and Shape Security in January 2020, we have assembled the broadest portfolio of application security and delivery technologies in the market today. As a result of the continued evolution of our BIG-IP family, we enable customers to transition traditional applications from data centers to multi-cloud environments while maintaining private data center levels of security. At the same time, we are enabling modern application architectures with our NGINX technologies, F5 SaaS offerings, and Aspen Mesh. Our State of Applications Services report 2020 shows 76% of organizations are managing a complex application portfolio spanning traditional and modern applications. F5 is unique in our ability to span both traditional and modern applications, as a result, our customers are able to provision consistent, and industry-leading application security across their combined traditional and modern application portfolio. We are leveraging our access to application data and our analytics capabilities to enable automation and unlock business insights for our customers.

Transforming how customers experience F5

As we expand the role we play for our customers, we are also transforming how our customers experience F5. We have made it easier for our customers to procure, deploy, manage, and upgrade our technologies by introducing new consumption models and continuing to evolve our solutions' capabilities.

As we have expanded our offerings, we are better able to solve a broader range of customer challenges and increasingly, customers are choosing a suite of F5 solutions. Going forward we will leverage and grow our foundational capabilities in data and insights, digital sales, and SaaS-delivered capabilities to deliver consistent world-class customer experiences, including simple, integrated and friction-free consumption of our technologies. We will continue to improve customer understanding of F5's expanded portfolio with a focus on buying personas and business needs and intend to enhance our digital customer experiences to deliver both growth and efficiency.

Capturing growth in security and software

Our ability to serve both traditional and modern applications means we are uniquely suited to provide consistent, industry-leading security across our customers entire application estate. Over the last ten years, enterprises were focused on protecting their networks from attack. F5 Labs Threat Research shows a 300% increase in attacks on applications in the past two years. With cyber criminals increasingly attacking applications and their users, we believe application security will be an area of significant investment over the next decade.

Our acquisition of Shape Security brings the leader in online fraud and abuse prevention, adding protection against automated attacks, bots, and targeted fraud, to F5's world-class portfolio of application security and delivery technologies. Together, F5 and Shape represent an end-to-end application security solution, reducing infrastructure complexity, protecting our customers against losses from online fraud, reputational damage, and disruptions to critical online services.

In the last several years, we have significantly enhanced and expanded our software offerings. Our meaningful software growth over the last two years has largely been driven by steps we have taken to improve automation and orchestration in our BIG-IP software, making it easier to procure, deploy and upgrade, as well as the introduction of new flexible commercial models, including annual and longer-term subscriptions. We expect to drive continued software growth from additional enhancements to our BIG-IP family, as well as advancements and continued adoption of NGINX, application security, Shape and cloud services.

F5 Products and Solutions

F5's portfolio of multi-cloud application security and delivery technologies are enabling customers to address the challenges of delivering differentiated digital experiences to their customers.

Simplifying traditional app delivery for multi-cloud environments

Our BIG-IP family of offerings provides feature-rich, highly programmable and configurable application delivery solutions for traditional applications in enterprises and service providers. Traditional applications are based on monolithic, three-tier, or client-server architectures which remain the dominant architecture for millions of core business, customer-facing, and internally used applications in most organizations.

Refined over 20+ years of experience and innovation, BIG-IP has established itself as the leading application delivery technology for traditional applications, providing load balancing, and DNS services. Many customers also use the advanced security capabilities of BIG-IP, including Web Application Firewall, carrier-grade firewall and NAT, identity-aware proxy, SSL-VPN, and SSL offloading, that are available as tightly-integrated modules or extensions. Via the F5 Automation Toolchain, BIG-IP capabilities easily integrate into orchestration frameworks such as Ansible, HashiCorp Terraform, OpenShift, and Cloud Foundry as part of a CI/CD pipeline.

BIG-IP capabilities are available in software-only Virtual Editions (VEs) that deploy on any standard hypervisor in private and public clouds and are available in many performance throughput options. VE can be deployed on public clouds, including Amazon Web Services, Microsoft Azure, and Google Cloud Platform, through Bring Your Own License (BYOL) and the public cloud marketplaces. Virtual Edition is available via utility pricing (via public cloud marketplaces), short- and long-term subscription, and perpetual licensing models. In addition, F5 offers customers additional licensing, consumption flexibility, and value via Enterprise Licensing Agreements.

BIG-IP Cloud Edition (CE) is a software offering that enables customers to leverage BIG-IP capabilities in virtualized and cloud-based environments on a per-application basis. CE provides right-sized packaging and pricing and enhanced manageability for organizations that want to deploy dedicated BIG-IP services to support individual applications.

F5 BIG-IQ Centralized Management provides central management, analytics, and automation for BIG-IP instances. Available in virtual or physical form factors, BIG-IQ simplifies, enhances management of, and reduces customer operational costs associated with BIG-IP deployments.

F5's physical systems are designed to enhance the performance of our software by leveraging a combination of custom FPGA logic and off-the-shelf silicon, providing a balance of cost and flexibility. Currently, we offer two types of physical configurations: BIG-IP iSeries appliances and our chassis-based VIPRION systems. Both BIG-IP iSeries and VIPRION systems run the same BIG-IP software modules as are available in the Virtual Edition and are licensed on a perpetual basis. To help customers comply with regulatory requirements and protect sensitive data, our physical systems are certified up to NIST FIPS 140-2 Level 2 and Common Criteria Evaluation Assurance Level (EAL 4+). BIG-IP iSeries appliances and chassis-based VIPRION systems differ primarily in their performance and size characteristics resulting from the hardware components and configurations that make up these systems. The iSeries appliance lineup ranges from the entry-level BIG-IP i2000 series for small and medium-sized organizations to the highest-performing BIG-IP i15000 series for large enterprises and service providers. Currently, we offer four chassis-based systems: VIPRION 4800, VIPRION 4480, VIPRION 2400, and VIPRION 2200. We also offer the VIPRION 4450 blade for VIPRION 4800 (8-blade chassis) and VIPRION 4480 (4-blade chassis).

Enabling modern app delivery at scale

To better address the needs of digitally transforming enterprises that have a mix of traditional, three-tier architectures and cloud-first microservices architectures, our NGINX technologies offer lightweight, agile ADC and API management software for container-built applications, CI/CD workflows, and microservices. Our NGINX technology enables developer and DevOps agility to get applications to market quickly, with security and automation closer to the code. F5 SaaS offerings support modern cloud application delivery and security use cases for cloud-native applications, making it easier for developers and DevOps engineers to build in the application services required for production.

Our NGINX product offerings are:

- NGINX Plus, an all-in-one load balancer, web server, content cache, and API gateway for modern applications.
- NGINX Controller, which provides orchestration and analytics for NGINX Plus.
- NGINX Ingress Controller and NGINX Service Mesh, which provide traffic management for Kubernetes clusters.
- NGINX App Protect, which integrates F5's market-leading WAF with the flexibility and performance of NGINX Plus.

We believe the combination of F5 and NGINX solutions help our customers enable adaptive applications in container, cloud-native, and microservices environments, providing the ease-of-use and flexibility developers require while also delivering the scale, security, reliability, and enterprise readiness network operations teams demand.

Securing every app, anywhere

F5's advanced application security services, including DDoS mitigation, web application firewall (WAF), bot protection, and SSL/TLS traffic decryption provide best-in-class enterprise infrastructure protection across any deployment type, from on-premises to cloud.

With Essential App Protect SaaS and NGINX App Protect software offerings, F5 provides its advanced security capabilities for development and DevOps teams. Both Essential App Protect and NGINX App Protect provide self-service access and API-driven integration into automation and orchestration frameworks. Often referred to as "shifting security left", or DevSecOps, this ensures security is applied earlier in the software development lifecycle and covers the full portfolio of modern and long-tail applications in the enterprise.

Shape's technology addresses the increasing sophistication of fraud and abuse attacks. Shape's artificial intelligence platform protects the largest banks, airlines, retailers, and federal agencies against bots and fraud which bypass best-practice industry security controls. Shape protects more than one billion accounts worldwide against credential stuffing attacks, the industry's leading cybersecurity threat.

Shape's advanced technology consists of next-generation client-side JavaScript and SDKs (software development kits), horizontally scalable reverse proxy and API services, and large-scale machine learning, analytics, and data platform systems, which work together to deliver the highest anti-fraud efficacy in the industry. This technology is sold as integrated, fully-managed services, in an "outcome-as-a-service" cybersecurity model.

Silverline provides customers fully-managed application security. Current offerings include Silverline Web Application Firewall, Silverline DDoS Protection, and Silverline Threat Intelligence Services. These services provide enterprise and service provider customers with F5's proven security technologies coupled with world-class security professionals. Silverline's Security Operations Center experts set up, manage, and support each customer's application solutions as an extension to the customer's staff. Shape technology was combined in F5's fiscal third quarter with F5's Silverline managed services platform to launch Silverline Shape Defense, creating a version of Shape's technology platform capabilities for customers who prefer a managed service.

Depending on the level of protection required, customers can route traffic through the Silverline cloud-based platform 24/7 or only when an attack is detected. Silverline Managed Services also provides an affordable and straightforward deployment alternative for customers who want to minimize the upfront costs and expense of maintaining on-premises solutions. For large enterprises, subscribing to Silverline Managed Services in conjunction with our on-premises DDoS Hybrid Defender and Advanced WAF can provide the first line of defense against attacks, and prevent them from having a significant downtime impact on their application or network services.

Unlocking the value of application insights

Beacon, a SaaS application launched in the first quarter of fiscal 2020, enables cross-platform visibility and analytics of application service performance and security. By fusing the broad telemetry available via in-situ F5 products with third-party data sources and end-user monitoring capabilities, Beacon helps customers detect and resolve application performance and security issues helping reduce mean-time-to-detect, -innocence, and -repair enabling better end-user experiences.

Shape's technology platform enables generalized AI-powered user analytics. While Shape has focused on using these capabilities to detect advanced fraud and abuse, going forward, the same technology is being integrated throughout F5 to create general AI-powered user analytics capabilities within and beyond cybersecurity use cases.

Service Provider Solutions

BIG-IP offerings also comprise our service provider solutions that address the complex requirements for enabling fast, secure, reliable communications among the elements of existing infrastructures such as 4G/LTE and evolving to newly designed cloud-native 5G networks, network functions virtualization (NFV) environments, and edge computing.

In addition to the solutions described above, F5 also offers solutions for fixed and mobile service provider customers to enable fast, secure, reliable communications in their networks. These solutions include intelligent traffic management services to classify and manipulate network traffic to successfully manage and migrate to newer technologies such as IPv4 to IPv6 and 4G to 5G. Our carrier-class network firewall services are used to secure the Gi/N6 interface, secure signaling threats and IoT applications, and detect and mitigate DDoS attacks. Our solutions are also used by our customers to secure complex signaling for mobility protocols like Diameter, SIP, and GTP, as well as IoT protocols. All F5 software solutions can be delivered on dedicated F5 hardware, as Virtual Network Functions (VNFs) that can use F5 VNF Manager or other industry solutions to deploy and manage VNF instances, and are evolving as Container Network Functions (CNF).

Competition

As F5 expands its reach and role into a broader set of multi-cloud solutions, the companies that we consider competitors changes too. In addition to server load balancing, traffic management, and other functions normally associated with application delivery, our suite of solutions has expanded our addressable market into security, and policy management, where we compete with a number of companies focused on niche areas of application security. The ability to create customized, programmable services (e.g., using iRules) enables our customers and our partners to design solutions to problems for which there is no off-the-shelf solution. As a result, we believe the traditional definitions of our market do not encompass all of the features, functions, and capabilities of our products, or accurately represent the addressable market for our solutions.

Within the more narrowly defined traditional ADC market, several companies sell server load balancing products and capabilities. These include Citrix Systems, Radware, and a number of other competitors that have a smaller market presence or limited feature set, such as A10 Networks, Amazon Web Services, Array Networks, Barracuda Networks, HAProxy, Kemp Technologies, Microsoft Azure, and VMware.

In application security, we compete with companies that provide web application firewalls, bot detection and mitigation, carrier-grade firewall, carrier-grade NAT, SSL orchestration, access policy management, DDoS protection, and fraud defense. Competitors include A10 Networks, Akamai, Cisco, Citrix Systems, Imperva, Juniper Networks, Radware, and Symantec/Blue Coat. With the addition of Shape, additional fraud, abuse, and analytics solutions become indirect competitors, including Akamai, Cloudflare, Imperva (Distil Networks), Fastly (Signal Sciences) and PerimeterX.

The principal competitive factors in the markets in which we compete include form factor, consumption model, ecosystem integrations, features and performance, customer support, brand recognition, scope of distribution and sales channels, and pricing. Some of our competitors have already tried or plan to adopt aggressive pricing policies to gain market share. However, because F5 offers superior performance, broad functionality, including lighter-weight options with NGINX and F5 Cloud Services, we believe that we can and will compete effectively against such pricing policies.

Corporate Functions

Customer Services and Technical Support

In connection with our products, we offer a broad range of professional services including consulting, training, installation, maintenance, and other technical support services.

We believe that our ability to provide consistent, high-quality customer service and technical support is a key factor in attracting and retaining large enterprise and service provider customers. Accordingly, we offer a broad range of support services that includes installation, phone and online technical support, hardware repair and replacement, software updates, online tools, consulting, and training services.

We provide these services directly to end users and also utilize a multi-tiered support model, leveraging the capabilities of our channel partners. Our technical support staff is strategically located in regional service centers to support our global customer base.

Product Development

We believe our future success depends on our ability to maintain technology leadership by continuing to improve our products and by developing new products to meet the changing needs of our customers and partners. Our engineering organization uses standard processes for the development, documentation, and quality control of services, software, and systems that are designed to meet these goals. These processes include working with our business development and marketing teams, customers, and partners to identify technology innovation opportunities to better meet the evolving needs of our addressable markets.

Over 90 percent of our engineers are engaged in software, SaaS, and managed services development in eight major locations. The BIG-IP LTM, DNS, and Automation Tool Chain offerings are primarily developed in Seattle, Washington and Hyderabad, India. Development of security products is centered in Tel Aviv, Israel and San Jose, California with our web application firewall and WebSafe/MobileSafe centered in Tel Aviv, and our core firewall (AFM) and identity and access and SSL-offloading products and technologies developed primarily in San Jose. Policy Enforcement Manager is also developed in

San Jose and Hyderabad, India. NGINX products are developed in San Francisco, California; Cork, Ireland; and Moscow, Russia.

Our hardware engineering team is located in Spokane, Washington; San Jose, California; and Tel Aviv, Israel.

Smaller development sites including Boulder, Colorado; Warsaw, Poland; and Billerica, Massachusetts also support the core development teams in the larger centers.

Members of all our engineering teams collaborate closely with one another to ensure the interoperability and performance of our solutions.

We believe that robust and constant innovation is a necessity for F5, so we are also innovating in new ways. For more than a year now, we have had dedicated teams focused on testing new disruptive innovations in technology, business models, or customer segments. We expect innovations resulting from the work of these teams will be complementary to our goal of delivering the broadest and most consistent portfolio of solutions across cloud and on-premises environments.

We rely on a combination of patent, copyright, trademark, and trade secret laws and restrictions on disclosure to protect our intellectual property rights. F5 holds 387 patents in the United States and has 44 international patents (with applications pending for various aspects of our technology). Our future success depends in part on our ability to protect our proprietary rights to the technologies used in our principal products. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use trade secrets or other information that we regard as proprietary. In addition, the laws of some foreign countries do not protect our proprietary rights as fully as the laws of the United States. Any issued patent may not preserve our proprietary position, and competitors or others may develop technologies similar to or superior to our technology. Our failure to enforce and protect our intellectual property rights could harm our business, operating results, and financial condition.

In addition to our own proprietary software, we incorporate software licensed from several third-party sources into our products. These are generally term licenses which may renew annually and that generally provide for certain rights and licenses to support our customers post termination. While we may not be able to renew all of these licenses in the future, we believe that alternative technologies for these licenses are available both domestically and internationally.

During the fiscal years ended September 30, 2020, 2019 and 2018, we had research and product development expenses of $441.3 million, $408.1 million, and $366.1 million, respectively.

Sales and Marketing

Our customers include a wide variety of enterprises and service providers among Fortune 1000 and Business Week Global 1000 companies, including those in technology, telecommunications, financial services, transportation, education, manufacturing, healthcare, and government. In fiscal year 2020, sales outside of the Americas represented 44.0% of our net revenues. Refer to Note 16 of our consolidated financial statements included in this Annual Report on Form 10-K for additional information regarding our revenues by geographic area.

Sales

We sell our products and services to large and medium enterprise customers, including federal government entities, financial services customers and service providers through a variety of routs to market and channels. Our sales teams sell our products and services directly to customers by working closely with our channel partners including distributors, value-added resellers (VARs), managed service providers (MSPs), and systems integrators.

F5 sales teams. Our inside sales team generates and qualifies leads from marketing and helps manage accounts by serving as a liaison between the field and internal corporate resources. Our outside sales team works directly with partners and customers across the globe. Our field sales personnel are located in major cities in three sales regions: the Americas (primarily the United States); Europe, the Middle East, and Africa (EMEA); and the Asia Pacific region (APAC). Field sales personnel work closely with our channel partners to sell our products and services to their customers. We reward partners that identify new business and provide sales expertise for our portfolio of products and solutions through various incentive programs. Systems engineers, with deep technical domain expertise, support our regional sales account managers and channel partners providing pre-sale technical solution engineering and support, as needed.

Distributors, VARs, and MSPs. As a key component of our sales strategy, we have established relationships with a number of large national and international distributors, local and specialized distributors, VARs, and MSPs. We derive a majority of our product sales from VARs and MSPs, relying on our large distributors for fulfillment, training, and partner enablement.

Our agreements with our channel partners are not exclusive and do not prevent them from selling competitive products. These agreements typically have one-year terms with no obligation to renew, and typically do not provide for exclusive sales territories or minimum purchase requirements.

For fiscal year 2020, sales to one of our worldwide distributors, Ingram Micro, Inc., represented 16.7% of our total revenues. Our agreements with distributors are standard, non-exclusive distribution agreements that renew automatically on an annual basis and generally can be terminated by either party with 90 days written notice prior to the start of any renewal term. The agreements grant certain distributors the right to distribute our products to resellers, with no minimum purchase requirements.

Systems integrators. We also market our products through strategic relationships with systems integrators, including Dell Services, DXC, HP Enterprise Services, and IBM Global Services, who include our products as core components of application deployments or network-based solutions they deploy for their customers. In most cases, systems integrators do not directly purchase our products for resale to their customers. Instead they typically recommend and/or manage our products as a part of broader solutions supporting enterprise applications and Internet facing systems that incorporate our technology for security, high availability, and enhanced performance.

Resellers and technology partners. Historically, our ability to compete with much larger companies has been strengthened through partnerships with large systems and software vendors. Currently, we partner with many technology partners and public cloud providers who resell our products. We have ongoing partnerships with the major cloud providers such as Amazon Web Services (AWS), Microsoft Azure, and Google Cloud Platform and have expanded our reseller routes to market to include their public cloud marketplaces. F5 has recently signed a Strategic Collaboration Agreement (SCA) with AWS, and are actively engaged with Microsoft Azure on private offers levering our software on Azure. Our business development team manages these relationships and closely monitors adjacent and complementary markets for opportunities to partner with those whose solutions are complementary to ours and could enable us to expand our addressable market.

Marketing

As we continue to expand our offerings beyond hardware and advance our range of consumption models (e.g. from on-premises to managed services), we continue to focus on driving a compelling and unique value proposition of F5 among our existing customers as well as new buying centers. In addition to revitalizing our brand in the market, our expansion into new buying centers among existing customers (DevOps for example), exploration of new routes to market (such as public cloud marketplaces), and acquisition of a host of net new customers, compels us to increase our focus and investments in more digitally-enabled, personalized and effortless experiences at scale.

We are increasing our focus on efforts to drive momentum behind our brand and reputation to deliver clarity, guidance and inspiration among our existing customers, future customers, partners, and employees around our evolving strategy behind F5's unique offering. Additionally, to best support our growth as we transform our role in driving value for our customers, we are underway with transforming marketing from a cost center to one of a revenue center to serve as a meaningful and predictable source of opportunities, customer growth and ultimately revenues. The critical success factors in this shift are increased investments in digital technologies, requisite competencies, and shifting our culture to adopt an agile mindset as we use data to constantly improve our contributions to our customers and ultimately our shareholders.

Manufacturing

We outsource the manufacturing of our pre-configured hardware platforms to a third-party contract manufacturer, Flex Ltd. ("Flex"), for building, assembling, and testing according to our specifications at Flex's facilities in Guadalajara, Mexico and Zhuhai, China. Flex also performs the following activities on our behalf: material procurement, PCB assembly and test, final assembly, system test, quality control, and direct shipment.

We provide a rolling forecast that allows Flex to stock component parts and other materials, plan capacity, and build finished goods inventory in anticipation of end-user demand. Flex procures components in volumes consistent with our forecast, assembles the products, and tests them according to our specifications. Generally, we do not own the system components. Hardware components for our products consist primarily of commodity parts and certain custom components. Most of our components are purchased from sources which we believe are readily available from other suppliers. However, some components are purchased from a single or limited source. If the components are unused or the products are not sold within specified periods of time, we may incur carrying charges or obsolete material charges for components that our contract manufacturers purchased to build products to meet our forecast or customer orders.

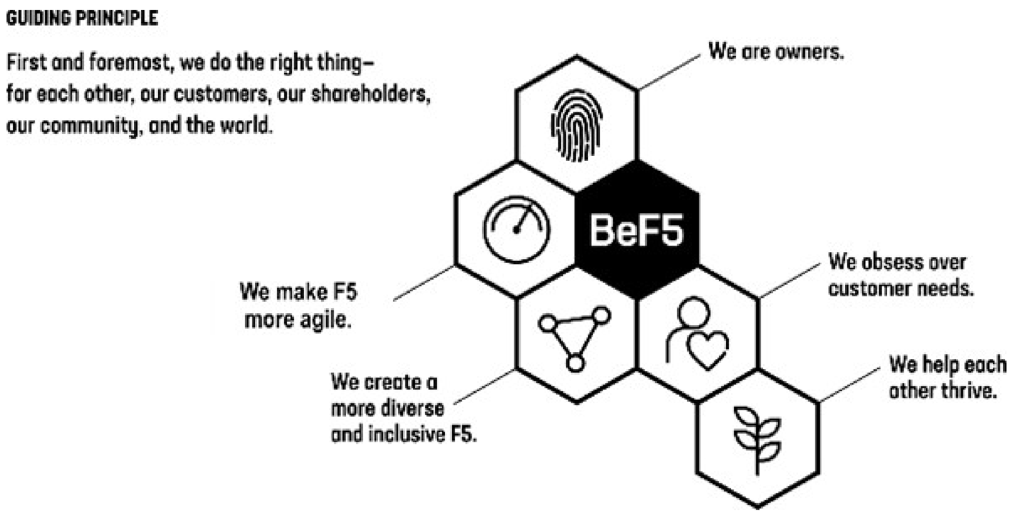
Systems built in Guadalajara are shipped to the Flex fulfillment center in Milpitas, California for distribution primarily to distributors, value-added resellers, or end users in EMEA and the Americas. Systems built and fulfilled in Zhuhai are for distribution to partners and customers in APAC. Title to the products transfers from Flex to us and then to our customers upon shipment from a designated fulfillment location.

Employees

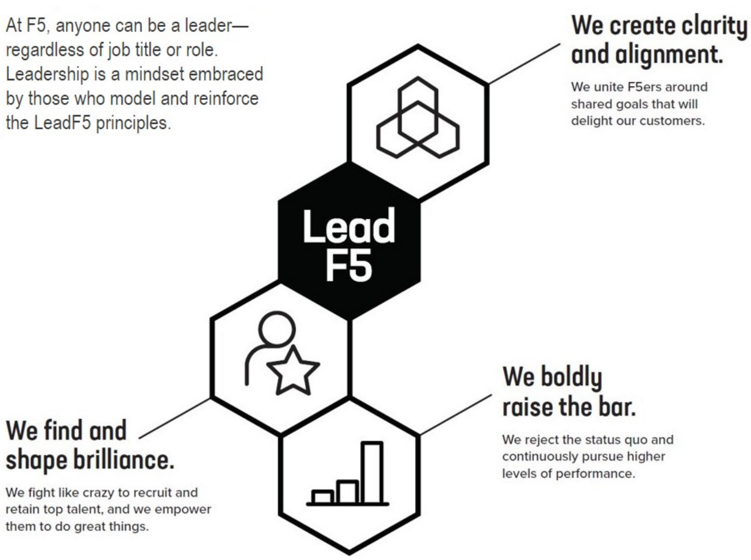
As of September 30, 2020, we had 6,109 employees – over 99% of whom were full time employees. Our employees are in 47 countries with 55% of employees in the United States. None of our employees are represented by a labor union. We have experienced no work stoppages and believe that our employee relations are in good standing, as evidenced by our bi-annual employee engagement survey results.

Culture and engagement

In 2018, we defined and launched BeF5. BeF5 conveys our Guiding Principle of "Do the right thing" and the five behaviors which unite F5ers and which we expect all employees to emulate.



In 2019, we defined and created our principles for leadership, referred to as LeadF5.



Communications, performance management, development, and a number of other employee engagement activities connect and reinforce BeF5 and LeadF5.

F5 supports employees and our culture through competitive benefits, a flexible work program which allows employees to work remotely, and a quarterly Zoom Out Day, dedicated to learning and exploring new ideas. During the current global crisis surrounding COVID-19, racial injustice, political uncertainty and natural disasters, we have provided employees and leaders with a variety of support and resources to help them thrive, including new wellness programs, educational series, additional remote working flexibility and support, and time off. Additionally, our Global Good program supports vulnerable communities where we work through volunteer efforts, matching of employee donations and volunteer time.

Growth and development

Ongoing development of our workforce is supported across multiple learning organizations within F5, providing opportunities to improve technical and professional knowledge, better understand our business and products, and strengthen management and leadership. Employees have access to multiple third-party resources to enhance the learning opportunities developed internally.

Diversity and Inclusion

F5 believes our differences—when embraced with humility and respect—drive smarter decisions, increased innovation, stronger performance, and a culture where everyone can be themselves and reach their full potential.

Employee Inclusion Groups (EIGs) – F5 Ability, F5 Appreciates Blackness, F5 Connects Women, F5 Latinx e Hispanos Unidos, F5 Military Veterans, F5 Multicultural and F5 Pride – bring people together across F5 around the world. All seven EIGs have a dedicated budget and executive sponsor. F5's EIGs are employee-led and such employee leaders participate in a F5 sponsored leadership development program. Each leader has dedicated time toward cultivating their EIG and growing as a leader themselves. In this way, F5 is building an internal diverse and inclusive leadership pipeline within the Company. During fiscal year 2020, our EIGs have played a critical role in F5 offering distinct programming to help build awareness, host community events, commemorate important dates, develop our employees, and attract diverse talent to F5.

Compensation and Benefits

F5 offers a competitive Total Rewards package intended to attract, retain and motivate our employees. Our package includes market-competitive pay, incentive plans, restricted stock unit grants (RSUs), an Employee Stock Purchase Plan, retirement plans, healthcare, paid time off and family leave.

Governance

In April 2020, F5 formally updated the Compensation Committee charter to reflect a broadening of its purview beyond executive compensation to include oversight of our policies and strategies relating to talent management and development.

Executive Officers of the Registrant

The following table sets forth certain information with respect to our executive officers as of November 19, 2020:

Name	Age	Position
François Locoh-Donou	49	President, Chief Executive Officer, and Director
Tom Fountain	44	Executive Vice President of Global Services and Chief Strategy Officer
Geng Lin	56	Executive Vice President and Chief Technology Officer
Frank Pelzer	50	Executive Vice President and Chief Financial Officer
Gus Robertson	51	Senior Vice President and General Manager, NGINX
Scot Rogers	53	Executive Vice President and General Counsel
Kara Sprague	40	Executive Vice President and General Manager, BIG-IP
Derek Smith	56	Senior Vice President and General Manager, Shape
Chad Whalen	49	Executive Vice President, Worldwide Sales
Ana White	47	Executive Vice President and Chief Human Resources Officer
Mika Yamamoto	48	Executive Vice President and Chief Marketing and Customer Experience Officer

François Locoh-Donou has served as our President, Chief Executive Officer and member of our Board of Directors since April 2017. Prior to joining F5, Mr. Locoh-Donou served as Senior Vice President and Chief Operating Officer of Ciena Corporation. During his more than 15 years at Ciena, Mr. Locoh-Donou served in several leadership positions. From August 2011 to October 2015, he served as Ciena's Senior Vice President, Global Products Group. Previously, he served as Ciena's Vice President and General Manager, Europe, Middle East and Africa from June 2005 to August 2011. He holds an M.B.A. from Stanford University, a 'Mastere' in Optical Telecommunications from the National Institute of Telecommunications of Paris (ENST), and a 'Diplome d'Ingenieur' in Physics Engineering from the National Institute of Physics in Marseille (ENSPM), France. Mr. Locoh-Donou serves on the board of Capital One Financial Corporation (NYSE: COF). He is also the co-founder of Cajou Espoir, a cashew-processing facility that employs several hundred people in rural Togo, 80 percent of whom are women. Cajou Espoir exports more than 400 tons of cashew kernels annually to the U.S. and Europe.

Tom Fountain has served as our Executive Vice President of Global Services and Chief Strategy Officer since June 2020. Mr. Fountain joined F5 in January 2018 as Executive Vice President and Chief Strategy Officer. Mr. Fountain is responsible for F5's global services organization, including global support, consulting, and services teams. He is also responsible for F5's corporate strategy, corporate development, technology partnerships, our service provider business, and new business incubations. From November 2012 to January 2018, Mr. Fountain served as Senior Vice President for Strategy and Corporate Development at McAfee LLC, Vice President of Strategy and Operations at Intel Corporation, and Senior Vice President for Strategy and Corporate Development at McAfee Incorporated. Previously, Mr. Fountain served as Vice President and General Manager of the Content and Media Business Unit at Juniper Networks from December 2011 to November 2012 and Vice President of Corporate Strategy at Juniper Networks from February 2009 to December 2011. Earlier in his career, Mr. Fountain was a venture capitalist at Mayfield Fund from June 2003 to February 2009 and co-founder and engineering leader at Ingrian Networks from December 1999 to June 2004. He holds an M.B.A., an M.S. in Computer Science, an M.S. in Electrical Engineering, and a B.S. in Computer Systems Engineering, each from Stanford University.

Geng Lin joined F5 as our Executive Vice President and Chief Technology Officer in July 2019. Mr. Lin is responsible for the technical vision for the company with a focus on next-generation technological capabilities through organic and inorganic innovation, including advanced research initiatives and strategic partnerships. Prior to joining F5, Mr. Lin was the Managing Director, Chief Development Officer and Head of Engineering for consumer and community banking for J.P. Morgan Chase from September 2017 to June 2019. Previously, he served as Head of Service Engineering for Next Billion Users, CTO of Corporate Networks at Google, CTO of Network Business at Dell and CTO of Cisco's IBM Alliance. Mr. Lin is an industry-leading expert in distributed systems, software-defined infrastructure, and cloud services. He is a contributing author of two books on cloud and data-intensive computing and holds nine U.S. patents. Mr. Lin received B.Sc. and M.Sc. degrees in Computer Science from Peking University and a Ph.D. degree in Computer Science from the University of British Columbia.

Frank Pelzer has served as our Executive Vice President and Chief Financial Officer since May 2018. He oversees F5's worldwide financial planning, analysis, accounting, reporting, and internal auditing procedures, as well as investor relations. Prior to joining F5, Mr. Pelzer served as President and Chief Operating Officer of the Cloud Business Group at SAP, responsible for the execution of strategy and operations of the company's Software as a Service (SaaS) portfolio including Concur, Ariba, Fieldglass, SuccessFactors, and Hybris. Prior to that, he served as Chief Financial Officer of Concur Technologies, before it was acquired by SAP in 2014. Mr. Pelzer has also held senior leadership positions at Deutsche Bank and Credit Suisse Group. Mr. Pelzer serves on the board of directors for Benefitfocus, Limeade, and Modumetal. He holds a B.A. from Dartmouth College and an M.B.A. from the Tuck School of Business at Dartmouth College.

Scot Rogers has served as our Executive Vice President and General Counsel since January 2014. Mr. Rogers has held a variety of positions in F5's legal department since 2005, including most recently as Senior Vice President and Associate General Counsel immediately prior to his promotion to Executive Vice President. From 2002 through 2005, Mr. Rogers was the General Counsel for Xpediate Consulting, a healthcare technology and consulting company located in the San Francisco Bay Area. Prior to becoming a corporate counsel, he spent eight years in private practice as a commercial litigator. He is a graduate of the University of Texas and holds a J.D. from the Dedman School of Law of Southern Methodist University.

Kara Sprague is Executive Vice President and General Manager, BIG-IP product group. She is responsible for F5's BIG-IP Application Delivery and Security product portfolio management, products and solutions. Prior to joining F5 in 2017, Ms. Sprague held various leadership positions across the technology practice of McKinsey & Company. Most recently she led the Technology, Media, and Telecom Practice for the Western Region. Prior to McKinsey, Ms. Sprague was on the engineering staff of Oracle, Agilent Technologies, and Hewlett-Packard. She holds a bachelor's degree and two master's degrees from Massachusetts Institute of Technology and serves on the board of Girls Who Code.

Gus Robertson joined F5 as Senior Vice President and General Manager of NGINX following the Company's May 2019 acquisition of Nginx, Inc., where he was Chief Executive Officer. Mr. Robertson joined NGINX as CEO in 2012, raising more than $100 million in venture capital from such investors as Goldman Sachs and New Enterprise Associates. Prior to joining NGINX, he led Global Business Development at Red Hat and ran the Asia Pacific region for Visio, prior to its acquisition by Microsoft in 2000. Mr. Robertson studied Marketing at Charles Sturt University in Australia and completed the Advanced Management Program at Duke University's Fuqua School of Business.

Derek Smith joined F5 as Senior Vice President and General Manager of Shape following the Company's January 2020 acquisition of Shape Security, Inc. which he co-founded in 2011 and served as Chief Executive Officer. Shape's solutions protect enterprises and government agencies from fraud, abuse and other sophisticated cyber attacks. Prior to co-founding

Shape, Smith was Senior Advisor for Cyber-Policy at the Office of the Secretary of Defense at the U.S. Department of Defense. He joined the government agency from Raytheon, the global defense contractor, where he served as VP of Cyber-Security after the company acquired Oakley Networks in 2007. Smith founded Oakley Networks in 2001, having developed the first data-leakage protection and insider threat network security technology, which is now deployed throughout the U.S. Department of Defense, the U.S. intelligence community, and the Fortune 500.

Chad Whalen has served as our Executive Vice President of Worldwide Sales since July 2018. He is responsible for F5's global sales strategy and brings over 20 years of experience leading global teams across Europe, Asia, and North and South America in network infrastructure, security, and SaaS. Mr. Whalen joined F5 in 2017 to lead the Cloud Sales team. Prior to joining F5, he ran strategic alliances at Fortinet, worldwide sales and services at Jasper, Americas sales and field operations at Ciena and global sales and marketing at World Wide Packets (WWP). He holds a B.A. in Business Administration and Management from Eastern Washington University.

Ana White has served as our Executive Vice President and Chief Human Resources Officer since January 2018. She is responsible for the F5's people, practices, and professional growth programs; recruiting; diversity and inclusion; organizational development; and employee advocacy initiatives. Ms. White comes to F5 from Microsoft, where she led global Human Resources teams for over 18 years across multiple business units. Most recently, she acted as General Manager, Human Resources for Microsoft's Business Development, Finance, HR and Legal organizations with responsibility for their teams' HR strategy, talent management, diversity and inclusion, and organizational capability as well as HR Business Insights across Microsoft. Prior to that, Ms. White led HR for the Marketing and Consumer Business organization. Prior to Microsoft, she was a Compensation and Benefits Consultant at Willis Towers Watson. She holds a B.S. in Mathematics from Seattle University, and serves on the taskforce for both the Seattle University Center for Science and Innovation and the board of Childhaven.

Mika Yamamoto joined F5 in May 2019 in the newly created role of Executive Vice President and Chief Marketing and Customer Experience Officer. In this role, she is responsible for leading the company's marketing strategies across segments, channels, and geographies, and ensuring customers remain at the forefront of the company's Digital Transformation initiative. Prior to joining F5, Ms. Yamamoto served as Global President of Marketo, where she led the company's go-to-market strategy after it was acquired by Adobe. Ms. Yamamoto previously served as Chief Digital Marketing Officer and CMO for SAP. In addition, she has held senior leadership roles at Amazon Books, Microsoft Windows and Microsoft Stores, Gartner Research and Accenture. She holds a B.A. in Commerce, Economics and Marketing from Queen's University in Canada and serves on the board of the Rainier Valley Food Bank.

Item 1A. *Risk Factors*

In addition to the other information in this report, the following risk factors should be carefully considered in evaluating our company and operations.

Our business could be adversely impacted by conditions affecting the information technology market

A substantial portion of our business depends on the demand for information technology by large enterprise customers and service providers. In addition to the challenges presented by new cloud computing models, we are dependent upon the overall economic health of our current and prospective customers and the continued growth and evolution of the Internet. International, national, regional and local economic conditions, such as recessionary economic cycles, protracted economic slowdown or further deterioration of the economy could adversely impact demand for our products. Demand for our products and services depends substantially upon the general demand for application delivery products and associated services, which fluctuates based on numerous factors, including capital spending levels and growth of our current and prospective customers, as well as general economic conditions. Moreover, the purchase of our products is often discretionary and may involve a significant commitment of capital and other resources. Future economic projections for the information technology sector are uncertain as companies continue to reassess their spending for technology projects and embrace new models for delivery of IT services, such as cloud computing and highly orchestrated software defined networking environments. As a result, spending priorities for our current and future customers may vary and demand for our products and services may be impacted. In addition, customer buying patterns are changing over time and more customers seek to rent software on a subscription basis and to reduce their total cost of ownership. These evolving business models could lead to changes in demand and licensing strategies, which could have a material adverse effect on our business, results of operations and financial condition.

Cloud-based computing trends present competitive and execution risks

Customers are transitioning to a hybrid computing environment utilizing various cloud-based software and services accessed via various smart client devices. Pricing and delivery models are evolving and our competitors are developing and deploying cloud-based services for customers. In addition, new cloud infrastructures are enabling the emergence of new competitors including large cloud providers who offer their own ADC functionality as well as smaller companies targeting the growing numbers of "born in the cloud" applications. We are devoting significant resources to develop and deploy our own competing cloud-based software and services strategies. While we believe our expertise and investments in software and infrastructure for cloud-based services provides us with a strong foundation to compete, it is uncertain whether our strategies will attract the customers or generate the revenue required to be successful. In addition to software development costs, we are incurring costs to build and maintain infrastructure to support cloud-computing services. These costs may reduce the operating margins we have previously achieved. Whether we are successful in this new business model depends on our execution in a number of areas, including:

- continuing to innovate and bring to market compelling cloud-based services that generate increasing traffic and market share;
- maintaining the utility, compatibility and performance of our software on the growing array of cloud computing platforms and the enhanced interoperability requirements associated with orchestration of cloud computing environments; and
- implementing the infrastructure to deliver our own cloud-based services.

These new business models may reduce our revenues or operating margins and could have a material adverse effect on our business, results of operations and financial condition.

Industry consolidation may result in increased competition

Some of our competitors have made acquisitions or entered into partnerships or other strategic relationships to offer a more comprehensive solution than they had previously offered. We have also entered into large, strategic partnerships to enhance our competitive position in the marketplace. As IT companies attempt to strengthen or maintain their market positions in the evolving application delivery, mobility, cloud networking and cloud platform markets, these companies continue to seek to deliver comprehensive IT solutions to end users and combine enterprise-level hardware and software solutions that may compete with our solutions and which could negatively impact our partnerships. These consolidators or potential consolidators may have significantly greater financial, technical and other resources than we do and may be better positioned to acquire and offer complementary products and services. The companies resulting from these possible combinations may create more compelling product and service offerings and be able to offer greater pricing flexibility or sales and marketing support for such offerings than we can. These heightened competitive pressures could result in a loss of customers or a reduction in our revenues or revenue growth rates, all of which could adversely affect our business, results of operations and financial condition.

We may not be able to compete effectively in the emerging application services market

The markets we serve are new, rapidly evolving and highly competitive, and we expect competition to persist and intensify in the future. Our principal competitors in the application services market include Citrix Systems, Inc., Radware Ltd., and a number of other competitors that have a smaller market presence or limited feature set, such as: A10 Networks, Amazon Web Services, HAProxy, Microsoft Azure, and VMware.

In related markets, we compete with companies such as the following:

- Cisco, Juniper Networks, and A10 Networks for carrier-grade firewall capabilities;
- Akamai, Imperva, and Citrix Systems in the web application firewall market;
- Cisco, Juniper Networks, and A10 Networks in Carrier Grade NAT;
- Symantec/Blue Coat and A10 Networks in SSL Orchestration;
- Pulse Security and Ping Identity for Access Policy Manager;

We expect to continue to face additional competition as new participants enter our markets. As we continue to expand globally, we may see new competitors in different geographic regions. In addition, larger companies with significant resources, brand recognition, and sales channels may form alliances with or acquire competing application services solutions from other companies and emerge as significant competitors. Potential competitors may bundle their products or incorporate an Internet traffic management or security component into existing products in a manner that discourages users from purchasing our products. Any of these circumstances may limit our opportunities for growth and negatively impact our financial performance.

Our success depends on our timely development of new products and features, market acceptance of new product offerings and proper management of the timing of the life cycle of our products

The markets for our products and services are characterized by:

- rapid technological change;
- evolving industry standards;
- consolidation of network and application functions into existing network infrastructure products;
- requirements that our products interoperate with those of other IT vendors to enable ease of management;
- fluctuations in customer demand;
- changes in customer requirements; and
- frequent new product and service introductions and enhancements.

Our continued success depends on our ability to identify and develop new products and new features for our existing products to meet the demands of these changes, and the acceptance of those products and features by our existing and target customers. In addition, our products must interoperate with our end customers' IT infrastructure, which often have different specifications, deploy products from multiple vendors, and utilize multiple protocol standards. Our customers' IT infrastructure is becoming more complex and we may be reliant on orchestration and interoperability with third party vendors on whom we are reliant for testing and support of new product versions and configurations. If we are unable to identify, develop and deploy new products and new product features on a timely basis, our business and results of operations may be harmed.

The current development cycle for our products is on average 12-24 months. The introduction of new products or product enhancements may shorten the life cycle of our existing products, or replace sales of some of our current products, thereby offsetting the benefit of even a successful product introduction, and may cause customers to defer purchasing our existing products in anticipation of the new products. This could harm our operating results by decreasing sales, increasing our inventory levels of older products and exposing us to greater risk of product obsolescence. We have also experienced, and may in the future experience, delays in developing and releasing new products and product enhancements. This has led to, and may in the future lead to, delayed sales, increased expenses and lower quarterly revenue than anticipated. Also, in the development of our products, we have experienced delays in the prototyping of our products, which in turn has led to delays in product introductions. In addition, complexity and difficulties in managing product transitions at the end-of-life stage of a product can create excess inventory of components associated with the outgoing product that can lead to increased expenses. Any or all of the above problems could materially harm our business and results of operations.

Our success depends on sales and continued innovation of our Application Delivery Controller and Application Security product lines

We expect to derive a significant portion of our net revenues from sales of our Application Delivery Controller (ADC) and Application Security products in the future. Implementation of our strategy depends upon these products being able to solve critical network availability, performance and security problems for our customers. If our products are unable to solve these problems for our customers or if we are unable to sustain the high levels of innovation in product feature sets needed to maintain leadership in what will continue to be a competitive market environment, our business and results of operations will be harmed.

Security vulnerabilities in our IT systems or products as well as unforeseen product errors could have a material adverse impact on our business results of operations, financial condition and reputation

In the ordinary course of business, we store sensitive data, including intellectual property, personal data, our proprietary business information and that of our customers, suppliers and business partners on our networks. In addition, we store sensitive data through cloud-based services that may be hosted by third parties and in data center infrastructure maintained by third parties. The secure maintenance of this information is critical to our operations and business strategy. Our information systems and those of our partners and customers are subject to the increasing threat of intrusions by a wide range of actors including computer programmers, hackers or sophisticated nation-state and nation-state supported actors or they may be compromised due to employee error or wrongful conduct, malfeasance, or other disruptions. Despite our security measures, and those of our third-party vendors, our information technology and infrastructure has experienced breaches or disruptions and may be vulnerable in the future to breach, attacks or disruptions. If any breach or attack compromises our networks, creates system disruptions or slowdowns or exploits security vulnerabilities of our products, the information stored on our networks or those of our customers could be accessed and modified, publicly disclosed, lost or stolen, and we may be subject to liability to our customers, suppliers, business partners and others, and suffer reputational and financial harm.

In addition, our products are used to manage critical applications and data for customers and third parties may attempt to exploit security vulnerabilities in our products as well as our internal IT systems. As we continue to focus on the development and marketing of security solutions, we become a bigger target for malicious computer hackers, including sophisticated nation-state and nation-state supported actors who wish to exploit security vulnerabilities in our products or IT systems.

We devote significant resources to addressing security vulnerabilities in our IT systems, product solutions and services through our efforts to engineer more secure solutions and services, enhance security and reliability features in our solutions and services, deploy security updates to address security vulnerabilities and seek to respond to known security incidents in sufficient time to minimize any potential adverse impact. Despite our efforts to harden our infrastructure and build secure solutions, from time to time, we experience attacks and other cyber-threats. These attacks can seek to exploit, among other things, known or unknown vulnerabilities in technology included in our IT infrastructure, solutions and services. While we have undertaken efforts to mitigate these vulnerabilities, they could render our internal systems, products, and solutions and services susceptible to a cyber-attack.

Our products may also contain undetected errors or defects when first introduced or as new versions are released. We have experienced these errors or defects in the past in connection with new products and product upgrades. As our products and customer IT infrastructures become increasingly complex, customers may experience unforeseen errors in implementing our products into their IT environments. We expect that these errors or defects will be found from time to time in new or enhanced products after commencement of commercial shipments. These problems may cause us to incur significant warranty and repair costs, divert the attention of our engineering personnel from our product development efforts and cause significant customer relations problems. We may also be subject to liability claims for damages related to product errors or defects. While we carry insurance policies covering this type of liability, these policies may not provide sufficient protection should a claim be asserted. A material product liability claim may harm our business and results of operations.

Our products must successfully operate with products from other vendors. As a result, when problems occur in a network, it may be difficult to identify the source of the problem. The occurrence of software or hardware problems, whether caused by our products or another vendor’s products, may result in the delay or loss of market acceptance of our products. The occurrence of any of these problems may harm our business and results of operations.

Any errors, defects or vulnerabilities in our products or IT systems could result in:

- expenditures of significant financial and product development resources in efforts to analyze, correct, eliminate, or work-around errors and defects or to address and eliminate vulnerabilities;
- remediation costs, such as liability for stolen assets or information, repairs or system damage;
- increased cybersecurity protection costs which may include systems and technology changes, training, and engagement of third party experts and consultants;
- increased insurance premiums;
- loss of existing or potential customers or channel partners;
- loss of proprietary information leading to lost competitive positioning and lost revenues;
- negative publicity and damage to our reputation;
- delayed or lost revenue;
- delay or failure to attain market acceptance;
- an increase in warranty claims compared with our historical experience, or an increased cost of servicing warranty claims, either of which would adversely affect our gross margins; and
- litigation, regulatory inquiries, or investigations that may be costly and harm our reputation.

We are dependent on various information technology systems, and failures of or interruptions to those systems could harm our business

Many of our business processes depend upon our IT systems, the systems and processes of third parties, and on interfaces with the systems of third parties. For example, our order entry system provides information to the systems of our contract manufacturers, which enables them to build and ship our products. If those systems fail or are interrupted, or if our ability to connect to or interact with one or more networks is interrupted, our processes may function at a diminished level or not at all. This would harm our ability to ship products, and our financial results may be harmed.

In addition, reconfiguring our IT systems or other business processes in response to changing business needs may be time-consuming and costly. To the extent this impacted our ability to react timely to specific market or business opportunities, our financial results may be harmed.

Our failure to adequately protect personal information could have a material adverse effect on our business

A wide variety of local, state, national, and international laws, directives and regulations apply to the collection, use, retention, protection, disclosure, transfer, and other processing of personal data. These data protection and privacy-related laws and regulations continue to evolve and may result in ever-increasing regulatory and public scrutiny and escalating levels of enforcement and sanctions and increased costs of compliance. Certain safe-harbor exemptions upon which the Company relies for data transfers have been challenged and may no longer be available to us in the future. Our failure to comply with applicable laws and regulations, or to protect such data, could result in enforcement action against us, including fines, imprisonment of company officials and public censure, claims for damages by end-customers and other affected individuals, damage to our reputation and loss of goodwill (both in relation to existing end-customers and prospective end-customers), any of which could have a material adverse effect on our operations, financial performance, and business. Changing definitions of personal data and personal information, within the European Union, the United States, and elsewhere, especially relating to classification of IP addresses, machine identification, location data, and other information, may limit or inhibit our ability to operate or expand our business, including limiting strategic partnerships that may involve the sharing of data. The evolving data protection regulatory environment may require significant management attention and financial resources to analyze and modify our IT infrastructure to meet these changing requirements all of which could reduce our operating margins and impact our operating results and financial condition.

Our success depends on our key personnel and our ability to hire, retain and motivate qualified executives, sales and marketing, operations, product development and professional services personnel

Our success depends, in large part, on our ability to attract, engage, retain, and integrate qualified executives and other key employees throughout all areas of our business. In order to attract and retain executives and other key employees in a competitive marketplace, we must provide a competitive compensation package, including cash- and equity-based compensation. If we do not obtain the stockholder approval needed to continue granting equity compensation in a competitive manner, our ability to attract, retain, and motivate executives and key employees could be weakened. Failure to successfully hire executives and key employees or the loss of any executives and key employees could have a significant impact on our operations. We have recently experienced changes in our senior leadership team and we expect to continue to see changes as we build the team that is needed to execute our strategy. Changes in our management team may be disruptive to our business, and any failure to successfully integrate key new hires or promoted employees could adversely affect our business and results of operations. The complexity of our products and their integration into existing networks and ongoing support, as well as the sophistication of our sales and marketing effort, requires us to retain highly trained developers, professional services, customer support and sales personnel. Competition for qualified developers, professional services, customer support and sales personnel in our industry is intense, especially in Silicon Valley and Seattle where we have substantial operations and a need for highly skilled personnel, because of the limited number of people available with the necessary technical skills and understanding of our products. Also, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited, that they have divulged proprietary or other confidential information, that they have violated non-compete obligations to their prior employers, or that their former employers own their inventions or other work product. Our ability to hire and retain these personnel may be adversely affected by volatility or reductions in the price of our common stock or our ability to get approval from shareholders to offer additional common stock to our employees, since these employees are generally granted restricted stock units. The loss of services of any of our key personnel, the inability to retain and attract qualified personnel in the future or delays in hiring qualified personnel may harm our business and results of operations. In addition, we recently announced a restructuring to re-align our workforce to match strategic and financial objectives and optimize resources for long term growth, including a reduction in force program impacting a number of employees. This restructuring could lead to increased attrition amongst those employees who were not directly affected by the reduction in force program.

We recently implemented a restructuring program, which we cannot guarantee will achieve its intended result

In the first fiscal quarter of 2020, we completed a restructuring program to match strategic and financial objectives and optimize resources for long term growth. We incur substantial costs to implement restructuring plans, and our restructuring activities may subject us to litigation risks and expenses. Our past restructuring plans do not provide any assurance that additional restructuring plans will not be required or implemented in the future. In addition, our restructuring plans may have other consequences, such as attrition beyond our planned reduction in workforce, a negative effect on employee morale and productivity or our ability to attract highly skilled employees. Our competitors may also use our restructuring plans to seek to gain a competitive advantage over us. As a result, our restructuring plans may affect our revenue and other operating results in the future.

The average selling price of our products may decrease and our costs may increase, which may negatively impact revenues and profits

It is possible that the average selling prices of our products will decrease in the future in response to competitive pricing pressures, increased sales discounts, new product introductions by us or our competitors, as well as the shift to more software consumption based and "as a service based" models, or other factors. Therefore, in order to maintain our profits, we must develop and introduce new products and product enhancements on a timely basis and continually reduce our product costs. Our failure to do so could cause our revenue and profits to decline, which would harm our business and results of operations. In addition, we may experience substantial period-to-period fluctuations in future operating results due to the erosion of our average selling prices.

Our business may be harmed if our contract manufacturers are not able to provide us with adequate supplies of our products or if a single source of hardware assembly is lost or impaired

We outsource the manufacturing of our hardware platforms to third party contract manufacturers who assemble these hardware platforms to our specifications. We have experienced minor delays in shipments from contract manufacturers in the past. However, if we experience major delays in the future or other problems, such as inferior quality and insufficient quantity of product, any one or a combination of these factors may harm our business and results of operations. The inability of our contract manufacturers to provide us with adequate supplies of our products or the loss of one or more of our contract manufacturers may cause a delay in our ability to fulfill orders while we obtain a replacement manufacturer and may harm our business and results of operations. In particular, we currently subcontract manufacturing of our products to a single contract manufacturer with whom we do not have a long-term contract. If our arrangement with this single source of hardware assembly was terminated or otherwise impaired, and we were not able to engage another contract manufacturer in a timely manner, our business, financial condition and results of operation could be adversely affected.

If the demand for our products grows, we will need to increase our raw material and component purchases, contract manufacturing capacity and internal test and quality control functions. Any disruptions in product flow may limit our revenue, may harm our competitive position and may result in additional costs or cancellation of orders by our customers.

Our business could suffer if there are any interruptions or delays in the supply of hardware components from our third-party sources

We currently purchase several hardware components used in the assembly of our products from a number of single or limited sources. Lead times for these components vary significantly. The unavailability of suitable components, any interruption or delay in the supply of any of these hardware components or the inability to procure a similar component from alternate sources at acceptable prices within a reasonable time, may delay assembly and sales of our products and, hence, our revenues, and may harm our business and results of operations.

It is difficult to predict our future operating results because we have an unpredictable sales cycle

Our products have a lengthy sales cycle and the timing of our revenue is difficult to predict. Historically, our sales cycle has ranged from approximately two to three months and has tended to lengthen as our products become increasingly complex. Also, as our distribution strategy is focused on a channel model, utilizing value-added resellers, distributors and systems integrators, the level of variability in the length of sales cycle across transactions has increased and made it more difficult to predict the timing of many of our sales transactions. Sales of our products require us to educate potential customers in their use and benefits. Sales of our products are subject to delays from the lengthy internal budgeting, approval and competitive evaluation processes that large enterprises and governmental entities may require. For example, customers frequently begin by evaluating our products on a limited basis and devote time and resources to testing our products before they decide whether or not to purchase. Customers may also defer orders as a result of anticipated releases of new products or enhancements by our competitors or us. As a result, our products have an unpredictable sales cycle that contributes to the uncertainty of our future operating results.

We may not be able to sustain or develop new distribution relationships, and a reduction or delay in sales to significant distribution partners could hurt our business

We sell our products and services through multiple distribution channels in the United States and internationally, including leading industry distributors, value-added resellers, systems integrators, service providers and other indirect channel partners. We have a limited number of agreements with companies in these channels, and we may not be able to increase our number of distribution relationships or maintain our existing relationships. Recruiting and retaining qualified channel partners and training them in our technologies requires significant time and resources. These channel partners may also market, sell and support products and services that are competitive with ours and may devote more resources to the marketing, sales and support of such competitive products. Our indirect sales channel structure could subject us to lawsuits, potential liability, and reputational harm if, for example, any of our channel partners misrepresent the functionality of our products or services to customers or violate laws or our corporate policies. If we are unable to establish or maintain our indirect sales channels, our business and results of operations will be harmed. In addition, one worldwide distributor of our products accounted for 16.7% of our total net revenue for fiscal year 2020. A substantial reduction or delay in sales of our products to these distribution partners, if not replaced by sales to other indirect channel partners and distributors, could harm our business, operating results and financial condition.

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

Sales to U.S. and foreign, federal, state, and local governmental agency end-customers account for a significant portion of our revenues and we may in the future increase sales to government entities. Sales to government entities are subject to a number of risks. Selling to government entities can be highly competitive, expensive, and time consuming, often requiring significant upfront time and expense without any assurance that these efforts will generate a sale. The substantial majority of our sales to date to government entities have been made indirectly through our channel partners. Government certification requirements for products like ours may change, thereby restricting our ability to sell into the federal government sector until we have attained the revised certification. Government demand and payment for our products and services may be impacted by public sector budgetary cycles and funding authorizations, with funding reductions or delays adversely affecting public sector demand for our products and services. Government entities may have statutory, contractual or other legal rights to terminate contracts with our distributors and resellers for convenience or due to a default, and any such termination may adversely impact our future operating results. Governments routinely investigate and audit government contractors' administrative processes, and any unfavorable audit could result in the government refusing to continue buying our products and services, a reduction of revenue or fines or civil or criminal liability if the audit uncovers improper or illegal activities, which could adversely impact our operating results in a material way. Finally, for purchases by the U.S. government, the government may require certain products to be manufactured in the United States and other relatively high cost manufacturing locations, and we may not manufacture all products in locations that meet the requirements of the U.S. government, affecting our ability to sell these products to the U.S. government.

Misuse of our products could harm our reputation

Our products may be misused by end-customers or third parties that obtain access to our products. For example, our products could be used to censor private access to certain information on the Internet. Such use of our products for censorship could result in negative publicity and damage to our reputation. In addition, as many of our products are subject to export control regulations, diversion of our products to restricted third parties by others could result in investigations, penalties, fines, trade restrictions and negative publicity that could damage our reputation and materially impact our business, operating results, and financial condition.

Our quarterly and annual operating results may fluctuate in future periods, which may cause our stock price to fluctuate

Our quarterly and annual operating results have varied significantly in the past and could vary significantly in the future, which makes it difficult for us to predict our future operating results. Our operating results may fluctuate due to a variety of factors, many of which are outside of our control, including the changing and recently volatile U.S. and global economic environment, which may cause our stock price to fluctuate. In particular, we anticipate that the size of customer orders may increase as we continue to focus on larger business accounts. A delay in the recognition of revenue, even from just one account, may have a significant negative impact on our results of operations for a given period. In the past, a majority of our sales have been realized near the end of a quarter. Accordingly, a delay in an anticipated sale past the end of a particular quarter may negatively impact our results of operations for that quarter, or in some cases, that fiscal year. Additionally, we have exposure to the credit risks of some of our customers and sub-tenants. Although we have programs in place that are designed to monitor and mitigate the associated risk, there can be no assurance that such programs will be effective in reducing our credit risks adequately. We monitor individual payment capability in granting credit arrangements, seek to limit the total credit to amounts we believe our customers can pay and maintain reserves we believe are adequate to cover exposure for potential losses. If there is a deterioration of a sub-tenant's or a major customer's creditworthiness or actual defaults are higher than expected, future losses, if incurred, could harm our business and have a material adverse effect on our operating results. Further, our operating results may be below the expectations of securities analysts and investors in future quarters or years. Our failure to meet these expectations will likely harm the market price of our common stock. Such a decline could occur, and has occurred in the past, even when we have met our publicly stated revenue and/or earnings guidance.

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

As a result of customer buying patterns and the efforts of our sales force and channel partners to meet or exceed their sales objectives, we have historically received a substantial portion of sales orders and generated a substantial portion of revenue during the last few weeks of each fiscal quarter. In addition, any significant interruption in our information technology systems, which manage critical functions such as order processing, revenue recognition, financial forecasts, inventory and supply chain management, and trade compliance reviews, could result in delayed order fulfillment and decreased revenue for that fiscal quarter. If expected revenue at the end of any fiscal quarter is delayed for any reason, including the failure of anticipated purchase orders to materialize, our third party contract manufacturers' inability to manufacture and ship products prior to fiscal quarter-end to fulfill purchase orders received near the end of the fiscal quarter, our failure to manage inventory to meet demand, our inability to release new products on schedule, any failure of our systems related to order review and processing, or any delays in shipments based on trade compliance requirements, our revenue for that quarter could fall below our expectations, resulting in a decline in the trading price of our common stock.

Changes in financial accounting standards may cause adverse unexpected revenue fluctuations and affect our reported results of operations

A change in accounting policies can have a significant effect on our reported results and may even affect our reporting of transactions completed before the change is effective. New pronouncements and varying interpretations of existing pronouncements have occurred with frequency and may occur in the future. Changes to existing rules, or changes to the interpretations of existing rules, could lead to changes in our accounting practices, and such changes could adversely affect our reported financial results or the way we conduct our business.

If we are unable to maintain effective internal control over financial reporting, the accuracy and timeliness of our financial reporting may be adversely affected

As a public company, we are required to design and maintain proper and effective internal controls over financial reporting and to report any material weaknesses in such internal controls. Section 404 of the Sarbanes-Oxley Act of 2002 requires that we evaluate and determine the effectiveness of our internal controls over financial reporting and provide a management report on the internal controls over financial reporting, which must be attested to by our independent registered public accounting firm. We have an ongoing program to review the design of our internal controls framework in keeping with changes in business needs, implement necessary changes to our controls design and test the system and process controls necessary to comply with these requirements. If in the future, our internal controls over financial reporting are determined to be not effective resulting in a material weakness, investor perceptions regarding the reliability of our financial statements may be adversely affected which could cause a decline in the market price of our stock and otherwise negatively affect our liquidity and financial condition.

We may have exposure to greater than anticipated tax liabilities

Our provision for income taxes is subject to volatility and could be affected by changes in our business operations, including acquisitions, new offerings, and changes in the jurisdictions in which we operate. The provision for income taxes may also be impacted by changes in stock-based compensation, changes in the research and development tax credit laws, earnings being lower than anticipated in jurisdictions where we have lower statutory rates and being higher than anticipated in jurisdictions where we have higher statutory rates, transfer pricing adjustments, not meeting the terms and conditions of tax holidays or incentives, changes in the valuation of our deferred tax assets and liabilities, changes in actual results versus our estimates, or changes in tax laws, regulations, accounting principles or interpretations thereof, including changes to the tax laws applicable to corporate multinationals. Our results of operations and cash flows could be affected by future guidance implementing the provisions of the Tax Cuts and Jobs Act. In addition, we may be subject to examination of our income tax returns by the U.S. Internal Revenue Service and other tax authorities. While we regularly assess the likelihood of adverse outcomes from such examinations and the adequacy of our provision for income taxes, there can be no assurance that such provision is sufficient and that a determination by a tax authority will not have an adverse effect on our results of operations and cash flows.

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

Our products are subject to U.S. export controls and may be exported outside the U.S. only with the required level of export license or through an export license exception because we incorporate encryption technology into our products. In addition, various countries regulate the import of certain encryption technology and have enacted laws that could limit our ability to distribute our products or our customers' ability to implement our products in those countries. Changes in our products or changes in export and import regulations may create delays in the introduction of our products in international markets, prevent our customers with international operations from deploying our products throughout their global systems or, in some cases, prevent the export or import of our products to certain countries altogether. Any change in export or import regulations or related legislation, shift in approach to the enforcement or scope of existing regulations or change in the countries, persons or technologies targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export or sell our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business, operating results and financial condition.

We may not be able to adequately protect our intellectual property, and our products may infringe on the intellectual property rights of third parties

We rely on a combination of patent, copyright, trademark and trade secret laws, and restrictions on disclosure of confidential and proprietary information to protect our intellectual property rights. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy or otherwise obtain and use our products or technology. Monitoring unauthorized use of our products is difficult, and we cannot be certain that the steps we have taken will prevent misappropriation of our technology, particularly in foreign countries where the laws may not protect our proprietary rights as fully as in the United States.

Our industry is characterized by the existence of a large number of patents and frequent claims and related litigation regarding patent and other intellectual property rights. In the ordinary course of our business, we are involved in disputes and licensing discussions with others regarding their claimed proprietary rights and cannot provide assurance that we will always successfully defend ourselves against such claims and such matters are subject to many uncertainties and outcomes are not predictable with assurance. We expect that infringement claims may increase as the number of products and competitors in our market increases and overlaps occur. Also, as we have gained greater visibility, market exposure and competitive success, we face a higher risk of being the subject of intellectual property infringement claims. If we are found to infringe the proprietary rights of others, or if we otherwise settle such claims, we could be compelled to pay damages or royalties and either obtain a license to those intellectual property rights or alter our products so that they no longer infringe upon such proprietary rights. Any license could be very expensive to obtain or may not be available at all or may require us to make royalty payments which could adversely affect gross margins in future periods. The actual liability in any such matters may be materially different from our estimate, if any, which could result in the need to adjust the liability and record additional expenses. Similarly, changing our products or processes to avoid infringing upon the rights of others may be costly or impractical. In addition, we have initiated, and may in the future initiate, claims or litigation against third parties for infringement of our proprietary rights, or to determine the scope and validity of our proprietary rights or those of our competitors. Any of these claims, whether claims that we are infringing the proprietary rights of others, or vice versa, with or without merit, may be time-consuming, result in costly litigation and diversion of technical and management personnel or require us to cease using infringing technology, develop non-infringing technology or enter into royalty or licensing agreements. Further, our license agreements typically require us to indemnify our customers, distributors and resellers for infringement actions related to our technology, which could cause us to become involved in infringement claims made against our customers, distributors or resellers. Any of the above-described circumstances relating to intellectual property rights disputes could result in our business and results of operations being harmed.

We incorporate open source software into our products. Although we monitor our use of open source closely, the terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that such licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. We could also be subject to similar conditions or restrictions should there be any changes in the licensing terms of the open source software incorporated into our products. In either event, we could be required to seek licenses from third parties in order to continue offering our products, to re-engineer our products or to discontinue the sale of our products in the event re-engineering cannot be accomplished on a timely or successful basis, any of which could adversely affect our business, operating results and financial condition.

Many of our products include intellectual property licensed from third parties. In the future, it may be necessary to renew licenses for third party intellectual property or obtain new licenses for other technology. These third party licenses may not be available to us on acceptable terms, if at all. The inability to obtain certain licenses, or litigation regarding the interpretation or enforcement of license rights and related intellectual property issues, could have a material adverse effect on our business, operating results and financial condition. Furthermore, we license some third party intellectual property on a non-exclusive basis and this may limit our ability to protect our intellectual property rights in our products.

Our operating results are exposed to risks associated with international commerce

As our international sales increase, our operating results become more exposed to international operating risks. Additionally, our international sales and operations are subject to a number of risks, including the following:

- greater difficulty in enforcing contracts and accounts receivable collection and longer collection periods;
- the uncertainty of protection for intellectual property rights in some countries;
- 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 products 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 U.S. Foreign Corrupt Practices Act, 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;
- increased expenses incurred in establishing and maintaining office space and equipment for our international operations;
- greater difficulty in recruiting local experienced personnel, and the costs and expenses associated with such activities;
- management communication and integration problems resulting from cultural and geographic dispersion;
- fluctuations in exchange rates between the U.S. dollar and foreign currencies in markets where we do business;
- economic uncertainty around the world, including continued economic uncertainty as a result of sovereign debt issues in Europe; and
- general economic and political conditions in these foreign markets.

In addition, in June 2016, voters in the United Kingdom approved an advisory referendum to withdraw from the European Union (commonly referred to as Brexit). The uncertainty surrounding the terms of the United Kingdom's withdrawal and its consequences, may cause our customers to closely monitor their costs and reduce their spending on our products and services.

We must hire and train experienced personnel to staff and manage our foreign operations. To the extent that we experience difficulties in recruiting, training, managing, and retaining an international staff, and specifically staff related to sales management and sales personnel, we may experience difficulties in sales productivity in foreign markets. We also enter into strategic distributor and reseller relationships with companies in certain international markets where we do not have a local presence. If we are not able to maintain successful strategic distributor relationships internationally or recruit additional companies to enter into strategic distributor relationships, our future success in these international markets could be limited. Business practices in the international markets that we serve 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 contracts. We intend to continue expanding into international markets. Sales outside of the Americas represented 44.0% and 44.5% of our net revenues for the fiscal years ended September 30, 2020 and 2019, respectively.

These factors and other factors could harm our ability to gain future international revenues 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.

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

Our sales contracts are denominated in U.S. dollars, and therefore, substantially all of our revenue is not subject to foreign currency risk. However, a strengthening of the U.S. dollar could increase the real cost of our solutions to our 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, 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. To date, we have not entered into any hedging arrangements with respect to foreign currency risk or other derivative instruments.

Changes in governmental regulations could negatively affect our revenues

Many of our products are subject to various regulations promulgated by the United States and various foreign governments including, but not limited to, environmental regulations and regulations implementing export license requirements and restrictions on the import or export of some technologies, especially encryption technology. Changes in governmental regulation and our inability or failure to obtain required approvals, permits or registrations could harm our international and domestic sales and adversely affect our revenues, business and operations.

New regulations related to conflict minerals may force us to incur additional expenses and could limit the supply and increase the costs of certain metals and minerals used in the manufacturing of our products

In August 2012, the SEC adopted new requirements under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (or the Dodd-Frank Act) for companies that use certain minerals and derivative metals (referred to as conflict minerals, regardless of their country of origin) in their products, whether or not these products are manufactured by third parties. The Dodd-Frank Act requires companies to perform due diligence and disclose whether or not such minerals originate from the Democratic Republic of Congo or adjoining countries. We filed a report on Form SD with the SEC regarding such matters on May 29, 2020. These requirements could adversely affect the sourcing, availability and pricing of minerals or metals used in the manufacture of our products and the numerous components that go into our products all of which could adversely affect our business, financial condition, and operating results. In addition, we will incur additional costs to comply with the disclosure requirements, including costs related to determining the source of any relevant minerals and metals used in our products. We have a complex supply chain and many components are sourced through our contract manufacturer and we may not be able to sufficiently verify the origins for these minerals and metals used in our products through the due diligence procedures that we implement. As a result, we may face reputational challenges with our customers and other stakeholders and possible regulatory risk.

We face litigation risks

We are a party to lawsuits in the normal course of our business. Litigation in general, and intellectual property and securities litigation in particular, can be expensive, lengthy and disruptive to normal business operations. Moreover, the results of complex legal proceedings are difficult to predict. Responding to lawsuits has been, and will likely continue to be, expensive and time-consuming for us. An unfavorable resolution of these lawsuits could adversely affect our business, results of operations or financial condition.

Acquisitions present many risks and we may not realize the financial and strategic goals that are contemplated at the time of the transaction

With respect to our past acquisitions, as well as any other future acquisitions we may undertake, we may find that the acquired businesses, products or technologies do not further our business strategy as expected, that we paid more than what the assets are later worth or that economic conditions change, all of which may generate future impairment charges. Our acquisitions may be viewed negatively by customers, financial markets or investors. There may be difficulty integrating the operations and personnel of the acquired business, and we may have difficulty retaining the key personnel of the acquired business. We may have difficulty in integrating the acquired technologies or products with our existing product lines. Our ongoing business and management’s attention may be disrupted or diverted by transition or integration issues and the complexity of managing geographically and culturally diverse locations. We may have difficulty maintaining uniform standards, controls, procedures and policies across locations. We may experience significant problems or liabilities associated with product quality, technology and other matters.

Our inability to successfully operate and integrate newly-acquired businesses appropriately, effectively and in a timely manner, or to retain key personnel of any acquired business, could have a material adverse effect on our ability to take advantage of further growth in demand for integrated traffic management and security solutions and other advances in technology, as well as on our revenues, gross margins and expenses.

Anti-takeover provisions could make it more difficult for a third party to acquire us

Our Board of Directors has the authority to issue up to 10,000,000 shares of preferred stock and to determine the price, rights, preferences, privileges and restrictions, including voting rights, of those shares without any further vote or action by the shareholders. The rights of the holders of common stock may be subject to, and may be adversely affected by, the rights of the holders of any preferred stock that may be issued in the future. The issuance of preferred stock may have the effect of delaying, deferring or preventing a change of control of our company without further action by our shareholders and may adversely affect the voting and other rights of the holders of common stock. Further, certain provisions of our bylaws, including a provision limiting the ability of shareholders to raise matters at a meeting of shareholders without giving advance notice, may have the effect of delaying or preventing changes in control or management of our company, which could have an adverse effect on the market price of our common stock. Similarly, state anti-takeover laws in the State of Washington related to corporate takeovers may prevent or delay a change of control of our company.

Our stock price could be volatile, particularly during times of economic uncertainty and volatility in domestic and international stock markets

Our stock price has been volatile and has fluctuated significantly in the past. The trading price of our stock is likely to continue to be volatile and subject to fluctuations in the future. Some of the factors that could significantly affect the market price of our stock include:

- Actual or anticipated variations in operating and financial results;
- Analyst reports or recommendations;
- Rumors, announcements or press articles regarding our competitors' operations, management, organization, financial condition or financial statements; and
- Other events or factors, many of which are beyond our control.

The stock market in general and the market for technology companies in particular, have experienced extreme price and volume fluctuations. These fluctuations have often been unrelated or disproportionate to operating performance. The fluctuations may continue in the future and this could significantly impact the value of our stock and your investment.

If securities or industry analysts publish inaccurate or unfavorable research about our business, or discontinue publishing research about our business, the price and trading volume of our securities could decline

The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us, our business, our market or our competitors. If one or more of the analysts who cover us downgrade our common stock or publish inaccurate or unfavorable research about our business, the price of our securities would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, demand for our securities could decrease, which might cause the price and trading volume of our securities to decline.

We face risks associated with having operations and employees located in Israel

We have offices and employees located in Israel. As a result, political, economic, and military conditions in Israel directly affect our operations. The future of peace efforts between Israel and its Arab neighbors remains uncertain. There has been a significant increase in hostilities and political unrest in Israel in the past year. The effects of these hostilities and violence on the Israeli economy and our operations in Israel are unclear, and we cannot predict the effect on us of further increases in these hostilities or future armed conflict, political instability or violence in the region. In addition, many of our employees in Israel are obligated to perform annual reserve duty in the Israeli military and are subject to being called for active duty under emergency circumstances. We cannot predict the full impact of these conditions on us in the future, particularly if emergency circumstances or an escalation in the political situation occurs. If many of our employees in Israel are called for active duty for a significant period of time, our operations and our business could be disrupted and may not be able to function at full capacity. Current or future tensions and conflicts in the Middle East could adversely affect our business, operating results, financial condition and cash flows.

Our business is subject to the risks of earthquakes, fire, power outages, floods, and other catastrophic events, and to interruption by man-made problems such as terrorism

A significant natural disaster, such as an earthquake, a fire, a flood, or a significant power outage could have a material adverse impact on our business, operating results, and financial condition. We have an administrative and product development office and a third party contract manufacturer located in the San Francisco Bay Area, a region known for seismic activity. In addition, natural disasters could affect our supply chain, manufacturing vendors, or logistics providers' ability to provide materials and perform services such as manufacturing products or assisting with shipments on a timely basis. In the event our or our service providers' information technology systems or manufacturing or logistics abilities are hindered by any of the events discussed above, shipments could be delayed, resulting in missed financial targets, such as revenue and shipment targets, for a particular quarter. In addition, cyber-attacks, acts of terrorism, or other geo-political unrest could cause disruptions in our business or the business of our supply chain, manufacturers, logistics providers, partners, or end-customers or the economy as a whole. Any disruption in the business of our supply chain, manufacturers, logistics providers, partners or end-customers that impacts sales at the end of a fiscal quarter could have a significant adverse impact on our quarterly results. All of the aforementioned risks may be further increased if the disaster recovery plans for us and our suppliers prove to be inadequate. To the extent that any of the above should result in delays or cancellations of customer orders, or the delay in the manufacture, deployment or shipment of our products, our business, financial condition and operating results would be adversely affected.

The effects of a pandemic or widespread health epidemic such as the coronavirus outbreak could have a material adverse effect on our business and results of operations

In March 2020, the World Health Organization declared COVID-19 a global pandemic. The impact on the global population and the duration of the COVID-19 pandemic is difficult to assess or predict and depends on numerous evolving factors that we may not be able to accurately predict or effectively respond to, including, without limitation: the duration and scope of the outbreak; actions taken by governments, businesses, and individuals in response to the outbreak; the effect on economic activity and actions taken in response.

While our analysis shows COVID-19 did not have a significant impact on our results of operations for the fiscal year ended September 30, 2020, the impacts of the global pandemic on our business and financial outlook are currently unknown. Areas that may or may not be adversely disrupted or impacted by the COVID-19 pandemic include, but are not limited to: customer demand for our products and services, reductions in customer spend, delayed or the inability to collect from our customers, disruptions to our supply chain that could result in delays, shortages or increased costs of our products, disruptions to our operations in servicing our customers as a result of working remotely or business location closures, which all may adversely impact our business, results of operations and overall financial performance in future periods.

In addition to other risks listed in this "Risk Factors" section, factors that may affect our operating results include, but are not limited to:

- fluctuations in demand for our products and services due to changing market conditions, pricing conditions, technology evolution, seasonality, or other changes in the global economic environment;
- changes or fluctuations in sales and implementation cycles for our products and services;
- changes in the mix of our products and services, including increases in subscription-based offerings;
- changes in the growth rate of the application delivery market;
- reduced visibility into our customers' spending and implementation plans;
- reductions in customers' budgets for data center and other IT purchases or delays in these purchases;
- changes in end-user customer attach rates and renewal rates for our services;
- fluctuations in our gross margins, including the factors described herein, which may contribute to such fluctuations;
- our ability to control costs, including operating expenses, the costs of hardware and software components, and other manufacturing costs;
- our ability to develop, introduce and gain market acceptance of new products, technologies and services, and our success in new and evolving markets;
- any significant changes in the competitive environment, including the entry of new competitors or the substantial discounting of products or services;
- the timing and execution of product transitions or new product introductions, and related inventory costs;
- variations in sales channels, product costs, or mix of products sold;
- our ability to establish and manage our distribution channels, and the effectiveness of any changes we make to our distribution model;
- the ability of our contract manufacturers and suppliers to provide component parts, hardware platforms and other products in a timely manner;

- benefits anticipated from our investments in sales, marketing, product development, manufacturing or other activities;
- impacts on our overall tax rate caused by any reorganization in our corporate structure;
- changes in tax laws or regulations, or other accounting rules; and
- general economic conditions, both domestically and in our foreign markets.

Item 1B. *Unresolved Staff Comments*

Not applicable.

Item 2. *Properties*

We lease our principal administrative, sales, marketing, research and development facilities, which are located in Seattle, Washington and consist of approximately 515,000 square feet. In May 2017, we entered into a lease agreement for the building in Seattle, Washington that now serves as our corporate headquarters. This lease will expire in 2033 with an option for renewal.

We also lease a total of approximately 320,000 square feet of space at another location in Seattle, which served as our previous corporate headquarters through June 2019, when we relocated to our current location. The leases for the three buildings that served as our previous corporate headquarters expire in July 2022.

We believe that our existing properties are in good condition and suitable for the conduct of our business. We also lease additional office space for product development and sales and support personnel in the United States and internationally. We believe that our future growth can be accommodated by our current facilities or by leasing additional space if necessary.

Item 3. *Legal Proceedings*

See Note 13 - Commitments and Contingencies of the Notes to Financial Statements (Part II, Item 8 of this Form 10-K) for information regarding legal proceedings in which we are involved.

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 Prices of Common Stock

Our common stock is traded on the Nasdaq Global Select Market under the symbol "FFIV." The following table sets forth the high and low sales prices of our common stock as reported on the Nasdaq Global Select Market.

	Fiscal Year 2020		Fiscal Year 2019	
	High	Low	High	Low
First Quarter	$ 153.00	$ 128.51	$ 195.41	$ 149.87
Second Quarter	$ 141.31	$ 79.78	$ 173.44	$ 148.91
Third Quarter	$ 153.56	$ 101.42	$ 168.94	$ 131.53
Fourth Quarter	$ 156.36	$ 116.79	$ 153.99	$ 121.36

The last reported sales price of our common stock on the Nasdaq Global Select Market on November 9, 2020 was $154.97.

As of November 9, 2020, there were 45 holders of record of our common stock. As many of our shares of common stock are held by brokers and other institutions on behalf of shareholders, we are unable to estimate the total number of beneficial holders of our common stock represented by these record holders.

Dividend Policy

Our policy has been to retain cash for use in our business, for investment in acquisitions and to repurchase shares of our common stock. Accordingly, we have not paid dividends and do not anticipate declaring dividends on our common stock in the foreseeable future.

Unregistered Securities Sold in 2020

We did not sell any unregistered shares of our common stock during the fiscal year 2020.

Issuer Purchases of Equity Securities

On October 31, 2018, we announced that our Board of Directors authorized an additional $1.0 billion for our common stock share repurchase program. This new authorization is incremental to the existing $4.4 billion program, initially approved in October 2010 and expanded in each fiscal year. Acquisitions for the share repurchase programs will be made from time to time in private transactions or open market purchases as permitted by securities laws and other legal requirements. The programs can be terminated at any time. During fiscal year 2020, we repurchased and retired 799,495 shares at an average price of $125.10 per share and as of September 30, 2020, we had $1.3 billion remaining authorized to purchase shares.

Shares repurchased and retired during the fourth quarter of fiscal year 2020 are as follows (in thousands, except shares and per share data):

	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased per the Publicly Announced Plan	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan[2]
July 1, 2020 — July 31, 2020	—	$ —	—	$ 1,322,518
August 1, 2020 — August 31, 2020	373,078	$ 139.79	357,644	$ 1,272,511
September 1, 2020 — September 30, 2020	—	$ —	—	$ 1,272,511

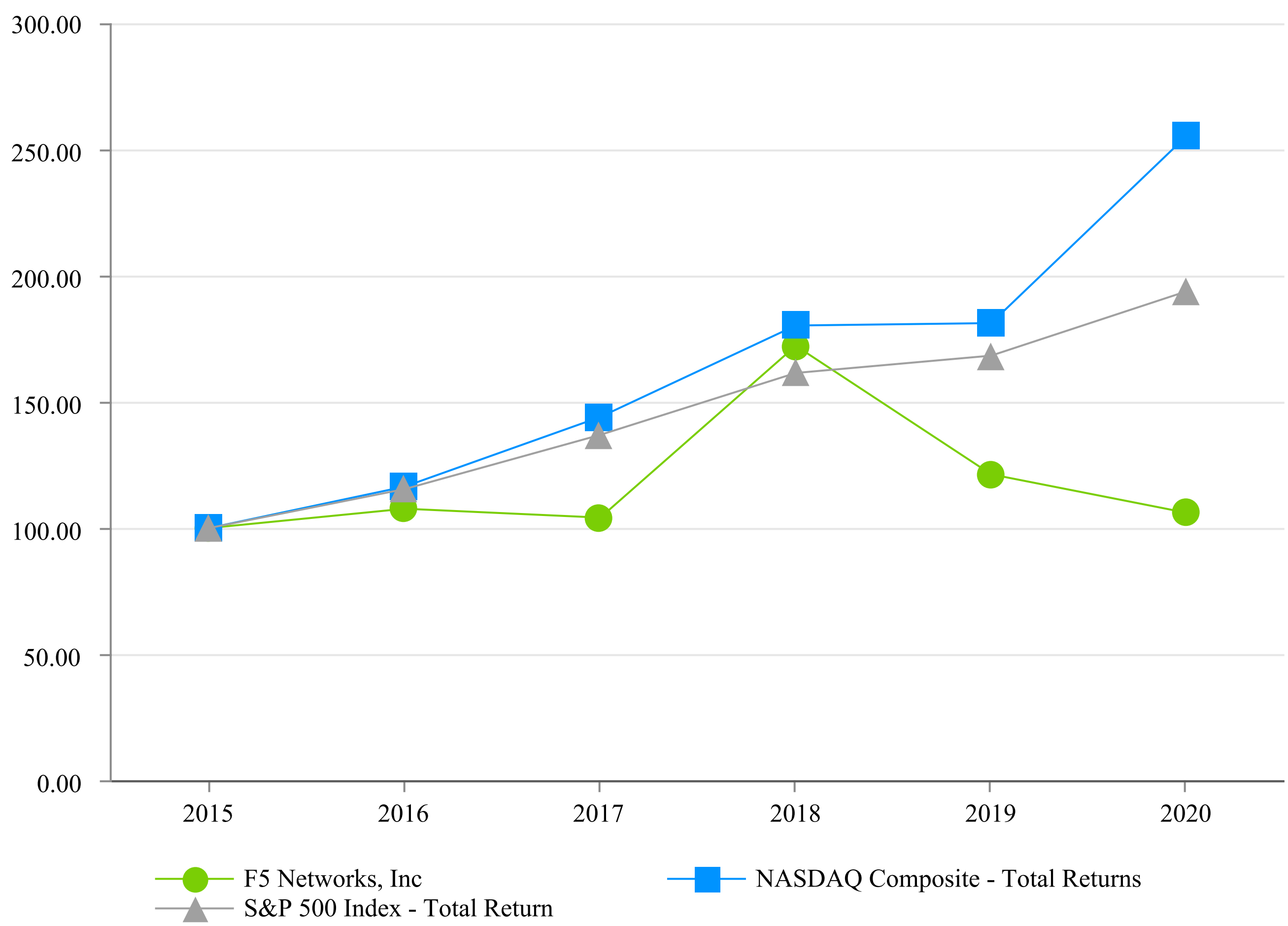
(1) Includes 15,434 shares withheld from restricted stock units that vested in the fourth quarter of 2020 to satisfy minimum tax withholding obligations that arose on the vesting of restricted stock units.

(2) Shares withheld from restricted stock units that vested to satisfy minimum tax withholding obligations that arose on the vesting of such awards do not deplete the dollar amount available for purchases under the repurchase program.

Performance Measurement Comparison of Shareholder Return

The following graph compares the annual percentage change in the cumulative total return on shares of our common stock, the Nasdaq Composite Index and the S&P 500 Index for the period commencing September 30, 2015, and ending September 30, 2020.

Comparison of Cumulative Total Return
On Investment Since September 30, 2015*



The Company's closing stock price on September 30, 2020, the last trading day of the Company's 2020 fiscal year, was $122.77 per share.

* Assumes that $100 was invested September 30, 2015 in shares of Common Stock and in each index, and that all dividends were reinvested. Shareholder returns over the indicated period should not be considered indicative of future shareholder returns.

Item 6. *Selected Financial Data*

The following selected consolidated historical financial data are derived from our audited financial statements. The consolidated balance sheet data as of September 30, 2020 and 2019 and the consolidated income statement data for the years ended September 30, 2020, 2019 and 2018 are derived from our audited consolidated financial statements and related notes that are included elsewhere in this report. The consolidated balance sheet data as of September 30, 2018, 2017 and 2016 and the consolidated income statement data for the years ended September 30, 2017 and 2016 are derived from our audited consolidated financial statements and related notes which are not included in this report. The information set forth below should be read in conjunction with our historical financial statements, including the notes thereto, and "Management's Discussion and Analysis of Financial Condition and Results of Operations," included elsewhere in this report.

	Years Ended September 30,				
	2020	2019 (4)	2018	2017	2016
	(In thousands, except per share data)				
Consolidated Income Statement Data					
Net revenues					
Products	$ 1,025,856	$ 985,591	$ 960,108	$ 964,662	$ 944,469
Services	1,324,966	1,256,856	1,201,299	1,125,379	1,050,565
Total	2,350,822	2,242,447	2,161,407	2,090,041	1,995,034
Cost of net revenues					
Products	215,275	174,986	181,061	176,032	166,624
Services	192,612	181,591	180,420	177,453	170,581
Total	407,887	356,577	361,481	353,485	337,205
Gross profit	1,942,935	1,885,870	1,799,926	1,736,556	1,657,829
Operating expenses					
Sales and marketing	843,178	748,619	664,135	652,239	628,743
Research and development	441,324	408,058	366,084	350,365	334,227
General and administrative	258,366	210,730	160,382	156,887	138,431
Litigation expense (1)	—	—	—	391	9,051
Restructuring charges (2)	7,800	—	18,426	12,718	—
Total	1,550,668	1,367,407	1,209,027	1,172,600	1,110,452
Income from operations	392,267	518,463	590,899	563,956	547,377
Other income, net	4,130	22,648	12,861	11,561	2,514
Income before income taxes	396,397	541,111	603,760	575,517	549,891
Provision for income taxes	88,956	113,377	150,071	154,756	184,036
Net income	$ 307,441	$ 427,734	$ 453,689	$ 420,761	$ 365,855
Net income per share — basic	$ 5.05	$ 7.12	$ 7.41	$ 6.56	$ 5.43
Weighted average shares — basic	60,911	60,044	61,262	64,173	67,433
Net income per share — diluted	$ 5.01	$ 7.08	$ 7.32	$ 6.50	$ 5.38
Weighted average shares — diluted	61,378	60,456	62,013	64,775	67,984
Consolidated Balance Sheet Data					
Cash, cash equivalents, and short-term investments	$ 1,209,889	$ 972,282	$ 1,039,412	$ 1,016,928	$ 882,395
Restricted cash (3)	3,270	3,035	1,187	1,224	1,151
Long-term investments	102,939	358,402	411,184	284,802	276,375
Total assets	4,677,920	3,390,275	2,605,476	2,476,489	2,306,323
Long-term liabilities	1,157,373	523,252	365,551	312,554	276,823
Total shareholders' equity	2,232,268	1,761,497	1,285,492	1,229,392	1,185,262

(1) Litigation expense primarily represents a patent-related jury verdict and legal fees associated with the litigation.
(2) Restructuring charges represent severance and other employee-related costs associated with workforce reductions that took place in the first quarter of fiscal 2020 and the fourth quarters of fiscal 2018 and 2017.
(3) Restricted cash represents escrow accounts established in connection with lease agreements for our facilities.
(4) Selected financial data for fiscal year 2019 contains effects from the adoption of ASC 606, and differs in comparability to previous years due to those effects. See Note 2 - Revenue from Contracts with Customers for more details.

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

The following discussion of our financial condition and results of operations contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934 and Section 27A of the Securities Act of 1933. These statements include, but are not limited to, statements about our plans, objectives, expectations, strategies, intentions or other characterizations of future events or circumstances and are generally identified by the words "expects," "anticipates," "intends," "plans," "believes," "seeks," "estimates," and similar expressions. These forward-looking statements are based on current information and expectations and are subject to a number of risks and uncertainties. Our actual results could differ materially from those expressed or implied by these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed under "Item 1A. Risk Factors" herein and in other documents we file from time to time with the Securities and Exchange Commission. We assume no obligation to revise or update any such forward-looking statements.

Overview

F5 is a leading provider of multi-cloud application services which enable our customers to develop, deploy, operate, secure, and govern applications in any architecture, from on-premises to the public cloud. Our enterprise-grade application services are available as cloud-based, software-as-a-service, and software-only solutions optimized for multi-cloud environments, with modules that can run independently, or as part of an integrated solution on our high-performance appliances. We market and sell our products primarily through multiple indirect sales channels in the Americas (primarily the United States); Europe, the Middle East, and Africa (EMEA); and the Asia Pacific region (APAC). Enterprise customers (Fortune 1000 or Business Week Global 1000 companies) in the technology, telecommunications, financial services, transportation, education, manufacturing, and health care industries, along with government customers, continue to make up the largest percentage of our customer base.

On January 24, 2020, we completed the acquisition of Shape Security, a provider of fraud and abuse prevention solutions. Together, F5 and Shape represent an end-to-end application security solution, reducing infrastructure complexity while protecting every aspect of the 'code to customer' journey against losses from online fraud, reputational damage, and disruptions to critical online services.

Our management team monitors and analyzes a number of key performance indicators in order to manage our business and evaluate our financial and operating performance on a consolidated basis. Those indicators include:

- *Revenues*. The majority of our revenues are derived from sales of our application delivery controller (ADC) products including our BIG-IP appliances and VIPRION chassis and related software modules and our software-only Virtual Editions; Local Traffic Manager (LTM), DNS Services (formerly Global Traffic Manager); Advanced Firewall Manager (AFM) and Policy Enforcement Manager (PEM), that leverage the unique performance characteristics of our hardware and software architecture; and products that incorporate acquired technology, including Application Security Manager (ASM) and Access Policy Manager (APM); NGINX Plus and NGINX Controller; Shape Defense and Enterprise Defense; and the Secure Web Gateway and Silverline DDoS and Application security offerings which are sold to customers on a subscription basis. We also derive revenues from the sales of services including annual maintenance contracts, training and consulting services. We carefully monitor the sales mix of our revenues within each reporting period. We believe customer acceptance rates of our new products and feature enhancements are indicators of future trends. We also consider overall revenue concentration by customer and by geographic region as additional indicators of current and future trends. We are also monitoring the uncertainty related to the impacts that the COVID-19 pandemic has on the global economy and our customer base.
- *Cost of revenues and gross margins.* We strive to control our cost of revenues and thereby maintain our gross margins. Significant items impacting cost of revenues are hardware costs paid to our contract manufacturers, third-party software license fees, software-as-a-service infrastructure, amortization of developed technology and personnel and overhead expenses. Our margins have remained relatively stable; however, factors such as sales price, product and services mix, inventory obsolescence, returns, component price increases, warranty costs, and the uncertainty surrounding the COVID-19 pandemic and its potential impacts to our supply chain could significantly impact our gross margins from quarter to quarter and represent significant indicators we monitor on a regular basis.
- *Operating expenses.* Operating expenses are substantially driven by personnel and related overhead expenses. Existing headcount and future hiring plans are the predominant factors in analyzing and forecasting future operating expense trends. Other significant operating expenses that we monitor include marketing and promotions, travel, professional fees, computer costs related to the development of new products and provision of services, facilities and depreciation expenses.
- *Liquidity and cash flows.* Our financial condition remains strong with significant cash and investments. The decrease in cash and cash equivalents for fiscal year 2020 was primarily due to $955.6 million in cash paid for the acquisition of Shape in the

second quarter of fiscal 2020 as well as $100.0 million of cash required for the repurchase of outstanding common stock under our share repurchase program in fiscal year 2020 and $59.9 million of capital expenditures related to the expansion of our facilities to support our operations worldwide as well as investments in information technology infrastructure and equipment purchases to support our core business activities. Going forward, we believe the primary driver of cash flows will be net income from operations. The decrease in cash and cash equivalents for fiscal year 2020 was partially offset by cash provided by operating activities of $660.9 million and $400.0 million in cash proceeds from the issuance of debt in connection with our acquisition of Shape. We will continue to evaluate possible acquisitions of, or investments in businesses, products, or technologies that we believe are strategic, which may require the use of cash. Additionally, on January 31, 2020, we entered into a Revolving Credit Agreement (the "Revolving Credit Agreement") that provides for a senior unsecured revolving credit facility in an aggregate principal amount of $350.0 million (the "Revolving Credit Facility"). We have the option to increase commitments under the Revolving Credit Facility from time to time, subject to certain conditions, by up to $150.0 million. As of September 30, 2020, there were no outstanding borrowings under the Revolving Credit Facility, and we had available borrowing capacity of $350.0 million.

- *Balance sheet.* We view cash, short-term and long-term investments, deferred revenue, accounts receivable balances and days sales outstanding as important indicators of our financial health. Deferred revenues continued to increase in fiscal 2020 due to the growth of our subscriptions business, including the acquired deferred revenue associated with the Shape acquisition. Our days sales outstanding for the fourth quarter of fiscal year 2020 was 43. Days sales outstanding is calculated by dividing ending accounts receivable by revenue per day for a given quarter.

Critical Accounting Policies

Our consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

We believe that, of our significant accounting policies, which are described in Note 1 of the notes to the consolidated financial statements, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition. On October 1, 2018, we adopted the new revenue recognition standard by applying the modified retrospective approach to those contracts which were not completed as of October 1, 2018. Results for reporting periods beginning after October 1, 2018 are presented under the new revenue recognition standard, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior periods.

We sell products through distributors, resellers, and directly to end users. Revenue related to our contracts with customers is recognized by following a five-step process:

- *Identify the contract(s) with a customer.* Evidence of a contract generally consists of a purchase order issued pursuant to the terms and conditions of a distributor, reseller or end user agreement.

- *Identify the performance obligations in the contract.* Performance obligations are identified in our contracts and include hardware, hardware-based software, software-only solutions, cloud-based subscription services as well as a broad range of service performance obligations including consulting, training, installation and maintenance.

- *Determine the transaction price.* The purchase price stated in an agreed upon purchase order is generally representative of the transaction price. We offer several programs in which customers are eligible for certain levels of rebates if certain conditions are met. When determining the transaction price, we consider the effects of any variable consideration.

- *Allocate the transaction price to the performance obligations in the contract.* The transaction price in a contract is allocated based upon the relative standalone selling price of each distinct performance obligation identified in the contract.

- *Recognize revenue when (or as) the entity satisfies a performance obligation.* We satisfy performance obligations either over time or at a point in time as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring control of promised products and services to a customer.

The following is a description of the principal activities from which we generate revenue:

Product

Revenue from the sale of our hardware and perpetual software products is generally recognized at a point in time when the product has been fulfilled and the customer is obligated to pay for the product. We also offer several products by subscription, either through term-based license agreements or as a service through our cloud-based platform. Revenue for term-based license agreements is recognized at a point in time, when we deliver the software license to the customer and the subscription term has commenced. For our software-as-a-service offerings, revenue is recognized ratably as the services are provided. Hardware, including the software run on those devices is considered Systems revenue. Perpetual or subscription software offerings that are deployed on a standalone basis, along with software sold as a service are considered Software revenue. When rights of return are present and we cannot estimate returns, revenue is recognized when such rights of return lapse. Payment terms to customers are generally net 30 days to net 60 days.

Services

Revenues for post-contract customer support (PCS) are recognized on a straight-line basis over the service contract term. PCS includes a limited period of telephone support, updates, repair or replacement of any failed product or component that fails during the term of the agreement, bug fixes and rights to upgrades, when and if available. Consulting services are customarily billed at fixed hourly rates, plus out-of-pocket expenses, and revenues are recognized as the consulting is completed. Similarly, training revenue is recognized as the training is completed.

Contract acquisition costs

Sales commissions earned by our sales force are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commissions for initial service contracts and subscription offerings are deferred and then amortized as an expense on a straight-line basis over the period of benefit which management has determined to be 4.5 years and 3 years, respectively.

Significant Judgments

We enter into certain contracts with customers, including enterprise license arrangements, with non-standard terms and conditions. Management exercises significant judgment in assessing contractual terms in these arrangements to identify and evaluate performance obligations and total consideration. Management allocates consideration to each performance obligation based on relative fair value using standalone selling price and recognizes associated revenue as control is transferred to the customer.

Business Combinations. Our business combinations are accounted for under the acquisition method. We allocate the fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets.

On January 24, 2020, we completed our acquisition of Shape Security, Inc. for a total purchase price of $1.0 billion, of which approximately $120.0 million of finite-lived developed technology was recorded. Management valued the developed technology using the multi-period excess earnings method under the income approach. Management applied significant judgment in estimating the fair value of the acquired developed technology, which involved the use of a significant assumption with respects to the revenue growth rate and technology migration curve.

COVID-19 Update

Management has prioritized a human-first approach to the COVID-19 pandemic. For F5, this means ensuring the health and safety of employees, their families and our communities. Further, this approach extends to our customers as we look for ways that we can support their operations during this crisis.

While our analysis shows COVID-19 did not have a significant impact on our results of operations for the fiscal year ended September 30, 2020, the impacts of the global pandemic on our business and financial outlook are currently unknown. We are conducting business with substantial modifications to employee travel, employee work locations, and virtualization or cancellation of certain sales and marketing events, among other modifications. We will continue to actively monitor the situation and may take further actions that alter our business operations as may be required by federal, state or local authorities, or that we determine are in the best interests of our employees, customers, partners, suppliers and stockholders. It is not clear what the potential effects any such alterations or modifications may have on our business, including the effects on our customers and prospects, or on our financial results.

Results of Operations

The following discussion and analysis should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K.

	Years Ended September 30,		
	2020	2019	2018
	(in thousands, except percentages)		
Net revenues			
Products	$1,025,856	$ 985,591	$ 960,108
Services	1,324,966	1,256,856	1,201,299
Total	$2,350,822	$2,242,447	$2,161,407
Percentage of net revenues			
Products	43.6 %	44.0 %	44.4 %
Services	56.4	56.0	55.6
Total	100.0 %	100.0 %	100.0 %

Net Revenues. Total net revenues increased 4.8% in fiscal year 2020 from fiscal year 2019, compared to an increase of 3.7% in fiscal year 2019 from the prior year. Overall revenue growth for the year ended September 30, 2020 was due to increased product and service revenue. The product revenue increase was driven by software revenue increases, specifically from the addition of the software-as-a-service product offerings through the Shape acquisition and our subscription-based offerings, which include our enterprise license agreement product offerings. Service revenues increased as a result of our increased installed base of products. Revenues outside of the United States represented 48.1%, 49.3% and 49.6% of net revenues in fiscal years 2020, 2019 and 2018, respectively.

Net Product Revenues. Net product revenues increased 4.1% in fiscal year 2020 from fiscal year 2019, compared to an increase of 2.7% in fiscal year 2019 from the prior year. The increase of $40.3 million in net product sales for fiscal year 2020 was due to an increase in software sales compared to the same period in the prior year, partially offset by a decrease in systems revenue. The increase of $25.5 million in net product sales for fiscal year 2019 was primarily due to an increase in software sales compared to the prior year, partially offset by a decrease in systems revenue.

The following presents net product revenues by systems and software (in thousands):

	Years Ended September 30,		
	2020	2019	2018
Net product revenues			
Systems revenue	$ 668,313	$ 745,798	$ 810,182
Software revenue	357,543	239,793	149,926
Total net product revenue	$1,025,856	$ 985,591	$ 960,108
Percentage of net product revenues			
Systems revenue	65.1 %	75.7 %	84.4 %
Software revenue	34.9	24.3	15.6
Total net product revenue	100.0 %	100.0 %	100.0 %

Net Service Revenues. Net service revenues increased 5.4% in fiscal year 2020 from fiscal year 2019, compared to an increase of 4.6% in fiscal year 2019 from the prior year. The increases in service revenue were the result of increased purchases or renewals of maintenance contracts driven by additions to our installed base of products.

The following distributors of our products accounted for more than 10% of total net revenue:

	Years Ended September 30,		
	2020	2019	2018
Ingram Micro, Inc.	16.7 %	18.2 %	16.6 %
Tech Data	—	10.2 %	11.6 %
Westcon Group, Inc.	—	10.0 %	10.4 %
Synnex Corporation	—	—	10.8 %
Arrow ECS	—	—	10.7 %

The following distributors of our products accounted for more than 10% of total receivables:

	September 30,	
	2020	2019
Ingram Micro, Inc.	14.1 %	12.4 %
Synnex Corporation	11.4 %	12.9 %
Carahsoft Technology	—	11.5 %

No other distributors accounted for more than 10% of total net revenue or receivables.

	Years Ended September 30,		
	2020	2019	2018
	(in thousands, except percentages)		
Cost of net revenues and gross profit			
Products	$ 215,275	$ 174,986	$ 181,061
Services	192,612	181,591	180,420
Total	407,887	356,577	361,481
Gross profit	$1,942,935	$1,885,870	$1,799,926
Percentage of net revenues and gross margin (as a percentage of related net revenue)			
Products	21.0 %	17.8 %	18.9 %
Services	14.5	14.4	15.0
Total	17.4	15.9	16.7
Gross margin	82.6 %	84.1 %	83.3 %

Cost of Net Product Revenues. Cost of net product revenues consist of finished products purchased from our contract manufacturers, manufacturing overhead, freight, warranty, provisions for excess and obsolete inventory and amortization expenses in connection with developed technology from acquisitions. Cost of net product revenues increased to $215.3 million in fiscal year 2020, up 23.0% from the prior year, primarily due to an increase in revenue and related managed service costs from the Shape acquisition. Cost of net product revenues decreased to $175.0 million in fiscal year 2019 from $181.1 million in fiscal year 2018, primarily due to a change in product mix.

Cost of Net Service Revenues. Cost of net service revenues consist of the salaries and related benefits of our professional services staff, travel, facilities and depreciation expenses. Cost of net service revenues as a percentage of net service revenues remained relatively flat at 14.5% in fiscal year 2020 compared to 14.4% in fiscal year 2019 and 15.0% in fiscal year 2018. Professional services headcount at the end of fiscal 2020 increased to 965 from 925 at the end of fiscal 2019. Professional services headcount at the end of fiscal year 2019 increased to 925 from 891 at the end of fiscal 2018. In addition, cost of net service revenues included stock-based compensation expense of $20.8 million, $18.3 million and $18.8 million for fiscal years 2020, 2019 and 2018, respectively.

	Years Ended September 30,		
	2020	2019	2018
	(in thousands, except percentages)		
Operating expenses			
Sales and marketing	$ 843,178	$ 748,619	$ 664,135
Research and development	441,324	408,058	366,084
General and administrative	258,366	210,730	160,382
Restructuring charges	7,800	—	18,426
Total	$1,550,668	$1,367,407	$1,209,027
Operating expenses (as a percentage of net revenue)			
Sales and marketing	35.9 %	33.4 %	30.7 %
Research and development	18.8	18.2	16.9
General and administrative	11.0	9.4	7.4
Restructuring charges	0.3	—	0.9
Total	66.0 %	61.0 %	55.9 %

Sales and Marketing. Sales and marketing expenses consist of the salaries, commissions and related benefits of our sales and marketing staff, the costs of our marketing programs, including public relations, advertising and trade shows, travel, facilities, and depreciation expenses. Sales and marketing expense increased 12.6% in fiscal year 2020 from the prior year, as compared to a year-over-year increase of 12.7% in fiscal year 2019. The increase in sales and marketing expense for fiscal year 2020 was primarily due to increases in commissions and personnel costs of $75.4 million, compared to the prior year. The increases in commissions and personnel costs were driven by growth in sales and marketing employee headcount during fiscal year 2020, including employees from the acquisition of Shape, as well as higher commissions related to software sales. Sales and marketing headcount at the end of fiscal year 2020 increased to 2,395 from 2,146 at the end of fiscal year 2019. In fiscal year 2019, the increase in sales and marketing expense was primarily due to increases in commissions and personnel costs of $43.3 million, compared to the prior year. The increases in commissions and personnel costs were driven by growth in sales and marketing employee headcount during fiscal year 2019, including employees from the acquisition of NGINX, as well as higher commissions related to software sales. Sales and marketing headcount at the end of fiscal year 2019 increased to 2,146 from 1,682 at the end of fiscal year 2018. Sales and marketing expense included stock-based compensation expense of $88.4 million, $69.5 million and $61.5 million for fiscal years 2020, 2019 and 2018, respectively.

Research and Development. Research and development expenses consist of the salaries and related benefits of our product development personnel, prototype materials and other expenses related to the development of new and improved products, facilities and depreciation expenses. Research and development expense increased 8.2% in fiscal year 2020, compared to the prior year. The increase in research and development expense for fiscal year 2020 was primarily due to increased personnel costs of $18.2 million, compared to the prior year. The increase in personnel costs were driven by growth in research and development employee headcount during fiscal year 2020, including employees from the acquisition of Shape. Research and development headcount at the end of fiscal year 2020 increased to 1,797 from 1,556 at the end of fiscal year 2019. In fiscal year 2019, research and development expense increased 11.5%, compared to the prior year. The increase in research and development expense for fiscal year 2019 was primarily due to increased personnel costs of $25.0 million, compared to the prior year. The increase in personnel costs were driven by growth in research and development employee headcount during fiscal year 2019. Research and development headcount at the end of fiscal year 2019 increased to 1,556 from 1,268 at the end of fiscal year 2018. Research and development expense included stock-based compensation expense of $50.3 million, $40.9 million and $47.3 million for fiscal years 2020, 2019 and 2018, respectively.

General and Administrative. General and administrative expenses consist of the salaries, benefits and related costs of our executive, finance, information technology, human resource and legal personnel, third-party professional service fees, bad debt charges, facilities and depreciation expenses. General and administrative expense increased 22.6% in fiscal year 2020, compared to the prior year. The increase in general and administrative expense for fiscal year 2020 was primarily due to an increase of $19.2 million in fees paid to outside consultants for legal, accounting and tax services, primarily related to the acquisition of Shape. In addition, personnel costs increased $18.5 million, compared to the prior year due to growth in general and administrative headcount, including employees from the acquisition of Shape. In fiscal year 2019, general and administrative expense increased 31.4% compared to the prior year. The increase in general and administrative expense for fiscal year 2019 was primarily due to an increase of $18.1 million in fees paid to outside consultants for legal, accounting and tax services, primarily related to the acquisition of NGINX. In addition, personnel costs increased $6.5 million, compared to the prior year due to growth in general and administrative headcount, including employees from the acquisition of NGINX. General and administrative expense for fiscal year 2019 also included an impairment charge of $6.3 million related to capitalized internal-use software costs, and an increase in facilities cost of $8.7 million, compared to the prior year, primarily due to the move of our corporate headquarters which began in April 2019. General and administrative headcount at the end of fiscal year 2020 increased to 704 from 593 at the end of fiscal year 2019 and 475 at the end of fiscal year 2018. General and administrative expense included stock-based compensation expense of $37.8 million, $32.2 million and $27.9 million for fiscal years 2020, 2019 and 2018, respectively.

Restructuring charges. In the first fiscal quarter of 2020, we completed a restructuring plan to align strategic and financial objectives and optimize resources for long-term growth. As a result of these initiatives, we recorded a restructuring charge of $7.8 million in the first quarter of fiscal year 2020 related to a reduction in workforce. In September 2018, we initiated a restructuring plan, recording a restructuring charge of $18.4 million in the fourth quarter of fiscal year 2018 related to a reduction in workforce.

	Years Ended September 30,		
	2020	2019	2018
	(in thousands, except percentages)		
Other income and income taxes			
Income from operations	$ 392,267	$ 518,463	$ 590,899
Other income, net	4,130	22,648	12,861
Income before income taxes	396,397	541,111	603,760
Provision for income taxes	88,956	113,377	150,071
Net income	$ 307,441	$ 427,734	$ 453,689
Other income and income taxes (as percentage of net revenue)			
Income from operations	16.7 %	23.1 %	27.3 %
Other income, net	0.2	1.0	0.6
Income before income taxes	16.9	24.1	27.9
Provision for income taxes	3.8	5.0	6.9
Net income	13.1 %	19.1 %	21.0 %

Other Income, Net. Other income, net, consists primarily of interest income and expense and foreign currency transaction gains and losses. Other income, net decreased $18.5 million in fiscal year 2020, as compared to fiscal year 2019 and increased $9.8 million in fiscal year 2019, as compared to fiscal year 2018. The decrease in other income, net for fiscal year 2020 was primarily due to a decrease of $13.1 million in interest income from our investments compared to the same period in the prior year. In addition, interest expense increased $7.5 million for fiscal year 2020 compared to the prior year as a result of $400.0 million of debt issued as part of our acquisition of Shape in January 2020. The increase in other income, net for fiscal year 2019 as compared to fiscal year 2018 was primarily due to an increase of $8.3 million in interest income, compared to the prior year, and foreign currency gains of $1.8 million, compared to the prior year.

Provision for Income Taxes. We recorded a 22.4% provision for income taxes for fiscal year 2020, compared to 21.0% in fiscal year 2019 and 24.9% in fiscal year 2018. The increase in the effective tax rate from fiscal year 2019 to 2020 is primarily due to an increase in the tax impact from stock based compensation and other non-deductible expenses. The decrease in the effective tax rate from fiscal year 2018 to 2019 is primarily due to a further reduction in the U.S. federal income tax rate to 21%, the non-recurring tax expense recorded in fiscal year 2018 for deemed repatriation of undistributed foreign earnings and remeasurement of net deferred tax assets, partially offset by a decrease in tax deductible stock compensation.

We record a valuation allowance to reduce our deferred tax assets to the amount we believe is more likely than not to be realized. In making these determinations we consider historical and projected taxable income, and ongoing prudent and feasible tax planning strategies in assessing the appropriateness of a valuation allowance. The net increase in the valuation allowance of $9.1 million for fiscal year 2020 and $0.7 million for fiscal year 2019 was primarily related to tax net operating losses and credits incurred in certain foreign jurisdictions and state tax carryforwards. Our net deferred tax assets as of September 30, 2020, 2019 and 2018 were $44.6 million, $27.4 million, and $33.4 million respectively.

Our worldwide effective tax rate may fluctuate based on a number of factors, including variations in projected taxable income in the various geographic locations in which we operate, changes in the valuation of our net deferred tax assets, resolution of potential exposures, tax positions taken on tax returns filed in the various geographic locations in which we operate, and the introduction of new accounting standards or changes in tax laws or interpretations thereof in the various geographic locations in which we operate. We have recorded liabilities to address potential tax exposures related to business and income tax positions we have taken that could be challenged by taxing authorities. The ultimate resolution of these potential exposures may be greater or less than the liabilities recorded which could result in an adjustment to our future tax expense.

Liquidity and Capital Resources

We have funded our operations with our cash balances, cash generated from operations and proceeds from public offerings of our securities.

	Years Ended September 30, 2020	2019	2018
		(in thousands)	
Liquidity and Capital Resources			
Cash and cash equivalents and investments	$ 1,312,828	$ 1,330,684	$ 1,450,596
Cash provided by operating activities	660,898	747,841	761,068
Cash used in investing activities	(747,002)	(414,634)	(456,023)
Cash provided by (used in) financing activities	337,243	(155,447)	(551,263)

Cash and cash equivalents, short-term investments and long-term investments totaled $1,312.8 million as of September 30, 2020, compared to $1,330.7 million as of September 30, 2019, representing a decrease of $17.9 million. The decrease was primarily due to $955.6 million in cash paid for the acquisition of Shape in the second quarter of fiscal 2020 as well as $100.0 million of cash required for the repurchase of outstanding common stock under our share repurchase program in fiscal year 2020 and $59.9 million of capital expenditures related to the expansion of our facilities to support our operations worldwide as well as investments in information technology infrastructure and equipment purchases to support our core business activities. The decrease was partially offset by cash provided by operating activities of $660.9 million and $400.0 million in cash proceeds from the issuance of debt in connection with our acquisition of Shape. As of September 30, 2020, 59.1% of our cash and cash equivalents and investment balances were outside of the U.S. The cash and cash equivalents and investment balances outside of the U.S. are subject to fluctuation based on the settlement of intercompany balances. In fiscal year 2019, the decrease to cash and cash equivalents, short-term investments and long-term investments from the prior year was primarily due to $611.6 million in cash paid for the acquisition of NGINX in the third quarter of fiscal 2019 as well as $201.0 million of cash required for the repurchase of outstanding common stock under our share repurchase program in fiscal year 2019 and $103.5 million of capital expenditures related to the expansion of our facilities to support our operations worldwide. As of September 30, 2019, 55.8% of our cash and cash equivalents and investment balances were outside of the U.S.

Cash provided by operating activities during fiscal year 2020 was $660.9 million compared to $747.8 million in fiscal year 2019 and $761.1 million in fiscal year 2018. Cash provided by operating activities resulted primarily from cash generated from net income, after adjusting for non-cash charges such as stock-based compensation, depreciation and amortization charges and changes in operating assets and liabilities.

Cash from operations could be affected by various risks and uncertainties, including, but not limited to, the effects of the COVID-19 pandemic and other risks detailed in Part I, Item 1A titled “Risk Factors”. However, we anticipate our current cash, cash equivalents and investment balances, anticipated cash flows generated from operations, and available borrowing capacity on the Revolver Credit Facility will be sufficient to meet our liquidity needs.

Cash used in investing activities during fiscal year 2020 was $747.0 million compared to cash used in investing activities of $414.6 million in fiscal year 2019 and cash used in investing activities of $456.0 million in fiscal year 2018. Cash used in investing activities for fiscal year 2020 was primarily the result of $955.6 million in cash paid for the acquisition of Shape, along with capital expenditures related to maintaining our operations worldwide and the purchase of investments, partially offset by the maturity and sale of investments. Cash used in investing activities for fiscal year 2019 was primarily the result of $611.6 million in cash paid for the acquisition of NGINX, along with capital expenditures related to the build-out of our new corporate headquarters and the purchase of investments, partially offset by the maturity and sale of investments. Cash used in investing activities for fiscal year 2018 was primarily the result of the purchase of investments and capital expenditures related to maintaining our operations worldwide, partially offset by the sale and maturity of investments.

Cash provided by financing activities was $337.2 million for fiscal year 2020, compared to cash used in financing activities of $155.4 million for fiscal year 2019 and $551.3 million for fiscal year 2018. Cash provided by financing activities for fiscal year 2020 included $400.0 million in cash proceeds from a term loan, as well as cash received from the exercise of employee stock options and stock purchases under our employee stock purchase plan of $52.8 million, partially offset by $100.0 million in cash used to repurchase common stock under our share repurchase program and $10.0 million in cash used to make a principal payment on our term loan. Cash used in financing activities for fiscal year 2019 included $201.0 million to repurchase common stock under our share repurchase program, which was partially offset by cash received from the exercise of employee stock options and stock purchases under our employee stock purchase plan of $45.6 million. Cash used in financing activities for fiscal year 2018 included $600.1 million to repurchase common stock under our share repurchase program, which was partially offset by cash received from the exercise of employee stock options and stock purchases under our employee stock purchase plan of $48.8 million.

On January 31, 2020, we entered into a Revolving Credit Agreement (the "Revolving Credit Agreement") that provides for a senior unsecured revolving credit facility in an aggregate principal amount of $350.0 million (the "Revolving Credit Facility"). We have the option to increase commitments under the Revolving Credit Facility from time to time, subject to certain conditions, by up to $150.0 million. As of September 30, 2020, there were no outstanding borrowings under the Revolving Credit Facility, and we had available borrowing capacity of $350.0 million.

Based on our current operating and capital expenditure forecasts, we believe that our existing cash and investment balances, together with cash generated from operations should be sufficient to meet our operating requirements for the next twelve months. Our future capital requirements will depend on many factors, including our rate of revenue growth, the expansion of our sales and marketing activities, the timing and extent of expansion into new territories, the timing of introductions of new products and enhancements of existing products, the continuing market acceptance of our products and cash paid for future acquisitions.

Obligations and Commitments

As of September 30, 2020, we had approximately $54.8 million of tax liabilities, including interest and penalties, related to uncertain tax positions (See Note 9 to our Consolidated Financial Statements). Because of the high degree of uncertainty regarding the settlement of these liabilities, we are unable to estimate the years in which future cash outflows may occur.

As of September 30, 2020, our principal commitments consisted of borrowings under the Term Loan Facility and obligations outstanding under operating leases.

In connection with the acquisition of Shape, on January 24, 2020, we entered into a Term Credit Agreement ("Term Credit Agreement") with certain institutional lenders that provides for a senior unsecured term loan facility in an aggregate principal amount of $400.0 million (the "Term Loan Facility"). The proceeds from the Term Loan Facility were primarily used to finance the acquisition of Shape and related expenses. As of September 30, 2020, $390.0 million of principal amount under the Term Loan Facility was outstanding. There is a financial covenant that requires us to maintain a leverage ratio, calculated as of the last day of each fiscal quarter, of consolidated total indebtedness to consolidated EBITDA. This covenant may result in a higher interest rate on our outstanding principal borrowings on the Term Loan Facility in future periods, depending on the Company's performance. We will monitor the effect that the COVID-19 pandemic may have on our leverage ratio calculation but do not believe there will be a material impact to the interest payable on our borrowings under the Term Loan Facility. Refer to Note 7 of our Consolidated Financial Statements for the scheduled principal maturities of the Term Loan Facility as of September 30, 2020.

We outsource the manufacturing of our pre-configured hardware platforms to contract manufacturers who assemble each product to our specifications. Our agreement with our largest contract manufacturer allows them to procure component inventory on our behalf based upon a rolling production forecast. We are contractually obligated to purchase the component inventory in accordance with the forecast, unless we give notice of order cancellation in advance of applicable lead times.

Recently Adopted Accounting Standards

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606) (ASU 2014-09). ASU 2014-09 and the related amendments outline a new, single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The new model requires revenue recognition to depict the transfer of promised goods or services to customers in an amount that reflects the consideration a company expects to receive in exchange for those goods or services. We adopted this new accounting standard and the related amendments on October 1, 2018 using the modified retrospective method. Refer to Note 2 - Revenue from Contracts with Customers for further discussion.

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02, Leases (Topic 842) (ASU 2016-02), which requires lessees to recognize on the balance sheet a right-of-use asset, representing its right to use the underlying asset for the lease term, and a corresponding lease liability for all leases with terms greater than twelve months. Our leases consist primarily of operating leases for our offices and lab spaces. We do not have finance leases. The guidance also requires qualitative and quantitative disclosures designed to assess the amount, timing and uncertainty of cash flows arising from leases. We adopted this standard on October 1, 2019 on a modified retrospective basis by applying the new standard to our lease portfolio as of October 1, 2019. Under the modified retrospective method, financial results reported in periods prior to fiscal 2020 are unchanged. As a result of the adoption of this standard, we recognized lease liabilities and corresponding right-of-use assets for our long-term leases for office space, which had a material impact to our consolidated balance sheets. The adoption of this standard had no impact on the consolidated income statements and consolidated statements of cash flows. Refer to Note 8 - Leases for further discussion.

Upon adoption of the standard, we elected the package of three practical expedients for existing and expired contracts to not reassess: the existence of additional leases, lease classification, or the treatment of initial direct costs. We also apply the short-term lease exemption for leases with an original expected term of 12 months or less and expense such leases month-to-month and do not record a right-of-use asset or lease liability. Short-term lease activity under the exception is not significant. Additionally, we do not separate lease and non-lease components in the allocation of minimum lease payments for our office space and equipment leases, as such separation is not significant.

We include in minimum lease payments, fixed and variable payments based on a rate or index, but exclude variable payments based on satisfying future benchmarks or actual future costs incurred; such amounts are expensed as incurred. To calculate the net present value, we apply an incremental borrowing rate. This incremental borrowing rate is determined using a portfolio approach based on the rate of interest we would pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. Renewal options to extend lease terms are excluded from the minimum lease term at lease commencement.

Recently Issued Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which modifies the accounting for credit losses for most financial assets and requires the use of an expected loss model, replacing the currently used incurred loss method. Under this model, entities will be required to estimate the lifetime expected credit loss on such instruments and record an allowance to offset the amortized cost basis of the financial asset, resulting in a net presentation of the amount expected to be collected on the financial asset. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40) (ASU 2018-15), which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software, and hosting arrangements that include an internal use software license. The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. We do not anticipate that the adoption of this standard will have a material impact on our consolidated financial statements.

Item 7A. *Quantitative and Qualitative Disclosure About Market Risk*

Interest Rate Risk. Our cash equivalents consist of high-quality securities, as specified in our investment policy guidelines. The policy limits the amount of credit exposure to any one issue or issuer to a maximum of 5% of the total portfolio with the exception of U.S. treasury and agency securities and money market funds, which are exempt from size limitation. The policy requires investments in securities that mature in three years or less, with the average maturity being no greater than one and a half years. These securities are subject to interest rate risk and will decrease in value if interest rates increase. A decrease of one percent in the average interest rate would have resulted in a decrease of approximately $2.3 million in our interest income for the fiscal year 2020.

	Maturing in				
	Three Months or Less	Three Months to One Year	Greater Than One Year	Total	Fair Value
	(in thousands, except for percentages)				
September 30, 2020					
Included in cash and cash equivalents	$ 250,970	$ —	$ —	$ 250,970	$ 250,970
Weighted average interest rate	0.6 %	—	—	—	—
Included in short-term investments	$ 51,871	$ 308,462	$ —	$ 360,333	$ 360,333
Weighted average interest rates	1.4 %	1.5 %	—	—	—
Included in long-term investments	$ —	$ —	$ 102,939	$ 102,939	$ 102,939
Weighted average interest rate	—	—	1.6 %	—	—
September 30, 2019					
Included in cash and cash equivalents	$ 293,642	$ —	$ —	$ 293,642	$ 293,642
Weighted average interest rate	2.1 %	—	—	—	—
Included in short-term investments	$ 98,811	$ 274,252	$ —	$ 373,063	$ 373,063
Weighted average interest rates	2.1 %	2.2 %	—	—	—
Included in long-term investments	$ —	$ —	$ 358,402	$ 358,402	$ 358,402
Weighted average interest rate	—	—	2.5 %	—	—
September 30, 2018					
Included in cash and cash equivalents	$ 54,336	$ —	$ —	$ 54,336	$ 54,336
Weighted average interest rate	1.1 %	—	—	—	—
Included in short-term investments	$ 146,376	$ 468,329	$ —	$ 614,705	$ 614,705
Weighted average interest rates	1.4 %	1.7 %	—	—	—
Included in long-term investments	$ —	$ —	$ 411,184	$ 411,184	$ 411,184
Weighted average interest rate	—	—	1.9 %	—	—

Foreign Currency Risk. The majority of our sales and expenses are denominated in U.S. dollars and as a result, we have not experienced significant foreign currency transaction gains and losses to date. While we have conducted some transactions in foreign currencies during the fiscal year ended 2020 and expect to continue to do so, we do not anticipate that foreign currency transaction gains or losses will be significant at our current level of operations. However, as we continue to expand our operations internationally, transaction gains or losses may become significant in the future. We have not engaged in foreign currency hedging to date. However, we may do so in the future.

Item 8. ***Financial Statements and Supplementary Data***

F5 NETWORKS, INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of F5 Networks, Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of F5 Networks, Inc. and its subsidiaries (the "Company") as of September 30, 2020 and 2019, and the related consolidated statements of income, of comprehensive income, of shareholders' equity and of cash flows for each of the three years in the period ended September 30, 2020, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of September 30, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended September 30, 2020 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2020, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Changes in Accounting Principles

As discussed in Note 1 to the consolidated financial statements, the Company changed the manner in which it accounts for leases as of October 1, 2019 and the manner in which it accounts for revenues from contracts with customers as of October 1, 2018.

Basis for Opinions

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

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

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

Definition and Limitations of Internal Control over Financial Reporting

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

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

Critical Audit Matters

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

Acquisition of Shape Security, Inc. – Valuation of Developed Technology Intangible Asset

As described in Notes 1 and 3 to the consolidated financial statements, on January 24, 2020, the Company completed the acquisition of Shape Security, Inc. for a total purchase price of $1.0 billion, of which approximately $120.0 million of developed technology was recorded. Management valued the developed technology using the multi-period excess earnings method under the income approach. Management applied significant judgment in estimating the fair value of the developed technology intangible asset, which involved the use of significant assumptions related to the revenue growth rate and the technology migration curve.

The principal considerations for our determination that performing procedures relating to the acquisition of Shape Security, Inc. and the valuation of developed technology is a critical audit matter are (i) the high degree of auditor judgment and subjectivity in applying procedures relating to the fair value measurement of the developed technology acquired due to the significant judgment by management when developing the estimate; (ii) significant audit effort in evaluating the significant assumptions relating to the estimate, such as the revenue growth rate and technology migration curve; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the acquisition accounting, including controls over management's valuation of the acquired developed technology and controls over development of the revenue growth rate and technology migration curve assumptions. These procedures also included, among others, (i) reading the merger agreement, and (ii) testing management's process for estimating the fair value of the acquired developed technology. Testing management's process included evaluating the appropriateness of the valuation method, testing the completeness and accuracy of data provided by management, and evaluating the reasonableness of significant assumptions related to the revenue growth rate and technology migration curve. Evaluating the reasonableness of management's revenue growth rate and technology migration curve assumptions involved considering (i) the past performance of the acquired business, (ii) the consistency with external market and industry data, and (iii) whether these assumptions were consistent with evidence obtained in other areas of the audit. Professionals with specialized skill and knowledge were used to assist in evaluating the method used to value the developed technology, and the reasonableness of the technology migration curve assumption used by management.

/s/ PricewaterhouseCoopers LLP
Seattle, Washington
November 19, 2020

We have served as the Company's auditor since 1996.

F5 NETWORKS, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands)

	September 30, 2020	September 30, 2019
ASSETS		
Current assets		
Cash and cash equivalents	$ 849,556	$ 599,219
Short-term investments	360,333	373,063
Accounts receivable, net of allowances of $3,105 and $3,259	296,183	322,029
Inventories	27,898	34,401
Other current assets	259,506	182,874
Total current assets	1,793,476	1,511,586
Property and equipment, net	229,239	223,426
Operating lease right-of-use assets	300,680	—
Long-term investments	102,939	358,402
Deferred tax assets	45,173	27,701
Goodwill	1,858,966	1,065,379
Other assets, net	347,447	203,781
Total assets	$ 4,677,920	$ 3,390,275
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 64,472	$ 62,627
Accrued liabilities	321,398	235,869
Deferred revenue	883,134	807,030
Current portion of long-term debt	19,275	—
Total current liabilities	1,288,279	1,105,526
Deferred tax liabilities	602	313
Deferred revenue, long-term	389,498	391,086
Operating lease liabilities, long-term	338,715	—
Long-term debt	369,047	—
Other long-term liabilities	59,511	131,853
Total long-term liabilities	1,157,373	523,252
Commitments and contingencies (Note 13)		
Shareholders' equity		
Preferred stock, no par value; 10,000 shares authorized, no shares outstanding	—	—
Common stock, no par value; 200,000 shares authorized, 61,099 and 60,367 shares issued and outstanding	305,453	142,597
Accumulated other comprehensive loss	(18,716)	(19,190)
Retained earnings	1,945,531	1,638,090
Total shareholders' equity	2,232,268	1,761,497
Total liabilities and shareholders' equity	$ 4,677,920	$ 3,390,275

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

F5 NETWORKS, INC.
CONSOLIDATED INCOME STATEMENTS
(in thousands, except per share amounts)

	Years Ended September 30, 2020	2019	2018
Net revenues			
Products	$ 1,025,856	$ 985,591	$ 960,108
Services	1,324,966	1,256,856	1,201,299
Total	2,350,822	2,242,447	2,161,407
Cost of net revenues			
Products	215,275	174,986	181,061
Services	192,612	181,591	180,420
Total	407,887	356,577	361,481
Gross profit	1,942,935	1,885,870	1,799,926
Operating expenses			
Sales and marketing	843,178	748,619	664,135
Research and development	441,324	408,058	366,084
General and administrative	258,366	210,730	160,382
Restructuring charges	7,800	—	18,426
Total	1,550,668	1,367,407	1,209,027
Income from operations	392,267	518,463	590,899
Other income, net	4,130	22,648	12,861
Income before income taxes	396,397	541,111	603,760
Provision for income taxes	88,956	113,377	150,071
Net income	$ 307,441	$ 427,734	$ 453,689
Net income per share — basic	$ 5.05	$ 7.12	$ 7.41
Weighted average shares — basic	60,911	60,044	61,262
Net income per share — diluted	$ 5.01	$ 7.08	$ 7.32
Weighted average shares — diluted	61,378	60,456	62,013

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

F5 NETWORKS, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Years Ended September 30, 2020	2019	2018
Net income	$ 307,441	$ 427,734	$ 453,689
Other comprehensive income (loss):			
Foreign currency translation adjustment	(572)	(837)	(1,415)
Available-for-sale securities:			
Unrealized gains (losses) on securities, net of taxes of $76, $954, and $(869) for the years ended September 30, 2020, 2019, and 2018, respectively	809	3,715	(2,775)
Reclassification adjustment for realized losses included in net income, net of taxes of $(65), $(35), and $(4) for the years ended September 30, 2020, 2019, and 2018, respectively	237	110	9
Net change in unrealized gains (losses) on available-for-sale securities, net of tax	1,046	3,825	(2,766)
Total other comprehensive income (loss)	474	2,988	(4,181)
Comprehensive income	$ 307,915	$ 430,722	$ 449,508

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

F5 NETWORKS, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(in thousands)

	Common Stock		Accumulated Other Comprehensive Loss	Retained Earnings	Total Shareholders' Equity
	Shares	Amount			
Balances, September 30, 2017	62,594	$ 17,627	$ (17,997)	$ 1,229,762	$ 1,229,392
Exercise of employee stock options	1	3	—	—	3
Issuance of stock under employee stock purchase plan	475	48,815	—	—	48,815
Issuance of restricted stock	1,219	—	—	—	—
Repurchase of common stock	(4,074)	(203,873)	—	(396,208)	(600,081)
Stock-based compensation	—	157,855	—	—	157,855
Net income	—	—	—	453,689	453,689
Other comprehensive loss	—	—	(4,181)	—	(4,181)
Balances, September 30, 2018	60,215	$ 20,427	$ (22,178)	$ 1,287,243	$ 1,285,492
Cumulative effect adjustment from adoption of ASC 606	—	—	—	36,048	36,048
Exercise of employee stock options	6	159	—	—	159
Issuance of stock under employee stock purchase plan	334	45,439	—	—	45,439
Issuance of restricted stock	998	—	—	—	—
Repurchase of common stock	(1,186)	(88,110)	—	(112,935)	(201,045)
Stock-based compensation	—	164,682	—	—	164,682
Net income	—	—	—	427,734	427,734
Other comprehensive income	—	—	2,988	—	2,988
Balances, September 30, 2019	60,367	$ 142,597	$ (19,190)	$ 1,638,090	$ 1,761,497
Exercise of employee stock options	104	2,596	—	—	2,596
Issuance of stock under employee stock purchase plan	419	50,239	—	—	50,239
Issuance of restricted stock	1,027	—	—	—	—
Repurchase of common stock	(799)	(100,016)	—	—	(100,016)
Taxes paid related to net share settlement of equity awards	(19)	(2,536)	—	—	(2,536)
Stock-based compensation	—	212,573	—	—	212,573
Net income	—	—	—	307,441	307,441
Other comprehensive income	—	—	474	—	474
Balances, September 30, 2020	61,099	$ 305,453	$ (18,716)	$ 1,945,531	$ 2,232,268

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

F5 NETWORKS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended September 30,		
	2020	2019	2018
Operating activities			
Net income	$ 307,441	$ 427,734	$ 453,689
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock-based compensation	201,948	162,914	157,855
Depreciation and amortization	95,857	68,507	59,491
Non-cash operating lease costs	39,139	—	—
Deferred income taxes	7,293	7,440	20,810
Impairment of assets	9,673	6,273	—
Non-cash provisions for exit costs	—	8,211	—
Other	2,122	1,662	1,194
Changes in operating assets and liabilities (excluding effects of the acquisition of businesses):			
Accounts receivable	46,502	(18,305)	(4,889)
Inventories	6,503	(3,832)	(734)
Other current assets	(49,895)	(75,449)	15,607
Other assets	(25,690)	(22,742)	446
Accounts payable and accrued liabilities	34,742	74,710	6,583
Deferred revenue	35,514	110,718	51,016
Lease liabilities	(50,251)	—	—
Net cash provided by operating activities	660,898	747,841	761,068
Investing activities			
Purchases of investments	(584,240)	(602,987)	(855,424)
Maturities of investments	543,065	625,201	439,130
Sales of investments	309,687	278,244	12,736
Acquisition of businesses, net of cash acquired	(955,574)	(611,550)	—
Cash provided by sale of fixed assets	—	—	1,000
Purchases of property and equipment	(59,940)	(103,542)	(53,465)
Net cash used in investing activities	(747,002)	(414,634)	(456,023)
Financing activities			
Proceeds from the exercise of stock options and purchases of stock under employee stock purchase plan	52,835	45,598	48,818
Repurchase of common stock	(100,016)	(201,045)	(600,081)
Proceeds from term debt agreement	400,000	—	—
Payments on term debt agreement	(10,000)	—	—
Payments for debt issuance costs	(3,040)	—	—
Taxes paid related to net share settlement of equity awards	(2,536)	—	—
Net cash provided by (used in) financing activities	337,243	(155,447)	(551,263)
Net increase (decrease) in cash, cash equivalents and restricted cash	251,139	177,760	(246,218)
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(567)	(1,400)	(2,340)
Cash, cash equivalents and restricted cash, beginning of year	602,254	425,894	674,452
Cash, cash equivalents and restricted cash, end of year	$ 852,826	$ 602,254	$ 425,894

	Years Ended September 30,		
	2020	2019	2018
Supplemental disclosures of cash flow information			
Cash paid for taxes, net of refunds	$ 80,236	$ 100,569	$ 104,878
Cash paid for amounts included in the measurement of operating lease liabilities	60,564	—	—
Cash paid for interest on long-term debt	6,568	—	—
Supplemental disclosures of non-cash activities			
Right-of-use assets obtained in exchange for lease obligations	$ 402,007	$ —	$ —
Capitalized leasehold improvements paid directly by landlord	—	34,948	9,958

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

F5 NETWORKS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Summary of Significant Accounting Policies

The Company

F5 Networks, Inc. (the “Company”) is a leading provider of multi-cloud application services which enable its customers to develop, deploy, operate, secure, and govern applications in any architecture, from on-premises to the public cloud. The Company's cloud, software, and hardware solutions enable its customers to deliver digital experiences to their customers faster, reliably, and at scale. The Company's enterprise-grade application services are available as cloud-based, software-as-a-service, and software-only solutions optimized for multi-cloud environments, with modules that can run independently, or as part of an integrated solution on its high-performance appliances. In connection with its solutions, the Company offers a broad range of professional services, including consulting, training, installation, maintenance, and other technical support services. On January 24, 2020, the Company completed the acquisition of Shape Security, Inc. ("Shape"), a leader in online fraud and abuse prevention, adding protection from automated attacks, botnets, and targeted fraud to F5's world-class portfolio of application services.

Accounting Principles

The Company’s consolidated financial statements and accompanying notes are prepared on the accrual basis of accounting in accordance with generally accepted accounting principles in the United States of America (GAAP).

Principles of Consolidation

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

Prior Period Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation in the Consolidated Statements of Cash Flows. The reclassified amounts are considered immaterial and there was no change to total cash from operating, investing or financing activities as a result.

Use of Estimates and Assumptions

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Examples of estimates and assumptions include: revenue recognition, identifying and evaluating the performance obligations of contracts with non-standard terms, and the allocation of purchase consideration based on the relative fair value standalone sales price of these performance obligations; business combinations, including the determination of fair value for acquired developed technology assets and the evaluation and selection of significant assumptions such as revenue growth rate and technology migration curve; and the incremental borrowing rate for measuring lease obligations. Actual results and outcomes may differ from management's estimates and assumptions.

In December 2019, a novel strain of coronavirus (“COVID-19“) was first identified, and in March 2020, the World Health Organization categorized COVID-19 as a pandemic. The Company assessed the impact that COVID-19 had on its results of operations, including, but not limited to an assessment of its allowance for doubtful accounts, the carrying value of short-term and long-term investments, the carrying value of goodwill and other long-lived assets, and the impact to revenue recognition and cost of revenues. The Company is actively monitoring the impact to the results of its business operations, and may make decisions required by federal, state or local authorities, or that are determined to be in the best interests of its employees, customers, partners, suppliers and stockholders. As of the filing date, the extent to which the COVID-19 pandemic may impact the Company’s financial condition or results of operations remains uncertain.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with original maturities of three months or less to be cash equivalents. The Company invests its cash and cash equivalents in deposits with five major financial institutions, which, at times, exceed federally insured limits. The Company has not experienced any losses on its cash and cash equivalents. Amounts included in restricted cash represent those for which the Company's use is restricted by a contractual agreement.

Investments

The Company classifies its investment securities as available-for-sale. Investment securities, consisting of certificates of deposit, corporate and municipal bonds and notes, the United States government and agency securities and international government securities are reported at fair value with the related unrealized gains and losses included as a component of accumulated other comprehensive income (loss) in shareholders' equity. Realized gains and losses and declines in value of securities judged to be other than temporary are included in other income (expense). The cost of investments for purposes of computing realized and unrealized gains and losses is based on the specific identification method. Investments in securities with maturities of less than one year or where management's intent is to use the investments to fund current operations are classified as short-term investments. Investments with maturities of greater than one year are classified as long-term investments.

Concentration of Credit Risk

The Company extends credit to customers and is therefore subject to credit risk. The Company performs initial and ongoing credit evaluations of its customers' financial condition and does not require collateral. An allowance for doubtful accounts is recorded to account for potential bad debts. Estimates are used in determining the allowance for doubtful accounts and are based upon an assessment of selected accounts and as a percentage of remaining accounts receivable by aging category. In determining these percentages, the Company evaluates historical write-offs, and current trends in customer credit quality, as well as changes in credit policies. At September 30, 2020, Ingram Micro, Inc. and Synnex Corporation accounted for 14.1% and 11.4% of the Company's accounts receivable, respectively. At September 30, 2019, Synnex Corporation, Ingram Micro, Inc. and Carahsoft Technology accounted for 12.9%, 12.4% and 11.5% of the Company's accounts receivable, respectively. No other customers accounted for more than 10% of total receivables as of September 30, 2020 and 2019.

The Company maintains its cash and investment balances with high credit quality financial institutions.

Fair Value of Financial Instruments

Short-term and long-term investments are recorded at fair value as the underlying securities are classified as available-for-sale with any unrealized gain or loss being recorded to other comprehensive income. The fair value for securities held is determined using quoted market prices, broker or dealer quotations, or alternative pricing sources with reasonable levels of price transparency.

Inventories

The Company outsources the manufacturing of its pre-configured hardware platforms to contract manufacturers, who assemble each product to the Company's specifications. As protection against component shortages and to provide replacement parts for its service teams, the Company also stocks limited supplies of certain key product components. The Company reduces inventory to net realizable value based on excess and obsolete inventories determined primarily by historical usage and forecasted demand. Inventories consist of hardware and related component parts and are recorded at the lower of cost and net realizable value (as determined by the first-in, first-out method).

Property and Equipment

Property and equipment are stated at net book value. Depreciation of property and equipment are provided using the straight-line method over the estimated useful lives of the assets, ranging from two to five years. Leasehold improvements are amortized over the lesser of the remaining lease term or the estimated useful life of the improvements. The cost of normal maintenance and repairs is charged to expense as incurred and expenditures for major improvements are capitalized at cost. Gains or losses on the disposition of assets are reflected in the income statements at the time of disposal.

Business Combinations

The Company's business combinations are accounted for under the acquisition method. Management allocates the fair value of purchase consideration to the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values. The excess of the fair value of purchase consideration over the fair values of these identifiable assets and liabilities is recorded as goodwill. Such valuations require management to make significant estimates and assumptions, especially with respect to intangible assets.

On January 24, 2020, the Company completed its acquisition of Shape Security, Inc. for a total purchase price of $1.0 billion, of which approximately $120.0 million of finite-lived developed technology was recorded. Management valued the developed technology using the multi-period excess earnings method under the income approach. Management applied significant judgment in estimating the fair value of the acquired developed technology, which involved the use of a significant assumption with respects to the revenue growth rate and technology migration curve.

Goodwill

Goodwill represents the excess purchase price over the estimated fair value of net assets acquired as of the acquisition date. The Company tests goodwill for impairment on an annual basis and between annual tests when impairment indicators are identified, and goodwill is written down when impaired. For its annual goodwill impairment test in all periods to date, the Company has operated under one reporting unit and the fair value of its reporting unit has been determined by the Company's enterprise value. The Company performs its annual goodwill impairment test during the second fiscal quarter.

For its annual impairment test performed in the second quarter of fiscal 2020, the Company completed a quantitative assessment and determined that there was no impairment of goodwill. The Company also considered potential impairment indicators of goodwill at September 30, 2020 and noted no indicators of impairment.

Intangible Assets

Intangible assets with finite lives consist of acquired developed technologies, customer relationships, patents and trademarks, trade names, and non-compete covenants acquired through business combination or asset acquisition. Intangible assets acquired through business combination are recorded at their respective estimated fair values upon acquisition close. Other intangible assets acquired through asset acquisition are recorded at their respective cost. The Company determines the estimated useful lives for acquired intangible assets based on the expected future cash flows associated with the respective asset. The Company's intangible assets with finite lives are amortized using the straight-line method over their estimated useful lives, ranging from two to fifteen years. Amortization expense related to acquired developed technologies are charged to cost of product revenues. Amortization expense related to customer relationships, trade names, and non-compete covenants are charged to sales and marketing activities. Amortization expense related to patents and trademarks are charged to general and administrative activities. The Company evaluates the recoverability of intangible assets periodically by taking into account events or circumstances that may warrant revised estimates of useful lives or that indicate the asset may be impaired.

Software Development Costs

The authoritative guidance requires certain internal software development costs related to software to be sold to be capitalized upon the establishment of technological feasibility. Capitalized software development costs are amortized over the remaining estimated economic life of the product. The Company's software development costs incurred subsequent to achieving technological feasibility have not been significant and, as a result, all software development costs have been expensed as research and development activities as incurred.

Internal-Use Software

The Company capitalizes costs incurred during the application development stage associated with the development of internal-use software systems. The capitalized costs are then amortized over the estimated useful life of the software, which is generally three to five years, and are included in property and equipment in the accompanying consolidated balance sheets.

Impairment of Long-Lived Assets

The Company assesses the impairment of long-lived assets whenever events or changes in business circumstances indicate that the carrying amount of an asset may not be recoverable. When such events occur, management determines whether there has been impairment by comparing the anticipated undiscounted net future cash flows to the related asset's carrying value. If impairment exists, the asset is written down to its estimated fair value.

Revenue Recognition

On October 1, 2018, the Company adopted the new revenue recognition standard by applying the modified retrospective approach to those contracts which were not completed as of October 1, 2018. Results for reporting periods beginning after October 1, 2018 are presented under the new revenue recognition standard, while prior period amounts are not adjusted and continue to be reported under the accounting standards in effect for the prior periods.

The Company sells products through distributors, resellers, and directly to end users. Revenue related to the Company's contracts with customers is recognized by following a five-step process:

- *Identify the contract(s) with a customer.* Evidence of a contract generally consists of a purchase order issued pursuant to the terms and conditions of a distributor, reseller or end user agreement.

- *Identify the performance obligations in the contract.* Performance obligations are identified in the Company's contracts and include hardware, hardware-based software, software-only solutions, cloud-based subscription services as well as a broad range of service performance obligations including consulting, training, installation and maintenance.
- *Determine the transaction price.* The purchase price stated in an agreed upon purchase order is generally representative of the transaction price. The Company offers several programs in which customers are eligible for certain levels of rebates if certain conditions are met. When determining the transaction price, the Company considers the effects of any variable consideration.
- *Allocate the transaction price to the performance obligations in the contract.* The transaction price in a contract is allocated based upon the relative standalone selling price of each distinct performance obligation identified in the contract.
- *Recognize revenue when (or as) the entity satisfies a performance obligation.* The Company satisfies performance obligations either over time or at a point in time as discussed in further detail below. Revenue is recognized at the time the related performance obligation is satisfied by transferring control of promised products and services to a customer.

The following is a description of the principal activities from which the Company generates revenue:

Product

Revenue from the sale of the Company's hardware and perpetual software products is generally recognized at a point in time when the product has been fulfilled and the customer is obligated to pay for the product. The Company also offers several products by subscription, either through term-based license agreements or as a service through its cloud-based platform. Revenue for term-based license agreements is recognized at a point in time, when the Company delivers the software license to the customer and the subscription term has commenced. For the Company's software-as-a-service offerings, revenue is recognized ratably as the services are provided. Hardware, including the software run on those devices is considered Systems revenue. Perpetual or subscription software offerings that are deployed on a standalone basis, along with software sold as a service are considered Software revenue. When rights of return are present and the Company cannot estimate returns, revenue is recognized when such rights of return lapse. Payment terms to customers are generally net 30 days to net 60 days.

Services

Revenues for post-contract customer support (PCS) are recognized on a straight-line basis over the service contract term. PCS includes a limited period of telephone support, updates, repair or replacement of any failed product or component that fails during the term of the agreement, bug fixes and rights to upgrades, when and if available. Consulting services are customarily billed at fixed hourly rates, plus out-of-pocket expenses, and revenues are recognized as the consulting is completed. Similarly, training revenue is recognized as the training is completed.

Contract acquisition costs

Sales commissions earned by the Company's sales force are considered incremental and recoverable costs of obtaining a contract with a customer. Sales commissions for initial service contracts and subscription offerings are deferred and then amortized as an expense on a straight-line basis over the period of benefit which management has determined to be 4.5 years and 3 years, respectively.

Significant Judgments

The Company enters into certain contracts with customers, including enterprise license arrangements, with non-standard terms and conditions. Management exercises significant judgment in assessing contractual terms in these arrangements to identify and evaluate performance obligations and total consideration. Management allocates consideration to each performance obligation based on relative fair value using standalone selling price and recognizes associated revenue as control is transferred to the customer.

Shipping and Handling

Shipping and handling fees charged to the Company's customers are recognized as product revenue in the period shipped and the related costs for providing these services are recorded as a cost of sale.

Guarantees and Product Warranties

In the normal course of business to facilitate sales of its products, the Company indemnifies other parties, including customers, resellers, lessors, and parties to other transactions with the Company, with respect to certain matters. The Company has agreed to hold the other party harmless against losses arising from a breach of representations or covenants, or out of intellectual property infringement or other claims made against certain parties. These agreements may limit the time within which an indemnification claim can be made and the amount of the claim. The Company has entered into indemnification agreements with its officers and directors, and the Company's bylaws contain similar indemnification obligations to the Company's agents. It is not possible to determine the maximum potential amount under these indemnification agreements due to the limited history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement.

The Company offers warranties of one year for hardware for those customers without service contracts, with the option of purchasing additional warranty coverage in yearly increments. The Company accrues for warranty costs as part of its cost of sales based on associated material product costs and technical support labor costs. Accrued warranty costs as of September 30, 2020 and 2019 were not material.

Research and Development

Research and development expenses consist of salaries and related benefits of product development personnel, prototype materials and expenses related to the development of new and improved products, and an allocation of facilities, depreciation and amortization expense. Research and development expenses are reflected in the income statements as incurred.

Advertising

Advertising costs are expensed as incurred. The Company incurred $7.8 million, $4.7 million and $4.6 million in advertising costs during the fiscal years 2020, 2019 and 2018, respectively.

Income Taxes

Deferred income tax assets and liabilities are determined based upon differences between the financial statement and income tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The realization of deferred tax assets is based on historical tax positions and estimates of future taxable income. A valuation allowance is recorded when it is more-likely-than-not that some of the deferred tax assets will not be realized.

The Company assesses whether tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. The Company may 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, including resolution of any related appeals or litigation processes, based on the technical merits of the position. The tax benefits to be recognized in the financial statements from such a position is measured as the largest amount of benefit that has a greater than fifty percent likelihood of being realized upon ultimate settlement. The Company adjusts these liabilities based on a variety of factors, including the evaluation of information not previously available. These adjustments are reflected as increases or decreases to income tax expense in the period in which new information is available.

The Company has made an accounting policy election to treat taxes under the global intangible low-taxed income (GILTI) provision as a current period expense.

Foreign Currency

The functional currency for the Company's foreign subsidiaries is either the U.S. dollar or the local currency depending on the assessment of management. An entity's functional currency is determined by the currency of the economic environment in which the majority of cash is generated and expended by the entity. The financial statements of all majority-owned subsidiaries and related entities, with a functional currency other than the U.S. dollar, have been translated into U.S. dollars. All assets and liabilities of the respective entities are translated at year-end exchange rates and all revenues and expenses are translated at average rates during the respective period. Translation adjustments are reported as other comprehensive income (loss) in the consolidated statements of comprehensive income.

Foreign currency transaction gains and losses are a result of the effect of exchange rate changes on transactions denominated in currencies other than the functional currency, including U.S. dollars. Gains and losses on those foreign currency transactions are included in determining net income or loss for the period of exchange and are recorded in other income, net. The net effect of foreign currency gains and losses was not material during the fiscal years ended September 30, 2020, 2019 and 2018.

Segments

Management has determined that the Company is organized as, and operates in, one reportable segment and operating segment: the development, marketing and sale of application services that optimize the security, performance and availability of network applications, servers and storage systems.

Stock-based Compensation

The Company issues incentive awards to its employees through stock-based compensation consisting of restricted stock units (RSUs). RSUs are payable in shares of the Company’s common stock as the periodic vesting requirements are satisfied, generally over one to four years. The value of an RSU is based upon the fair market value of the Company’s common stock on the date of grant. The value of RSUs are determined using the intrinsic value method and is based on the number of shares granted and the quoted price of the Company’s common stock on the date of grant.

The Company offers an Employee Stock Purchase Plan (ESPP) that permits eligible employees to purchase shares of the Company’s common stock at a discount. In determining the fair value of shares issued under the ESPP, the Company uses the Black-Scholes option pricing model. The assumptions within the option pricing model are based on management’s best estimates at that time, which impact the fair value of the ESPP option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the ESPP option.

The Company has also issued stock options as replacement awards, most notably for those assumed as part of business combinations. The Company used the Black-Scholes option pricing model to determine the fair value of the stock option replacement awards. The assumptions within the option pricing model are based on management’s best estimates at that time, which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option.

The Company accounts for stock-based compensation using the straight-line attribution method for recognizing compensation expense. The Company recognizes compensation expense for only the portion of stock-based awards that are expected to vest. Therefore, the Company applies estimated forfeiture rates that are derived from historical employee termination behavior. Based on historical differences with forfeitures of stock-based awards granted to the Company’s executive officers and Board of Directors versus grants awarded to all other employees, the Company has developed separate forfeiture expectations for these two groups.

The Company issues incentive awards to certain current executive officers as part of its annual equity awards program. A portion of the aggregate number of RSUs issued to executive officers vest in equal quarterly increments, and a portion is subject to the Company achieving specified performance goals.

For the performance stock awards granted prior to fiscal 2018, attainment is based on the Company achieving specific quarterly revenue and EBITDA targets. In each case, 70% of the quarterly performance stock grant is based on achieving at least 80% of the quarterly revenue goal set by the Company's Board of Directors, and the other 30% is based on achieving at least 80% of the quarterly EBITDA goal set by the Company's Board of Directors. The quarterly performance stock grant is paid linearly over 80% of the targeted goals. At least 100% of both goals must be attained in order for the quarterly performance stock grant to be awarded over 100%. Each goal is evaluated individually and subject to the 80% achievement threshold and the 100% over-achievement threshold. Each goal is also capped at achievement of 200% above target.

For the fiscal 2018, 2019 and 2020 performance stock awards, the Company's Compensation Committee adopted a new set of metrics that are differentiated from the quarterly revenue and EBITDA measures, including (1) 50% of the annual performance stock grant is based on achieving 80% of the annual revenue goal set by the Company’s Board of Directors; (2) 25% of the annual performance stock grant is based on achieving at least an 18% increase in annual software revenue compared to the prior year; and (3) 25% of the annual performance stock grant is based on relative total shareholder return (TSR) benchmarked to the S&P 500 index. In each case, no vesting or payment with respect to a performance goal shall occur unless a minimum threshold is met for the applicable goal. Vesting and payment with respect to the performance goal is linear above the threshold of the applicable goal and is capped at achievement of 200% above target.

The Company recognizes compensation costs for awards with performance conditions and market conditions on a straight-line basis over the requisite service period for each separately vesting portion of the award and, for awards with performance conditions, when it concludes it is probable that the performance condition will be achieved. The Company reassesses the probability of vesting at each balance sheet date and adjusts compensation costs based on the probability assessment.

Comprehensive Income

Comprehensive income includes certain changes in equity that are excluded from net income. Specifically, unrealized gains or losses on securities and foreign currency translation adjustments. These changes are included in accumulated other comprehensive income or loss.

Recently Adopted Accounting Standards

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (Topic 606) (ASU 2014-09). ASU 2014-09 and the related amendments outline a new, single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The new model requires revenue recognition to depict the transfer of promised goods or services to customers in an amount that reflects the consideration a company expects to receive in exchange for those goods or services. The Company adopted this new accounting standard and the related amendments on October 1, 2018 using the modified retrospective method. Refer to Note 2 - Revenue from Contracts with Customers for further discussion.

In February 2016, the Financial Accounting Standards Board ("FASB") issued ASU 2016-02, Leases (Topic 842) (ASU 2016-02), which requires lessees to recognize on the balance sheet a right-of-use asset, representing its right to use the underlying asset for the lease term, and a corresponding lease liability for all leases with terms greater than twelve months. The Company's leases consist primarily of operating leases for its offices and lab spaces. The Company does not have finance leases. The guidance also requires qualitative and quantitative disclosures designed to assess the amount, timing and uncertainty of cash flows arising from leases. The Company adopted this standard on October 1, 2019 on a modified retrospective basis by applying the new standard to its lease portfolio as of October 1, 2019. Under the modified retrospective method, financial results reported in periods prior to fiscal 2020 are unchanged. As a result of the adoption of this standard, the Company recognized lease liabilities and corresponding right-of-use assets for its long-term leases for office space, which had a material impact on its consolidated balance sheets. The adoption of this standard had no impact on the consolidated income statements and consolidated statements of cash flows. Refer to Note 8 - Leases for further discussion.

Upon adoption of the standard, the Company elected the package of three practical expedients for existing and expired contracts to not reassess: the existence of additional leases, lease classification, or the treatment of initial direct costs. The Company also applies the short-term lease exemption for leases with an original expected term of 12 months or less and expenses such leases month-to-month and does not record a right-of-use asset or lease liability. Short-term lease activity under the exception is not significant. Additionally, the Company does not separate lease and non-lease components in the allocation of minimum lease payments for its office space and equipment leases, as such separation is not significant.

The Company includes in minimum lease payments, fixed and variable payments based on a rate or index, but excludes variable payments based on satisfying future benchmarks or actual future costs incurred; such amounts are expensed as incurred. To calculate the net present value, the Company applied an incremental borrowing rate. This incremental borrowing rate is determined using a portfolio approach based on the rate of interest the Company would pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term. Renewal options to extend lease terms are excluded from the minimum lease term at lease commencement.

Recently Issued Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments (ASU 2016-13), which modifies the accounting for credit losses for most financial assets and requires the use of an expected loss model, replacing the currently used incurred loss method. Under this model, entities will be required to estimate the lifetime expected credit loss on such instruments and record an allowance to offset the amortized cost basis of the financial asset, resulting in a net presentation of the amount expected to be collected on the financial asset. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The Company does not anticipate that the adoption of this standard will have a material impact on its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40) (ASU 2018-15), which aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software, and hosting arrangements that include an internal use software license. The accounting for the service element of a hosting arrangement that is a service contract is not affected by the amendments in this update. The new standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted. The Company does not anticipate that the adoption of this standard will have a material impact on its consolidated financial statements.

2. Revenue from Contracts with Customers

Capitalized Contract Acquisition Costs

The table below shows significant movements in capitalized contract acquisition costs (current and noncurrent) for the years ended September 30, 2020 and 2019 (in thousands):

	2020	2019
Balance, beginning of year	$ 59,446	$ —
Impacts from adoption of ASC 606	—	54,608
Additional capitalized contract acquisition costs deferred	43,557	33,925
Amortization of capitalized contract acquisition costs	(32,607)	(29,087)
Balance, end of year	$ 70,396	$ 59,446

Amortization of capitalized contract acquisition costs was $32.6 million and $29.1 million for the years ended September 30, 2020 and 2019, respectively, and is recorded in Sales and Marketing expense in the accompanying consolidated income statements. There was no impairment of any capitalized contract acquisition costs during any period presented.

Contract Balances

Timing may differ between the satisfaction of performance obligations and the invoicing and collection of amounts related to the Company's contracts with customers. The Company records assets for amounts related to performance obligations that are satisfied but not yet billed and/or collected, in addition to contracts that have started, but not yet been fully billed. These assets are recorded as contract assets rather than receivables when receipt of the consideration is conditional on something other than the passage of time. Liabilities are recorded for amounts that are collected in advance of the satisfaction of performance obligations. These liabilities are classified as current and non-current deferred revenue.

The table below shows significant movements in contract assets (current and noncurrent) for the years ended September 30, 2020 and 2019 (in thousands):

	2020	2019
Balance, beginning of year	$ 132,492	$ —
Impacts from adoption of ASC 606	—	57,499
Revenue recognized during period but not yet billed	37,260	27,459
Contract asset net additions	123,533	88,068
Contract assets acquired through the purchase of Shape	6,045	—
Contract assets reclassified to accounts receivable	(98,858)	(40,534)
Balance, end of year	$ 200,472	$ 132,492

As of September 30, 2020, contract assets that are expected to be reclassified to receivables within the next 12 months are included in other current assets, with those expected to be transferred to receivables in more than 12 months included in other assets. There were no impairments of contract assets during the year ended September 30, 2020.

The table below shows significant movements in the deferred revenue balances (current and noncurrent) for the year ended September 30, 2020 and 2019 (in thousands):

	2020	2019
Balance, beginning of year	$ 1,198,116	$ 1,015,321
Impacts from adoption of ASC 606	—	68,078
Amounts billed but not recognized as revenues	850,022	866,142
Amounts acquired through the purchase of Shape	39,000	—
Revenues recognized related to the opening balance of deferred revenue	(814,506)	(751,425)
Balance, end of year	$ 1,272,632	$ 1,198,116

The Company's contract assets and liabilities are reported in a net position on a contract by contract basis at the end of each reporting period.

Remaining Performance Obligations

Remaining performance obligations represent the amount of the transaction price under contracts with customers that are attributable to performance obligations that are unsatisfied or partially satisfied at the reporting date. As of September 30, 2020, the total non-cancelable remaining performance obligations under the Company's contracts with customers was approximately $1.3 billion and the Company expects to recognize revenues on approximately 69.4% of these remaining performance obligations over the next 12 months, 19.0% in year two, and the remaining balance thereafter.

See Note 16 - Segment Information, for disaggregated revenue by significant customer and geographic region, as well as disaggregated product revenue by systems and software.

3. Business Combinations

Fiscal Year 2020 Acquisition of Shape Security, Inc.

On December 19, 2019, the Company entered into a Merger Agreement (the "Merger Agreement") with Shape Security, Inc. ("Shape"), a provider of fraud and abuse prevention solutions. The transaction closed on January 24, 2020 with Shape becoming a wholly-owned subsidiary of F5.

Pursuant to the Merger Agreement, at the effective time of the acquisition, the capital stock of Shape and the vested outstanding and unexercised stock options in Shape were cancelled and converted to the right to receive approximately $1.0 billion in cash, subject to certain adjustments and conditions set forth in the Merger Agreement, and the unvested stock options and restricted stock units in Shape held by continuing employees of Shape were assumed by F5, on the terms and conditions set forth in the Merger Agreement. Included in cash consideration was $23.2 million of transaction costs paid by F5 on behalf of Shape. In addition, the Company incurred $15.3 million of transaction costs associated with the acquisition which was included in General and Administrative expenses in fiscal 2020.

As a result of the acquisition, the Company acquired all the assets and assumed all the liabilities of Shape. The goodwill related to the Shape acquisition is comprised primarily of expected synergies from combining operations and the acquired intangible assets that do not qualify for separate recognition. Goodwill related to the Shape acquisition is not expected to be deductible for tax purposes. The results of operations of Shape have been included in the Company's consolidated financial statements from the date of acquisition.

The allocated purchase consideration to assets acquired and liabilities assumed based on preliminary estimated fair values is presented in the following table (in thousands):

			Estimated Useful Life
Assets acquired			
Cash, cash equivalents, and restricted cash	$	53,934	
Fair value of tangible assets:			
Accounts receivable		21,077	
Deferred tax assets		24,619	
Operating lease right-of-use assets		29,644	
Other tangible assets		22,571	
Identifiable intangible assets:			
Developed technologies		120,000	7 years
Customer relationships		21,000	4 years
Trade name		9,500	5 years
Goodwill		799,611	
Total assets acquired	$	1,101,956	
Liabilities assumed			
Deferred revenue	$	(39,000)	
Operating lease liabilities		(30,773)	
Other assumed liabilities		(18,571)	
Total liabilities assumed	$	(88,344)	
Net assets acquired	$	1,013,612	

The initial allocation of the purchase price was based on preliminary valuations and assumptions and is subject to change within the measurement period. The Company expects to finalize the allocation of the purchase price as soon as practicable and no later than one year from the acquisition date.

The developed technology intangible asset will be amortized on a straight-line basis over its estimated useful life of seven years and included in cost of net product revenues. The trade names and customer relationships intangible assets will be amortized on a straight-line basis over their estimated useful lives of five years and four years, respectively, and included in sales and marketing expenses. The weighted average life of the amortizable intangible assets recognized from the Shape acquisition was 6.5 years as of January 24, 2020, the date the transaction closed. The estimated useful lives for the acquired intangible assets were based on the expected future cash flows associated with the respective asset.

Since the Shape acquisition was completed on January 24, 2020, the F5 and Shape teams have been executing a plan to integrate ongoing operations. The pro forma financial information, as well as the revenue and earnings generated by Shape, were not considered material to the Company's operations.

Fiscal Year 2019 Acquisition of Nginx, Inc.

On March 9, 2019, the Company entered into a Merger Agreement (the "Merger Agreement") with Nginx, Inc. ("NGINX"), a provider of open source web server software and application delivery solutions. The transaction closed on May 8, 2019 with NGINX becoming a wholly-owned subsidiary of F5.

Pursuant to the Merger Agreement, at the effective time of the Merger, the capital stock of NGINX and the vested outstanding and unexercised stock options in NGINX were cancelled and converted to the right to receive approximately $643.2 million in cash, subject to certain adjustments and conditions set forth in the Merger Agreement, and the unvested stock options and restricted stock units in NGINX held by continuing employees of NGINX were assumed by F5, on the terms and conditions set forth in the Merger Agreement. Included in cash consideration was $19.0 million of transaction costs paid by F5 on behalf of NGINX. In addition, the Company incurred $1.0 million of transaction costs associated with the acquisition which was included in General and Administrative expenses for fiscal 2019.

As a result of the acquisition, the Company acquired all the assets and assumed all the liabilities of NGINX. The goodwill related to the NGINX acquisition is comprised primarily of expected synergies from combining operations and the acquired intangible assets that do not qualify for separate recognition. The results of operations of NGINX have been included in the Company's consolidated financial statements from the date of acquisition.

The allocated purchase consideration to assets acquired and liabilities assumed based on the estimated fair values is presented in the following table (in thousands):

		Estimated Useful Life
Assets acquired		
Cash and cash equivalents	$ 29,911	
Fair value of tangible assets:		
Other tangible assets	23,699	
Identifiable intangible assets:		
Developed technologies	62,500	7 years
Customer relationships	12,000	15 years
Trade name	14,500	7 years
Non-competition agreements	300	2 years
Goodwill	503,414	
Total assets acquired	$ 646,324	
Liabilities assumed		
Other assumed liabilities	$ (9,116)	
Total liabilities assumed	$ (9,116)	
Net assets acquired	$ 637,208	

The measurement period for the NGINX acquisition lapsed during the third quarter of fiscal 2020. The Company reduced the carrying amount of goodwill by $6.0 million to reflect an adjustment to consideration exchanged for the purchase of NGINX within the post-close measurement period. No other financial statement amounts were affected by this adjustment. The adjustment was not material to the current period or any of the previous period financial statements.

The developed technology intangible asset will be amortized on a straight-line basis over its estimated useful life of seven years and included in cost of net product revenues. The trade names and customer relationships intangible assets will be amortized on a straight-line basis over their estimated useful lives of seven years and fifteen years, respectively, and included in sales and marketing expenses. The weighted average life of the amortizable intangible assets recognized from the NGINX acquisition was 8.1 years as of May 8, 2019, the date the transaction closed. The estimated useful lives for the acquired intangible assets were based on the expected future cash flows associated with the respective asset. Tax deductible goodwill based on the Company's preliminary calculation is $490.3 million.

Since the NGINX acquisition was completed on May 8, 2019, the F5 and NGINX teams have been executing a plan to integrate ongoing operations.

4. Fair Value Measurements

In accordance with the authoritative guidance on fair value measurements and disclosure under GAAP, the Company determines fair value using a fair value hierarchy that distinguishes between market participant assumptions developed based on market data obtained from sources independent of the reporting entity, and the reporting entity’s own assumptions about market participant assumptions developed based on the best information available in the circumstances and expands disclosure about fair value measurements.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants at the measurement date, essentially the exit price.

The levels of fair value hierarchy are:

Level 1: Quoted prices in active markets for identical assets and liabilities at the measurement date that the Company has the ability to access.

Level 2: Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3: Unobservable inputs for which there is little or no market data available. These inputs reflect management's assumptions of what market participants would use in pricing the asset or liability.

Level 1 investments are valued based on quoted market prices in active markets and include the Company's cash equivalent investments. Level 2 investments, which include investments that are valued based on quoted prices in markets that are not active, broker or dealer quotations, actual trade data, benchmark yields or alternative pricing sources with reasonable levels of price transparency, include the Company's certificates of deposit, corporate bonds and notes, municipal bonds and notes, U.S. government securities, U.S. government agency securities and international government securities. Fair values for the Company's level 2 investments are based on similar assets without applying significant judgments. In addition, all of the Company's level 2 investments have a sufficient level of trading volume to demonstrate that the fair values used are appropriate for these investments.

A financial instrument's level within the fair value hierarchy is based upon the lowest level of any input that is significant to the fair value measurement. However, the determination of what constitutes "observable" requires significant judgment by the Company. The Company considers observable data to be market data which is readily available, regularly distributed or updated, reliable and verifiable, not proprietary, and provided by independent sources that are actively involved in the relevant market.

The Company's financial assets measured at fair value on a recurring basis subject to the disclosure requirements at September 30, 2020, were as follows (in thousands):

	Fair Value Measurements at Reporting Date Using			
	Quoted Prices in Active Markets for Identical Securities (Level 1)	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**	**Fair Value at September 30, 2020**
Cash equivalents	$ 43,553	$ 207,417	$ —	$ 250,970
Short-term investments				
Available-for-sale securities — corporate bonds and notes	—	189,662	—	189,662
Available-for-sale securities — municipal bonds and notes	—	6,146	—	6,146
Available-for-sale securities — U.S. government securities	—	117,374	—	117,374
Available-for-sale securities — U.S. government agency securities	—	47,151	—	47,151
Long-term investments				
Available-for-sale securities — corporate bonds and notes	—	102,939	—	102,939
Total	$ 43,553	$ 670,689	$ —	$ 714,242

The Company's financial assets measured at fair value on a recurring basis subject to the disclosure requirements at September 30, 2019, were as follows (in thousands):

	Fair Value Measurements at Reporting Date Using			
	Quoted Prices in Active Markets for Identical Securities (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Fair Value at September 30, 2019
Cash equivalents	$ 140,238	$ 153,404	$ —	$ 293,642
Short-term investments				
Available-for-sale securities — certificates of deposit	—	249	—	249
Available-for-sale securities — corporate bonds and notes	—	259,547	—	259,547
Available-for-sale securities — municipal bonds and notes	—	12,129	—	12,129
Available-for-sale securities — U.S. government securities	—	78,992	—	78,992
Available-for-sale securities — U.S. government agency securities	—	22,146	—	22,146
Long-term investments				
Available-for-sale securities — corporate bonds and notes	—	298,916	—	298,916
Available-for-sale securities — municipal bonds and notes	—	2,524	—	2,524
Available-for-sale securities — U.S. government securities	—	5,515	—	5,515
Available-for-sale securities — U.S. government agency securities	—	51,447	—	51,447
Total	$ 140,238	$ 884,869	$ —	$ 1,025,107

The Company uses the fair value hierarchy for financial assets and liabilities. The carrying amounts of other current financial assets and other current financial liabilities approximate fair value due to their short-term nature.

The Company's non-financial assets and liabilities, which include goodwill, intangible assets, and long-lived assets, are not required to be carried at fair value on a recurring basis. These non-financial assets and liabilities are measured at fair value on a non-recurring basis when there is an indicator of impairment, and they are recorded at fair value only when impairment is recognized. The Company reviews goodwill and intangible assets for impairment annually, during the second quarter of each fiscal year, or as circumstances indicate the possibility of impairment. The Company monitors the carrying value of long-lived assets for impairment whenever events or changes in circumstances indicate its carrying amount may not be recoverable. During the year ended September 30, 2020, the Company recorded impairment of a right-of-use asset of $9.7 million related to the exit of a leased facility, which was allocated to various expense line items on the Company's consolidated income statement. During the year ended September 30, 2019, the Company recorded impairment of capitalized internal-use software costs of $6.3 million, which was reflected in the general and administrative expense line item on the Company's consolidated income statement. No impairment of long-lived assets was noted as of and for the year ended 2018.

5. Short-Term and Long-Term Investments

Short-term investments consist of the following (in thousands):

September 30, 2020	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds and notes	$ 188,932	$ 736	$ (6)	$ 189,662
Municipal bonds and notes	6,143	3	—	6,146
U.S. government securities	117,363	14	(3)	117,374
U.S. government agency securities	47,148	3	—	47,151
	$ 359,586	$ 756	$ (9)	$ 360,333

September 30, 2019	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Certificates of deposit	$ 249	$ —	$ —	$ 249
Corporate bonds and notes	259,242	402	(97)	259,547
Municipal bonds and notes	12,128	6	(5)	12,129
U.S. government securities	78,988	18	(14)	78,992
U.S. government agency securities	22,138	9	(1)	22,146
	$ 372,745	$ 435	$ (117)	$ 373,063

Long-term investments consist of the following (in thousands):

September 30, 2020	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds and notes	$ 102,206	$ 756	$ (23)	$ 102,939
	$ 102,206	$ 756	$ (23)	$ 102,939

September 30, 2019	Cost or Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Corporate bonds and notes	$ 298,888	$ 469	$ (441)	$ 298,916
Municipal bonds and notes	2,528	2	(6)	2,524
U.S. government securities	5,515	3	(3)	5,515
U.S. government agency securities	51,463	5	(21)	51,447
	$ 358,394	$ 479	$ (471)	$ 358,402

Interest income from investments was $12.2 million, $25.3 million and $17.0 million for fiscal years 2020, 2019 and 2018, respectively. Interest income is included in other income, net on the Company's consolidated income statements.

The following table summarizes investments that have been in a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for more than 12 months as of September 30, 2020 (in thousands):

	Less Than 12 Months		12 Months or Greater		Total	
September 30, 2020	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Corporate bonds and notes	$ 43,492	$ (28)	$ 5,006	$ (1)	$ 48,498	$ (29)
U.S. government securities	41,812	(3)	—	—	41,812	(3)
Total	$ 85,304	$ (31)	$ 5,006	$ (1)	$ 90,310	$ (32)

The following table summarizes investments that have been in a continuous unrealized loss position for less than 12 months and those that have been in a continuous unrealized loss position for more than 12 months as of September 30, 2019 (in thousands):

	Less Than 12 Months		12 Months or Greater		Total	
September 30, 2019	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
Corporate bonds and notes	$ 237,747	$ (434)	$ 109,613	$ (104)	$ 347,360	$ (538)
Municipal bonds and notes	864	—	7,800	(11)	8,664	(11)
U.S. government securities	27,095	(12)	9,991	(5)	37,086	(17)
U.S. government agency securities	30,946	(22)	—	—	30,946	(22)
Total	$ 296,652	$ (468)	$ 127,404	$ (120)	$ 424,056	$ (588)

The Company invests in securities that are rated investment grade. The unrealized losses on investments for fiscal year 2020 were primarily caused by interest rate increases.

The Company reviews the individual securities in its portfolio to determine whether a decline in a security's fair value below the amortized cost basis is other-than-temporary. The Company determined that as of September 30, 2020, there were no investments in its portfolio that were other-than-temporarily impaired.

6. Balance Sheet Details

Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of the Company’s cash and cash equivalents and restricted cash reported within the consolidated balance sheets that sum to the total cash, cash equivalents and restricted cash shown in the Company’s consolidated statements of cash flows for the periods presented (in thousands):

	September 30,	
	2020	2019
Cash and cash equivalents	$ 849,556	$ 599,219
Restricted cash included in other assets, net	3,270	3,035
Total cash, cash equivalents and restricted cash	$ 852,826	$ 602,254

Inventories

Inventories consist of the following (in thousands):

	September 30,	
	2020	2019
Finished goods	$ 17,096	$ 22,441
Raw materials	10,802	11,960
	$ 27,898	$ 34,401

Other Current Assets

Other current assets consist of the following (in thousands):

	September 30,	
	2020	2019
Contract assets	$ 138,096	$ 79,407
Prepaid expenses	47,197	49,051
Capitalized contract acquisition costs	29,650	28,228
Other	44,563	26,188
	$ 259,506	$ 182,874

Property and Equipment

Property and equipment consist of the following (in thousands):

	September 30,	
	2020	2019
Computer equipment	$ 153,256	$ 142,372
Software	95,288	85,866
Office furniture and equipment	45,280	38,892
Leasehold improvements	175,593	151,055
	469,417	418,185
Accumulated depreciation and amortization	(240,178)	(194,759)
	$ 229,239	$ 223,426

Depreciation and amortization expense totaled approximately $59.5 million, $58.0 million, and $45.9 million for the fiscal years ended September 30, 2020, 2019 and 2018, respectively.

During the year ended September 30, 2019, the Company recorded impairment of capitalized internal-use software costs of $6.3 million. The charge was reflected in the general and administrative expense line item on the Company's consolidated statement of operations.

Goodwill

Changes in the carrying amount of goodwill during fiscal years 2020 and 2019 are summarized as follows (in thousands):

Balance, September 30, 2018	$ 555,965
Acquisition of Nginx, Inc.	509,414
Balance, September 30, 2019	1,065,379
Acquisition of Shape Security, Inc.	799,611
Adjustment to goodwill[1]	(6,024)
Balance, September 30, 2020	$ 1,858,966

(1) The Company reduced the carrying amount of goodwill by $6.0 million in the third quarter of fiscal year 2020 to reflect an adjustment to consideration exchanged for the purchase of NGINX within the post-close measurement period.

Other Assets

Other assets consist of the following (in thousands):

	September 30, 2020	September 30, 2019
Intangible assets	$ 225,900	$ 108,903
Contract assets	62,377	53,085
Capitalized contract acquisition costs	40,746	31,218
Other	18,424	10,575
	$ 347,447	$ 203,781

Intangible assets are included in other assets on the balance sheet and consist of the following (in thousands):

	2020			2019		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Developed technology	$ 246,173	$ (76,556)	$ 169,617	$ 126,173	$ (53,213)	$ 72,960
Customer relationships	41,242	(10,657)	30,585	20,242	(5,533)	14,709
Patents and trademarks	20,260	(14,448)	5,812	19,160	(11,800)	7,360
Trade names	24,973	(5,174)	19,799	15,473	(1,836)	13,637
Non-compete covenants	2,260	(2,173)	87	2,260	(2,023)	237
	$ 334,908	$ (109,008)	$ 225,900	$ 183,308	$ (74,405)	$ 108,903

Amortization expense related to intangible assets was approximately $34.6 million, $11.8 million, and $11.1 million for the fiscal years ended September 30, 2020, 2019 and 2018, respectively.

Estimated amortization expense for intangible assets for the five succeeding fiscal years is as follows (in thousands):

2021	$ 42,722
2022	41,429
2023	40,625
2024	35,360
2025	29,624
	$ 189,760

Accrued Liabilities

Accrued liabilities consist of the following (in thousands):

	September 30, 2020	September 30, 2019
Payroll and benefits	$ 169,708	$ 138,453
Operating lease liabilities, current	46,010	—
Income and other tax accruals	33,048	31,801
Other	72,632	65,615
	$ 321,398	$ 235,869

Other Long-term Liabilities

Other long-term liabilities consist of the following (in thousands):

	September 30, 2020	September 30, 2019
Deferred rent	$ —	$ 66,103
Income taxes payable	49,846	42,324
Other	9,665	23,426
	$ 59,511	$ 131,853

7. Debt Facilities

Term Credit Agreement

In connection with the acquisition of Shape, on January 24, 2020, the Company entered into a Term Credit Agreement ("Term Credit Agreement") with certain institutional lenders that provides for a senior unsecured term loan facility in an aggregate principal amount of $400.0 million (the "Term Loan Facility"). The proceeds from the Term Loan Facility were primarily used to finance the acquisition of Shape and related expenses. In connection with the Term Loan Facility, the Company incurred $2.2 million in debt issuance costs, which are recorded as a reduction to the carrying value of the principal amount of the debt.

Borrowings under the Term Loan Facility bear interest at a rate equal to, at the Company's option, (a) LIBOR, adjusted for customary statutory reserves, plus an applicable margin of 1.125% to 1.75% depending on the Company's leverage ratio, or (b) an alternate base rate determined in accordance with the Term Credit Agreement, plus an applicable margin of 0.125% to 0.750% depending on the Company's leverage ratio. Interest on the outstanding principal of borrowings is currently due quarterly in arrears. As of September 30, 2020, the margin for LIBOR-based loans was 1.125% and the margin for alternate base rate loans was 0.125%.

The Term Loan Facility matures on January 24, 2023 with quarterly installments (commencing with the first full fiscal quarter ended after January 24, 2020) equal to 1.25% of the original principal amount of the Term Loan Facility. The remaining outstanding principal of borrowings under the Term Loan Facility is due upon maturity on January 24, 2023. Borrowings under the Term Loan Facility may be voluntarily prepaid, in whole or in part, without penalty or premium. Borrowings repaid or prepaid under the Term Loan Facility may not be reborrowed.

Among certain affirmative and negative covenants provided in the Term Credit Agreement, there is a financial covenant that requires the Company to maintain a leverage ratio, calculated as of the last day of each fiscal quarter, of consolidated total indebtedness to consolidated EBITDA. This covenant may result in a higher interest rate on its outstanding principal borrowings on the Term Loan Facility in future periods, depending on the Company's performance. As of September 30, 2020, the Company was in compliance with all covenants.

As of September 30, 2020, $390.0 million of principal amount under the Term Loan Facility was outstanding, excluding unamortized debt issuance costs of $1.7 million. The weighted average interest rate on the principal amount under the Term Loan Facility outstanding balance was 2.365% for the period ending September 30, 2020. The following table presents the scheduled principal maturities as of September 30, 2020 (in thousands):

Fiscal Years Ending September 30:		
2021	$	20,000
2022		20,000
2023		350,000
Total	$	390,000

Revolving Credit Agreement

On January 31, 2020, the Company entered into a Revolving Credit Agreement (the "Revolving Credit Agreement") that provides for a senior unsecured revolving credit facility in an aggregate principal amount of $350.0 million (the "Revolving Credit Facility"). The Company has the option to increase commitments under the Revolving Credit Facility from time to time, subject to certain conditions, by up to $150.0 million. Borrowings under the Revolving Credit Facility bear interest at a rate equal to, at the Company's option, (a) LIBOR, adjusted for customary statutory reserves, plus an applicable margin of 1.125% to 1.75% depending on the Company's leverage ratio, or (b) an alternate base rate determined in accordance with the Revolving Credit Agreement, plus an applicable margin of 0.125% to 0.750% depending on the Company's leverage ratio. The Revolving Credit Agreement also requires payment of a commitment fee calculated at a rate per annum of 0.125% to 0.300% depending on the Company's leverage ratio on the undrawn portion of the Revolving Credit Facility. Commitment fees incurred during fiscal year 2020 were not material.

The Revolving Credit Facility matures on January 31, 2025, at which time any remaining outstanding principal of borrowings under the Revolving Credit Facility is due. The Company has the option to request up to two extensions of the maturity date in each case for an additional period of one year. Among certain affirmative and negative covenants provided in the Revolving Credit Agreement, there is a financial covenant that requires the Company to maintain a leverage ratio, calculated as of the last day of each fiscal quarter, of consolidated total indebtedness to consolidated EBITDA. As of September 30, 2020, the Company was in compliance with all covenants. As of September 30, 2020, there were no outstanding borrowings under the Revolving Credit Facility, and the Company had available borrowing capacity of $350.0 million.

8. Leases

During the first quarter of fiscal 2020, the Company adopted ASU 2016-02, *Leases (Topic 842)* (the "Leasing Standard") using the transition method provided in ASU 2018-11, *Leases (Topic 842): Targeted Improvements*. The impact of adopting the Leasing Standard resulted in the recognition of right-of-use assets and lease liabilities of $304.8 million and $386.4 million, respectively, on October 1, 2019, the date of adoption.

The majority of the Company's operating lease payments relate to its corporate headquarters in Seattle, Washington, which includes approximately 515,000 square feet of office space. The lease commenced in April 2019 and expires in 2033 with an option for renewal. The Company has concluded that the renewal option is not yet likely to be exercised. The Company also leases additional office and lab space for product development and sales and support personnel in the United States and internationally. The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

The components of the Company's operating lease expenses for the year ended September 30, 2020 were as follows (in thousands):

		Fiscal year ended September 30, 2020
Operating lease expense	$	49,925
Short-term lease expense		3,563
Variable lease expense		21,980
Total lease expense	$	75,468

In the fourth quarter of fiscal 2020, the Company recorded an impairment for $9.7 million against the right-of-use asset related to the former Seattle headquarters location, due to the low likelihood of future sublease receipts, as the Company will no longer seek to sublease the space. Variable lease expense primarily consists of common area maintenance and parking expenses. The Company executed two sublease contracts that commenced during the first quarter of fiscal year 2020. Lease income payments commenced in the second fiscal quarter. The Company has three additional subleases through the fiscal 2020 acquisition of Shape Security.

Supplemental balance sheet information related to the Company's operating leases was as follows (in thousands, except lease term and discount rate):

	September 30, 2020
Operating lease right-of-use assets, net	$ 300,680
Operating lease liabilities, current[1]	46,010
Operating lease liabilities, long-term	338,715
Total operating lease liabilities	$ 384,725
Weighted average remaining lease term (in years)	10.2
Weighted average discount rate	2.58 %

(1) Current portion of operating lease liabilities is included in accrued liabilities on the Company's consolidated balance sheet.

As of September 30, 2020, the future operating leases payments for each of the next five years and thereafter is as follows (in thousands):

Fiscal Years Ending September 30:	Operating Lease Payments
2021	$ 55,601
2022	56,813
2023	44,041
2024	39,590
2025	33,215
Thereafter	217,506
Total lease payments	446,766
Less: imputed interest	(62,041)
Total lease liabilities	$ 384,725

Operating lease liabilities above do not include sublease income. As of September 30, 2020, the Company expects to receive sublease income of approximately $10.2 million, which consists of $4.5 million to be received in fiscal year 2021 and $5.7 million to be received over the two fiscal years thereafter.

As of September 30, 2020, the Company had no significant operating leases that were executed but not yet commenced.

ASC 840 - Leases

As a result of adopting the Leasing Standard, reporting periods beginning in the first quarter of fiscal 2020 are presented under the new standard while prior period amounts are not adjusted and continue to be reported in accordance with ASC 840 - Leases.

Prior to the adoption of the Leasing Standard, future minimum operating lease payments, net of sublease income, were as follows as of September 30, 2019 (in thousands):

Fiscal Year	Gross Lease Payments	Sublease Income	Net Lease Payments
2020	$ 54,046	$ 683	$ 53,363
2021	50,712	1,051	49,661
2022	47,550	1,082	46,468
2023	36,514	368	36,146
2024	33,971	—	33,971
Thereafter	242,826	—	242,826
	$ 465,619	$ 3,184	$ 462,435

9. Income Taxes

The United States and international components of income before income taxes are as follows (in thousands):

	Years Ended September 30,		
	2020	2019	2018
United States	$ 216,409	$ 360,648	$ 441,336
International	179,988	180,463	162,424
	$ 396,397	$ 541,111	$ 603,760

The provision for income taxes consists of the following (in thousands):

	Years Ended September 30,		
	2020	2019	2018
Current			
U.S. federal	$ 26,978	$ 43,039	$ 78,454
State	4,230	13,864	9,800
Foreign	50,368	49,197	41,040
Total	81,576	106,100	129,294
Deferred			
U.S. federal	10,875	8,716	21,259
State	(1,121)	1,617	725
Foreign	(2,374)	(3,056)	(1,207)
Total	7,380	7,277	20,777
	$ 88,956	$ 113,377	$ 150,071

The effective tax rate differs from the U.S. federal statutory rate as follows (in thousands):

	Years Ended September 30,		
	2020	2019	2018
Income tax provision at statutory rate	$ 83,243	$ 113,633	$ 147,921
State taxes, net of federal benefit	4,258	14,206	9,349
Tax impact of foreign operations	(7,693)	(9,161)	(6,696)
Research and development and other credits	(11,843)	(12,760)	(13,159)
Domestic manufacturing deduction	—	—	(9,722)
Stock-based and other compensation	18,002	6,771	(150)
Transition impacts of the Tax Cuts and Jobs Act	—	—	21,015
Other	2,989	688	1,513
	$ 88,956	$ 113,377	$ 150,071

The provision for income taxes for fiscal year 2020, 2019, and 2018 includes various impacts from the Tax Cuts and Jobs Act enacted on December 22, 2017. Significant impacts for fiscal year 2020 include a deduction for foreign derived intangible income, a tax on global intangible low taxed income, and the base erosion anti-avoidance tax. Significant impacts for fiscal year 2019 include a reduction of the U.S. federal income tax rate to 21%, a deduction for foreign derived intangible income, a tax on global intangible low taxed income, and repeal of the deduction for income attributable to domestic production activities. Significant impacts for fiscal year 2018 include a reduction of the U.S. federal income tax rate to 24.5%, a tax for deemed repatriation of undistributed foreign earnings, and an expense from the remeasurement of the Company's net deferred tax assets to reflect the change in the U.S. federal income tax rate when temporary differences are expected to reverse.

Effective January 1, 2018, the U.S. tax law provides a deduction for the foreign-source portion of dividends received from specified foreign corporations. The Company no longer maintains an indefinite reinvestment assertion on unremitted foreign earnings and has recorded a deferred tax liability for any estimated foreign, federal, or state tax liabilities associated with a future repatriation of foreign earnings.

In April 2020, recent interpretations of a German law relating to withholding taxes on intellectual property rights emerged. We have evaluated this law and do not expect a material impact to our financial position or results of operations.

The Company benefits from tax incentive arrangements in certain foreign jurisdictions, which expire in fiscal year 2021 to 2034. The tax incentive agreements are conditional upon meeting certain operational, employment, and investment requirements. These arrangements decreased foreign taxes by $8.2 million, $8.1 million and $6.4 million, and increased diluted earnings per common share by $0.13, $0.13 and $0.10 for the years ended September 30, 2020, 2019 and 2018, respectively.

The tax effects of the temporary differences that give rise to the deferred tax assets and liabilities are as follows (in thousands):

	Years Ended September 30, 2020	2019
Deferred tax assets		
Net operating loss carry-forwards	$ 54,842	$ 12,269
Accrued compensation and benefits	13,162	13,478
Stock-based compensation	13,010	7,144
Deferred revenue	40,577	35,247
Lease liabilities	19,656	17,313
Other accruals and reserves	17,384	15,786
Tax credit carryforwards	15,807	13,783
Depreciation	620	592
	175,058	115,612
Valuation allowance	(32,587)	(23,495)
	142,471	92,117
Deferred tax liabilities		
Purchased intangibles	(46,491)	(10,560)
Depreciation	(34,757)	(39,910)
Deferred costs	(11,924)	(10,656)
Other accruals and reserves	(4,728)	(3,603)
	(97,900)	(64,729)
Net deferred tax assets	$ 44,571	$ 27,388

At September 30, 2020, the Company had foreign net operating loss carryforwards of approximately $59.5 million that can be carried forward indefinitely, and $3.4 million that will expire in fiscal years 2026 to 2030. The Company had $170.7 million of federal net operating loss carryforwards, of which $111.8 million can be carried forward indefinitely and $58.9 million that will expire in fiscal years 2032 to 2037. The annual utilization of the federal net operating loss carryforwards is limited under Internal Revenue Code Section 382. The Company also had $379.6 million of state net operating loss carryforwards, of which $158.2 million can be carried forward indefinitely and $221.4 million will expire in fiscal years 2027 to 2040. In addition, there are $4.0 million of foreign credit carryforwards that will expire in fiscal years 2021 to 2036, $0.5 million of federal credit carryforwards that will expire in fiscal year 2039, $15.6 million of state tax credit carryforwards that can be carried forward indefinitely, and $3.7 million of state tax credit carryforwards that will expire in fiscal years 2030 to 2035. Management believes that it is more likely than not that the benefit from certain foreign net operating loss and credit carryforwards and state tax net operating loss and credit carryforwards will not be realized. In recognition of this risk, the Company has provided a valuation allowance on the deferred tax assets relating to these carryforwards. The net change in the total valuation allowance was an increase of $9.1 million and $0.7 million for years ended September 30, 2020 and 2019, respectively.

The Company recognizes the financial statement impact of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more-likely-than-not threshold, the amount recognized in the financial statements is the largest impact that has a greater than fifty percent likelihood of being realized upon ultimate settlement with the relevant tax authority.

The following table provides a reconciliation of the beginning and ending amount of unrecognized tax benefits in fiscal years 2020, 2019 and 2018 (in thousands):

	2020	2019	2018
Balance, beginning of period	$ 42,287	$ 31,672	$ 23,135
Gross increases related to prior period tax positions	8,664	5,129	2,715
Gross decreases related to prior period tax positions	(1,051)	(287)	—
Gross increases related to current period tax positions	9,272	7,756	8,230
Decreases relating to settlements with tax authorities	(3,578)	—	—
Reductions due to lapses of statute of limitations	(3,827)	(1,983)	(2,408)
Balance, end of period	$ 51,767	$ 42,287	$ 31,672

The total amount of gross unrecognized tax benefits was $51.8 million, $42.3 million, and $31.7 million as of September 30, 2020, 2019, and 2018, respectively, of which, $34.3 million, $29.4 million, and $23.1 million, if recognized, would affect the effective tax rate. There is a reasonable possibility that the Company's unrecognized tax benefits will change within twelve months due to audit settlements or the expiration of statute of limitations, but the Company does not expect the change to be material to the consolidated financial statements.

The Company recognizes interest and, if applicable, penalties (not included in the "unrecognized tax benefits" table above) for any uncertain tax positions. Interest and penalties are recorded as a component of income tax expense. In the years ended September 30, 2020, 2019 and 2018, the Company recorded approximately $1.0 million decrease, $2.4 million increase and $0.4 million increase, respectively, of interest and penalty expense related to uncertain tax positions. As of September 30, 2020 and 2019, the Company had a cumulative balance of accrued interest and penalties on unrecognized tax positions of $3.0 million and $4.0 million, respectively.

The Company and its subsidiaries are subject to U.S. federal income tax as well as the income tax of multiple state and foreign jurisdictions. The Company has concluded all U.S. federal income tax matters for fiscal years through September 30, 2016. Major jurisdictions where there are wholly owned subsidiaries of F5 Networks, Inc. which require income tax filings include the United Kingdom, Japan, Singapore, Australia, and Israel. The earliest periods open for review by local taxing authorities are fiscal years 2019 for the United Kingdom, 2014 for Japan, 2015 for Singapore, 2016 for Australia, and 2013 for Israel. The Company is currently under audit by various states for fiscal years 2015 through 2018 and by Israel for fiscal years 2013 to 2017. Within the next four fiscal quarters, the statute of limitations will begin to close on the fiscal year 2017 federal income tax return, fiscal years 2015, 2016, and 2017 state income tax returns and fiscal years 2013 to 2019 foreign income tax returns.

10. Shareholders' Equity

Common Stock Repurchase

On October 31, 2018, the Company announced that its Board of Directors authorized an additional $1.0 billion for its common stock share repurchase program. This new authorization is incremental to the existing $4.4 billion program, initially approved in October 2010 and expanded in each fiscal year. Acquisitions for the share repurchase programs will be made from time to time in private transactions or open market purchases as permitted by securities laws and other legal requirements. The programs can be terminated at any time. During fiscal year 2020, the Company repurchased and retired 799,495 shares at an average price of $125.10 per share and as of September 30, 2020, the Company had $1.3 billion remaining authorized to purchase shares.

Shares repurchased and retired during the fourth quarter of fiscal year 2020 are as follows (in thousands, except shares and per share data):

	Total Number of Shares Purchased[1]	Average Price Paid per Share	Total Number of Shares Purchased per the Publicly Announced Plan	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plan[2]
July 1, 2020 — July 31, 2020	—	$ —	—	$ 1,322,518
August 1, 2020 — August 31, 2020	373,078	$ 139.79	357,644	$ 1,272,511
September 1, 2020 — September 30, 2020	—	$ —	—	$ 1,272,511

(1) Includes 15,434 shares withheld from restricted stock units that vested in the fourth quarter of 2020 to satisfy minimum tax withholding obligations that arose on the vesting of restricted stock units.

(2) Shares withheld from restricted stock units that vested to satisfy minimum tax withholding obligations that arose on the vesting of such awards do not deplete the dollar amount available for purchases under the repurchase program.

11. Stock-based Compensation

The Company recognized $201.9 million, $162.9 million and $157.9 million of stock-based compensation expense for the fiscal years ended September 30, 2020, 2019 and 2018, respectively. The income tax benefit recognized on stock-based compensation within income tax expense was $37.6 million, $31.3 million and $34.6 million for the fiscal years ended September 30, 2020, 2019 and 2018, respectively. As of September 30, 2020, there was $205.6 million of total unrecognized stock-based compensation cost, the majority of which will be recognized over approximately two years. Going forward, stock-based compensation expenses may increase as the Company issues additional equity-based awards to continue to attract and retain key employees. On October 30, 2020, the Company's Board of Directors and Compensation Committee approved 1,451,566 RSUs to employees and executive officers pursuant to the Company's annual equity awards program.

Company has adopted a number of stock-based compensation plans as discussed below.

2011 Employee Stock Purchase Plan. In April 2012, the Board of Directors amended and restated the Company's 1999 Employee Stock Purchase Plan, or the Employee Stock Purchase Plan. A total of 10,000,000 shares of common stock have been reserved for issuance under the Employee Stock Purchase Plan. The Employee Stock Purchase Plan permits eligible employees to acquire shares of the Company's common stock through periodic payroll deductions of up to 15% of base compensation. No employee may purchase more than 10,000 shares during an offering period. In addition, no employee may purchase more than $25,000 worth of stock, determined by the fair market value of the shares at the time such option is granted, in one calendar year. The Employee Stock Purchase Plan has been implemented in a series of offering periods, each 6 months in duration. The price at which the common stock may be purchased is 85% of the lesser of the fair market value of the Company's common stock on the first day of the applicable offering period or on the last day of the respective purchase period. As of September 30, 2020 there were 1,899,745 shares available for awards under the Employee Stock Purchase Plan.

In determining the fair value of the right to purchase under the Employee Stock Purchase Plan, the Company uses the Black-Scholes option pricing model that employs the following key assumptions:

	Employee Stock Purchase Plan Years Ended September 30,		
	2020	2019	2018
Risk-free interest rate	1.10% - 1.97%	2.25% - 2.51%	1.14% - 1.77%
Expected dividend	—	—	—
Expected term	0.5 years	0.5 years	0.5 years
Expected volatility	26.32% - 41.94%	18.14% - 31.74%	22.03% - 24.87%

Acquisition Related Incentive Plans. In connection with the Company's acquisition of Traffix Systems in the second quarter of fiscal year 2012, the Company assumed the Traffix 2007 Israeli Employee Share Option Plan, or the Traffix Plan. Unvested options to acquire Traffix's common stock were converted into options to acquire the Company's common stock in connection with the acquisition. A total of 106,829 shares of common stock were reserved for issuance under the Traffix Plan. The plan provided for grants of stock options to persons who were employees, officers, directors, consultants or advisors to Traffix on or prior to February 21, 2012. During the fiscal year 2020, the Company issued no stock options or restricted stock units under the Traffix Plan. As of September 30, 2020, there were options to purchase 49 shares outstanding and no shares available for additional awards under the Traffix Plan. The Company terminated the Traffix Plan effective January 3, 2014 and no additional shares may be issued from the Traffix Plan.

In May 2019, the Company adopted the Nginx Acquisition Equity Incentive Plan, or the Nginx Acquisition Plan. The Nginx Acquisition Plan provided for discretionary grants of stock options and stock units for employees, directors and consultants of Nginx, Inc. to whom the Company offered employment in connection with the Company's acquisition of Nginx. A total of 183,061 shares of common stock were reserved for issuance under the Nginx Acquisition Plan. Upon certain changes in control of the Company, the surviving entity will either assume or substitute all outstanding stock awards under the Nginx Acquisition Plan or the vesting of 50% of the stock awards shall be accelerated. During the fiscal year 2020, the Company issued no stock options or restricted stock units under the Nginx Acquisition Plan. As of September 30, 2020, there were no options outstanding and 121,820 stock units outstanding. The Company terminated the Nginx Acquisition Plan effective October 31, 2019 and no additional shares may be issued from the Nginx Acquisition Plan.

In connection with the Company's acquisition of Nginx, Inc. in the third quarter of fiscal year 2019, the Company assumed the Nginx Inc. 2011 Share Plan, or the Nginx Plan. Unvested options to acquire Nginx's common stock and unvested stock units with respect to Nginx's common stock were converted into options to acquire the Company's common stock and stock units with respect to the Company's stock in connection with the acquisition. A total of 302,634 shares of common stock were reserved for issuance under the Nginx Plan (including converted options and stock units). The Nginx Plan provided for grants of stock options, stock awards and stock units to persons who were employees, officers, directors and consultants to Nginx, Inc. prior to May 8, 2019. During the fiscal year 2020, the Company issued no stock options or restricted stock units under the Nginx Plan. As of September 30, 2020, there were options to purchase 131,342 shares outstanding and 17,986 stock units outstanding. The Company terminated the Nginx Acquisition Plan effective October 31, 2019 and no additional shares may be issued from the Nginx Acquisition Plan.

In January 2020, the Company adopted the Shape Acquisition Equity Incentive Plan, or the Shape Acquisition Plan. The Shape Acquisition Plan provided for discretionary grants of stock options and stock units for employees, directors and consultants of Shape Security, Inc. to whom the Company offered employment in connection with the Company's acquisition of Shape. A total of 450,000 shares of common stock were reserved for issuance under the Shape Acquisition Plan. Upon certain changes in control of the Company, the surviving entity will either assume or substitute all outstanding stock awards under the Shape Acquisition Plan or the vesting of 50% of the stock awards shall be accelerated. During the fiscal year 2020, the Company issued no stock options and 411,385 restricted stock units under the Shape Acquisition Plan. As of September 30, 2020, there were no options outstanding and 377,066 stock units outstanding.

In connection with the Company's acquisition of Shape Security, Inc. in the second quarter of fiscal year 2020, the Company assumed the Shape 2011 Stock Plan, or the Shape Plan. Unvested options to acquire Shape's common stock and unvested stock units with respect to Shape's common stock were converted into options to acquire the Company's common stock and stock units with respect to the Company's stock in connection with the acquisition. A total of 501,085 shares of common stock were reserved for issuance under the Shape Plan (including converted options and stock units). The Shape Plan provided for grants of stock options, stock awards and stock units to persons who were employees, officers, directors and consultants to Shape Security, Inc. prior to January 24, 2020. During the fiscal year 2020, the Company issued (including conversions to Company awards) 334,709 stock options and 7,703 stock units under the Shape Plan. As of September 30, 2020, there were options to purchase 259,709 shares outstanding and 5,631 stock units outstanding.

2014 Incentive Plan. In March 2014, the Company adopted the 2014 Incentive Plan, or the 2014 Plan, which amended and restated the 2005 Equity Incentive Plan. The 2014 Plan provides for discretionary grants of stock options, stock units and other equity and cash-based awards for employees, including officers, directors and consultants. A total of 21,280,000 shares of common stock have been reserved for issuance under the 2014 Plan. Upon certain changes in control of the Company, all outstanding and unvested options or stock awards under the 2014 Plan will vest at the rate of 50%, unless assumed or substituted by the acquiring entity. During the fiscal year 2020, the Company issued no stock options, 152,199 performance stock units and 1,237,609 restricted stock units under the 2014 Plan. As of September 30, 2020, there were no options outstanding, 145,869 performance stock units outstanding, 1,204,290 restricted stock units outstanding and 2,453,277 shares available for new awards under the 2014 Plan.

A summary of restricted stock unit activity under the 2014 Plan is as follows:

	Performance Stock Units		Restricted Stock Units	
	Outstanding Performance Stock Units	Weighted Average Grant Date Fair Value	Outstanding Restricted Stock Units	Weighted Average Grant Date Fair Value
Balance, September 30, 2019	55,184	$ 165.83	1,041,889	$ 158.10
Units granted	152,199	147.30	1,237,609	142.58
Units vested	(42,053)	142.01	(933,413)	134.49
Units cancelled	(19,461)	157.81	(141,795)	150.58
Balance, September 30, 2020	145,869	$ 146.42	1,204,290	$ 146.39

A majority of the restricted stock units the Company grants to its employees vest quarterly over a two-year period. The performance stock units, restricted stock units and stock options under all plans were granted during fiscal years 2020, 2019 and 2018 with a per-share weighted average fair value of $137.84, $165.64 and $126.86, respectively. The fair value of performance stock units and restricted stock units vested during fiscal years 2020, 2019 and 2018 was $138.4 million, $159.6 million and $182.6 million, respectively. In determining the fair value of the portion of the performance awards based on Total Shareholder Return, the Company uses a Monte Carlo simulation model that employs the following key assumptions:

				Expected Volatility		
Grant Date	Fair Value per Share	Expected Term (in years)	Risk-Free Interest Rate	F5 Networks	Index Members	Expected Dividend
November 1, 2019						
Tranche 1	$ 196.02	0.91	1.53 %	27.61 %	26.88 %	—
Tranche 2	$ 199.85	1.91	1.55 %	26.22 %	26.70 %	—
Tranche 3	$ 202.56	2.91	1.54 %	24.90 %	24.82 %	—

As of September 30, 2020, the following annual equity grants for executive officers or a portion thereof are outstanding:

Grant Date	RSUs Granted	Vesting Schedule	Vesting Period	Date Fully Vested
November 1, 2019	228,616	Quarterly, Annually[1]	3 years	November 1, 2022
November 1, 2018	144,066	Quarterly, Annually[1]	3 years	November 1, 2021
November 1, 2017	140,135	Quarterly, Annually[1]	4 years	November 1, 2021
November 1, 2016	115,347	Quarterly	4 years	November 1, 2020

(1) 50% of the annual equity grant vests in equal quarterly increments and 50% is subject to the Company achieving specified annual performance goals.

A summary of stock option activity under all of the Company's plans is as follows:

	Options Outstanding	
	Number of Shares	Weighted Average Exercise Price per Share
Balance, September 30, 2019	207,759	$ 24.43
Options granted	334,709	41.10
Options exercised	(104,487)	24.84
Options cancelled	(46,881)	40.09
Balance, September 30, 2020	391,100	$ 36.71

All stock options granted in fiscal year 2020 and 2019 were replacement awards of those assumed as part of the acquisitions of Shape and NGINX, respectively. No stock options were granted in fiscal year 2018.

The total intrinsic value of options exercised during fiscal 2020, 2019 and 2018 was $11.4 million, $0.7 million and $0.1 million, respectively.

A summary of options outstanding that are exercisable and that have vested and are expected to vest as of September 30, 2020 is as follows:

	Number of Shares	Weighted Average Remaining Contractual Life (in Years)	Weighted Average Exercise Price per Share	Aggregate Intrinsic Value(1)
				(In thousands)
Stock options outstanding	391,100	7.81	$ 36.71	$ 34,236
Exercisable	119,734	7.11	$ 25.38	$ 11,683
Vested and expected to vest	368,503	7.77	$ 36.04	$ 32,477

(1) Aggregate intrinsic value represents the difference between the fair value of the Company's common stock underlying these options at September 30, 2020 and the related exercise prices.

As of September 30, 2020, equity based awards (including stock options and restricted stock units) are available for future issuance as follows:

	Awards Available for Grant
Balance, September 30, 2019	2,939,974
Granted	(2,143,605)
Cancelled	266,925
Additional shares reserved (terminated), net	1,651,664
Balance, September 30, 2020	2,714,958

12. Net Income Per Share

Basic net income per share is computed by dividing net income by the weighted average number of common shares outstanding during the period. Diluted net income per share is computed by dividing net income by the weighted average number of common and dilutive common stock equivalent shares outstanding during the period. The Company's nonvested restricted stock units do not have nonforfeitable rights to dividends or dividend equivalents and are not considered participating securities that should be included in the computation of earnings per share under the two-class method.

The following table sets forth the computation of basic and diluted net income per share (in thousands, except per share data):

	Years Ended September 30,		
	2020	2019	2018
Numerator			
Net income	$ 307,441	$ 427,734	$ 453,689
Denominator			
Weighted average shares outstanding — basic	60,911	60,044	61,262
Dilutive effect of common shares from stock options and restricted stock units	467	412	751
Weighted average shares outstanding — diluted	61,378	60,456	62,013
Basic net income per share	$ 5.05	$ 7.12	$ 7.41
Diluted net income per share	$ 5.01	$ 7.08	$ 7.32

Anti-dilutive stock-based awards excluded from the calculations of diluted earnings per share were immaterial for the years ended September 30, 2020, 2019 and 2018.

13. Commitments and Contingencies

Purchase Obligations

Purchase obligations are comprised of purchase commitments with the Company's contract manufacturers. The agreement with the Company's primary contract manufacturer allows them to procure component inventory on the Company's behalf based on the Company's production forecast. The Company is obligated to purchase component inventory that the contract manufacturer procures in accordance with the forecast, unless cancellation is given within applicable lead times. As of September 30, 2020, the Company's remaining unfulfilled purchase obligations were $18.1 million.

Litigation

On June 8, 2020, Lynwood Investment CY Limited ("Lynwood") filed a lawsuit in the United States District Court for the Northern District of California against the Company and certain affiliates, along with other defendants. In its complaint, Lynwood claims to be the assignee of all rights and interests of Rambler Internet Holding LLC ("Rambler"), and alleges that the intellectual property in the NGINX software originally released by the co-founder of NGINX in 2004 belongs to Rambler (and therefore Lynwood, by assignment) because the software was created and developed while the co-founder was employed by Rambler. Lynwood asserts 26 causes of action against the various defendants, including copyright infringement, violation of trademark law, tortious interference, conspiracy, and fraud. The complaint seeks damages, disgorgement of profits, fees and costs, declarations of copyright and trademark ownership, trademark cancellations, and injunctive relief. Lynwood also initiated several trademark opposition and cancellation proceedings before the Trademark Trial and Appeal Board of the United States Patent and Trademark Office, which have all since been suspended. The Company and the other defendants have filed motions to dismiss all claims asserted against them in the lawsuit.

In addition to the above matter, the Company is subject to a variety of legal proceedings, claims, investigations, and litigation arising in the ordinary course of business, including intellectual property litigation. Management believes that the Company has meritorious defenses to the allegations made in its pending cases and intends to vigorously defend these lawsuits; however, the Company is unable currently to determine the ultimate outcome of these or similar matters or the potential exposure to loss, if any. There are many uncertainties associated with any litigation and these actions or other third-party claims against the Company may cause it to incur costly litigation and/or substantial settlement charges that could have a material adverse effect on the Company's business, financial condition, results of operations, and cash flows.

The Company records an accrual for loss contingencies for legal proceedings when it believes that an unfavorable outcome is both (a) probable and (b) the amount or range of any possible loss is reasonably estimable. The Company has not recorded an accrual for loss contingencies associated with the legal proceedings or the investigations discussed above.

14. Restructuring Charges

In December 2019, the Company initiated a restructuring plan to match strategic and financial objectives and optimize resources for long term growth, including a reduction in force program affecting approximately 75 employees. The Company recorded a restructuring charge of $7.8 million in the first quarter of fiscal 2020. The Company does not expect to record any significant future charges related to the restructuring plan.

During fiscal year 2020, the following activity was recorded (in thousands):

	Employee Severance, Benefits and Related Costs
Accrued expenses, October 1, 2019	$ —
Restructuring charges	7,800
Cash payments	(7,639)
Non-cash items	—
Accrued expenses, September 30, 2020	$ 161

In July 2018, the Company initiated a restructuring plan, which included a reduction in force program affecting approximately 215 employees. The Company recorded a restructuring charge of $18.4 million in the fourth quarter of fiscal 2018 and as of September 30, 2018, the Company had $8.3 million in accrued restructuring costs related to this plan. All severance restructuring costs had been paid as of September 30, 2019 and the plan was complete.

15. Employee Benefit Plans

The Company has a 401(k) savings plan whereby eligible employees may voluntarily contribute a percentage of their compensation. The Company may, at its discretion, match a portion of the employees' eligible contributions. Contributions by the Company to the plan during the years ended September 30, 2020, 2019, and 2018 were approximately $11.3 million, $10.5 million and $10.5 million, respectively. Contributions made by the Company vest over four years.

16. Segment Information

Operating segments are defined as components of an enterprise for which separate financial information is available and evaluated regularly by the chief operating decision-maker, or decision-making group, in deciding how to allocate resources and in assessing performance. Management has determined that the Company is organized as, and operates in, one reportable operating segment: the development, marketing and sale of application services that optimize the security, performance and availability of network applications, servers and storage systems.

Revenues by Geographic Location and Other Information

The Company does business in three main geographic regions: the Americas (primarily the United States); Europe, the Middle East, and Africa (EMEA); and the Asia Pacific region (APAC). The Company's chief operating decision-maker reviews financial information presented on a consolidated basis accompanied by information about revenues by geographic region. The Company's foreign offices conduct sales, marketing and support activities. Revenues are attributed by geographic location based on the location of the customer.

The following presents revenues by geographic region (in thousands):

	Years Ended September 30,		
	2020	**2019**	**2018**
Americas:			
United States	$ 1,221,190	$ 1,137,556	$ 1,088,270
Other	95,878	108,112	116,073
Total Americas	1,317,068	1,245,668	1,204,343
EMEA	593,307	553,701	546,239
Asia Pacific	440,447	443,078	410,825
	$ 2,350,822	$ 2,242,447	$ 2,161,407

The Company generates revenues from the sale of products and services. The Company continues to offer its products through a range of consumption models, from physical systems to software solutions and managed services. The following presents net product revenues by systems and software (in thousands):

	Years Ended September 30,		
	2020	**2019**	**2018**
Net product revenues			
Systems revenue	$ 668,313	$ 745,798	$ 810,182
Software revenue	357,543	239,793	149,926
Total net product revenue	$ 1,025,856	$ 985,591	$ 960,108

The following distributors of the Company's products accounted for more than 10% of total net revenue:

	Years Ended September 30,		
	2020	**2019**	**2018**
Ingram Micro, Inc.	16.7 %	18.2 %	16.6 %
Tech Data	—	10.2 %	11.6 %
Westcon Group, Inc.	—	10.0 %	10.4 %
Synnex Corporation	—	—	10.8 %
Arrow ECS	—	—	10.7 %

The Company tracks assets by physical location. Long-lived assets consist of property and equipment, net, and are shown below (in thousands):

	September 30, 2020	September 30, 2019
United States	$ 190,509	$ 194,176
EMEA	20,361	13,451
Other countries	18,369	15,799
	$ 229,239	$ 223,426

17. Quarterly Results of Operations (Unaudited)

The following presents the Company's unaudited quarterly results of operations for the eight quarters ended September 30, 2020. The information should be read in conjunction with the Company's financial statements and related notes included elsewhere in this report. This unaudited information has been prepared on the same basis as the audited financial statements and includes all adjustments, consisting only of normal recurring adjustments that were considered necessary for a fair statement of the Company's operating results for the quarters presented.

	Three Months Ended							
	Sept. 30, 2020	June 30, 2020	March 31, 2020	Dec. 31, 2019	Sept. 30, 2019	June 30, 2019	March 31, 2019	Dec. 31, 2018
	(unaudited and in thousands, except per share data)							
Net revenues								
Products	$278,451	$253,331	$259,538	$234,536	$264,926	$248,929	$237,859	$233,877
Services	336,365	329,921	323,911	334,769	325,462	314,465	307,036	309,893
Total	614,816	583,252	583,449	569,305	590,388	563,394	544,895	543,770
Cost of net revenues								
Products	62,634	57,437	53,086	42,118	44,693	44,336	43,547	42,410
Services	49,333	48,603	48,152	46,524	46,225	46,431	44,631	44,304
Total	111,967	106,040	101,238	88,642	90,918	90,767	88,178	86,714
Gross profit	502,849	477,212	482,211	480,663	499,470	472,627	456,717	457,056
Operating expenses								
Sales and marketing	220,379	211,808	215,472	195,519	217,554	195,852	170,954	164,259
Research and development	120,300	115,991	109,028	96,005	102,812	116,894	96,314	92,038
General and administrative	63,557	61,792	74,013	59,004	64,390	57,141	46,656	42,543
Restructuring charges	—	—	—	7,800	—	—	—	—
Total operating expenses	404,236	389,591	398,513	358,328	384,756	369,887	313,924	298,840
Income from operations	98,613	87,621	83,698	122,335	114,714	102,740	142,793	158,216
Other income, net	(1,090)	141	(141)	5,220	3,397	4,722	7,434	7,095
Income before income taxes	97,523	87,762	83,557	127,555	118,111	107,462	150,227	165,311
Provision for income taxes	19,860	17,890	22,178	29,028	23,274	21,557	34,140	34,406
Net income	$ 77,663	$ 69,872	$ 61,379	$ 98,527	$ 94,837	$ 85,905	$116,087	$130,905
Net income per share — basic	$ 1.27	$ 1.15	$ 1.01	$ 1.62	$ 1.57	$ 1.43	$ 1.94	$ 2.17
Weighted average shares — basic	61,149	60,978	60,869	60,649	60,283	59,981	59,686	60,216
Net income per share — diluted	$ 1.26	$ 1.14	$ 1.00	$ 1.62	$ 1.57	$ 1.43	$ 1.93	$ 2.16
Weighted average shares — diluted	61,636	61,415	61,084	60,815	60,448	60,196	60,029	60,645

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

The Company maintains disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) that are designed to ensure that required information is recorded, processed, summarized and reported within the required timeframe, as specified in the rules set forth by the Securities Exchange Commission. Our disclosure controls and procedures are also designed to ensure that information required to be disclosed is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosures.

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of September 30, 2020 and, based on this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures were effective as of September 30, 2020.

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). 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.

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. Management conducted an assessment of the effectiveness of our internal control over financial reporting as of September 30, 2020. In making this assessment, management used 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 this assessment and on those criteria, management concluded that our internal control over financial reporting was effective as of September 30, 2020.

The effectiveness of the Company's internal control over financial reporting as of September 30, 2020, has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

Changes in Internal Control over Financial Reporting

During the fourth fiscal quarter, there were no changes to our internal control over financial reporting that materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

Although the entire global F5 workforce is working remotely as a result of the COVID-19 pandemic, there were no material changes to our existing internal controls over financial reporting as a result of this.

Item 9B. ***Other Information***

None.

PART III

Item 10. *Directors, Executive Officers and Corporate Governance*

Certain information required by this item regarding the Company's directors and executive officers is incorporated herein by reference to the sections entitled "Board of Directors — Nominees and Continuing Directors," "Corporate Governance — Committees of the Board — Audit Committee" and "— Code of Ethics for Senior Financial Officers" and "— Director Nomination," and "Security Ownership of Certain Beneficial Owners and Management — Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's definitive Proxy Statement that will be furnished to the SEC no later than January 28, 2021 (the "Proxy Statement"). Additional information regarding the Company's directors and executive officers is set forth in Item 1 of Part I of this Annual Report on Form 10-K under the caption "Directors and Executive Officers of the Registrant."

Item 11. *Executive Compensation*

The information required by this item is incorporated by reference to the sections entitled "Executive Compensation" and "Corporate Governance — Committees of the Board — Compensation Committee" and "— Compensation Committee Interlocks and Insider Participation" and "— Compensation Committee Report" in the Proxy Statement.

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

The information required by this item is incorporated by reference to the section entitled "Security Ownership of Certain Beneficial Owners and Management" in the Proxy Statement.

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

The information required by this item is incorporated by reference to the sections entitled "Board of Directors — Director Independence" and "Corporate Governance — Related Person Transactions Policy and Procedures" and "— Certain Relationships and Related Person Transactions" in the Proxy Statement.

Item 14. *Principal Accountant Fees and Services*

The information required by this item is incorporated by reference to the section entitled "Executive Compensation — Fees Paid to PricewaterhouseCoopers LLP" and "— Audit Committee Pre-Approval Procedures" and "— Annual Independence Determination" in the Proxy Statement.

PART IV

Item 15. ***Exhibits and Financial Statement Schedules***

(a) Documents filed as part of this report are as follows:

1. *Consolidated Financial Statements:*

Our Consolidated Financial Statements are listed in the Index to Consolidated Financial Statements.

2. *Financial Statement Schedule:*

Financial statement schedules have been omitted because the information required to be set forth therein is not applicable, material, or is shown in the Consolidated Financial Statements or the notes hereto.

3. *Exhibits:*

The required exhibits are included at the end of this Annual Report on Form 10-K and are described in the Exhibit Index immediately preceding the first exhibit.

Item 16. ***Form 10-K Summary***

Not applicable.

EXHIBIT INDEX

Exhibit Number			Exhibit Description
2.1		—	Merger Agreement dated as of March 9, 2019, by and among the Registrant, Nginx, Inc., Neva Merger Sub Limited, and Fortis Advisors LLC(1)
2.2		—	Merger Agreement, dated December 19, 2019, by and among F5 Networks, Inc., Silhouette Merger Sub, Inc., Shape Security, Inc., and Shareholder Representative Services LLC(2)+
3.1		—	Third Amended and Restated Articles of Incorporation of the Registrant(3)
3.2		—	Seventh Amended and Restated Bylaws adopted January 21, 2020(4)
4.1		—	Description of the Registrant's Securities(5)
4.2		—	Specimen Common Stock Certificate(6)
10.1		—	Commitment Letter, dated as of December 19, 2019, by and among F5 Networks, Inc., JPMorgan Chase Bank, N.A, Bank of America, N.A., and BofA Securities, Inc.(2)
10.2		—	Term Credit Agreement, dated as of January 24, 2020, among F5 Networks, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as Administrative Agent(7)
10.3		—	Revolving Credit Agreement dated as of January 31, 2020, among F5 Networks, Inc., the lenders party thereto and JPMorgan Chase Bank, N.A., as the Administrative Agent(8)
10.4		—	Second Amended and Restated Office Lease Agreement dated April 5, 2010, between the Registrant and CLP--Elliott West, L.P.(9)
10.5		—	Office Lease Agreement between the Registrant and Selig Real Estate Holdings XXV, L.L.C. dated October 31, 2006(10)
10.6		—	Office Lease Agreement between the Registrant and Fifth & Columbia Investors, LLC dated May 3, 2017(11)
10.7		—	Form of Indemnification Agreement between the Registrant and each of its directors and certain of its officers(12) §
10.8		—	F5 Networks, Inc. 2011 Employee Stock Purchase Plan (Amended and Restated effective March 14, 2019)(13) §
10.9		—	Form of Change of Control Agreement between the Registrant and the executive officers(14) §
10.10		—	Traffix Communication Systems Ltd. 2007 Israeli Employee Share Option Plan(15) §
10.11		—	F5 Networks, Inc. 2014 Incentive Plan, as amended and restated(16) §
10.12		—	Nginx, Inc. 2011 Share Plan(17) §
10.13		—	Nginx, Inc. Acquisition Equity Incentive Plan(17) §
10.14		—	Nginx, Inc. Acquisition Equity Incentive Plan Award Agreement(18) §
10.15		—	F5 Networks, Inc. Assumed Shape 2011 Stock Plan(19) §
10.16		—	F5 Networks, Inc. Shape Acquisition Equity Incentive Plan(19) §
10.17		—	F5 Networks, Inc. Shape Acquisition Equity Incentive Plan Award Agreement (Accelerated Vesting)(20) §
10.18		—	Form of 2014 Incentive Plan Award Agreement (Accelerated Vesting) as revised October 2017(21) §
10.19	*	—	Form of 2014 Incentive Plan Award Agreement (Accelerated Vesting) as revised November 2019 §
10.20		—	Offer Letter from the Registrant to François Locoh-Donou(22) §
10.21		—	Offer Letter from the Registrant to Francis J. Pelzer(23) §
10.22		—	Separation Agreement and General Release of all Claims between the Registrant and John DiLullo(23) §
21.1	*	—	Subsidiaries of the Registrant
23.1	*	—	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
31.1	*	—	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	*	—	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	*	—	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	*	—	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document
101.SCH	*	—	Inline XBRL Taxonomy Extension Schema Document
101.CAL	*	—	Inline XBRL Taxonomy Extension Calculation Linkbase Document

Exhibit Number		Exhibit Description
101.DEF *	—	Inline XBRL Taxonomy Extension Definition Linkbase Document
101.LAB *	—	Inline XBRL Taxonomy Extension Label Linkbase Document
101.PRE *	—	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104 *	—	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed herewith.

§ Indicates a management contract or compensatory plan or arrangement.

\+ Schedules and annexes have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted schedule and/or annex will be furnished supplementally to the Securities and Exchange Commission upon request.

(1) Incorporated by reference from Current Report on Form 8-K dated March 11, 2019 and filed with the SEC on March 11, 2019.
(2) Incorporated by reference from Current Report on Form 8-K dated December 19, 2019 and filed with the SEC on December 24, 2019.
(3) Incorporated by reference from Current Report on Form 8-K dated March 19, 2013 and filed with the SEC on March 19, 2013.
(4) Incorporated by reference from Current Report on Form 8-K dated January 21, 2020 and filed with the SEC on January 23, 2020.
(5) Incorporated by reference from Annual Report on Form 10-K for the year ended September 30, 2019.
(6) Incorporated by reference from Exhibit 4.1 of Registration Statement on Form S-1, File No. 333-75817.
(7) Incorporated by reference from Current Report on Form 8-K dated January 24, 2020 and filed with the SEC on January 24, 2020.
(8) Incorporated by reference from Quarterly Report on Form 10-Q for the quarter ended December 31, 2019.
(9) Incorporated by reference from Current Report on Form 8-K dated April 5, 2010 and filed with the SEC on April 8, 2010.
(10) Incorporated by reference from Current Report on Form 8-K dated October 31, 2006 and filed with the SEC on November 3, 2006.
(11) Incorporated by reference from Current Report on Form 8-K dated May 3, 2017 and filed with the SEC on May 3, 2017.
(12) Incorporated by reference from Exhibit 10.1 of Registration Statement on Form S-1, File No. 333-75817.
(13) Incorporated by reference from Current Report on Form 8-K dated March 14, 2019 and filed with the SEC on March 14, 2019.
(14) Incorporated by reference from Current Report on Form 8-K dated April 29, 2009 and filed with the SEC on May 4, 2009.
(15) Incorporated by reference from Registration Statement on Form S-8 File No. 333-179794.
(16) Incorporated by reference from Current Report on Form 8-K dated March 12, 2020 and filed with the SEC on March 13, 2020.
(17) Incorporated by reference from Registration Statement on Form S-8 File No. 333-231802.
(18) Incorporated by reference from Quarterly Report on Form 10-Q for the quarter ended June 30, 2019.
(19) Incorporated by reference from Form S-8 filed with the SEC on February 3, 2020.
(20) Incorporated by reference from Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.
(21) Incorporated by reference from Annual Report on Form 10-K for the year ended September 30, 2017.
(22) Incorporated by reference from Current Report on Form 8-K dated January 27, 2017 and filed with the SEC on January 30, 2017.
(23) Incorporated by reference from Current Report on Form 8-K dated April 20, 2018 and filed with the SEC on April 25, 2018.

SIGNATURES

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

F5 NETWORKS, INC.

By: /s/ FRANÇOIS LOCOH-DONOU
François Locoh-Donou
Chief Executive Officer and President

Dated: November 13, 2020

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

Signature	Title	Date
By: /s/ FRANÇOIS LOCOH-DONOU François Locoh-Donou	Chief Executive Officer, President, and Director (principal executive officer)	November 13, 2020
By: /s/ FRANCIS J. PELZER Francis J. Pelzer	Executive Vice President, Chief Financial Officer (principal financial officer and principal accounting officer)	November 13, 2020
By: /s/ ALAN J. HIGGINSON Alan J. Higginson	Director	November 13, 2020
By: /s/ A. GARY AMES A. Gary Ames	Director	November 13, 2020
By: /s/ SANDRA BERGERON Sandra Bergeron	Director	November 13, 2020
By: /S/ ELIZABETH BUSE Elizabeth Buse	Director	November 13, 2020
By: /s/ DEBORAH L. BEVIER Deborah L. Bevier	Director	November 13, 2020
By: /s/ MICHEL COMBES Michel Combes	Director	November 13, 2020
By: /s/ MICHAEL L. DREYER Michael L. Dreyer	Director	November 13, 2020
By: /s/ PETER KLEIN Peter Klein	Director	November 13, 2020
By: /s/ NIKHIL MEHTA Nikhil Mehta	Director	November 13, 2020
By: /s/ MARIE MYERS Marie Myers	Director	November 13, 2020
By: /s/ SRIPADA SHIVANANDA Sripada Shivananda	Director	November 13, 2020