

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

FORM 10-K

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

For the fiscal year ended December 31, 2020

OR

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

For the transition period from _____ to _____
Commission File Number 000-24435

MICROSTRATEGY INCORPORATED

(Exact Name of Registrant as Specified in Its Charter)

Delaware	1850 Towers Crescent Plaza, Tysons Corner, VA 22182	51-0323571
(State of Incorporation)	(Address of Principal Executive Offices) (Zip Code)	(I.R.S. Employer Identification No.)

Registrant's Telephone Number, Including Area Code: (703) 848-8600

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

Title of Each Class	Trading Symbol	Name of Each Exchange on which Registered
Class A common stock, par value \$0.001 per share	MSTR	The Nasdaq Global Select Market

Securities registered pursuant to Section 12(g) of the Act: Not applicable

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.

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant (based on the last reported sale price of the registrant's class A common stock on June 30, 2020 on the Nasdaq Global Select Market) was approximately \$907.0 million.

As of February 2, 2021, the registrant had 7,622,997 and 1,964,025 shares of class A common stock and class B common stock outstanding, respectively.

Documents incorporated by reference: Portions of the definitive proxy statement for the 2021 Annual Meeting of Stockholders of the Registrant to be filed subsequently with the SEC are incorporated by reference into Part III of this Annual Report on Form 10-K to the extent indicated herein.

MICROSTRATEGY INCORPORATED

TABLE OF CONTENTS

	<u>Page</u>
<u>PART I</u>	
Item 1. <u>Business</u>	5
Item 1A. <u>Risk Factors</u>	14
Item 1B. <u>Unresolved Staff Comments</u>	34
Item 2. <u>Properties</u>	34
Item 3. <u>Legal Proceedings</u>	35
Item 4. <u>Mine Safety Disclosures</u>	35
<u>PART II</u>	
Item 5. <u>Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities</u>	36
Item 6. <u>Selected Financial Data</u>	38
Item 7. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	39
Item 7A. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	61
Item 8. <u>Financial Statements and Supplementary Data</u>	62
Item 9. <u>Changes in and Disagreements with Accountants on Accounting and Financial Disclosure</u>	62
Item 9A. <u>Controls and Procedures</u>	62
Item 9B. <u>Other Information</u>	64
<u>PART III</u>	
Item 10. <u>Directors, Executive Officers and Corporate Governance</u>	65
Item 11. <u>Executive Compensation</u>	65
Item 12. <u>Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters</u>	65
Item 13. <u>Certain Relationships and Related Transactions, and Director Independence</u>	65
Item 14. <u>Principal Accountant Fees and Services</u>	65
<u>PART IV</u>	
Item 15. <u>Exhibits, Financial Statement Schedules</u>	66
Item 16. <u>Form 10-K Summary</u>	66

The trademarks and registered trademarks of MicroStrategy Incorporated and its subsidiaries referred to herein include, but are not limited to, MicroStrategy, Intelligence Everywhere, MicroStrategy 2021 HyperIntelligence, HyperNow, MicroStrategy Consulting, MicroStrategy Education, Dossier, MicroStrategy Cloud, Enterprise Semantic Graph, MicroStrategy Services, Global Delivery Center, and Intelligent Enterprise. Third-party product and company names mentioned herein may be the trademarks of their respective owners.

CERTAIN DEFINITIONS

All references in this Annual Report on Form 10-K (“Annual Report”) to “MicroStrategy,” the “Company,” “we,” “us,” and “our” refer to MicroStrategy Incorporated and its consolidated subsidiaries (unless the context otherwise indicates).

FORWARD-LOOKING INFORMATION AND RISK FACTOR SUMMARY

This Annual Report contains forward-looking statements within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). For this purpose, any statements contained herein that are not statements of historical fact, including without limitation, certain statements under “Item 1. Business,” “Item 1A. Risk Factors,” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and located elsewhere herein regarding industry prospects and our results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects,” and similar expressions are intended to identify forward-looking statements. Such forward-looking statements represent management’s current expectations and are inherently uncertain. Investors are warned that actual results may differ from management’s expectations.

Our business is subject to a number of risks that could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. These risks are discussed more fully under “Item 1A. Risk Factors” and include, but are not limited to the following:

- We depend on revenue from a single software platform, and a substantial customer shift from a product license model to a cloud subscription model could negatively affect the timing of revenue recognition
- Our results in any particular period may depend on large transactions that involve longer and less predictable sales cycles
- We may fail to maintain successful relationships with our channel partners which could adversely affect our business, operating results, and financial condition
- Our bitcoin strategy exposes us to various risks associated with bitcoin
- Fluctuations in the price of bitcoin, which may be influenced by highly uncertain regulatory, commercial, and technical factors, may significantly influence the market price of our class A common stock
- Our historical financial statements do not reflect the potential variability in earnings that we may experience in the future relating to bitcoin holdings
- Our bitcoin holdings could subject us to regulatory scrutiny
- The concentration of our bitcoin holdings enhances the risks inherent in our bitcoin acquisition strategy
- Our bitcoin holdings are less liquid than our existing cash and cash equivalents and may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents
- If we or our third-party service providers experience a security breach or cyberattack, or if our private key is lost or destroyed, we may lose some or all of our bitcoin
- Our recognition of deferred revenue and advance payments may not be representative of revenues for succeeding periods
- We operate in an industry marked by rapid technological change and intense competition, and we may be unable to develop new offerings and deliver our products at a competitive price

- The performance of our software may be impacted by changes in third party-software, new industry standards and errors, bugs and security vulnerabilities that could materially adversely affect the operation of and demand for our existing software, reduce our revenue, and lead to litigation claims against us
- Business disruptions, including as a result of the COVID-19 pandemic, could materially adversely affect our operating results or result in a material weakness in our internal controls
- Our international operations are complex and expose us to additional risks
- We or our third-party service providers may be the target of cybersecurity attacks or security breaches, which may harm our reputation and demand for our offerings and may disrupt our operations
- Changes in, or any failure to comply with, laws or regulations relating to privacy or the collection, processing and storage of personal data could materially adversely affect our business
- The market price of our class A common stock has been and may continue to be volatile
- Because of the rights of our two classes of common stock and because we are controlled by Michael J. Saylor, Mr. Saylor could prevent a third party from acquiring us, or limit the ability of our other stockholders to influence corporate matters, which could make our class A common stock less attractive
- We may sell shares of our class A common stock, convertible debt instruments or other convertible securities which could depress the price of our class A common stock.
- Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our indebtedness
- We may not have the ability to raise the funds necessary to settle conversions of our outstanding convertible notes in cash or to repurchase the notes upon a fundamental change
- The conditional conversion feature of our outstanding convertible notes, if triggered, may adversely affect our financial condition and operating results
- The accounting method for convertible debt securities that may be settled in cash and/or shares, such as our outstanding convertible notes, could have a material effect on our diluted earnings per share

PART I

Item 1. Business

Overview

MicroStrategy® pursues two corporate strategies in the operation of its business. One strategy is to grow our enterprise analytics software business and the other strategy is to acquire and hold bitcoin.

MicroStrategy is a global leader in enterprise analytics software and services. Since our founding in 1989, MicroStrategy has been focused on empowering organizations to leverage the immense value of their data. Our vision is to enable Intelligence Everywhere™ by delivering world-class software and services that empower enterprise users with actionable intelligence.

Our core offering is MicroStrategy 2021™, which delivers modern analytics on an open, comprehensive enterprise platform. In 2019, we introduced HyperIntelligence®, a breakthrough technology that overlays actionable enterprise data on popular business applications and workflows people rely on every day. Businesses can harness MicroStrategy's innovative technology to make information and actions flow significantly faster so their workforce can make more informed decisions and take smarter actions. We also offer MicroStrategy Consulting™ and MicroStrategy Education™ to help customers deploy, optimize, and manage their analytics initiatives.

We also pursue a business strategy of acquiring bitcoin when our cash, cash equivalents and short-term investments exceed current working capital requirements, and we may from time to time, subject to market conditions, issue debt or equity securities in capital raising transactions with the objective of using the proceeds to purchase bitcoin. We view our bitcoin holdings as long-term holdings and we do not plan to engage in regular trading of bitcoin or to hedge or otherwise enter into derivative contracts with respect to our bitcoin holdings, though we may sell bitcoin in future periods as needed to generate cash for treasury management and other general corporate purposes.

We believe that bitcoin is attractive because it can serve as a store of value, supported by a robust and public open source architecture, that is untethered to sovereign monetary policy and can therefore serve as a hedge against inflation. We also believe that bitcoin offers additional opportunity for appreciation in value with increasing adoption due to its limited supply. In addition, we believe that our bitcoin strategy is complementary to our analytics software and services business, as we believe that our bitcoin and related activities in support of the bitcoin network enhance awareness of our brand and can provide opportunities to secure new customers for our analytics offerings. We are also exploring opportunities to apply bitcoin related technologies such as blockchain analytics into our software offerings.

The MicroStrategy Software Platform

Our core product offering is our software platform. In December 2020, we released MicroStrategy 2021, the newest release of our flagship enterprise analytics platform. MicroStrategy 2021 allows our customers to build high-performance, governed, and secure applications that can scale across their enterprises. Our platform is designed to empower the entire workforce with intelligence through the following differentiated features:

- **Modern Analytics:** We offer a modern analytics experience by delivering insights across multiple devices to users via our HyperIntelligence products, visualization and reporting capabilities, mobility features, and custom applications developed on our platform.
 - *HyperIntelligence* – Our platform improves business processes by providing cards with contextual intelligence, suggestions, and workflows directly within the websites, applications, and mobile devices that people rely on every day. For example, users can simply hover over a highlighted word on a website to instantly bring up relevant, contextual insights on key data.
 - *Data Visualization and Reporting* – Our platform uses Dossier®, our self-service dashboarding tool, that provides users with the formatting, layout, and input controls they need to build beautiful analytics applications.
 - *Transformational Mobility* – Our platform empowers the increasingly mobile workforce to make decisions and take action quickly on-the-go. It delivers more ways for organizations to quickly

deploy mobile productivity apps for a variety of business functions and roles on any standard device.

- *Custom Applications* – Our platform enables users to create highly customized web and mobile applications using the Document tool.
- **Open, Federated Architecture:** Our strategy is to embrace innovation and deliver the most open analytics platform on the market.
 - *Federated Analytics* – Our platform provides analysts and data scientists with seamless access to trusted, governed data directly within their favorite tools. MicroStrategy 2021 includes integrations with Microsoft Excel, Power BI, and Tableau to provide users with the flexibility to leverage trusted data from MicroStrategy directly within the client applications they are accustomed to. MicroStrategy 2021 also provides integrations for Jupyter and R Studio to enable data scientists to connect to published MicroStrategy data, leverage it in their tools, and publish updated data back into MicroStrategy 2021 – all without leaving Jupyter or R Studio.
 - *APIs and Gateways* – Our gateways, APIs, and connectors enable MicroStrategy 2021 to integrate with the most popular enterprise platforms and tools. In addition to over 200 connectors to popular drivers and gateways to enterprise assets, we offer a comprehensive set of Representational State Transfer (“REST”) APIs that makes it easy to embed the platform in packaged and custom applications, workflows, and devices.
 - *Multiple Deployment Options* – We also believe that customers should have the choice of where to deploy their analytics platform without compromising functionality. Our fully featured platform can be deployed in three ways: on premises, the customer’s cloud environment, or the MicroStrategy Cloud™ Environment (“MCE”). MCE is a cloud subscription service that allows customers to deploy the platform on Amazon Web Services (“AWS”) or Microsoft Azure environments hosted and managed by us.
- **Enterprise Platform:** Our platform is designed to securely scale analytics across the enterprise. MicroStrategy 2021 has the tools that enable organizations to deliver secure, high-performance applications at scale.
 - *Enterprise Semantic Graph™* – The engine of our platform is our proprietary Enterprise Semantic Graph, which provides a structured view of a company’s data assets by organizing them into understandable business terms. Our Enterprise Semantic Graph also enriches metadata content with real-time location intelligence and content and system usage telemetry. The Enterprise Semantic Graph allows users to have a consistent and secure view across multiple data sources to deliver a single version of truth.
 - *Scalability* – Our platform powers some of the largest business intelligence deployments in the world. Our platform is designed to scale efficiently to hundreds of thousands of users, with millions of personalized queries, across hundreds of applications, built on top of the largest datasets.
 - *Security* – Our platform includes a comprehensive set of features for superior administration, security, and architecture, including role-based access to both row and column data. We offer integrated digital identity solutions designed to deliver seamless, user-friendly authentication and real-time telemetry applications for location intelligence.

MicroStrategy Services™

Through our MicroStrategy Support, MicroStrategy Consulting, and MicroStrategy Education services, we help customers better leverage our platform by offering a comprehensive set of innovative services to deploy, optimize, and maintain their business intelligence platform.

MicroStrategy Support

Our global network of MicroStrategy-certified support experts brings a wealth of experience and knowledge to help customers achieve their system availability and uptime goals and to improve the overall customer experience through highly responsive troubleshooting and proactive technical product support. Standard support is included in each customer's maintenance plan. For additional services, customers can choose one of our three premium support options – extended support, premier support, or elite support. With these premium support options, customers can receive extended coverage and enhanced service at each touchpoint.

MicroStrategy Consulting

We believe our consulting services materially complement our software by increasing customer adoption and helping our customers achieve returns on investment derived from better understanding their data. Many companies want to better utilize their data to provide actionable insights but lack the internal expertise to define requirements and deliver solutions. MicroStrategy Consulting provides customers with architecture and implementation services to help them quickly realize results. Our consultants serve as critical resources for operations and maintenance and end-to-end, full-lifecycle projects that develop, deploy, and operate our customers' business intelligence environments. With thousands of successful projects delivered to customers worldwide spanning all major industries, our consultants apply industry best practices to guide our customers in defining, developing, and delivering business analytics solutions. MicroStrategy Consulting operates worldwide across North America, Latin America, South America, Europe, the Middle East, Africa, and the Asia Pacific region, with consultants from our local offices and our Global Delivery Center™ in Warsaw, Poland.

MicroStrategy Education

We believe the path to the Intelligent Enterprise™ involves skill-specific paths of learning. To help organizations maximize the utility, adoption, and performance of their MicroStrategy deployments, MicroStrategy Education offers free and paid learning options. MicroStrategy Education is available worldwide in multiple languages and a variety of formats.

Analytics Software and Services Strategy

Sales and Services

MicroStrategy sells its platform in two basic ways. The first way is to sell product licenses to customers for them to deploy the platform on their infrastructure either on premises or in the customer's cloud environment. The second way is to sell customers MCE, a cloud subscription service, so they can access our software in a cloud environment that is hosted and managed by us. In November 2020, we also introduced a new HyperIntelligence cloud subscription service offering, called Hyper.Now™. Hyper.Now allows anybody to launch a HyperIntelligence environment, hosted by MicroStrategy, directly from our website. Revenues from product license sales comprise product licenses revenues, and revenues from cloud subscriptions comprise subscription services revenues. Currently, the vast majority of our product sales are license sales.

MicroStrategy sells through our dedicated enterprise sales force and channel partners to increase market coverage in both domestic and international markets. We provide financial incentives for our channel partners to market and distribute our offerings. In addition, we offer a wide range of services that provide support in the discovery, planning, development, and deployment stages of a MicroStrategy offering.

Dedicated Sales Force

We market our offerings chiefly through our direct sales force. We have sales offices in locations throughout the world and use channel partners in several countries where we do not have sales offices.

Channel Partners

We have established strategic alliances with third-party vendors to help ensure the success of our customers' enterprise intelligence initiatives. Our channel partners are system integrators, consulting firms, resellers, solution providers, managed service providers, original equipment manufacturers ("OEMs"), and technology companies. These firms utilize the MicroStrategy platform for a variety of commercial purposes, and our agreements with them generally provide non-exclusive rights to market our offerings and allow access to our marketing materials, product training, and direct sales force for field-level assistance.

We make significant commitments to our channel partners, including technical training, certifications, pre-sales and sales enablement, and marketing programs. Through our joint efforts, we believe customers are able to minimize their risk and maximize the return on their business intelligence projects. Our channel partners allow us to leverage sales and service resources and marketing and industry-specific expertise to expand our user base and increase our market coverage.

Marketing

Our marketing programs target the following principal constituencies:

- our historical base of enterprise-wide operational and technology executives and departmental buyers across large global enterprises;
- corporate and departmental technology buyers in mid-sized enterprises;
- government technology buyers and the vendors to the government community;
- independent software vendors that want to embed our technology tools in their solutions; and
- system integrators that have technology relationships with large enterprises, governments, and information-intensive businesses.

We continually seek to increase our brand awareness by focusing our messaging on the possibilities for value creation, the benefits of using our platform, and competitive differentiators. The channels we use to communicate with these constituencies include digital and social media, advertising, free and evaluation software, events, media coverage, channel partners, and word-of-mouth and peer references.

Customers

Our customers include leading companies from a wide range of industries, including retail, consulting, technology, manufacturing, banking, insurance, finance, healthcare, telecommunications, as well as the public sector.

Competition

The analytics market is highly competitive and subject to rapidly changing technology. Within the analytics space, we compete with many different software vendors, including IBM, Microsoft, Oracle, Qlik, Salesforce, and SAP. Our future success depends on our ability to differentiate our offerings and successfully compete across analytics implementation projects of varying sizes.

Our ability to compete successfully depends on a number of factors, both within and outside of our control. Some of these factors include software deployment options; analytical, mobility, data discovery, and visualization capabilities; performance and scalability; the quality and reliability of our customer service and support; and brand recognition. Failure to compete successfully in any one of these or other areas may reduce the demand for our offerings and materially adversely affect our revenue from both existing and prospective customers.

Key Differentiators

- A comprehensive, modern, and open enterprise analytics and mobility platform uniquely featuring HyperIntelligence, transformational mobility, and federated analytics.

- Our exclusive and patented HyperIntelligence capabilities that inject contextual analytics into existing tools, websites, and online workflows.
- Our proprietary Enterprise Semantic Graph.
- Over 200 connectors to popular drivers and gateways to enterprise assets.
- A comprehensive set of REST APIs that makes it easy to embed the platform in packaged and custom applications, workflows, and devices.
- Flexible deployment methods that allow our customers to deploy our platform efficiently and securely using their own hardware or in a cloud environment they manage or via the MCE, our cloud subscription service.
- Comprehensive platform administration, security, and architecture, including role-based access to both row and column data.
- A platform that is designed to scale with large datasets and deliver rapid response times.

Government Regulation

Aspects of our business involve collecting, processing, disclosing, storing, and transmitting personal data, which are subject to certain privacy policies, contractual obligations, and U.S. and foreign laws, regulations, and directives relating to privacy and data protection. We store a substantial amount of customer and employee data, including personal data, on our networks and other systems and the cloud environments we manage. In addition, the types of data subject to protection as personal data in the European Union, the United States, and elsewhere have been expanding. In recent years, the collection and use of personal data by companies have come under increased regulatory and public scrutiny, especially in relation to the collection and processing of sensitive data, such as healthcare, biometric, genetic, financial services, and children's data, precise location data, and data regarding a person's race or ethnic origins, political opinions, or religious beliefs. For example, in the United States, protected health information is subject to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which can provide for civil and criminal penalties for noncompliance. Entities (such as us) that engage in creating, receiving, maintaining, or transmitting protected health information provided by covered entities and other business associates are subject to enforcement under HIPAA. Our access to protected health information triggers obligations to comply with certain privacy rules and data security requirements under HIPAA.

In the European Union, the General Data Protection Regulation ("GDPR") imposes requirements regarding the handling and security of personal data, requires disclosure of data breaches to individuals, customers, and data protection authorities in certain circumstances, requires companies to honor data subjects' requests relating to their personal data, permits regulators to impose fines of up to €20,000,000 or 4% of global annual revenue, whichever is higher, and establishes a private right of action. Furthermore, a new ePrivacy Regulation, regulating electronic communications, was proposed in 2017 and is under consideration by the European Commission, the European Parliament, and the European Council. More recently, the Court of Justice of the European Union ("CJEU") invalidated the U.S.-EU Privacy Shield in July 2020. The U.S.-EU Privacy Shield provided a mechanism to lawfully transfer personal data from the European Union to the United States and certain other countries. In the wake of the invalidation of the U.S.-EU Privacy Shield, we have transitioned to reliance on the EU Standard Contractual Clauses ("SCCs") to lawfully transfer certain personal data from the European Union to the United States. The rules involving this alternative data transfer option are also undergoing revision and this transfer mechanism may also be declared invalid (or require us to change our business practices) in the future, requiring us to provide an alternative means of data transfer.

Brazil also enacted the Lei Geral de Proteção de Dados (the Brazilian General Data Protection Law), which became effective in August 2020 and imposes requirements largely similar to GDPR on products and services offered to users in Brazil. We may also be subject in China to the Cybersecurity Law that went into effect in June 2017 and a revision of the Personal Information Security Specification that went into effect in October 2020, which have uncertain but broad application and impose a number of new privacy and data security obligations. China is also considering new legislation on the protection of privacy and personal data, including a Personal Information Protection Law and a Data Security Law that may impose new obligations on us. Other countries are considering new or expanded laws governing privacy and data security that may impact our business practices.

The state of California has also adopted a new comprehensive privacy law, the California Consumer Privacy Act (“CCPA”), which took effect in January 2020 and became enforceable in July 2020. We may be required to devote substantial resources to implement and maintain compliance with the CCPA, and noncompliance could result in regulatory investigations and fines or private litigation. Moreover, in November 2020, California voters approved a new privacy law, the California Privacy Rights Act (“CPRA”), which amends the CCPA to create new privacy rights and obligations in California. Several other states are also considering bills similar to the CCPA or other generally applicable privacy laws that may impose additional costs and obligations on us.

Furthermore, the U.S. Congress is considering comprehensive privacy legislation. At this time, it is unclear whether Congress will pass such a law and if so, when and what it will require and prohibit. Moreover, it is not clear whether any such legislation would give the Federal Trade Commission (“FTC”) any new authority to impose civil penalties for violations of the Federal Trade Commission Act in the first instance, whether Congress will grant the FTC rulemaking authority over privacy and information security, or whether Congress will vest some or all privacy and data security regulatory authority and enforcement power in a new agency, akin to EU data protection authorities.

Bitcoin Acquisition Strategy

In September 2020, our Board of Directors adopted a Treasury Reserve Policy (as amended to date, the “Treasury Reserve Policy”) that updated our treasury management and capital allocation strategies, under which our treasury reserve assets will consist of:

- cash and cash equivalents and short-term investments (“Cash Assets”) held by us that exceed working capital requirements; and
- bitcoin held by us, with bitcoin serving as the primary treasury reserve asset on an ongoing basis, subject to market conditions and anticipated needs of the business for Cash Assets.

As part of these treasury management and capital allocation strategies, we purchased a total of approximately 70,469 bitcoin at an aggregate purchase price of approximately \$1.125 billion in 2020 for an average purchase price of approximately \$15,964 per bitcoin, inclusive of fees and expenses. These purchases included purchases of bitcoin using the net proceeds of our issuance of \$650.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2025 in the fourth quarter of 2020.

In 2021, we determined to adopt, in addition to and in conjunction with our Treasury Reserve Policy, a business strategy of purchasing bitcoin, and we may from time to time, subject to market conditions, issue debt or equity securities in capital raising transactions with the objective of using the proceeds to purchase bitcoin. Under this business strategy we also periodically engage in activities to educate the market regarding bitcoin. We believe that our bitcoin strategy is complementary to our analytics software and services business, as we believe that our bitcoin and related activities in support of the bitcoin network enhance awareness of our brand and can provide opportunities to secure new customers for our analytics offerings. We are also exploring opportunities to apply bitcoin related technologies such as blockchain analytics into our software offerings.

We view our bitcoin holdings as long-term holdings and we do not plan to engage in regular trading of bitcoin or to hedge or otherwise enter into derivative contracts with respect to our bitcoin holdings, though we may sell bitcoins in future periods as needed to generate cash for treasury management and other general corporate purposes. We have not targeted any specific amount of bitcoin holdings, and we will continue to monitor market conditions in determining whether to conduct debt or equity financings to purchase additional bitcoin.

As of February 8, 2021, we held approximately 71,079 bitcoin that were acquired at an aggregate purchase price of \$1.145 billion and an average purchase price of approximately \$16,109 per bitcoin, inclusive of fees and expenses.

Overview of Bitcoin

Bitcoin is a digital asset that is issued by and transmitted through an open source protocol collectively maintained by a peer-to-peer network of decentralized user nodes. This network hosts a public transaction ledger, known as the bitcoin blockchain, on which bitcoin holdings and transactions in bitcoin are recorded. Balances of bitcoin are stored in individual “wallet” functions, which associate network public addresses with a “private key” that controls the transfer of bitcoin. The bitcoin blockchain can be updated without any single entity owning or operating the network. New bitcoin is created and allocated by the protocol that governs bitcoin through a “mining” process that

rewards users that verify transactions in the bitcoin blockchain. The bitcoin protocol limits the total issuance of bitcoin over time to 21 million.

Bitcoin can be used to pay for goods and services, or it can be converted to fiat currencies, such as the U.S. dollar, at rates of exchange determined by market forces on bitcoin trading platforms, which operate 24-hours-a-day, 7-days-a-week and are not regulated in as comprehensive a manner as traditional securities exchanges. As a result, trading on these markets is likely more subject to manipulation than on securities markets regulated by the SEC, and pricing on these markets is likely affected by such manipulative activity. In addition to these platforms, over-the-counter markets and derivatives markets for bitcoin also exist; however, these markets are still maturing and many are unregulated.

Potential Advantages and Disadvantages of Holding Bitcoin

We believe that bitcoin is attractive because it can serve as a store of value, supported by a robust and public open source architecture, that is untethered to sovereign monetary policy and can therefore serve as a hedge against inflation. Bitcoin exists entirely in electronic form, as virtually irreversible public transaction ledger entries on the blockchain, and transactions in bitcoin are recorded and authenticated not by a central repository, but by a decentralized peer-to-peer network. This decentralization avoids certain threats common to centralized computer networks, such as denial of service attacks, and reduces the dependency of the bitcoin network on any single system. While the bitcoin network as a whole is decentralized, the private keys used to access bitcoin balances are not widely distributed and are held on hardware (which can be physically controlled by the holder or by a third party such as a custodian) or via software programs on third-party servers and loss of such private keys results in an inability to access, and effective loss of, the corresponding bitcoin. Consequently, bitcoin holdings are susceptible to all of the risks inherent in holding any electronic data, such as power failure, data corruption, security breach, communication failure, and user error, among others. These risks, in turn, make bitcoin subject to theft, destruction, or loss of value from hackers, corruption, or technology-specific factors such as viruses that do not affect conventional fiat currency. In addition, the bitcoin network relies on open source developers to maintain and improve the bitcoin protocol. Accordingly, bitcoin may be subject to protocol design changes, governance disputes such as “forked” protocols, competing protocols, and other open source-specific risks that do not affect conventional proprietary software.

We believe that in the context of the economic and public health crisis precipitated by COVID-19 and the unprecedented government financial stimulus measures adopted around the world, decreasing interest rates, as well as the breakdown of trust in and between political institutions and political parties in the United States and globally, bitcoin represents a more attractive store of value than fiat currency, and further that opportunity for appreciation in the value of bitcoin exists in the event that such factors lead to even more widespread adoption of bitcoin as a treasury reserve alternative.

Government Regulation

Activities involving bitcoin and other digital assets may fall within the jurisdiction of more than one financial regulator and are subject to U.S. federal, state and local laws, as well as laws of foreign jurisdictions where applicable. Businesses that are engaged in the transmission and custody of bitcoin and other digital assets, including brokers and custodians, can be subject to U.S. Treasury Department regulations as money services businesses as well as state money transmitter licensing requirements. Bitcoin and other digital assets are subject to anti-fraud regulations under federal and state commodity laws, and digital asset derivative instruments are substantively regulated by the U.S. Commodity Futures Trading Commission. Certain jurisdictions, including, among others, New York and a number of countries outside the United States, have developed regulatory requirements specifically for digital assets and companies that transact in them.

In addition, since transactions in bitcoin provide a reasonable degree of pseudo anonymity, they are susceptible to misuse for criminal activities, such as money laundering. This misuse, or the perception of such misuse (even if untrue), could lead to greater regulatory oversight of bitcoin platforms, and there is the possibility that law enforcement agencies could close bitcoin platforms or other bitcoin-related infrastructure with little or no notice and prevent users from accessing or retrieving bitcoin held via such platforms or infrastructure. For example, in her January 2021 nomination hearing before the Senate Finance Committee, Treasury Secretary Janet Yellen noted that cryptocurrencies have the potential to improve the efficiency of the financial system but that they can be used to finance terrorism, facilitate money laundering, and support malign activities that threaten U.S. national security interests and the integrity of the U.S. and international financial systems. Accordingly, Secretary Yellen expressed

her view that federal regulators needed to look closely at how to encourage the use of cryptocurrencies for legitimate activities while curtailing their use for malign and illegal activities. Furthermore, in December 2020, the Financial Crimes Enforcement Network (“FinCEN”), a unit of the Treasury Department focused on money laundering, proposed a new set of rules for cryptocurrency-based exchanges aimed at reducing the use of cryptocurrencies for money laundering. These proposed rules would require filing reports with FinCEN regarding cryptocurrency transactions in excess of \$10,000 and also impose record-keeping requirements for cryptocurrency transactions in excess of \$3,000 involving users who manage their own private keys. In January 2021, the Biden Administration issued a memorandum freezing federal rulemaking, including these proposed FinCEN rules, to provide additional time for the Biden Administration to review the rulemaking that had been proposed by the Trump Administration. As a result, it remains unclear whether these proposed rules will take effect.

Our Bitcoin Holdings

At December 31, 2020, we carried \$1.054 billion of digital assets on our balance sheet, consisting of the approximately 70,469 bitcoins and reflecting \$70.7 million in cumulative impairment losses attributable to bitcoin trading price fluctuations, and held \$59.7 million in cash and cash equivalents, compared to no digital assets and \$456.7 million in cash and cash equivalents at December 31, 2019, reflecting the shift in our liquid asset holdings following the adoption of our new Treasury Reserve Policy. As of February 8, 2021, we held approximately 71,079 bitcoins that were acquired at an aggregate purchase price of \$1.145 billion and an average purchase price of approximately \$16,109 per bitcoin, inclusive of fees and expenses. We expect to purchase additional bitcoin in future periods, though we may also sell bitcoin in future periods as needed to generate Cash Assets for treasury management purposes.

Employees

As of December 31, 2020, we had a total of 1,997 employees, of whom 818 were based in the United States and 1,179 were based internationally. None of our employees in the United States is represented by a labor union; however, in certain foreign subsidiaries, some employees are members of trade or local unions. In France, our employees are represented by a works council as required by local law. We have not experienced any work stoppages and consider our relations with our employees to be good.

The following table summarizes employee headcount as of the dates indicated:

	December 31, 2020	December 31, 2019	December 31, 2018
Subscription services	49	69	56
Product support	154	219	202
Consulting	393	392	452
Education	37	38	47
Sales and marketing	479	597	707
Research and development	642	743	716
General and administrative	243	338	348
Total headcount	1,997	2,396	2,528

We recognize and value the contribution of all our employees. Due to their dedication, hard work, loyalty, and commitment, we have had continued success as a company. Our philosophy is to create an agile, evolving environment that allows all of our employees to grow and thrive, with initiatives and platforms that reward and recognize employees for their hard work and commitment to delivering personal excellence and creativity at MicroStrategy.

Our human capital management objectives are to attract, retain, and develop leading talent to deliver on our business strategies. To accomplish these objectives, we constantly strive to understand the drivers of attraction, retention, and sustainable engagement with our employees in each of the geographies in which we operate. As part of this process, we regularly benchmark our employee offerings within our industry and local markets to provide a competitive advantage in aligning our core benefits while meeting employee local needs. In addition, we pride ourselves on preparing a highly skilled workforce through technical boot camps, regular training workshops, and a variety of other learning experiences. Our initiative-driven teams work with a modern technology stack, and they meet and learn from some of the most experienced innovators in their field. Through these efforts we seek to create an environment in which our employees can flourish, respond quickly to client demand and enhance their connections with colleagues and towards the communities they are a part of globally.

Available Information

Our website is located at www.microstrategy.com. We make available free of charge, on or through the Investor Relations section of our website (<http://ir.microstrategy.com>), our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports, as soon as reasonably practicable after electronically filing such reports with the Securities and Exchange Commission ("SEC"). Information found on our website is not part of this Annual Report or any other report filed with the SEC. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers, including us, that file electronically with the SEC at www.sec.gov.

Item 1A. Risk Factors

You should carefully consider the risks described below before making an investment decision. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations.

If any of the following risks occurs, our business, financial condition, or results of operations could be materially adversely affected. In such case, the market price of our class A common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Business

Our quarterly operating results, revenues, and expenses may fluctuate significantly, which could have an adverse effect on the market price of our stock

For many reasons, including those described below, our operating results, revenues, and expenses have varied in the past and may vary significantly in the future from quarter to quarter. These fluctuations could have an adverse effect on the market price of our class A common stock.

Fluctuations in Quarterly Operating Results. Our quarterly operating results may fluctuate, in part, as a result of:

- the size, timing, volume, and execution of significant orders and shipments;
- fluctuations in the price of bitcoin, of which we have made significant purchases and in which we expect to continue to make significant purchases, and potential material impairment charges that may be associated therewith;
- the mix of our offerings ordered by customers, including product licenses and cloud subscriptions, which can affect the extent to which revenue is recognized immediately or over future quarterly periods;
- the timing of the release or delivery of new or enhanced offerings and market acceptance of new and enhanced offerings;
- the timing of announcements of new offerings by us or our competitors;
- changes in our pricing policies or those of our competitors;
- the length of our sales cycles;
- seasonal or other buying patterns of our customers;
- changes in our operating expenses;
- the impact of the coronavirus (“COVID-19”) pandemic, or other future infectious disease pandemics, on the global economy and on our customers, suppliers, employees, and business;
- the timing of research and development projects;
- utilization of our consulting and education services, which can be affected by delays or deferrals of customer implementation of our software;
- fluctuations in foreign currency exchange rates;
- bilateral or multilateral trade tensions, which could affect our offerings in particular foreign markets;
- our profitability and expectations for future profitability and their effect on our deferred tax assets and net income for the period in which any adjustment to our net deferred tax asset valuation allowance may be made;
- increases or decreases in our liability for unrecognized tax benefits; and
- changes in customer decision-making processes or customer budgets.

Limited Ability to Adjust Expenses. We base our operating expense budgets on expected revenue trends and strategic objectives. Many of our expenses, such as office leases and certain personnel costs, are relatively fixed. We may be unable to adjust spending quickly enough to offset any unexpected revenue shortfall. Accordingly, any shortfall in revenue may cause significant variation in operating results in any quarter. For example, if our revenues in the future are not sufficient to offset our operating expenses, or we are unable to adjust our operating expenses in a timely manner in response to any shortfall in anticipated revenue, we may incur operating losses.

Based on the above factors, we believe quarter-to-quarter comparisons of our operating results are not a good indication of our future performance. It is possible that in one or more future quarters, our operating results may be below the expectations of public market analysts and investors. In that event, the market price of our class A common stock may fall.

We may not be able to regain or increase profitability in the future

We generated a net loss for the fiscal year ended December 31, 2020, and we may not be able to regain or increase profitability on a quarterly or annual basis in the future. If our revenues are not sufficient to offset our operating expenses, or we are unable to adjust our operating expenses in a timely manner in response to any shortfall in anticipated revenue, we may incur operating losses in future periods, our profitability may decrease, or we may cease to be profitable. As a result, our business, results of operations, and financial condition may be materially adversely affected.

As of December 31, 2020, we had \$6.5 million of deferred tax assets, net of a \$1.3 million valuation allowance. If we are unable to regain or increase profitability in the future, we may be required to increase the valuation allowance against these deferred tax assets, which could result in a charge that would materially adversely affect net income in the period in which the charge is incurred.

We depend on revenue from a single software platform and related services as well as revenue from our installed customer base

Our revenue is derived from sales of our analytics software platform and related services. Although demand for analytics software has continued to grow, the market for analytics offerings continues to evolve. Resistance from consumer and privacy groups to commercial collection, use, and sharing of personal data has grown in recent years and our customers, potential customers, or the general public may perceive that use of our analytics software could violate individual privacy rights. In addition, increasing government restrictions on the collection, use, and transfer of personal data could impair the further growth of the market for analytics software, especially in foreign markets. Because we depend on revenue from a single software platform and related services, our business could be harmed by a decline in demand for, or in the adoption or prices of, our platform and related services as a result of, among other factors, any change in our pricing or packaging model, increased competition, maturation in the markets for our platform, or other risks described in this Annual Report. We also depend on our installed customer base for a substantial portion of our revenue. If our existing customers cancel or fail to renew their service contracts or fail to make additional purchases from us, our revenue could decrease and our operating results could be materially adversely affected.

A substantial customer shift in the deployment of the MicroStrategy platform from a product license model to a cloud subscription model could affect the timing of revenue recognition, reduce product licenses and product support revenues, and materially adversely affect our operating results

We offer our analytics platform in the form of a product license or a cloud subscription. The payment streams and revenue recognition timing for our product licenses are different from those for our cloud subscriptions. For product licenses, customers typically pay us a lump sum soon after entering into a license agreement, and we typically recognize product licenses revenue when control of the license is transferred to the customer. For cloud subscriptions, customers typically make periodic payments over the subscription period and we recognize subscription services revenues ratably over the subscription period. As a result, if a substantial number of current customers shift to, or new customers purchase, cloud subscriptions instead of product licenses, the resulting change in payment terms and revenue recognition may result in our recognizing less revenue in the reporting period in which the sale transactions are consummated than has been the case in prior periods, with more revenue being

recognized in future periods. This change in the timing of revenue recognition could materially adversely affect our operating results and cash flows for the periods during which such a shift or change in purchasing occurs. Accordingly, in any particular reporting period, cloud subscription sales could negatively impact product license sales to our existing and prospective customers, which could reduce product licenses and product support revenues.

We may have exposure to greater than anticipated tax liabilities

We are subject to income taxes and non-income taxes in a variety of domestic and foreign jurisdictions. Our future income tax liability could be materially adversely affected by earnings that are lower than anticipated in jurisdictions where we have lower statutory rates, earnings that are higher than anticipated in jurisdictions where we have higher statutory rates, changes in the valuation of our deferred tax assets and liabilities, changes in the amount of unrecognized tax benefits, or changes in tax laws, regulations, accounting principles, or interpretations thereof (including in response to the COVID-19 pandemic). In addition, if we sold any of our bitcoin at prices greater than the cost basis of the bitcoin sold, we would incur a tax liability with respect to any gain recognized, and such tax liability could be material.

Changes in the tax laws of foreign jurisdictions could arise, including as a result of the project undertaken by the Organisation for Economic Co-operation and Development ("OECD") to combat base erosion and profit shifting ("BEPS"). The OECD, which represents a coalition of member countries, has issued recommendations that, in some cases, make substantial changes to numerous long-standing tax positions and principles. These changes, many of which have been adopted or are under active consideration by OECD members and/or other countries, could increase tax uncertainty and may adversely affect our provision for income taxes.

In addition, in response to significant market volatility and disruptions to business operations resulting from the COVID-19 pandemic, legislatures and taxing authorities in many jurisdictions in which we operate have implemented, and in the future may implement additional, changes to their tax rules. As part of the U.S. Congress's response to the COVID-19 pandemic, the Families First Coronavirus Response Act ("FFCR Act") and the CARES Act were enacted in March 2020. Both contain numerous tax provisions. Regulatory guidance under the Tax Act, FFCR Act, and CARES Act is and continues to be forthcoming, and such guidance could ultimately increase or lessen the impact of these laws on our business and financial condition. It is also likely that the U.S. Congress will enact additional legislation in connection with the COVID-19 pandemic, some of which could have tax provisions that impact us. In addition, it is uncertain if and to what extent various states will conform to the Tax Act, FFCR Act, or CARES Act. These changes in law could include modifications that have temporary effect or more permanent changes. The impact of these changes on us, our long-term tax planning, and our effective tax rate could be material.

Our determination of our tax liability is subject to review by applicable domestic and foreign tax authorities. Any adverse outcome of such reviews could have an adverse effect on our operating results and financial condition. The determination of our worldwide provision for income taxes and other tax liabilities requires significant judgment and, in the ordinary course of business, there are many transactions and calculations where the ultimate tax determination is uncertain. Moreover, as a multinational business, we have subsidiaries that engage in many intercompany transactions in a variety of tax jurisdictions where the ultimate tax determination is uncertain.

We also have contingent tax liabilities that, in management's judgment, are not probable of assertion. If such unasserted contingent liabilities were to be asserted, or become probable of assertion, we may be required to record significant expenses and liabilities in the period in which these liabilities are asserted or become probable of assertion.

As a result of these and other factors, the ultimate amount of tax obligations owed may differ from the amounts recorded in our financial statements and any such difference may materially affect our financial results in future periods in which we change our estimates of our tax obligations or in which the ultimate tax outcome is determined.

We use channel partners and if we are unable to maintain successful relationships with them, our business, operating results, and financial condition could be materially adversely affected

In addition to our direct sales force, we use channel partners, such as system integrators, consulting firms, resellers, solution providers, managed service providers, OEMs, and technology companies, to license and support our offerings. For the year ended December 31, 2020, transactions by channel partners for which we recognized revenue accounted for 23.3% of our total product licenses revenues, and our ability to achieve revenue growth in the future will depend in part on our ability to maintain these relationships. Our channel partners may offer customers the products and services of several different companies, including competing offerings, and we cannot be certain that they will prioritize or devote adequate resources to selling our offerings. If we are unable to maintain our relationships with our channel partners, or if we experience a reduction in sales by our channel partners, our business, operating results, and financial condition could be materially adversely affected.

In addition, we rely on our channel partners to operate in accordance with applicable laws and regulatory requirements. If they fail to do so, we may need to incur significant costs in responding to investigations or enforcement actions or paying penalties assessed by the applicable authorities. We also rely on our channel partners to operate in accordance with the terms of their contractual agreements with us. For example, some of our agreements with our channel partners prescribe the terms and conditions pursuant to which they are authorized to resell or distribute our software and offer technical support and related services. If our channel partners do not comply with their contractual obligations to us, our business, operating results, and financial condition may be materially adversely affected.

Our recognition of deferred revenue and advance payments is subject to future performance obligations and may not be representative of revenues for succeeding periods

Our deferred revenue and advance payments totaled \$205.9 million as of December 31, 2020. The timing and ultimate recognition of our deferred revenue and advance payments depend on various factors, including our performance of various service obligations.

Because of the possibility of customer changes or delays in customer development or implementation schedules or budgets, and the need for us to satisfactorily perform product support and other services, deferred revenue and advance payments at any particular date may not be representative of actual revenue for any succeeding period.

We may lose sales, or sales may be delayed, due to the long sales and implementation cycles of certain of our offerings, which could materially adversely affect our revenues and operating results

The decision to purchase our offerings typically requires our customers to invest substantial time, money, personnel, and other resources, which can result in long sales cycles that can exceed nine months. These long sales cycles increase the risk that intervening events, such as the introduction of new offerings and changes in customer budgets and purchasing priorities, will affect the size, timing, and completion of an order. Even if an order is completed, the time and resources required to implement and integrate our offerings vary widely depending on customer needs and the complexity of deployment. If we lose sales or sales are delayed due to these long sales and implementation cycles, our revenues and operating results for that period may be materially adversely affected.

Our results in any particular period may depend on the number and volume of large transactions in that period and these transactions may involve lengthier, more complex, and more unpredictable sales cycles than other transactions

Larger, enterprise-level transactions often require considerably more resources, are often more complex to implement, and typically require additional management approval, which may result in a lengthier, more complex, and less predictable sales cycle and may increase the risk that an order is delayed or not brought to completion. We may also encounter greater competition and pricing pressure on these larger transactions, and our sales and delivery efforts may be more costly. The presence or absence of one or more large transactions in a particular period may have a material effect on our revenues and operating results for that period and may result in lower estimated revenues and earnings in future periods. For the year ended December 31, 2020, our top three product licenses

transactions with recognized revenue totaled \$15.3 million, or 17.6% of total product licenses revenues, compared to \$5.4 million, or 6.2% of total product licenses revenues, for the year ended December 31, 2019.

Our offerings face intense competition, which may lead to lower prices for our offerings, reduced gross margins, loss of market share, and reduced revenue

The analytics market is highly competitive and subject to rapidly changing technology. Within the analytics space, we compete with many different software vendors, including IBM, Microsoft, Oracle, Qlik, Salesforce, and SAP. Our future success depends on our ability to differentiate our offerings and successfully compete across analytics implementation projects of varying sizes. Our ability to compete successfully depends on a number of factors, both within and outside of our control. Some of these factors include software deployment options; analytical, mobility, data discovery, and visualization capabilities; performance and scalability; the quality and reliability of our customer service and support; and brand recognition. Failure to compete successfully in any one of these or other areas may reduce the demand for our offerings and materially adversely affect our revenue from both existing and prospective customers.

Some of our competitors have longer operating histories and significantly greater financial, technical, and marketing resources than we do. As a result, they may be able to respond more quickly to new or emerging technologies and changes in customer requirements or devote greater resources to the development, promotion, sale, and marketing of their offerings than we can, such as offering certain analytics products free of charge when bundled with other products. In addition, many of our competitors have strong relationships with current and potential customers, extensive industry and specialized business knowledge, and corresponding proprietary technologies that they can leverage. As a result, they may be able to prevent us from penetrating new accounts or expanding existing accounts.

Increased competition may lead to price cuts, reduced gross margins, and loss of market share. The failure to compete successfully and meet the competitive pressures we face may have a material adverse effect on our business, operating results, and financial condition.

Current and future competitors may also make strategic acquisitions or establish cooperative relationships among themselves or with others. By doing so, these competitors may increase their ability to meet the needs of our potential customers by their expanded offerings and rapidly gain significant market share, which could limit our ability to obtain revenues from new customers and to sustain software maintenance revenues from our installed customer base. In addition, basic office productivity software suites, such as Microsoft Office, could evolve to offer advanced analysis and reporting capabilities that may reduce the demand for our analytics offerings.

Risks Related to Our Technology and Intellectual Property

If we are unable to develop and release new offerings and software enhancements to respond to rapid technological change, new customer requirements, or evolving industry standards in a timely and cost-effective manner, our business, operating results, and financial condition could be materially adversely affected

The market for our offerings is characterized by frequent new offerings and software enhancements in response to rapid technological change, new customer requirements, and evolving industry standards. The introduction of new or enhanced offerings can quickly make existing ones obsolete. We believe our future success depends largely on our ability to continue to support popular operating systems and databases, maintain and improve our current offerings, rapidly develop new offerings and software enhancements that achieve market acceptance, maintain technological competitiveness, and meet an expanding range of customer requirements.

Analytics applications are inherently complex, and research and development can be costly and time consuming. In addition, customers may delay their purchasing decisions because they anticipate that new or enhanced versions of our offerings will soon become available or because of concerns regarding the complexity of migration or performance issues related to new offerings. We cannot be sure that we will succeed in developing, marketing, and delivering, on a timely and cost-effective basis, new or enhanced offerings that will achieve market acceptance. Moreover, even if our new offerings achieve market acceptance, we may experience a decline in revenues of our

existing offerings that is not fully matched by the new offering's revenue. This could result in a temporary or permanent revenue shortfall and materially adversely affect our business, operating results, and financial condition.

We depend on technology licensed to us by third parties, and changes in or the discontinuances of such licenses could impair our software, delay implementation of our offerings, or force us to pay higher license fees

We license third-party technologies that are incorporated into or utilized by our existing offerings. These licenses may be terminated, or we may be unable to license third-party technologies for future offerings. In addition, we may be unable to renegotiate acceptable third-party license terms, or we may be subject to infringement liability if third-party technologies that we license is found to infringe intellectual property rights of others. Changes in or the discontinuance of third-party licenses could lead to a material increase in our costs or to our offerings becoming inoperable or their performance being materially reduced. As a result, we may need to incur additional development costs to help ensure continued performance of our offerings, and we may experience a decreased demand for our offerings.

Changes in third-party software or systems or the emergence of new industry standards could materially adversely affect the operation of and demand for our existing software

The functionalities of our software depend in part on the ability of our software to interface with our customers' information technology ("IT") infrastructure and cloud environments, including software applications, network infrastructure, and end user devices, which are supplied to our customers by various other vendors. When new or updated versions of these third-party software or systems are introduced, or new industry standards in related fields emerge, we may be required to develop updated versions of or enhancements to our software to help ensure that it continues to effectively interoperate with our customers' IT infrastructure and cloud environments. If new or modified operating systems are introduced or new web standards and technologies or new standards in the field of database access technology emerge that are incompatible with our software, development efforts to maintain the interoperability of our software with our customers' IT infrastructure and cloud environments could require substantial capital investment and employee resources. If we are unable to update our software in a timely manner, cost-effectively, or at all, the ability of our software to perform key functions could be impaired, which may impact our customers' satisfaction with our software, potentially result in breach of warranty or other claims, and materially adversely affect demand for our software.

The nature of our software makes it particularly susceptible to undetected errors, bugs, or security vulnerabilities, which could cause problems with how the software performs and, in turn, reduce demand for our software, reduce our revenue, and lead to litigation claims against us

Despite extensive testing by us and our current and potential customers, we have in the past discovered software errors, bugs, or security vulnerabilities in our offerings after commercial shipments began and they may be found in future offerings or releases. This could result in lost revenue, damage to our reputation, or delays in market acceptance, which could have a material adverse effect on our business, operating results, and financial condition. We may also need to expend resources and capital to correct these defects if they occur.

Our customer agreements typically contain provisions designed to limit our exposure to product liability, warranty, and other claims. It is possible these provisions are unenforceable in certain domestic or international jurisdictions, and we may be exposed to such claims. A successful claim against us could have a material adverse effect on our business, operating results, and financial condition.

Our intellectual property is valuable, and any inability to protect it could reduce the value of our offerings and brand

Unauthorized third parties may try to copy or reverse engineer portions of our software or otherwise obtain and use our intellectual property. Copyrights, patents, trademarks, trade secrets, confidentiality procedures, and contractual commitments can only provide limited protection. Any intellectual property owned by us may be invalidated, circumvented, or challenged. Any of our pending or future intellectual property applications, whether or not currently being challenged, may not be issued with the scope we seek, if at all. Moreover, amendments to and

developing jurisprudence regarding U.S. and international law may affect our ability to protect our intellectual property and defend against claims of infringement. In addition, although we generally enter into confidentiality agreements with our employees and contractors, the confidential nature of our intellectual property may not be maintained. Furthermore, the laws of some countries do not provide the same level of protection of our intellectual property as do the laws of the United States. If we cannot protect our intellectual property against unauthorized copying or use, we may not remain competitive.

Third parties may claim we infringe their intellectual property rights

We periodically receive notices from third parties claiming we are infringing their intellectual property rights. The number of such claims may increase as we expand our offerings and branding, the number of offerings and level of competition in our industry grow, the functionality of offerings overlaps, and the volume of issued patents, patent applications, and copyright and trademark registrations continues to increase. Responding to any infringement claim, regardless of its validity, could:

- be time-consuming, costly, and/or result in litigation;
- divert management's time and attention from developing our business;
- require us to pay monetary damages or enter into royalty or licensing agreements that we would normally find unacceptable;
- require us to stop selling certain of our offerings;
- require us to redesign certain of our offerings using alternative non-infringing technology or practices, which could require significant effort and expense;
- require us to rename certain of our offerings or entities; or
- require us to satisfy indemnification obligations to our customers or channel partners.

Additionally, while we monitor our use of third-party software, including open source software, our processes for controlling such use in our offerings may not be effective. If we fail to comply with the terms or conditions associated with third-party software that we use, if we inadvertently embed certain types of third-party software into one or more of our offerings, or if third-party software that we license is found to infringe the intellectual property rights of others, we could subject ourselves to infringement liability and be required to re-engineer our offerings, discontinue the sale of our offerings, or make available to certain third parties or generally available, in source code form, our proprietary code, any of which could materially adversely affect our business, operating results, and financial condition.

If a successful infringement claim is made against us and we fail to develop or license a substitute technology or brand name, as applicable, our business, results of operations, financial condition, or cash flows could be materially adversely affected.

Risks Related to Our Operations

We face risks related to the COVID-19 pandemic that could significantly disrupt or materially adversely affect our business and operating results.

The COVID-19 pandemic has had a significant adverse impact on global commercial activity and has created significant volatility in financial markets. Many governmental authorities have instituted quarantines, work-from-home directives, shelter-in-place orders, social distancing mandates, travel restrictions, border closures, limitations on public gatherings, and closures of or operational limitations on non-essential businesses, which are adversely impacting a number of industries such as travel, leisure, hospitality, and retail. There is significant uncertainty around the breadth and duration of business disruptions related to COVID-19, as well as its impact on the global economy and consumer confidence. The COVID-19 pandemic could have a sustained adverse impact on economic and market conditions and trigger a period of prolonged global economic slowdown, which could decrease technology spending, adversely affect demand for our offerings, and harm our business and operating results.

Our product licenses revenues may be negatively impacted in future periods until the effects of the pandemic have subsided due to a general increase in the time it takes to close deals in the current depressed macroeconomic environment. Our product support revenues may also be negatively impacted in future periods by the overall depressed macroeconomic environment and to the extent that customers require extended payment terms or determine not to renew their product support arrangements as part of their efforts to reduce expenses. Similarly, we may experience declines in our consulting revenues in future periods due to the overall depressed macroeconomic environment and as our customers continue to operate in remote work environments and aim to reduce expenses. The uncertainty related to COVID-19 may also result in increased volatility in the financial projections we use as the basis for estimates and assumptions used in our financial statements.

In light of the uncertain and rapidly evolving situation relating to COVID-19, we have taken precautionary measures intended to reduce the risk of the virus to our employees, customers, and communities in which we operate. We have established remote working arrangements for our employees, placed restrictions on non-essential business travel, and cancelled or shifted our customer, employee, and industry events to a virtual-only format for the foreseeable future. As a result of these precautionary measures, there could be a negative impact on our sales, marketing, and customer success efforts, continued delays in our sales cycles, delays in the release or delivery of new or enhanced offerings or unexpected changes to such offerings, or operational or other challenges, any of which could significantly disrupt our business and operating results. For example, our shift to creating virtual customer and industry events may not be successful, and we may not be able to showcase our products as effectively or generate the same customer interest, opportunities, and leads through virtual events as we have historically done through in-person events. Additionally, while we have not experienced any material disruptions to date, our technological systems or infrastructure may not be equipped to facilitate effective remote working arrangements or operate in compliance with all laws and regulations for our employees in the short or long term.

Considerable uncertainty still surrounds COVID-19 and its potential long-term economic effects and the effectiveness of any responses taken by government authorities and businesses. Although we continue to actively monitor the situation and may take further actions as may be required by government authorities or as more information and public health guidance become available, the full extent to which COVID-19 impacts our business and operating results will depend on future developments, including the duration, spread, severity, and potential recurrence of the COVID-19 pandemic, impact on our customers and our sales cycles, our ability to generate new business leads, impact on our customer, employee, and industry events, and effect on our vendors, all of which are highly uncertain and cannot be predicted.

In addition, the effects of the COVID-19 pandemic may heighten many of the other risks described in this “Risk Factors” section.

Business disruptions, including interruptions, delays, or failures of our systems, third-party data center hosting facility, or other third-party services, could materially adversely affect our operating results or result in a material weakness in our internal controls that could adversely affect the market price of our stock

A significant portion of our research and development activities or certain other critical business operations are concentrated in facilities in Northern Virginia, China, and Poland. In addition, we serve our customers and manage certain critical internal processes using a third-party data center hosting facility located in the United States and other third-party services, including AWS, Azure, and other cloud services. Any disruptions or failures of our systems or the third-party hosting facility or other services that we use, including as a result of a natural disaster, fire, cyberattack, act of terrorism, geopolitical conflict, pandemic (including the ongoing COVID-19 pandemic), the effects of climate change, or other catastrophic event, as well as power outages, telecommunications infrastructure outages, a decision by one of our third-party service providers to close facilities that we use without adequate notice or to materially change the pricing or terms of their services, host country restrictions on the conduct of our business operations or the availability of our offerings, or other unanticipated problems with the third-party services that we use, such as a failure to meet service standards, could severely impact our ability to conduct our business operations or to attract new customers or maintain existing customers, or result in a material weakness in our internal control over financial reporting, any of which could materially adversely affect our future operating results.

Our international operations are complex and expose us to risks that could have a material adverse effect on our business, operating results, and financial condition

We receive a significant portion of our total revenues from international sales and conduct our business activities in various foreign countries, including some emerging markets where we have limited experience, where the challenges of conducting our business can be significantly different from those we have faced in more developed markets, and where business practices may create internal control risks. International revenues accounted for 41.9%, 43.7%, and 42.3% of our total revenues for the years ended December 31, 2020, 2019, and 2018, respectively. Our international operations require significant management attention and financial resources and expose us to additional risks, including:

- fluctuations in foreign currency exchange rates;
- new, or changes in, regulatory requirements;
- tariffs, export and import restrictions, restrictions on foreign investments, tax laws, sanctions, laws and policies that favor local competitors (such as mandatory technology transfers), and other trade barriers or protection measures;
- compliance with a wide variety of laws, including those relating to labor matters, antitrust, procurement and contracting, consumer and data protection, privacy, data localization, governmental access to data, network security, and encryption;
- costs of localizing offerings and lack of acceptance of localized offerings;
- difficulties in and costs of staffing, managing, and operating our international operations;
- economic weakness or currency-related crises;
- generally longer payment cycles and greater difficulty in collecting accounts receivable;
- weaker intellectual property protection;
- increased risk of corporate espionage or misappropriation, theft, or misuse of intellectual property, particularly in foreign countries where we have significant software development operations that have access to product source code, such as China;
- our ability to adapt to sales practices and customer requirements in different cultures;
- natural disasters, acts of war, terrorism, or pandemics (including the ongoing COVID-19 pandemic); and
- political instability and security risks in the countries where we are doing business.

Disruptions to trade, weakening of economic conditions, economic and legal uncertainties, or changes in currency rates may adversely affect our business, financial condition, operating results, and cash flows. For example, we may face heightened risks in connection with our international operations as a result of the withdrawal of the United Kingdom from the European Union, commonly referred to as “Brexit.” The future effects of Brexit are uncertain and will depend on the implementation of the Trade and Cooperation Agreement between the United Kingdom and the European Union and any other agreements the United Kingdom may make in the future to retain access to European Union markets post their separation. Brexit could, among other outcomes, disrupt the free movement of goods, services, and people between the United Kingdom and the European Union. Brexit could also lead to legal uncertainty and potentially divergent national laws and regulations as the United Kingdom determines which EU laws to replace or replicate. In addition, the Trump administration has called for substantial changes to U.S. foreign trade policy, including the imposition of greater restrictions on international trade and significant increases in tariffs on goods imported into the United States, and has increased tariffs on certain goods imported into the United States from a number of foreign markets, following which retaliatory tariffs have been imposed on exports of certain U.S. goods to those markets. These tariffs and any further escalation of protectionist trade measures could adversely affect the markets in which we sell our offerings and, in turn, our business, financial condition, operating results, and cash flows and it is unclear to what extent the Biden administration would undertake any of the changes proposed by the prior administration.

Changes to the U.S. taxation of our international income, or changes in foreign tax laws, could have a material effect on our future operating results. For example, the TaxAct led to corporate income tax rate changes, the modification or elimination of certain tax incentives, changes to the existing regime for taxing overseas earnings, and measures to prevent BEPS, and the United Kingdom adopted legislation imposing a tax related to offshore receipts in respect of intangible property held in low tax jurisdictions.

Moreover, compliance with foreign and U.S. laws and regulations that are applicable to our international operations is complex and may increase our cost of doing business in international jurisdictions. Our failure to comply with these laws and regulations has exposed, and may in the future expose, us to fines and penalties. These laws and regulations include anti-bribery laws, such as the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act, local laws prohibiting corrupt payments to government officials, and local laws relating to procurement, contracting, and antitrust. These laws and regulations also include import and export requirements and economic and trade sanctions administered by the Office of Foreign Assets Control and the U.S. Department of Commerce based on U.S. foreign policy and national security goals against targeted foreign states, organizations, and individuals. Although we have implemented policies and procedures designed to help ensure compliance with these laws, our employees, channel partners, and other persons with whom we do business may take actions in violation of our policies or these laws. For example, following an internal review initiated in 2018, we believe our Brazilian subsidiary failed or likely failed to comply with local procurement regulations in conducting business with certain Brazilian government entities. Any violation of these laws could subject us to civil or criminal penalties, including substantial fines or prohibitions on our ability to sell our offerings to one or more countries, and could also materially damage our reputation and our brand.

These factors may have a material adverse effect on our future sales, business, operating results, and financial condition.

We face a variety of risks in doing business with U.S. and foreign federal, state, and local governments and government agencies, including risks related to the procurement process, budget constraints and cycles, termination of contracts, and compliance with government contracting requirements

Our customers include the U.S. government and a number of state and local governments and government agencies. There are a variety of risks in doing business with government entities, including:

Procurement. Contracting with public sector customers is highly competitive and can be time-consuming and expensive, requiring us to incur significant up-front time and expense without any assurance that we will win a contract.

Budgetary Constraints and Cycles. Public sector funding reductions or delays adversely impact demand and payment for our offerings.

Termination of Contracts. Public sector customers often have contractual or other legal rights to terminate contracts for convenience or due to a default. If a contract is terminated for convenience, we may only be able to collect fees for software or services delivered prior to termination and settlement expenses. If a contract is terminated due to a default, we may not recover even those amounts, and we may be liable for excess costs incurred by the customer for procuring alternative software or services.

Compliance with Government Contracting Requirements. Government contractors are required to comply with a variety of complex laws, regulations, and contractual provisions relating to the formation, administration, or performance of government contracts that give public sector customers substantial rights and remedies, many of which are not typical for commercial contracts. These may include rights regarding price protection, the accuracy of information provided to the government, contractor compliance with socio-economic policies, and other terms unique to government contracts. Governments and government agencies routinely investigate and audit contractors for compliance with these requirements. If, as a result of an audit or review, it is determined that we have failed to comply with these requirements, we may be subject to civil and criminal penalties or administrative sanctions, including contract termination, forfeiture of profits, fines, and suspensions or debarment from future government business and we may suffer harm to our reputation.

Our customers also include a number of foreign governments and government agencies. Similar procurement, budgetary, contract, and audit risks also apply to these entities. In addition, compliance with complex regulations and contracting provisions in a variety of jurisdictions can be expensive and consume significant management resources. In certain jurisdictions, our ability to win business may be constrained by political and other factors unrelated to our competitive position in the market. Each of these difficulties could materially adversely affect our business and results of operations.

If we are unable to recruit or retain skilled personnel, or if we lose the services of our Chairman of the Board of Directors & Chief Executive Officer, our business, operating results, and financial condition could be materially adversely affected

Our future success depends on our continuing ability to attract, train, assimilate, and retain highly skilled personnel. Competition for qualified employees in the technology industry has historically been high, and may be further amplified by evolving restrictions on immigration, travel, or availability of visas for skilled technology workers, including restrictions imposed in response to the COVID-19 pandemic. We may not be able to retain our current key employees or attract, train, assimilate, and retain other highly skilled personnel in the future. Our future success also depends in large part on the continued service of Michael J. Saylor, our Chairman of the Board of Directors & Chief Executive Officer. If we lose the services of Mr. Saylor, or if we are unable to attract, train, assimilate, and retain the highly skilled personnel we need, our business, operating results, and financial condition could be materially adversely affected.

Changes in laws or regulations relating to privacy or the collection, processing, disclosure, storage, localization, or transmission of personal data, or any actual or perceived failure by us or our third-party service providers to comply with such laws and regulations, contractual obligations, or applicable privacy policies, could materially adversely affect our business

Aspects of our business involve collecting, processing, disclosing, storing, and transmitting personal data, which are subject to certain privacy policies, contractual obligations, and U.S. and foreign laws, regulations, and directives relating to privacy and data protection. We store a substantial amount of customer and employee data, including personal data, on our networks and other systems and the cloud environments we manage. In addition, the types of data subject to protection as personal data in the European Union, the United States, and elsewhere have been expanding. In recent years, the collection and use of personal data by companies have come under increased regulatory and public scrutiny, especially in relation to the collection and processing of sensitive data, such as healthcare, biometric, genetic, financial services, and children's data, precise location data, and data regarding a person's race or ethnic origins, political opinions, or religious beliefs. For example, in the United States, protected health information is subject to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which can provide for civil and criminal penalties for noncompliance. Entities (such as us) that engage in creating, receiving, maintaining, or transmitting protected health information provided by covered entities and other business associates are subject to enforcement under HIPAA. Our access to protected health information triggers obligations to comply with certain privacy rules and data security requirements under HIPAA.

Any systems failure or security breach that results in the release of, or unauthorized access to, personal data, or any failure or perceived failure by us or our third-party service providers to comply with applicable privacy policies, contractual obligations, or any applicable laws or regulations relating to privacy or data protection, could result in proceedings against us by domestic or foreign government entities or others, including private plaintiffs in litigation. Such proceedings could result in the imposition of sanctions, fines, penalties, liabilities, government orders, and/or orders requiring that we change our data practices, any of which could have a material adverse effect on our business, operating results, reputation, and financial condition.

Various U.S. and foreign government bodies may enact new or additional laws or regulations, or issue rulings that invalidate prior laws or regulations, concerning privacy, data storage, data protection, and cross-border transfer of data that could materially adversely impact our business. In the European Union, the General Data Protection Regulation ("GDPR") took effect in May 2018. GDPR establishes requirements regarding the handling and security of personal data, requires disclosure of data breaches to individuals, customers, and data protection authorities in certain circumstances, requires companies to honor data subjects' requests relating to their personal data, permits regulators to impose fines of up to €20,000,000 or 4% of global annual revenue, whichever is higher, and establishes

a private right of action. Furthermore, a new ePrivacy Regulation, regulating electronic communications, was proposed in 2017 and is under consideration by the European Commission, the European Parliament, and the European Council. More recently, the Court of Justice of the European Union (“CJEU”) invalidated the U.S.-EU Privacy Shield in July 2020. The U.S.-EU Privacy Shield provided a mechanism to lawfully transfer personal data from the European Union to the United States and certain other countries. In the wake of the invalidation of the U.S.-EU Privacy Shield, we have transitioned to reliance on the EU Standard Contractual Clauses (“SCCs”) to lawfully transfer certain personal data from the European Union to the United States. The rules involving this alternative data transfer option are also undergoing revision and this transfer mechanism may also be declared invalid (or require us to change our business practices) in the future, requiring us to provide an alternative means of data transfer.

Brazil also enacted the Lei Geral de Proteção de Dados (the Brazilian General Data Protection Law), which became effective in August 2020 and imposes requirements largely similar to GDPR on products and services offered to users in Brazil. In China, we may also be subject to the Cybersecurity Law that went into effect in June 2017 and the revision of the Personal Information Security Specification that went into effect in October 2020, which have broad but uncertain application and impose a number of new privacy and data security obligations. China is also considering the implementation of new legislation on the protection of privacy and personal data, including a Personal Information Protection Law and a Data Security Law that may impose new obligations on us. Other countries are considering new or expanded laws governing privacy and data security that may impact our business practices.

The state of California has also adopted a new comprehensive privacy law, the California Consumer Privacy Act (“CCPA”), which took effect in January 2020 and became enforceable in July 2020. We may be required to devote substantial resources to implement and maintain compliance with the CCPA, and noncompliance could result in regulatory investigations and fines or private litigation. Moreover, in November 2020, California voters approved a new privacy law, the California Privacy Rights Act (“CPRA”), which amends the CCPA to create new privacy rights and obligations in California. Several other states are also considering bills similar to the CCPA or other generally applicable privacy laws that may impose additional costs and obligations on us.

Furthermore, the U.S. Congress is considering comprehensive privacy legislation. At this time, it is unclear whether Congress will pass such a law and if so, when and what it will require and prohibit. Moreover, it is not clear whether any such legislation would give the Federal Trade Commission (“FTC”) any new authority to impose civil penalties for violations of the Federal Trade Commission Act in the first instance, whether Congress will grant the FTC rulemaking authority over privacy and information security, or whether Congress will vest some or all privacy and data security regulatory authority and enforcement power in a new agency, akin to EU data protection authorities.

Complying with these and other changing requirements could cause us or our customers to incur substantial costs or pay substantial fines or penalties, require us to change our business practices, require us to take on more onerous obligations in our contracts, or limit our ability to provide certain offerings in certain jurisdictions, any of which could materially adversely affect our business and operating results. New laws or regulations restricting or limiting the collection or use of mobile data could also reduce demand for certain of our offerings or require changes to our business practices, which could materially adversely affect our business and operating results.

If we or our third-party service providers experience a disruption due to a cybersecurity attack or security breach and unauthorized parties obtain access to our customers’, prospects’, vendors’, or channel partners’ data, our data, our networks or other systems, or the cloud environments we manage, our offerings may be perceived as not being secure, our reputation may be harmed, demand for our offerings may be reduced, our operations may be disrupted, we may incur significant legal and financial liabilities, and our business could be materially adversely affected

As part of our business, we process, store, and transmit our customers’, prospects’, vendors’, and channel partners’ data as well as our own, including in our networks and other systems and the cloud environments we manage. Security breaches may occur due to technological error, computer viruses, or third-party action, including intentional misconduct by computer hackers or state actors, physical break-ins, industrial espionage, fraudulent inducement of employees, customers, or channel partners to disclose sensitive information such as user names or passwords, and

employee, customer, or channel partner error or malfeasance. A security breach could result in unauthorized access to or disclosure, modification, misuse, loss, or destruction of our customers', prospects', vendors', or channel partners' data, our data (including our proprietary information, intellectual property, or trade secrets), our networks or other systems, or the cloud environments we manage. Third parties may also conduct attacks designed to prevent access to critical data or systems through ransomware or temporarily deny customers access to our cloud environments.

We have experienced attempts by third parties to identify and exploit software and service vulnerabilities, penetrate or bypass our security measures, and gain unauthorized access to our or our customers' or service providers' cloud environments, networks, and other systems. Security measures that we or our third-party service providers have implemented may not be effective against all current or future security threats. Because there are many different security breach techniques and such techniques continue to evolve, we may be unable to anticipate, detect, or mitigate attempted security breaches and implement adequate preventative measures.

Any security breach, ransomware attack, or successful denial of service attack could result in a loss of customer confidence in the security of our offerings and damage to our brand, reduce the demand for our offerings, disrupt our normal business operations, require us to spend material resources to investigate or correct the breach, require us to notify affected customers or individuals and/or applicable regulators and others, provide identity theft protection services to individuals, expose us to legal liabilities, including litigation, regulatory enforcement, and indemnity obligations, and materially adversely affect our revenues and operating results. Our software operates in conjunction with and is dependent on third-party products and components across a broad ecosystem. If there is a security vulnerability in one of these products or components, and if there is a security exploit targeting it, we could face increased costs, liability claims, customer dissatisfaction, reduced revenue, or harm to our reputation or competitive position.

These risks will increase as we continue to grow the number and scale of our cloud subscriptions and process, store, and transmit increasingly large amounts of our customers', prospects', vendors', channel partners', and our own data. In particular, in connection with the COVID-19 pandemic, there has been an increase in cyberattacks and other malicious activities as shelter-in-place orders and remote working conditions have led businesses to increasingly rely on virtual environments and communication systems.

Risks Related to Our Bitcoin Strategy and Holdings

Our bitcoin strategy exposes us to various risks associated with bitcoin

In September 2020, our Board of Directors adopted our Treasury Reserve Policy, under which our treasury reserve assets will consist of (i) Cash Assets held by us that exceed working capital requirements and (ii) bitcoin held by us, with bitcoin serving as the primary treasury reserve asset on an ongoing basis, subject to market conditions and anticipated needs of the business for Cash Assets.

In 2021, we determined to adopt, in addition to and in conjunction with our Treasury Reserve Policy, a business strategy of purchasing and holding bitcoin, and we may from time to time, subject to market conditions, issue debt or equity securities in capital raising transactions with the objective of using the proceeds to purchase bitcoin.

We have only recently adopted this bitcoin acquisition strategy and are continually examining the risks and rewards of such a strategy. This strategy has not been tested over time or under various market conditions. Some investors and other market participants may disagree with this strategy or actions we undertake to implement it. If bitcoin prices fall or our bitcoin acquisition strategy otherwise proves unsuccessful, it would adversely impact the market price of our class A common stock.

As of February 8, 2021, we held approximately 71,079 bitcoins that were acquired at an aggregate purchase price of \$1.145 billion and an average purchase price of approximately \$16,109 per bitcoin, inclusive of fees and expenses. These purchases included purchases of bitcoin using the net proceeds of our issuance of \$650.0 million aggregate principal amount of our 0.750% Convertible Senior Notes due 2025 (the "notes") in the fourth quarter of 2020. As part of our overall business strategy, we expect to purchase additional bitcoin in future periods, though we may also sell bitcoin in future periods as needed to generate Cash Assets for treasury management purposes.

While our bitcoin is currently owned directly by us, we are investigating other potential approaches to holding our bitcoin assets. If we change the means by which we hold our bitcoin assets, the accounting treatment for our bitcoin may correspondingly change. A change in the accounting treatment of our bitcoin holdings could have a material impact on our results of operations in future periods and could increase the volatility of our reported results of operations as well as affecting the carrying value of our bitcoin on our balance sheet, which in turn could have a material adverse effect on our financial results and the market price of our class A common stock.

Bitcoin is a highly volatile asset that has traded below \$4,000 per bitcoin and above \$44,000 per bitcoin in our principal market in the 12 months preceding the date of this Annual Report. Bitcoin does not pay interest or other returns and so our ability to generate cash from our bitcoin holdings depends on sales. The impact of our bitcoin holdings on our financial results and the market price of our class A common stock is likely to increase as we increase our overall holdings of bitcoin in the future. See “Risks Related to Our Bitcoin Strategy and Holdings – Our historical financial statements do not reflect the potential variability in earnings that we may experience in the future relating to bitcoin holdings.”

Fluctuations in the price of bitcoin may significantly influence the market price of our class A common stock

To the extent investors view the value of our class A common stock as linked to the value or change in the value of our bitcoin, fluctuations in the price of bitcoin may significantly influence the market price of our class A common stock.

Our historical financial statements do not reflect the potential variability in earnings that we may experience in the future relating to bitcoin holdings

Our historical financial statements, including those for the year ended December 31, 2020, do not fully reflect the potential variability in earnings that we may experience in the future from holding or selling significant amounts of bitcoin.

The price of bitcoin has historically been subject to dramatic price fluctuations and is highly volatile. As explained more fully in Note 2(g) to our consolidated financial statements for the year ended December 31, 2020 included in this Annual Report, we determine the fair value of our bitcoin based on quoted (unadjusted) prices on the active exchange that we have determined is our principal market for bitcoin. We perform an analysis each quarter to identify whether events or changes in circumstances, principally decreases in the quoted (unadjusted) prices on the active exchange, indicate that it is more likely than not that any of our bitcoin assets is impaired. In determining if an impairment has occurred, we consider the lowest price of one bitcoin quoted on the active exchange at any time since acquiring the specific bitcoin held. If the carrying value of a bitcoin exceeds that lowest price at any time during the quarter, an impairment loss is deemed to have occurred with respect to that bitcoin in the amount equal to the difference between its carrying value and such lowest price, and subsequent increases in the price of bitcoin will not affect the carrying value of our bitcoin. Gains (if any) are not recorded until realized upon sale, at which point they would be presented net of any impairment losses. In determining the gain to be recognized upon sale, we calculate the difference between the sale price and carrying value of the specific bitcoin sold immediately prior to sale.

As a result, any decrease in the fair value of bitcoin below our carrying value for such assets at any time since their acquisition requires us to incur an impairment charge, and such charge could be material to our financial results for the applicable reporting period, which may create significant volatility in our reported earnings and decrease the carrying value of our digital assets, which in turn could have a material adverse effect on the market price of our class A common stock.

At December 31, 2020, we carried \$1.054 billion of digital assets on our balance sheet, consisting of approximately 70,469 bitcoin and reflecting \$70.7 million in cumulative impairment losses attributable to bitcoin trading price fluctuations, and held \$59.7 million in cash and cash equivalents, compared to no digital assets and \$456.7 million in cash and cash equivalents at December 31, 2019, reflecting the shift in our liquid asset holdings following the adoption of our Treasury Reserve Policy. Digital asset impairment losses of \$70.7 million incurred during the year ended December 31, 2020 represented 17.5% of our operating expenses for the year, compared to no digital asset

impairment losses for the year ended December 31, 2019, contributing to our net loss of \$7.5 million in the year ended December 31, 2020 compared to net income of \$34.4 million in the year ended December 31, 2019.

Because we intend to purchase additional bitcoin in future periods and increase our overall holdings of bitcoin, we expect that the proportion of our total assets represented by bitcoin holdings will increase in the future. As a result, volatility in our earnings in future periods may be significantly more than what we experienced in prior periods.

Changes in securities regulation may adversely impact the market price of our class A common stock

Although bitcoin and other digital assets have experienced a surge of investor attention since bitcoin was invented in 2008, investors in the United States currently have limited means to gain exposure to bitcoin through traditional investment channels such as 401(k) retirement accounts, and instead generally must hold bitcoin through “hosted” wallets provided by digital asset service providers or through “unhosted” wallets that expose the investor to risks associated with loss or hacking of their private keys. Given the relative novelty of digital assets, general lack of familiarity with the processes needed to hold bitcoin directly, as well as the potential reluctance of financial planners and advisers to recommend direct bitcoin holdings to their retail customers because of the manner in which such holdings are custodied, some investors have sought exposure to bitcoin through investment vehicles that hold bitcoin and issue shares representing fractional undivided interests in their underlying bitcoin holdings. Although a number of investment vehicles currently offer this exposure to bitcoin, none of these investment vehicles currently offers its shares directly to the public in the United States, and such shares are offered only to “accredited investors” on a private placement basis. Investors who are not eligible to participate in these private placements may nevertheless purchase shares of these investment vehicles in the over-the-counter market, where such shares have historically traded at a premium to the net asset value (“NAV”) of the underlying bitcoin. These premiums have at times been substantial.

One reason for the substantial premium to NAV exhibited by the trading prices of shares of some bitcoin investment vehicles may be because of the relative scarcity of traditional investment vehicles providing investment exposure to bitcoin. To the extent investors view the value of our class A common stock as providing such exposure, it is possible that the value of our class A common stock also includes a premium over the value of our bitcoin.

Another reason for the substantial premium to NAV exhibited by the trading prices of shares of some bitcoin investment vehicles is that such vehicles operate in a manner similar to closed-end investment funds as opposed to exchange-traded funds (“ETFs”) and therefore do not continuously offer to create and redeem their shares at NAV in exchange for bitcoin. Although several bitcoin investment vehicles have attempted to list their shares on a U.S. national securities exchange to permit them to function in the manner of an ETF with continuous share creation and redemption at NAV, to date the SEC has declined to approve any such listing, citing concerns over the surveillance of trading in markets for the underlying bitcoin as well as concerns about fraud and manipulation in bitcoin trading markets.

If the SEC were to resolve its concerns over surveillance of the bitcoin trading markets, it is possible that the SEC would permit the listing of ETFs specializing in bitcoin, allowing these funds to offer their shares directly to the public. In addition to greatly simplifying the task of gaining investment exposure to bitcoin, the listing of a bitcoin ETF with continuous share creation and redemption at NAV would be expected to eliminate the NAV premiums currently exhibited by shares of investment vehicles that trade in the over-the-counter market. To the extent that our class A common stock is viewed as an alternative-to-bitcoin investment vehicle and trades at a premium to the value of our bitcoin holdings, that premium may also be eliminated, causing the value of our class A common stock to decline.

In addition, any introduction of bitcoin ETFs on U.S. national securities exchanges may be viewed by investors as offering “pure play” exposure to bitcoin that would generally not be subject to federal income tax at the entity level as we are.

As a result of the foregoing factors, to the extent investors view our class A common stock as linked to the value of our bitcoin holdings, the introduction of bitcoin ETFs on U.S. national securities exchanges could have a material adverse effect on the market value of our class A common stock.

Our bitcoin holdings could subject us to regulatory scrutiny

As noted above, several bitcoin investment vehicles have attempted to list their shares on a U.S. national securities exchange to permit them to function in the manner of an ETF with continuous share creation and redemption at NAV. To date the SEC has declined to approve any such listing, citing concerns over the surveillance of trading in markets for the underlying bitcoin as well as concerns about fraud and manipulation in bitcoin trading markets. Even though we do not function in the manner of an ETF and do not offer continuous share creation and redemption at NAV, it is possible that we nevertheless could face regulatory scrutiny from the SEC, as a company with securities traded on The Nasdaq Global Select Market.

In addition, as digital assets, including bitcoin, have grown in popularity and market size, there has been increasing focus on the extent to which digital assets can be used to launder the proceeds of illegal activities or fund criminal or terrorist activities, or entities subject to sanctions regimes. While we have implemented and maintain policies and procedures reasonably designed to promote compliance with applicable anti-money laundering and sanctions laws and regulations and take care to only acquire our bitcoin through entities subject to anti money laundering regulation and related compliance rules in the United States, if we are found to have purchased any of our bitcoin from bad actors that have used bitcoin to launder money or persons subject to sanctions, we may be subject to regulatory proceedings and further transactions or dealings in bitcoin may be restricted or prohibited.

Due to the unregulated nature and lack of transparency surrounding the operations of many bitcoin trading venues, they may experience fraud, security failures or operational problems, which may adversely affect the value of our bitcoin

Bitcoin trading venues are relatively new and, in some cases, unregulated. Furthermore, there are many bitcoin trading venues which do not provide the public with significant information regarding their ownership structure, management teams, corporate practices and regulatory compliance. As a result, the marketplace may lose confidence in bitcoin trading venues, including prominent exchanges that handle a significant volume of bitcoin trading.

For example, in 2019 there were reports claiming that 80-95% of bitcoin trading volume on trading venues was false or non-economic in nature, with specific focus on unregulated exchanges located outside of the United States. Such reports may indicate that the bitcoin market is significantly smaller than expected and that the United States makes up a significantly larger percentage of the bitcoin market than is commonly understood. Nonetheless, any actual or perceived false trading in the bitcoin market, and any other fraudulent or manipulative acts and practices, could adversely affect the value of our bitcoin.

Negative perception, a lack of stability in the broader bitcoin markets and the closure or temporary shutdown of bitcoin trading venues due to fraud, business failure, hackers or malware, or government-mandated regulation may reduce confidence in bitcoin and result in greater volatility in the prices of bitcoin. To the extent investors view our class A common stock as linked to the value of our bitcoin holdings, these potential consequences of a bitcoin trading venue's failure could have a material adverse effect on the market value of our class A common stock.

The price of bitcoin may be influenced by regulatory, commercial, and technical factors that are highly uncertain

Bitcoin and other digital assets are relatively novel and are subject to various risks and uncertainties that may adversely impact their price. For example, the application of securities laws and other regulations to such assets is unclear in certain respects, and it is possible that regulators in the United States or foreign countries may create new regulations or interpret laws in a manner that adversely affects the price of bitcoin. The growth of the digital assets industry in general, and the use and acceptance of bitcoin in particular, may also impact the price of bitcoin and is subject to a high degree of uncertainty. The pace of worldwide growth in the adoption and use of bitcoin may depend, for instance, on public familiarity with digital assets, ease of buying and accessing bitcoin, institutional demand for bitcoin as an investment asset, consumer demand for bitcoin as a means of payment, and the availability and popularity of alternatives to bitcoin. Even if growth in bitcoin adoption occurs in the near or medium-term, there is no assurance that bitcoin usage will continue to grow over the long-term. Because bitcoin has no physical existence beyond the record of transactions on the Bitcoin blockchain, a variety of technical factors related to the Bitcoin blockchain could also impact the price of bitcoin. For example, malicious attacks by "miners" who validate bitcoin transactions, inadequate mining fees to incentivize validating of bitcoin transactions, hard "forks" of the

Bitcoin blockchain into multiple blockchains, and advances in quantum computing could undercut the integrity of the Bitcoin blockchain and negatively affect the price of bitcoin. The liquidity of bitcoin may also be reduced and damage to the public perception of bitcoin may occur, if financial institutions were to deny banking services to businesses that hold bitcoin, provide bitcoin-related services or accept bitcoin as payment, which could also decrease the price of bitcoin.

The concentration of our bitcoin holdings enhances the risks inherent in our bitcoin acquisition strategy

As of February 8, 2021, we held approximately 71,079 bitcoins that were acquired at an aggregate purchase price of \$1.145 billion and we intend to purchase additional bitcoin and increase our overall holdings of bitcoin in the future. The concentration of our bitcoin holdings limits the risk mitigation that we could take advantage of by purchasing a more diversified portfolio of treasury assets, and the absence of diversification enhances the risks inherent in our bitcoin acquisition strategy. If there is a significant decrease in the price of bitcoin, we will experience a more pronounced impact on our financial condition than if we used our cash to purchase a more diverse portfolio of assets.

Our bitcoin holdings are less liquid than our existing cash and cash equivalents and may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents

In September 2020, we adopted bitcoin as our primary treasury reserve asset. Historically, the bitcoin markets have been characterized by more price volatility, less liquidity, and lower trading volumes compared to sovereign currencies markets, as well as relative anonymity, a developing regulatory landscape, susceptibility to market abuse and manipulation, and various other risks inherent in its entirely electronic, virtual form and decentralized network. During times of market instability, we may not be able to sell our bitcoin at reasonable prices or at all. As a result, our bitcoin holdings may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents. If we are unable to sell our bitcoin, or if we are forced to sell our bitcoin at a significant loss, in order to meet our working capital requirements, our business and financial condition could be negatively impacted.

If we or our third-party service providers experience a security breach or cyberattack and unauthorized parties obtain access to our bitcoin, we may lose some or all of our bitcoin and our financial condition and results of operations could be materially adversely affected

Security breaches and cyberattacks are of particular concern with respect to our bitcoin. Bitcoin and other blockchain-based cryptocurrencies have been, and may in the future be, subject to security breaches, cyberattacks, or other malicious activities. A successful security breach or cyberattack could result in a partial or total loss of our bitcoin in a manner that may not be covered by insurance or indemnity provisions of the custody agreement with a custodian who holds our bitcoin. Such a loss could have a material adverse effect on our financial condition and results of operations.

The loss or destruction of a private key required to access our bitcoin may be irreversible. If we are unable to access our private keys or if we experience a cyberattack or other data loss relating to our bitcoin, our financial condition and results of operations could be materially adversely affected.

Bitcoin is controllable only by the possessor of both the unique public key and private key relating to the local or online digital wallet in which the bitcoin is held. While the Bitcoin blockchain ledger requires a public key relating to a digital wallet to be published when used in a transaction, private keys must be safeguarded and kept private in order to prevent a third party from accessing the bitcoin held in such wallet. To the extent our private key is lost, destroyed, or otherwise compromised and no backup of the private key is accessible, we will be unable to access the bitcoin held in the related digital wallet. Furthermore, we cannot provide assurance that our digital wallets will not be compromised as a result of a cyberattack. The bitcoin and blockchain ledger, as well as other cryptocurrencies and blockchain technologies, have been, and may in the future be, subject to security breaches, cyberattacks, or other malicious activities.

In light of the significant amount of bitcoin we hold, we are continuing to seek a greater degree of diversification in the use of custodial services as the extent of potential risk of loss is dependent, in part, on the degree of diversification. As of December 31, 2020, the insurance that covers losses of our bitcoin holdings is only a small

fraction of the entirety of our holdings, and there can be no guarantee that such insurance will be maintained as part of the custodial services we have or that such coverage will cover losses with respect to our bitcoin.

Regulatory change reclassifying bitcoin as a security could lead to our classification as an “investment company” under the Investment Company Act of 1940 and could adversely affect the market price of bitcoin and the market price of our class A common stock.

While senior SEC officials have stated their view that bitcoin is not a “security” for purposes of the federal securities laws, the SEC has so far refused to permit the listing of any bitcoin-based exchange traded funds, citing, among other things, concerns regarding bitcoin market integrity and custodial protections. It is possible that the SEC could take a contrary position to the one taken by its senior officials or a federal court could conclude that bitcoin is a security. Such a determination could lead to our classification as an “investment company” under the Investment Company Act of 1940, which would subject us to significant additional regulatory controls that could have a material adverse effect on our business and operations and also may require us to substantially change the manner in which we conduct our business.

In addition, if bitcoin is determined to constitute a security for purposes of the federal securities laws, the additional regulatory restrictions imposed by those laws could adversely affect the market price of bitcoin and in turn adversely affect the market price of our class A common stock.

Risks Related to Our Class A Common Stock

The market price of our class A common stock has been and may continue to be volatile

The market price of our class A common stock has historically been volatile and this volatility has been significant in recent periods. Since August 11, 2020, the date on which we announced our initial purchase of bitcoin, the closing price of our class A common stock has increased from \$123.62 as of August 10, 2020, the last trading day before our announcement, to \$1,272.94 as of February 9, 2021. The market price of our class A common stock may fluctuate widely in response to various factors, some of which are beyond our control. These factors include, but are not limited to:

- quarterly variations in our results of operations or those of our competitors;
- announcements about our earnings that are not in line with analyst expectations, the likelihood of which may be enhanced because it is our policy not to give guidance relating to our anticipated financial performance in future periods;
- announcements by us or our competitors of acquisitions, dispositions, new offerings, significant contracts, commercial relationships, or capital commitments;
- fluctuations in the price of bitcoin, in which we have significant holdings, and expect we will continue to make, significant purchases, and announcements about our transactions in bitcoin;
- our ability to develop, market, and deliver new and enhanced offerings on a timely basis;
- commencement of, or our involvement in, litigation;
- recommendations by securities analysts or changes in earnings estimates and our ability to meet those estimates;
- investor perception of our Company;
- announcements by our competitors of their earnings that are not in line with analyst expectations;
- the volume of shares of our class A common stock available for public sale;
- sales or purchases of stock by us or by our stockholders and issuances of awards under our stock incentive plan; and
- general economic conditions and slow or negative growth of related markets, including as a result of the COVID-19 pandemic.

In addition, the stock market and the market for technology companies have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of companies in those markets. These market and industry factors may seriously harm the market price of our class A common stock, regardless of our actual operating performance.

Because of the rights of our two classes of common stock and because we are controlled by Michael J. Saylor, who beneficially owns the majority of our class B common stock, Mr. Saylor could transfer control of MicroStrategy to a third party without the approval of our Board of Directors or our other stockholders, prevent a third party from acquiring us, or limit the ability of our other stockholders to influence corporate matters

We have two classes of common stock: class A common stock and class B common stock. Holders of our class A common stock generally have the same rights as holders of our class B common stock, except that holders of class A common stock have one vote per share while holders of class B common stock have ten votes per share. As of February 2, 2021, holders of our class B common stock owned 1,964,025 shares of class B common stock, or 72.0% of the total voting power. As of February 2, 2021, Mr. Saylor, our Chairman of the Board of Directors & Chief Executive Officer, beneficially owned 1,961,668 shares of class B common stock, or 72.0% of the total voting power. Accordingly, Mr. Saylor can control MicroStrategy through his ability to determine the outcome of elections of our directors, amend our certificate of incorporation and by-laws, and take other actions requiring the vote or consent of stockholders, including mergers, going-private transactions, and other extraordinary transactions and their terms.

Our certificate of incorporation allows holders of class B common stock to transfer shares of class B common stock, subject to the approval of stockholders holding a majority of the outstanding class B common stock. Mr. Saylor could, without the approval of our Board of Directors or our other stockholders, transfer voting control of MicroStrategy to a third party. Such a transfer of control could have a material adverse effect on our business, operating results, and financial condition. Mr. Saylor could also prevent a change of control of MicroStrategy, regardless of whether holders of class A common stock might otherwise receive a premium for their shares over the then current market price. In addition, this concentrated control limits stockholders' ability to influence corporate matters and, as a result, we may take actions that our non-controlling stockholders do not view as beneficial or that conflict with their interests. As a result, the market price of our class A common stock could be materially adversely affected.

Our status as a "controlled company" could make our class A common stock less attractive to some investors or otherwise materially adversely affect our stock price

Because we qualify as a "controlled company" under Nasdaq corporate governance rules, we are not required to have independent directors comprise a majority of our Board of Directors. Additionally, our Board of Directors is not required to have an independent compensation or nominating committee or to have the independent directors exercise the nominating function. We are also not required to have the compensation of our executive officers be determined by a compensation committee of independent directors. In addition, we are not required to empower our Compensation Committee with the authority to engage the services of any compensation consultants, legal counsel, or other advisors, or to have the Compensation Committee assess the independence of compensation consultants, legal counsel, and other advisors that it engages.

In light of our status as a controlled company, our Board of Directors has determined not to establish an independent nominating committee or have its independent directors exercise the nominating function and has elected instead to have the Board of Directors be directly responsible for nominating members of the Board. A majority of our Board of Directors is currently comprised of independent directors, and our Board of Directors has established a Compensation Committee comprised entirely of independent directors. The Compensation Committee determines the compensation of our Chief Executive Officer. However, our Board of Directors has authorized our Chief Executive Officer to determine the compensation of executive officers other than himself, rather than having such compensation determined by the Compensation Committee, except that certain performance-based executive officer compensation is determined by the Compensation Committee. Awards made to directors and officers subject to Section 16 of the Exchange Act under our 2013 Stock Incentive Plan (as amended, the "2013 Equity Plan") are also approved by the Compensation Committee. Additionally, while our Compensation Committee is empowered with

the authority to retain and terminate outside counsel, compensation consultants, and other experts or consultants, it is not required to assess their independence.

Although currently a majority of our Board of Directors is comprised of independent directors and the Compensation Committee is comprised entirely of independent directors, we may elect in the future not to have independent directors constitute a majority of the Board of Directors or the Compensation Committee, our Chief Executive Officer's compensation determined by a compensation committee of independent directors, or a compensation committee of the Board of Directors at all.

Accordingly, should the interests of our controlling stockholder differ from those of other stockholders, the other stockholders may not have the same protections that are afforded to stockholders of companies that are required to follow all of the Nasdaq corporate governance rules. Our status as a controlled company could make our class A common stock less attractive to some investors or otherwise materially adversely affect our stock price.

Future sales, or the perception of future sales, of our class A common stock, convertible debt instruments or other convertible securities could depress the price of our class A common stock.

We may issue and sell additional shares of class A common stock, convertible notes, or other securities in subsequent offerings to raise capital or issue shares for other purposes, including in connection with the acquisition of additional bitcoin. We cannot predict:

- the size of future issuances of equity securities,
- the size and terms of future issuances of convertible debt instruments or other convertible securities
- the effect, if any, that future issuances and sales of our securities will have on the market price of the class A common stock.

Transactions involving newly issued class A common stock or other convertible debt instruments or other convertible securities could result in dilution, possibly substantial, to holders of our class A common stock.

Risks Relating to Our Outstanding Convertible Notes and Potential Future Indebtedness

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

Holders of the notes will have the right to require us to repurchase all or a portion of their notes upon the occurrence of a fundamental change at a fundamental change repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest, if any, as described in the indenture governing the notes (the "indenture"). In addition, upon conversion of the notes, unless we elect (or have previously irrevocably elected) to deliver solely shares of our class A common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share), we will be required to make cash payments in respect of the notes being converted as described in the indenture. However, we may not have enough available cash or be able to obtain financing at the time we are required to make repurchases of notes surrendered therefor or notes being converted. In addition, our ability to repurchase the notes or to pay cash upon conversions of the notes may be limited by law, by regulatory authority or by agreements governing our future indebtedness. Our failure to repurchase notes at a time when the repurchase is required by the indenture or to pay any cash payable on future conversions of the notes as required by the indenture would constitute a default under the indenture. A default under the indenture or the fundamental change itself could also lead to a default under agreements governing our existing or future indebtedness. If the repayment of the related indebtedness were to be accelerated after any applicable notice or grace periods, we may not have sufficient funds to repay the indebtedness and repurchase the notes or make cash payments upon conversions thereof.

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

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

Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay our indebtedness

As of the date of this Annual Report, there are outstanding \$650 million in aggregate principal amount of the notes. In addition, our bitcoin acquisition strategy anticipates that we may issue additional debt in future periods to finance additional purchases of bitcoin. Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the notes or any subsequently issued indebtedness, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling bitcoin or other assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

The accounting method for convertible debt securities that may be settled in cash and/or shares, such as the notes, could have a material effect on our diluted earnings per share

In August 2020, the Financial Accounting Standards Board (FASB) published Accounting Standards Update 2020-06, *Debt-Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging-Contracts in Entity's Own Equity (Subtopic 815-40), Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"). These amendments are effective for public companies for fiscal years beginning after December 15, 2021, with early adoption permitted, but no earlier than fiscal years beginning after December 15, 2020. We intend to early adopt the amendments effective January 1, 2021. As a result of this early adoption, the notes will be subject to the "if-converted" method for calculating diluted earnings per share. Under the "if-converted" method, diluted earnings per share will be calculated assuming that all of the notes were converted solely into shares of common stock at the beginning of the reporting period, unless the result would be anti-dilutive, which may adversely affect our diluted earnings per share. Refer to Note 3, Recent Accounting Standards, to our Consolidated Financial Statements for further detail on the impact of adopting ASU 2020-06 on diluted earnings per share.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

As of December 31, 2020, we leased approximately 214,000 square feet of office space at a location in Northern Virginia that serves as our corporate headquarters. This lease provides for certain tenant allowances and incentives and will expire in December 2030. In December 2020, we exercised an option to early terminate approximately 24,000 square feet of space at our corporate headquarters at the beginning of January 2022.

In addition, we lease offices in U.S. and foreign locations for our services and support, sales and marketing, research and development, and administrative personnel. As of December 31, 2020, we leased approximately 27,000 square feet of office and other space in the United States, in addition to our corporate headquarters, and approximately 151,000 square feet of office space in various foreign locations.

Item 3. Legal Proceedings

We are involved in various legal proceedings arising in the normal course of business. Although the outcomes of these legal proceedings are inherently difficult to predict, we do not expect the resolution of these legal proceedings to have a material adverse effect on our financial position, results of operations, or cash flows.

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

Our class A common stock is traded on the Nasdaq Global Select Market under the symbol "MSTR." There is no established public trading market for our class B common stock. As of February 2, 2021, there were approximately 1,152 stockholders of record of our class A common stock and two stockholders of record of our class B common stock.

Holders of our class A common stock generally have the same rights as holders of our class B common stock, except that holders of class A common stock have one vote per share while holders of class B common stock have ten votes per share.

We have never declared or paid any cash dividends on either our class A or class B common stock and have no current plans to declare or pay any such dividends.

Information regarding our equity compensation plans and the securities authorized for issuance thereunder is incorporated herein by reference to "Part III. Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

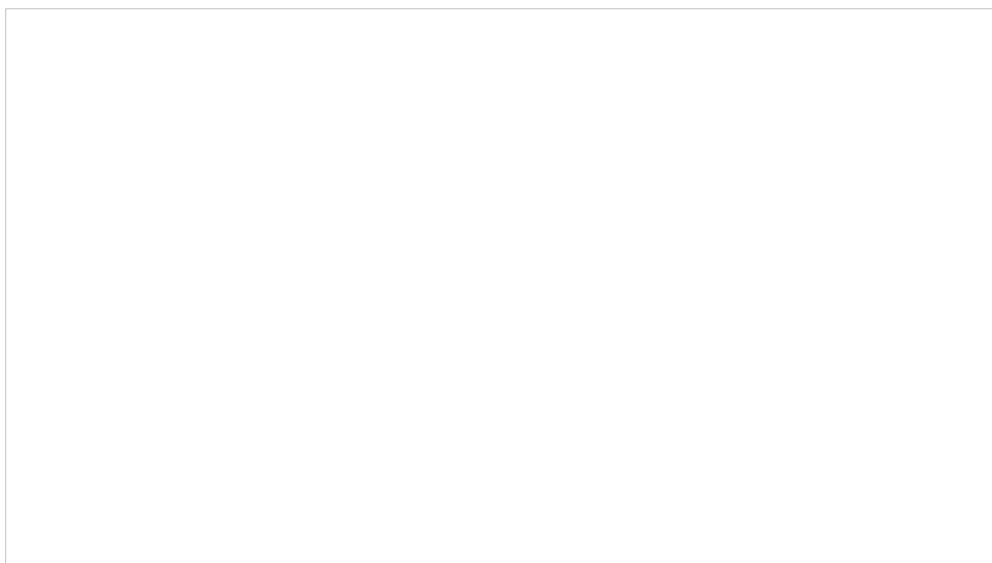
The following table provides information about our repurchases of equity securities that are registered by us pursuant to Section 12 of the Exchange Act during the periods indicated:

Period	(a) Total Number of Shares (or Units) Purchased	(b) Average Price Paid per Share (or Unit) (1)	(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs (1)	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs (1)
October 1, 2020 – October 31, 2020	0	N/A	0	\$ 209,137,964
November 1, 2020 – November 30, 2020	0	N/A	0	\$ 209,137,964
December 1, 2020 – December 31, 2020	0	N/A	0	\$ 209,137,964
Total:	0	N/A	0	\$ 209,137,964

- (1) On July 28, 2005, we announced that the Board of Directors authorized us to repurchase up to an aggregate of \$300.0 million of our class A common stock from time to time on the open market (the "Share Repurchase Program"). The Share Repurchase Program was subsequently amended to authorize us to repurchase up to an aggregate of \$800.0 million of our class A common stock through April 29, 2023, although the program may be suspended or discontinued by us at any time. The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors. The Share Repurchase Program may be funded using our working capital, as well as proceeds from any other funding arrangements that we may enter into in the future. As of December 31, 2020, pursuant to the Share Repurchase Program, we had repurchased an aggregate of 5,674,226 shares of our class A common stock at an average price per share of \$104.13 and an aggregate cost of \$590.9 million. As of December 31, 2020, \$209.1 million of our class A common stock remained available for repurchase pursuant to the Share Repurchase Program. The average price per share and aggregate cost amounts disclosed above include broker commissions.

Performance Graph

The following graph compares the cumulative total stockholder return on our class A common stock from December 31, 2015 (the last trading day before the beginning of our fifth preceding fiscal year) to December 31, 2020 (the last trading day of the fiscal year ended December 31, 2020) with the cumulative total return of (i) the Total Return Index for The Nasdaq Stock Market (U.S. Companies) (the “Nasdaq Composite Index”) and (ii) the Nasdaq Computer Index. The graph assumes the investment of \$100.00 on December 31, 2015 in our class A common stock, the Nasdaq Composite Index, and the Nasdaq Computer Index, and assumes that any dividends are reinvested. Measurement points are December 31, 2015, December 30, 2016, December 29, 2017, December 31, 2018, December 31, 2019, and December 31, 2020.



	12/31/15	12/30/16	12/29/17	12/31/18	12/31/19	12/31/20
MicroStrategy Incorporated	\$ 100.00	\$ 110.10	\$ 73.23	\$ 71.25	\$ 79.55	\$ 216.72
Nasdaq Composite Index	\$ 100.00	\$ 108.87	\$ 141.13	\$ 137.12	\$ 187.44	\$ 271.64
Nasdaq Computer Index	\$ 100.00	\$ 114.04	\$ 160.09	\$ 155.89	\$ 236.87	\$ 355.27

Item 6. Selected Financial Data

The following selected consolidated financial data should be read in conjunction with “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations,” the Consolidated Financial Statements and notes thereto, and other financial information appearing elsewhere in this Annual Report.

As discussed in Note 3, Recent Accounting Standards, to the Consolidated Financial Statements, we adopted ASU 2014-09 effective as of January 1, 2018 and adjusted our prior period Consolidated Financial Statements to reflect full retrospective adoption. In our Annual Report on Form 10-K for the year ended December 31, 2018, our Statements of Operations Data for the years ended December 31, 2017 and 2016 and our Balance Sheet Data as of December 31, 2017 and 2016 in the selected consolidated financial data below were also adjusted to reflect the full retrospective adoption of ASU 2014-09, where applicable. No further adjustments for the years ended December 31, 2017 and 2016 have been made in this Annual Report.

As discussed in Note 3, Recent Accounting Standards, to the Consolidated Financial Statements, we adopted Accounting Standards Update No. 2016-02, *Leases (Topic 842)*, and its subsequent amendments (“ASU 2016-02”) effective as of January 1, 2019 and did not restate comparative prior period Consolidated Financial Statements. As such, certain Balance Sheet Data for preceding years are not directly comparable to the Balance Sheet Data as of December 31, 2019 and 2020.

	Years Ended December 31,				
	2020	2019	2018	2017	2016
				(as adjusted)	(as adjusted)
	(in thousands, except per share data)				
Statements of Operations Data					
Total revenues	\$ 480,735	\$ 486,327	\$ 497,638	\$ 503,843	\$ 513,589
Net (loss) income	\$ (7,524)	\$ 34,355	\$ 22,501	\$ 18,195	\$ 92,239
(Loss) earnings per share (1)(2):					
Basic (loss) earnings per share	\$ (0.78)	\$ 3.35	\$ 1.98	\$ 1.59	\$ 8.07
Diluted (loss) earnings per share	\$ (0.78)	\$ 3.33	\$ 1.97	\$ 1.58	\$ 8.01
	As of December 31,				
	2020	2019	2018	2017	2016
				(as adjusted)	(as adjusted)
	(in thousands)				
Balance Sheet Data					
Total assets	\$ 1,465,612	\$ 916,571	\$ 855,768	\$ 933,219	\$ 869,716
Long-term liabilities, excluding deferred revenue and advance payments	\$ 612,287	\$ 133,850	\$ 61,299	\$ 50,150	\$ 16,741
Total stockholders' equity	\$ 553,045	\$ 508,559	\$ 529,731	\$ 605,726	\$ 566,317

- (1) Basic and fully diluted (loss) earnings per share for class A and class B common stock are the same.
- (2) We have never declared or paid any cash dividends on either class A or class B common stock.

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

Forward-Looking Information

This Annual Report contains forward-looking statements within the meaning of Section 21E of the Exchange Act. For this purpose, any statements contained herein that are not statements of historical fact, including without limitation, certain statements regarding industry prospects and our results of operations or financial position, may be deemed to be forward-looking statements. Without limiting the foregoing, the words "believes," "anticipates," "plans," "expects," and similar expressions are intended to identify forward-looking statements. The important factors discussed under "Part I. Item 1A. Risk Factors," among others, could cause actual results to differ materially from those indicated by forward-looking statements made herein and presented elsewhere by management from time to time. Such forward-looking statements represent management's current expectations and are inherently uncertain. Investors are warned that actual results may differ from management's expectations.

Management's Discussion and Analysis for the Year Ended December 31, 2018

Management's discussion and analysis of financial condition and results of operations for the year ended December 31, 2018, including comparison of our results for the years ended December 31, 2019 and 2018, is included in Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2019.

Business Overview

MicroStrategy pursues two corporate strategies in the operation of its business. One strategy is to grow our enterprise analytics software business and the other strategy is to acquire and hold bitcoin.

We are a global leader in enterprise analytics software and services. Our vision is to enable Intelligence Everywhere. The MicroStrategy platform brings together data from our customers' enterprise applications, such as their financial systems, human resources systems, and supply chain and customer relationship management tools, to provide analytics for actionable insights. Customers can also use our consulting and education offerings to harness MicroStrategy's innovative technology and empower their workforce to make better decisions.

Our customers include leading companies from a wide range of industries, including retail, consulting, technology, manufacturing, banking, insurance, finance, healthcare, telecommunications, as well as the public sector.

The analytics market is highly competitive. Our future success depends on the effectiveness with which we can differentiate our offerings from those offered by large software vendors that provide products across multiple lines of business, including one or more products that directly compete with our offerings, and other potential competitors across analytics implementation projects of varying sizes. We believe a key differentiator of MicroStrategy is our modern, open, comprehensive enterprise platform that can be extended to other tools and systems, can scale across the enterprise, is optimized for cloud or on-premises deployments, and can be combined with unique packages of our expert services and education offerings.

In 2021, we determined also to pursue as part of our overall business strategy, a strategy of investing our liquid assets that exceed working capital requirements in bitcoin, and we may from time to time, subject to market conditions, issue debt or equity securities in capital raising transactions with the objective of using the proceeds to purchase bitcoin. We believe that our bitcoin strategy is complementary to our analytics software and services business, as we believe that our bitcoin and related activities in support of the bitcoin network enhance awareness of our brand and can provide opportunities to secure new customers for our analytics offerings. We are also exploring opportunities to apply bitcoin related technologies such as blockchain analytics into our software offerings. We view our bitcoin holdings as long-term holdings and we do not plan to engage in regular trading of bitcoin or to hedge or otherwise enter into derivative contracts with respect to our bitcoin holdings, though we may sell bitcoin in future periods as needed to generate cash for treasury management and other general corporate purposes. As of February 8, 2021, the Company holds approximately 71,079 bitcoin that were acquired at an aggregate purchase price of \$1.145 billion and an average purchase price of approximately \$16,109 per bitcoin, inclusive of fees and expenses.

Impact of COVID-19 on Our Software Strategy

The COVID-19 pandemic has resulted, and is likely to continue to result, in significant economic disruption. It has already disrupted global travel and supply chains and adversely impacted global commercial activity. Considerable uncertainty still surrounds COVID-19 and its potential long-term economic effects, as well as the effectiveness of any responses taken by government authorities and businesses. The travel restrictions, limits on hours of operations and/or closures of non-essential businesses, and other efforts to curb the spread of COVID-19 have significantly disrupted business activity globally.

Significant uncertainty exists concerning the impact of the COVID-19 pandemic on our customers' and prospects' business and operations in future periods. Although our product licenses revenues were not materially impacted by the COVID-19 pandemic during the year ended December 31, 2020, we believe our product licenses revenues may be negatively impacted in future periods until the effects of the pandemic have subsided due to a general increase in the time it takes to close deals in the current depressed macroeconomic environment. Although we continued to see high renewal rates in our product support services during the year ended December 31, 2020, we believe our product support revenues may be negatively impacted in future periods by the overall depressed macroeconomic environment and to the extent that customers require extended payment terms or determine not to renew their product support arrangements as part of their efforts to reduce expenses. Similarly, we may experience declines in our consulting revenues in future periods due to the overall depressed macroeconomic environment and as our customers continue to operate in remote work environments and aim to reduce expenses. The uncertainty related to COVID-19 may also result in increased volatility in the financial projections we use as the basis for estimates and assumptions used in our financial statements.

We are also continuing to adapt our operations to meet the challenges of this uncertain and rapidly evolving situation, including establishing remote working arrangements for our employees, limiting non-essential business travel, and cancelling or shifting our customer, employee, and industry events to a virtual-only format for the foreseeable future. Our sales and marketing expenses decreased significantly during the year ended December 31, 2020, as we adapted to the challenges of selling in the current depressed macroeconomic environment, adopted virtual sales and marketing practices, and streamlined our team to sell in this new environment.

We have received, and may continue to receive, government assistance from various relief packages available in countries where we operate. For example, in the United States, the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") was enacted on March 27, 2020 to provide broad-based economic relief to various sectors of the U.S. economy through a variety of means, including payroll and income tax deferrals and employee retention credits. In the Asia Pacific region, government assistance provided to us has primarily been in the form of employer payroll tax exemptions. We have deferred payment of \$4.6 million of our employer portion of U.S. social security taxes accrued through December 31, 2020, half of which we expect to pay by December 31, 2021 and the remainder by December 31, 2022. Where taxes payable to government entities have been deferred to a later date, no reduction of expenses has been recorded.

Effects of the COVID-19 pandemic that may negatively impact our business in future periods include, but are not limited to: limitations on the ability of our customers to conduct their business, purchase our products and services, and make timely payments; curtailed consumer spending; deferred purchasing decisions; delayed consulting services implementations; and decreases in product licenses revenues driven by channel partners. We will continue to actively monitor the nature and extent of the impact to our business, operating results, and financial condition.

Treasury Reserve Policy and Bitcoin Acquisition Strategy

In September 2020, our Board of Directors adopted a Treasury Reserve Policy (as amended to date, the "Treasury Reserve Policy") that updated our treasury management and capital allocation strategies, under which our treasury reserve assets will consist of:

- cash and cash equivalents and short-term investments ("Cash Assets") held by us that exceed working capital requirements; and

- bitcoin held by us, with bitcoin serving as the primary treasury reserve asset on an ongoing basis, subject to market conditions and anticipated needs of the business for Cash Assets.

As part of these treasury management and capital allocation strategies, we purchased a total of approximately 70,469 bitcoins at an aggregate purchase price of approximately \$1.125 billion in 2020 for an average purchase price of approximately \$15,964 per bitcoin, inclusive of fees and expenses. These purchases included purchases of bitcoin using the net proceeds of issuance of \$650.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2025 in the fourth quarter of 2020.

At December 31, 2020, we carried \$1.054 billion of digital assets on our balance sheet, consisting of the approximately 70,469 bitcoins and reflecting \$70.7 million in cumulative impairment losses attributable to bitcoin trading price fluctuations, and held \$59.7 million in cash and cash equivalents, compared to no digital assets and \$456.7 million in cash and cash equivalents at December 31, 2019, reflecting the shift in our liquid asset holdings following the adoption of our new Treasury Reserve Policy. Digital asset impairment losses of \$70.7 million incurred in 2020 represented 17.5% of our operating expenses for the year, compared to no digital asset impairment losses for 2019, contributing to our net loss of \$7.5 million for 2020 compared to net income of \$34.4 million in 2019.

In 2021, we determined to adopt, in addition to and in conjunction with our Treasury Reserve Policy, a business strategy of purchasing bitcoin, and we may from time to time, subject to market conditions, issue debt or equity securities in capital raising transactions with the objective of using the proceeds to purchase bitcoin. We view our bitcoin holdings as long-term holdings and we do not plan to engage in regular trading of bitcoin or to hedge or otherwise enter into derivative contracts with respect to our bitcoin holdings, though we may sell bitcoins in future periods as needed to generate cash for treasury management and other general corporate purposes.

As of February 8, 2021, we held approximately 71,079 bitcoins that were acquired at an aggregate purchase price of \$1.145 billion and an average purchase price of approximately \$16,109 per bitcoin, inclusive of fees and expenses.

Operating Highlights

The following table sets forth certain operating highlights (in thousands) for the years ended December 31, 2020 and 2019:

	Years Ended December 31,	
	2020	2019
Revenues		
Product licenses	\$ 86,743	\$ 87,471
Subscription services	33,082	29,394
Total product licenses and subscription services	119,825	116,865
Product support	284,434	292,035
Other services	76,476	77,427
Total revenues	480,735	486,327
Cost of revenues		
Product licenses	2,293	2,131
Subscription services	14,833	15,161
Total product licenses and subscription services	17,126	17,292
Product support	23,977	28,317
Other services	49,952	54,365
Total cost of revenues	91,055	99,974
Gross profit	389,680	386,353
Operating expenses		
Sales and marketing	148,910	191,235
Research and development	103,561	109,423
General and administrative	80,136	86,697
Digital asset impairment losses	70,698	0
Total operating expenses	403,305	387,355
Loss from operations	\$ (13,625)	\$ (1,002)

We base our internal operating expense forecasts on expected revenue trends and strategic objectives. Many of our expenses, such as office leases and certain personnel costs, are relatively fixed. Accordingly, any shortfall in revenue may cause significant variation in our operating results. In addition, we have incurred and may continue to incur significant impairment losses on our digital assets and we may recognize gains upon sale of our digital assets in the future, which would be presented net of any impairment losses within operating expenses. We therefore believe that quarter-to-quarter comparisons of our operating results may not be a good indication of our future performance.

Share-based Compensation Expense

As discussed in Note 12, Share-based Compensation, to the Consolidated Financial Statements, we have outstanding stock options to purchase shares of our class A common stock, restricted stock units, and certain other stock-based awards under our 2013 Equity Plan. Share-based compensation expense (in thousands) from these awards was recognized in the following cost of revenues and operating expense line items in our Consolidated Statements of Operations for the periods indicated:

	Years Ended December 31,	
	2020	2019
Cost of subscription services revenues	\$ 75	\$ 7
Cost of product support revenues	155	331
Cost of consulting revenues	23	198
Cost of education revenues	202	20
Sales and marketing	1,609	1,943
Research and development	2,740	2,460
General and administrative	6,349	5,250
Total share-based compensation expense	<u>\$ 11,153</u>	<u>\$ 10,209</u>

As of December 31, 2020, we estimated that approximately \$36.6 million of additional share-based compensation expense for awards granted under the 2013 Equity Plan will be recognized over a remaining weighted average period of 3.1 years.

Non-GAAP Financial Measures

We are providing supplemental financial measures for (i) non-GAAP income from operations that excludes the impact of our share-based compensation expense and impairment losses and gains on sale from intangible assets, which include our digital assets, (ii) non-GAAP net income and non-GAAP diluted earnings per share that exclude the impact of our share-based compensation expense, impairment losses and gains on sale from intangible assets, which include our digital assets and the Domain Name Sale in the second quarter of 2019, interest expense arising from the amortization of the debt discount and issuance costs on our convertible senior notes, and related income tax effects, and (iii) certain non-GAAP constant currency revenues, cost of revenues, and operating expenses that exclude foreign currency exchange rate fluctuations. These supplemental financial measures are not measurements of financial performance under generally accepted accounting principles in the United States ("GAAP") and, as a result, these supplemental financial measures may not be comparable to similarly titled measures of other companies. Management uses these non-GAAP financial measures internally to help understand, manage, and evaluate our business performance and to help make operating decisions.

We believe that these non-GAAP financial measures are also useful to investors and analysts in comparing our performance across reporting periods on a consistent basis. The first supplemental financial measure excludes (i) a significant non-cash expense that we believe is not reflective of our general business performance, and for which the accounting requires management judgment and the resulting share-based compensation expense could vary significantly in comparison to other companies and (ii) significant impairment losses and gains on sale from intangible assets, which include our bitcoin. The second set of supplemental financial measures excludes the impact of (i) share-based compensation expense, (ii) impairment losses and gains on sale from intangible assets, which include our bitcoin and the Domain Name Sale, which was outside of our normal business operations, (iii) non-cash interest expense arising from the amortization of the debt discount and issuance costs related to our convertible senior notes, and (iv) related income tax effects. Although the portion of non-cash interest expense related to the amortization of the debt discount will be eliminated upon our planned adoption of ASU 2020-06 on January 1, 2021, excluding the current year non-cash interest expense related to both the amortization of the debt discount and the issuance costs will allow for greater comparability of our results after we adopt the new accounting rules. The third set of supplemental financial measures excludes changes resulting from fluctuations in foreign currency exchange rates so that results may be compared to the same period in the prior year on a non-GAAP constant currency basis. We believe the use of these non-GAAP financial measures can also facilitate comparison of our operating results to those of our competitors.

Non-GAAP financial measures are subject to material limitations as they are not in accordance with, or a substitute for, measurements prepared in accordance with GAAP. For example, we expect that share-based compensation expense, which is excluded from the first two non-GAAP financial measures, will continue to be a significant recurring expense over the coming years and is an important part of the compensation provided to certain employees, officers, and directors. Similarly, we expect that the portion of interest expense arising from the amortization of debt issuance costs will continue to be a recurring expense over the term of the convertible senior notes, even after our planned adoption of ASU 2020-06 on January 1, 2021. We have also excluded impairment losses and gains on sale from intangible assets from the first two non-GAAP financial measures, either of which may occur in future periods as a result of our continued holdings of significant amounts of bitcoin. Our non-GAAP financial measures are not meant to be considered in isolation and should be read only in conjunction with our Consolidated Financial Statements, which have been prepared in accordance with GAAP. We rely primarily on such Consolidated Financial Statements to understand, manage, and evaluate our business performance and use the non-GAAP financial measures only supplementally.

The following is a reconciliation of our non-GAAP income from operations, which excludes the impact of (i) share-based compensation expense and (ii) impairment losses and gains on sale from intangible assets, which include our digital assets, to its most directly comparable GAAP measures (in thousands) for the periods indicated:

	Years Ended December 31,	
	2020	2019
Reconciliation of non-GAAP income from operations:		
Loss from operations	\$ (13,625)	\$ (1,002)
Share-based compensation expense	11,153	10,209
Digital asset impairment losses	70,698	0
Non-GAAP income from operations	<u>\$ 68,226</u>	<u>\$ 9,207</u>

The following are reconciliations of our non-GAAP net income and non-GAAP diluted earnings per share, in each case excluding the impact of (i) share-based compensation expense, (ii) impairment losses and gains on sale from intangible assets, which include our digital assets and the Domain Name Sale in 2019, (iii) interest expense arising from the amortization of the debt discount and issuance costs on our convertible senior notes, and (iv) related income tax effects to their most directly comparable GAAP measures (in thousands, except per share data) for the periods indicated:

	Years Ended December 31,	
	2020	2019
Reconciliation of non-GAAP net income:		
Net (loss) income	\$ (7,524)	\$ 34,355
Share-based compensation expense	11,153	10,209
Digital asset impairment losses	70,698	0
Gain from Domain Name Sale	0	(29,829)
Interest expense arising from amortization of debt discount and issuance costs	1,543	0
Income tax effects (1)	(25,841)	7,450
Non-GAAP net income	<u>\$ 50,029</u>	<u>\$ 22,185</u>
Reconciliation of non-GAAP diluted earnings per share:		
Diluted (loss) earnings per share	\$ (0.78)	\$ 3.33
Share-based compensation expense (per diluted share)	1.15	0.99
Digital asset impairment losses (per diluted share)	7.31	0.00
Gain from Domain Name Sale (per diluted share)	0.00	(2.89)
Interest expense arising from amortization of debt discount and issuance costs (per diluted share)	0.16	0.00
Income tax effects (per diluted share)	(2.67)	0.72
Non-GAAP diluted earnings per share	<u>\$ 5.17</u>	<u>\$ 2.15</u>

(1) Income tax effects reflect the net tax effects of stock-based compensation expense, digital asset impairment losses, gain from the Domain Name Sale, and interest expense for amortization of debt discount and issuance costs.

The following are reconciliations of certain non-GAAP constant currency revenues, cost of revenues, and operating expenses to their most directly comparable GAAP measures (in thousands) for the periods indicated.

	Years Ended December 31,					
	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2020	2020	2020	2019	2020	2020
Product licenses revenues	\$ 86,743	\$ (1,227)	\$ 87,970	\$ 87,471	-0.8%	0.6%
Subscription services revenues	33,082	121	32,961	29,394	12.5%	12.1%
Product support revenues	284,434	(358)	284,792	292,035	-2.6%	-2.5%
Other services revenues	76,476	304	76,172	77,427	-1.2%	-1.6%
Cost of product support revenues	23,977	(142)	24,119	28,317	-15.3%	-14.8%
Cost of other services revenues	49,952	(347)	50,299	54,365	-8.1%	-7.5%
Sales and marketing expenses	148,910	(2,184)	151,094	191,235	-22.1%	-21.0%
Research and development expenses	103,561	42	103,519	109,423	-5.4%	-5.4%
General and administrative expenses	80,136	(444)	80,580	86,697	-7.6%	-7.1%

	Years Ended December 31,					
	GAAP	Foreign Currency Exchange Rate Impact (1)	Non-GAAP Constant Currency (2)	GAAP	GAAP % Change	Non-GAAP Constant Currency % Change (3)
	2019	2019	2019	2018	2019	2019
Product licenses revenues	\$ 87,471	\$ (3,642)	\$ 91,113	\$ 88,057	-0.7%	3.5%
Subscription services revenues	29,394	(333)	29,727	29,570	-0.6%	0.5%
Product support revenues	292,035	(7,110)	299,145	296,216	-1.4%	1.0%
Other services revenues	77,427	(2,091)	79,518	83,795	-7.6%	-5.1%
Cost of product support revenues	28,317	(479)	28,796	20,242	39.9%	42.3%
Cost of other services revenues	54,365	(1,834)	56,199	60,773	-10.5%	-7.5%
Sales and marketing expenses	191,235	(5,169)	196,404	205,525	-7.0%	-4.4%
Research and development expenses	109,423	(1,143)	110,566	102,499	6.8%	7.9%
General and administrative expenses	86,697	(1,029)	87,726	86,134	0.7%	1.8%

- (1) The “Foreign Currency Exchange Rate Impact” reflects the estimated impact from fluctuations in foreign currency exchange rates on international components of our Consolidated Statements of Operations. It shows the increase (decrease) in material international revenues or expenses, as applicable, from the same period in the prior year, based on comparisons to the prior year quarterly average foreign currency exchange rates. The term “international” refers to operations outside of the United States and Canada.

- (2) The “Non-GAAP Constant Currency” reflects the current period GAAP amount, less the Foreign Currency Exchange Rate Impact.
- (3) The “Non-GAAP Constant Currency % Change” reflects the percentage change between the current period Non-GAAP Constant Currency amount and the GAAP amount for the same period in the prior year.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our Consolidated Financial Statements, which have been prepared in accordance with GAAP.

The preparation of our Consolidated Financial Statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, and equity, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. These estimates, particularly estimates relating to our convertible senior notes and revenue recognition, have a material impact on our Consolidated Financial Statements. Actual results and outcomes could differ from these estimates and assumptions.

Convertible Debt Arrangement

As discussed in Note 9, Convertible Senior Notes, to the Consolidated Financial Statements, we issued convertible senior notes in December 2020. As the notes contain conversion features, we must separate the debt and equity components of the notes. The carrying amount of the liability component is determined by measuring the fair value of a similar debt instrument without any associated conversion features at the time of issuance and the carrying amount of the equity component is determined by deducting the fair value of the liability component from the initial proceeds of the notes. We also allocate issuance costs associated with the offering between debt and equity based on their relative carrying values at the time of issuance. Such issuance costs are taken as a direct reduction to the debt and equity components. Both the difference between the principal and the liability component's initial carrying value and the issuance costs allocated to the debt component are amortized to interest expense using the effective interest method over the expected term of the notes.

In determining the fair value of a similar debt instrument without any associated conversion features, we estimated a nonconvertible debt borrowing rate at the time of issuance using a blend of different methodologies, which considered Level 2 inputs such as observable market prices of our debt and class A common stock, our historical and implied class A common stock volatility, a synthetic credit rating consistent with that utilized for determining the incremental borrowing rate for our accounting of leasing arrangements, and analysis of similar convertible debt issuances and their equivalent nonconvertible debt yields.

Revenue Recognition

We recognize revenue using a five-step model:

- (i) Identifying the contract(s) with a customer,
- (ii) Identifying the performance obligation(s),
- (iii) Determining the transaction price,
- (iv) Allocating the transaction price to the performance obligations in the contract, and
- (v) Recognizing revenue when, or as, we satisfy a performance obligation.

We have elected to exclude taxes assessed by government authorities in determining the transaction price, and therefore revenue is recognized net of taxes collected from customers.

Performance Obligations and Timing of Revenue Recognition

We primarily sell goods and services that fall into the categories discussed below. Each category contains one or more performance obligations that are either (i) capable of being distinct (i.e., the customer can benefit from the good or service on its own or together with readily available resources, including those purchased separately from us) and distinct within the context of the contract (i.e., separately identifiable from other promises in the contract) or (ii) a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer. Aside from our term and perpetual product licenses, which are delivered at a point in time, the majority of our services are delivered over time.

Product Licenses

We sell different types of business intelligence software, licensed on a term or perpetual basis and installed either on premises or on a public cloud that is procured and managed by the customer. Although product licenses are sold with product support, the software is fully functional at the outset of the arrangement and is considered a distinct performance obligation. Revenue from product license sales is recognized when control of the license is transferred to the customer, which is the later of delivery or commencement of the license term. We may also sell through resellers and OEMs who purchase our software for resale. In reseller arrangements, revenue is recognized when control of the license is transferred to the end user. In OEM arrangements, revenue is recognized when control of the license is transferred to the OEM.

Subscription Services

We also sell access to our software through MCE, a cloud subscription service, wherein customers access the software through a cloud environment that we manage on behalf of the customer. Control of the software itself does not transfer to the customer under this arrangement and is not considered a separate performance obligation. Cloud subscriptions are regularly sold on a standalone basis and include technical support, monitoring, backups, updates, and quarterly service reviews. Revenue related to cloud subscriptions is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to the software.

Product Support

In all product license transactions, customers are required to purchase a standard product support package and may also purchase a premium product support package for a fixed annual fee. All product support packages include both technical support and when-and-if-available software upgrades, which are treated as a single performance obligation as they are considered a series of distinct services that are substantially the same and have the same duration and measure of progress. Revenue from product support is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to product support.

Consulting Services

We sell consulting services to help customers plan and execute deployment of our software. Customers are not required to use consulting services to fully benefit from the software. Consulting services are regularly sold on a standalone basis and either (i) prepaid upfront or (ii) sold on a time and materials basis. Consulting arrangements are each considered separate performance obligations because they do not integrate with each other or with other offerings to deliver a combined output to the customer, do not modify or customize (or are not modified or customized by) each other or other offerings, and do not affect the customer's ability to use the other consulting services or our other offerings. Revenue under consulting arrangements is recognized over time as services are delivered. For time and materials-based consulting arrangements, we have elected the practical expedient of recognizing revenue upon invoicing since the invoiced amount corresponds directly to the value of our service to date.

Education Services

We sell various education and training services to our customers. Education services are sold on a standalone basis under two different types of arrangements: (i) annual subscriptions to live and on-demand training courses and (ii) custom courses purchased on an hourly basis. Education arrangements are each considered separate performance obligations because they do not integrate with each other or with other offerings to deliver a combined output to the customer, do not modify or customize (or are not modified or customized by) each other or other offerings, and do not affect the customer's ability to use the other education services or our other offerings. Revenue on annual subscriptions is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to the training courses. Revenue on custom courses are recognized on a time and materials basis as the services are delivered.

See Note 16, Segment Information, to the Consolidated Financial Statements for information regarding total revenues by geographic region.

Estimates and Judgments

We make estimates and judgments to allocate the transaction price based on an observable or estimated standalone selling price ("SSP"). We also make estimates and judgments with respect to capitalizing incremental costs to obtain a customer contract and determining the subsequent amortization period. These estimates and judgments are discussed further below.

Determining the Transaction Price

The transaction price includes both fixed and variable consideration. Variable consideration is included in the transaction price to the extent it is probable that a significant reversal will not occur. The amount of variable consideration excluded from the transaction price was not material for the years ended December 31, 2020 and 2019. Our estimates of variable consideration are also subject to subsequent true-up adjustments and may result in changes to our transaction prices. Such true-up adjustments have not been and are not expected to be material. We have the following sources of variable consideration:

- (i) Performance penalties – Subscription services and product support arrangements generally contain performance response time guarantees. For subscription services arrangements, we estimate variable consideration using a portfolio approach because performance penalties are tied to standard up-time requirements. For product support arrangements, we estimate variable consideration on a contract basis because such arrangements are customer-specific. For both subscription services and product support arrangements, we use an expected value approach to estimate variable consideration based on historical business practices and current and future performance expectations to determine the likelihood of incurring penalties.
- (ii) Extended payment terms – Our standard payment terms are generally within 180 days of invoicing. If extended payment terms are granted to customers, those terms generally do not exceed one year. For contracts with extended payment terms, we estimate variable consideration on a contract basis because such estimates are customer-specific, and we use an expected value approach to analyze historical business experience on a customer-by-customer basis to determine the likelihood that extended payment terms lead to an implied price concession.
- (iii) Sales and usage-based royalties – Certain product license arrangements include sales or usage-based royalties, covering both product license and product support. In these arrangements, we use an expected value approach to estimate and recognize revenue for royalty sales each period, utilizing historical data on a contract-by-contract basis. True-up adjustments are recorded in subsequent periods when royalty reporting is received from the OEMs.

We provide a standard software assurance warranty to repair, replace, or refund software that does not perform in accordance with documentation. The standard software assurance warranty period is generally less than one year. Assurance warranty claims were not material for the years ended December 31, 2020 and 2019.

We do not adjust the transaction price for significant financing components where the time period between cash payment and performance is one year or less. However, there are circumstances where the timing between cash payment and performance may exceed one year. These circumstances generally involve prepaid multi-year product support and subscription services arrangements where the customer determines when the service is utilized (e.g., when to request on-call support services or when to use and access the software in the cloud). In these circumstances, we have determined no significant financing component exists because the customer controls when to utilize the service and because there are significant business purposes behind the timing difference between payment and performance (e.g., maximizing profit in the case of product support services and ensuring collectability in the case of subscription services).

Allocating the Transaction Price Based on Standalone Selling Prices (SSP)

We allocate the transaction price to each performance obligation in a contract based on its relative SSP. The SSP is the price, or estimated price, of the software or service when sold on a standalone basis at contract inception. In circumstances where SSP is not directly observable, we estimate SSP using the following methodologies:

- (i) Product licenses – Product licenses are not sold on a standalone basis and pricing is highly variable. We establish SSP of product licenses using a residual approach after first establishing the SSP of standard product support. Standard product support is sold on a standalone basis within a narrow range of the stated net license fee, and because an economic relationship exists between product licenses and standard product support, we have concluded that the residual method to estimate SSP of product licenses sold on both a perpetual and term basis is a fair allocation of the transaction price.
- (ii) Subscription services – Given the highly variable selling price of subscription services, we establish the SSP of our subscription services arrangements using a similar residual approach after first establishing the SSP of consulting and education services to the extent they are included in the arrangement. We have concluded that the residual method to estimate SSP of our subscription services is a fair allocation of the transaction price.
- (iii) Standard product support – We establish SSP of standard product support as a percentage of the stated net license fee, given such pricing is consistent with our normal pricing practices and there exists sufficient history of customers renewing standard product support on a standalone basis at similar percentages. Semi-annually, we track renewal rates negotiated when standard product support is initially sold with a perpetual license in order to determine the SSP of standard product support within each geographic region for the upcoming quarter. If the stated standard product support fee falls within the SSP range, the specific rate in the contract will be used to determine SSP. If the stated fee is above or below SSP, the highest or lowest end of the range, respectively, will generally be used to determine SSP of standard product support for perpetual licenses. For term licenses, we determine SSP of standard product support at the lower end of the SSP range used for perpetual licenses because the term licenses are time bound, resulting in a lower value placed on product support as compared to a perpetual license.
- (iv) Premium product support, consulting services, and education services – SSP of premium product support, consulting services, and education services is established by using a bell-shaped curve approach to define a narrow range within each geographic region in which the services are discounted off of the list price on a standalone basis.

We often provide options to purchase future offerings at a discount. We analyze the option price against the previously established SSP of the goods or services to determine if the options represent material rights that should be accounted for as separate performance obligations. In general, an option sold at or above SSP is not considered a material right because the customer could have received that right without entering into the contract. If a material right exists, revenue associated with the option is deferred and recognized when the future goods or services are transferred, or when the option expires. During the years ended December 31, 2020 and 2019, separate performance obligations arising from future purchase options have not been material.

Incremental Costs to Obtain Customer Contracts

Incremental costs incurred to obtain contracts with customers include certain variable compensation (e.g., commissions and bonuses) paid to our sales team. Although we may bundle our goods and services into one contract, commissions are individually determined on each distinct good or service in the contract. We expense as incurred those amounts earned on consulting and education services, which are generally performed within a one-year period and primarily sold on a standalone basis. We also expense as incurred those amounts earned on product license sales, since the amount is earned when the license is delivered. We capitalize those amounts earned on initial-year product support and cloud subscriptions and amortize the costs over a period of time that is consistent with the pattern of transfer to the customer, which we have determined to be a period of three years. Although we typically sell product support and cloud subscriptions for a period of one year, a majority of customers renew their product support and cloud subscription arrangements. Three years is generally the period after which platforms are no longer supported by our support team and when customers generally choose to upgrade their software platform. We do not currently pay variable compensation on product support or cloud subscription renewals.

Results of Operations

Comparison of the Years Ended December 31, 2020 and 2019

Revenues

Except as otherwise indicated herein, the term “domestic” refers to operations in the United States and Canada and the term “international” refers to operations outside of the United States and Canada.

Product licenses and subscription services revenues. The following table sets forth product licenses and subscription services revenues (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		
	2020	2019	% Change
Product Licenses and Subscription Services Revenues:			
Product Licenses			
Domestic	\$ 51,504	\$ 45,850	12.3%
International	35,239	41,621	-15.3%
Total product licenses revenues	86,743	87,471	-0.8%
Subscription Services			
Domestic	24,684	21,453	15.1%
International	8,398	7,941	5.8%
Total subscription services revenues	33,082	29,394	12.5%
Total product licenses and subscription services revenues	\$ 119,825	\$ 116,865	2.5%

The following table sets forth a summary, grouped by size, of the number of recognized product licenses transactions for the periods indicated:

	Years Ended December 31,	
	2020	2019
Product Licenses Transactions with Recognized Licenses Revenue in the Applicable Period:		
More than \$1.0 million in licenses revenue recognized	10	10
Between \$0.5 million and \$1.0 million in licenses revenue recognized	18	17
Total	28	27
<i>Domestic:</i>		
More than \$1.0 million in licenses revenue recognized	8	7
Between \$0.5 million and \$1.0 million in licenses revenue recognized	10	10
Total	18	17
<i>International:</i>		
More than \$1.0 million in licenses revenue recognized	2	3
Between \$0.5 million and \$1.0 million in licenses revenue recognized	8	7
Total	10	10

The following table sets forth the recognized revenue (in thousands) attributable to product licenses transactions, grouped by size, and related percentage changes for the periods indicated:

	Years Ended December 31,		
	2020	2019	% Change
Product Licenses Revenue Recognized in the Applicable Period:			
More than \$1.0 million in licenses revenue recognized	\$ 25,599	\$ 13,830	85.1%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	12,096	11,233	7.7%
Less than \$0.5 million in licenses revenue recognized	49,048	62,408	-21.4%
Total	86,743	87,471	-0.8%
Domestic:			
More than \$1.0 million in licenses revenue recognized	20,108	8,707	130.9%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	6,568	6,908	-4.9%
Less than \$0.5 million in licenses revenue recognized	24,828	30,235	-17.9%
Total	51,504	45,850	12.3%
International:			
More than \$1.0 million in licenses revenue recognized	5,491	5,123	7.2%
Between \$0.5 million and \$1.0 million in licenses revenue recognized	5,528	4,325	27.8%
Less than \$0.5 million in licenses revenue recognized	24,220	32,173	-24.7%
Total	\$ 35,239	\$ 41,621	-15.3%

Product licenses revenues decreased \$0.7 million during 2020, as compared to the prior year. For the years ended December 31, 2020 and 2019, product licenses transactions with more than \$0.5 million in recognized revenue represented 43.5% and 28.7%, respectively, of our product licenses revenues. During 2020, our top three product licenses transactions totaled \$15.3 million in recognized revenue, or 17.6% of total product licenses revenues, compared to \$5.4 million, or 6.2% of total product licenses revenues, during 2019. Although our product licenses revenues were not materially impacted by the COVID-19 pandemic during the year ended December 31, 2020, we believe our product licenses revenues may be negatively impacted in future periods until the effects of the pandemic have subsided due to a general increase in the time it takes to close deals in the current depressed macroeconomic environment.

Domestic product licenses revenues. Domestic product licenses revenues increased \$5.7 million during 2020, as compared to the prior year, primarily due to an increase in the average deal size and the number of transactions with more than \$1.0 million in recognized revenue, partially offset by a decrease in the average deal size and the number of transactions with less than \$0.5 million in recognized revenue.

International product licenses revenues. International product licenses revenues decreased \$6.4 million during 2020, as compared to the prior year, primarily due to a decrease in the average deal size of transactions with less than \$0.5 million in recognized revenue and a \$1.2 million unfavorable foreign currency exchange impact, partially offset by an increase in the number of transactions with recognized revenue between \$0.5 million and \$1.0 million.

Subscription services revenues. Subscription services revenues are derived from MCE, a cloud subscription service, that are recognized ratably over the service period in the contract. Subscription services revenues increased \$3.7 million during 2020, as compared to the prior year, primarily due to an increase in the use of subscription services by existing customers and conversions to cloud-based subscriptions from existing on-premises customers.

Product support revenues. The following table sets forth product support revenues (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Product Support Revenues:			
Domestic	\$ 167,266	\$ 172,124	-2.8%
International	117,168	119,911	-2.3%
Total product support revenues	<u>\$ 284,434</u>	<u>\$ 292,035</u>	-2.6%

Product support revenues are derived from providing technical software support and software updates and upgrades to customers. Product support revenues are recognized ratably over the term of the contract, which is generally one year. Product support revenues decreased \$7.6 million during 2020, as compared to the prior year, primarily due to certain customers converting from perpetual product licenses to our subscription services or term product licenses offerings and a decrease in new product support contracts. Although our product support revenues were not materially impacted by the COVID-19 pandemic during the year ended December 31, 2020, we believe our product support revenues may be negatively impacted in future periods by the overall depressed macroeconomic environment resulting from the COVID-19 pandemic and to the extent that customers require extended payment terms or determine not to renew their product support arrangements as part of their efforts to reduce expenses.

Other services revenues. The following table sets forth other services revenues (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Other Services Revenues:			
Consulting			
Domestic	\$ 33,021	\$ 29,779	10.9%
International	38,324	39,880	-3.9%
Total consulting revenues	<u>71,345</u>	<u>69,659</u>	2.4%
Education	5,131	7,768	-33.9%
Total other services revenues	<u>\$ 76,476</u>	<u>\$ 77,427</u>	-1.2%

Consulting revenues. Consulting revenues are derived from helping customers plan and execute the deployment of our software. Consulting revenues increased \$1.7 million during 2020, as compared to the prior year, primarily due to an increase in billable hours worldwide, partially offset by a decrease in average bill rates and a decrease in billable travel and entertainment expenditures. Although our consulting revenues were not materially impacted by the COVID-19 pandemic during the year ended December 31, 2020, we believe our consulting revenues may be negatively impacted in future periods by the overall depressed macroeconomic environment resulting from the COVID-19 pandemic and as our customers continue to operate in remote work environments and aim to reduce expenses.

Education revenues. Education revenues are derived from the education and training that we provide to our customers to enhance their ability to fully utilize the features and functionality of our software. These offerings include self-tutorials, custom course development, joint training with customers' internal staff, and standard course offerings, with pricing dependent on the specific offering delivered. Education revenues decreased \$2.6 million during 2020, as compared to the prior year, primarily due to a reduction in the average sales price of our education offerings and education offerings that we made available at no charge for a limited time period during the first half of 2020 in response to the COVID-19 pandemic.

Costs and Expenses

Cost of revenues. The following table sets forth cost of revenues (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Cost of Revenues:			
Product licenses and subscription services:			
Product licenses	\$ 2,293	\$ 2,131	7.6%
Subscription services	14,833	15,161	-2.2%
Total product licenses and subscription services	17,126	17,292	-1.0%
Product support	23,977	28,317	-15.3%
Other services:			
Consulting	42,923	47,664	-9.9%
Education	7,029	6,701	4.9%
Total other services	49,952	54,365	-8.1%
Total cost of revenues	\$ 91,055	\$ 99,974	-8.9%

Cost of product licenses revenues. Cost of product licenses revenues consists of referral fees paid to channel partners, the costs of product manuals and media, and royalties paid to third-party software vendors. Cost of product licenses revenues did not materially change during 2020, as compared to the prior year.

Cost of subscription services revenues. Cost of subscription services revenues consists of equipment, facility and other related support costs, and personnel and related overhead costs. Subscription services headcount decreased 29.0% to 49 at December 31, 2020 from 69 at December 31, 2019. Cost of subscription services revenues did not materially change during 2020, as compared to the prior year.

Cost of product support revenues. Cost of product support revenues consists of personnel and related overhead costs, including those under our Enterprise Support program. Our Enterprise Support program utilizes primarily consulting personnel to provide product support to our customers at our discretion. Compensation related to personnel providing Enterprise Support services is reported as cost of product support revenues. Product support headcount decreased 29.7% to 154 at December 31, 2020 from 219 at December 31, 2019. Cost of product support revenues decreased \$4.3 million during 2020, as compared to the prior year, primarily due to a \$3.8 million decrease in compensation and related costs due to a decrease in product support staffing levels, a \$0.7 million decrease in facility and other related support costs, and a \$0.4 million decrease in travel and entertainment expenditures, partially offset by a \$1.1 million increase in compensation and related costs attributable to non-product support personnel providing increased Enterprise Support services.

Cost of consulting revenues. Cost of consulting revenues consists of personnel and related overhead costs, excluding those under our Enterprise Support program which are allocated to cost of product support revenues. Consulting headcount increased 0.3% to 393 at December 31, 2020 from 392 at December 31, 2019. Cost of consulting revenues decreased \$4.7 million during 2020, as compared to the prior year, primarily due to a \$5.1 million decrease in travel and entertainment expenditures as a result of restrictions placed on non-essential business travel during the COVID-19 pandemic and a \$0.9 million decrease in compensation and related costs attributable to consulting personnel providing increased Enterprise Support services, partially offset by a \$1.1 million increase in compensation and related costs due to an increase in average staffing levels and a \$0.7 million increase in subcontractor costs.

Cost of education revenues. Cost of education revenues consists of personnel and related overhead costs. Education headcount decreased 2.6% to 37 at December 31, 2020 from 38 at December 31, 2019. Cost of education revenues did not materially change during 2020, as compared to the prior year.

Sales and marketing expenses. Sales and marketing expenses consist of personnel costs (excluding those under our Enterprise Support program which are allocated to cost of product support revenues), commissions, office facilities, travel, advertising, public relations programs, and promotional events, such as trade shows, seminars, and technical conferences. Sales and marketing headcount decreased 19.8% to 479 at December 31, 2020 from 597 at December 31, 2019. The following table sets forth sales and marketing expenses (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Sales and marketing expenses	\$ 148,910	\$ 191,235	-22.1%

Sales and marketing expenses decreased \$42.3 million during 2020, as compared to the prior year, primarily due to a \$10.2 million decrease in variable compensation, which includes the cancellation of a sales employee awards event as a result of the COVID-19 pandemic, a \$9.9 million decrease in employee salaries due to a decrease in staffing levels, an \$8.7 million decrease in marketing and advertising costs as we transitioned from in-person to virtual marketing events, an \$8.0 million decrease in travel and entertainment expenditures as a result of restrictions placed on non-essential business travel during the COVID-19 pandemic, a \$2.7 million decrease in facility and other related support costs, a \$1.4 million decrease in subcontractor costs, a \$1.0 million decrease in recruiting costs, and a \$0.5 million decrease in compensation and related costs attributable to sales and marketing personnel providing increased Enterprise Support services. Included in sales and marketing expenses for 2020 is an aggregate \$2.2 million favorable foreign currency exchange impact.

Research and development expenses. Research and development expenses consist of the personnel costs for our software engineering personnel, depreciation of equipment, and other related costs. Research and development headcount decreased 13.6% to 642 at December 31, 2020 from 743 at December 31, 2019. The following table summarizes research and development expenses (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Research and development expenses	\$ 103,561	\$ 109,423	-5.4%

Research and development expenses decreased \$5.9 million during 2020, as compared to the prior year, primarily due to a \$2.4 million decrease in compensation and related costs due to a decrease in staffing levels and certain COVID-19-related employer payroll tax exemptions in the Asia Pacific region, a \$1.4 million decrease in recruiting costs, a \$1.1 million decrease in facility and other related support costs (which includes an allocated portion of the gain on partial lease termination of our corporate headquarters lease during the fourth quarter of 2020), a \$0.7 million decrease in travel and entertainment expenditures as a result of restrictions placed on non-essential business travel during the COVID-19 pandemic, a \$0.7 million decrease in consulting and advisory costs, and a \$0.5 million decrease in employee relations expenses, partially offset by a \$0.7 million increase in technology infrastructure costs.

General and administrative expenses. General and administrative expenses consist of personnel and related overhead costs, and other costs of our executive, finance, human resources, information systems, and administrative departments, as well as third-party consulting, legal, and other professional fees. General and administrative headcount decreased 28.1% to 243 at December 31, 2020 from 338 at December 31, 2019. The following table sets forth general and administrative expenses (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
General and administrative expenses	\$ 80,136	\$ 86,697	-7.6%

General and administrative expenses decreased \$6.6 million during 2020, as compared to the prior year, primarily due to a \$2.0 million decrease in bad debt expense, a \$1.9 million decrease in facility and other related support costs (which includes an allocated portion of the gain on partial lease termination of our corporate headquarters lease during the fourth quarter of 2020), a \$1.7 million decrease in travel and entertainment expenditures as a result of restrictions placed on non-essential business travel during the COVID-19 pandemic, a \$1.6 million decrease in compensation and related costs due to a decrease in staffing levels, a \$1.0 million decrease in recruiting costs, a \$0.9 million decrease in costs related to our corporate aircraft, and a \$0.5 million decrease in employee relations expenses, partially offset by a \$2.1 million increase in legal, consulting, and other advisory costs and a \$1.1 million net increase in share-based compensation expense. The \$1.1 million net increase in share-based compensation expense is primarily due to the grant of additional awards under the 2013 Equity Plan, partially offset by certain awards becoming fully vested and the forfeiture of certain stock options.

Digital asset impairment losses. Digital asset impairment losses are recognized when the carrying value of our digital assets exceeds their lowest fair value at any time since their acquisition. Impaired digital assets are written down to fair value at the time of impairment, and such impairment loss cannot be recovered for any subsequent increases in fair value. The following table sets forth digital asset impairment losses (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Digital asset impairment losses	\$ 70,698	\$ 0	n/a

We did not sell any of our digital assets during the year ended December 31, 2020.

Other (Expense) Income, Net

During 2020, other expense, net, of \$7.0 million was comprised primarily of foreign currency transaction net losses arising mainly from the revaluation of U.S. denominated cash balances held at international locations. During 2019, other income, net, of \$28.4 million was comprised primarily of a \$29.8 million gain from the Domain Name Sale in the second quarter of 2019.

(Benefit from) Provision for Income Taxes

During 2020, we recorded a benefit from income taxes of \$12.4 million on pre-tax losses of \$20.0 million that resulted in an effective tax rate of 62.3%, as compared to a provision for income taxes of \$3.9 million on pre-tax income of \$38.3 million that resulted in an effective tax rate of 10.2% during 2019. The change in our effective tax rate in 2020, as compared to the prior year, was primarily due to certain discrete items, overall income or loss level, and the change in the proportion of U.S. versus foreign income.

The Tax Act imposed a mandatory deemed repatriation transition tax ("Transition Tax") on previously untaxed accumulated and current earnings and profits of certain of our foreign subsidiaries. The Company recorded a final tax expense of \$37.2 million related to the Transition Tax, comprised of a provisional Transition Tax obligation of \$40.3 million in 2017 and a subsequent \$(3.1) million measurement-period adjustment in 2018. The Company has elected to pay the Transition Tax over an eight-year period beginning in 2018, as permitted under the Tax Act. As of December 31, 2020, \$28.0 million of the Transition Tax was unpaid, of which \$25.1 million is included in "Other long-term liabilities" and \$3.0 million is included in "Accounts payable, accrued expenses, and operating lease liabilities" in our Consolidated Balance Sheets.

As of December 31, 2020, we had no U.S. federal net operating loss ("NOL") carryforwards and \$7.9 million of foreign NOL carryforwards. As of December 31, 2020, foreign NOL carryforwards, other temporary differences and carryforwards, and credits resulted in deferred tax assets, net of valuation allowances, of \$6.5 million. As of December 31, 2020, we also had a deferred tax liability of \$8.2 million primarily due to the debt discount on the Company's convertible senior notes, property and equipment depreciation, and other temporary differences.

As of December 31, 2020, we had a valuation allowance of \$1.3 million primarily related to certain foreign tax credit carryforward tax assets that, in our present estimation, more likely than not will not be realized. If we are unable to regain profitability in future periods, we may be required to increase the valuation allowance against our deferred tax assets, which could result in a charge that would materially adversely affect net (loss) income in the period in which the charge is incurred. We will continue to regularly assess the realizability of deferred tax assets.

Beginning in the third quarter of 2020, we no longer intend to permanently reinvest our foreign earnings and profits. After taking into account the Transition Tax and GILTI tax, we recorded a tax expense of \$1.7 million on undistributed foreign earnings of \$136.3 million related to foreign withholding tax and U.S. state income taxes in 2020.

Deferred Revenue and Advance Payments

Deferred revenue and advance payments represent amounts received or due from our customers in advance of our transferring our software or services to the customer. In the case of multi-year service contracts arrangements, the Company generally does not invoice more than one year in advance of services and does not record deferred revenue for amounts that have not been invoiced and that require an additional contract. Revenue is subsequently recognized in the period(s) in which control of the software or services is transferred to the customer.

The following table summarizes deferred revenue and advance payments (in thousands), as of:

	December 31,	
	2020	2019
Current:		
Deferred product licenses revenue	\$ 1,495	\$ 481
Deferred subscription services revenue	26,258	16,561
Deferred product support revenue	156,216	161,670
Deferred other services revenue	7,281	8,395
Total current deferred revenue and advance payments	<u>\$ 191,250</u>	<u>\$ 187,107</u>
Non-current:		
Deferred product licenses revenue	\$ 139	\$ 293
Deferred subscription services revenue	8,758	97
Deferred product support revenue	5,055	3,417
Deferred other services revenue	710	537
Total non-current deferred revenue and advance payments	<u>\$ 14,662</u>	<u>\$ 4,344</u>
Total current and non-current:		
Deferred product licenses revenue	\$ 1,634	\$ 774
Deferred subscription services revenue	35,016	16,658
Deferred product support revenue	161,271	165,087
Deferred other services revenue	7,991	8,932
Total current and non-current deferred revenue and advance payments	<u>\$ 205,912</u>	<u>\$ 191,451</u>

Total deferred revenue and advance payments increased \$14.5 million in 2020, as compared to the prior year, primarily due to an increase in deferred revenue from new subscription services contracts, including certain multi-year arrangements and customers converting from product licenses to our subscription services offerings, and an increase in deferred revenue from new product license contracts, partially offset by decreases in deferred product support from certain customers converting from perpetual product licenses to term product licenses or subscription services offerings and the recognition of previously deferred other services revenues. Included in our international deferred revenue balances at December 31, 2020 is a \$4.3 million favorable foreign currency impact from the general weakening of the U.S. dollar compared to the same period in the prior year.

We expect to recognize approximately \$191.3 million of deferred revenue and advance payments over the next 12 months. However, the timing and ultimate recognition of our deferred revenue and advance payments depend on our

satisfaction of various performance obligations, and the amount of deferred revenue and advance payments at any date should not be considered indicative of revenues for any succeeding period.

Liquidity and Capital Resources

Liquidity. Our principal sources of liquidity are cash and cash equivalents and on-going collection of our accounts receivable. Cash and cash equivalents may include holdings in bank demand deposits, money market instruments, certificates of deposit, and U.S. Treasury securities. We have also periodically invested a portion of our cash in short-term investments with stated maturity dates between three months and one year from the purchase date. In 2020, we invested a significant portion of our cash in bitcoin. As discussed in Note 2.g, Summary of Significant Accounting Policies – Digital Assets, to our Consolidated Financial Statements, our bitcoin are classified as indefinite-lived intangible assets.

As of December 31, 2020 and 2019, the amount of cash and cash equivalents and short-term investments held by our U.S. entities was \$13.7 million and \$289.4 million, respectively, and by our non-U.S. entities was \$46.0 million and \$276.2 million, respectively. We earn a significant amount of our revenues outside the United States and our accumulated undistributed foreign earnings and profits as of December 31, 2020 and 2019 were \$136.3 million and \$231.2 million, respectively. Beginning in the third quarter of 2020, we no longer intend to permanently reinvest our foreign earnings and profits. After taking into account the Transition Tax and GILTI tax, we recorded a tax expense of \$1.7 million on the undistributed foreign earnings related to foreign withholding tax and U.S. state income taxes in 2020.

We believe that existing cash and cash equivalents held by us and cash and cash equivalents anticipated to be generated by us are sufficient to meet working capital requirements, anticipated capital expenditures, and contractual obligations for at least the next 12 months. As of December 31, 2020, we held approximately 70,469 bitcoins. We do not believe we will need to sell any of our bitcoins within the next twelve months to meet our working capital requirements, although we may from time to time sell bitcoins as part of treasury management operations, including to increase our cash balances. The Bitcoin market historically has been characterized by significant volatility in its price, limited liquidity and trading volumes compared to sovereign currencies markets, relative anonymity, a developing regulatory landscape, susceptibility to market abuse and manipulation, and various other risks inherent in its entirely electronic, virtual form and decentralized network. During times of instability in the Bitcoin market, we may not be able to sell our bitcoins at reasonable prices or at all. As a result, our bitcoins are less liquid than our existing cash and cash equivalents and may not be able to serve as a source of liquidity for us to the same extent as cash and cash equivalents. In addition, upon sale of our bitcoin, we may incur additional taxes related to any realized gains or we may incur capital losses as to which the tax deduction may be limited.

The following table sets forth a summary of our cash flows (in thousands) and related percentage changes for the periods indicated:

	Years Ended December 31,		% Change
	2020	2019	
Net cash provided by operating activities	\$ 53,619	\$ 60,867	-11.9%
Net cash (used in) provided by investing activities	\$ (1,018,693)	\$ 353,687	388.0%
Net cash provided by (used in) financing activities	\$ 563,233	\$ (66,150)	951.4%

Net cash provided by operating activities. The primary source of our cash provided by operating activities is cash collections of our accounts receivable from customers following the sales and renewals of our product licenses and product support, as well as consulting, education, and subscription services, and, in 2019, consideration received from the Domain Name Sale, net of related income taxes and immaterial transaction costs. Our primary uses of cash in operating activities are for personnel-related expenditures for software development, personnel-related expenditures for providing consulting, education, and subscription services, and for sales and marketing costs, general and administrative costs, and income taxes. Non-cash items to further reconcile net (loss) income to net cash provided by operating activities consist primarily of depreciation and amortization, reduction in the carrying amount of ROU assets, credit losses and sales allowances, deferred taxes, release of liabilities for unrecognized tax benefits,

share-based compensation expense, digital asset impairment losses, gain on partial lease termination, and amortization of the debt discount and issuance costs on our convertible senior notes.

Net cash provided by operating activities decreased \$7.2 million during 2020, as compared to the prior year, due to a \$41.9 million decrease in net income and a \$27.7 million decrease from changes in operating assets and liabilities, partially offset by a \$62.3 million increase from changes in non-cash items, which included digital asset impairment losses of \$70.7 million. Included in net cash provided by operating activities during 2019 is a gain of \$21.7 from the Domain Name Sale, net of related income taxes and immaterial transaction costs.

Net cash (used in) provided by investing activities. The changes in net cash (used in) provided by investing activities primarily relate to purchases of digital assets, purchases and redemptions of short-term investments, and expenditures on property and equipment. Net cash used in investing activities was \$1,018.7 million during 2020, while net cash provided by investing activities was \$353.7 million during 2019. The change in net cash (used in) provided by investing activities was due to a \$1,125.0 million purchase of bitcoins and a \$564.5 million decrease in proceeds from the redemption of short-term investments, partially offset by a \$310.6 million decrease in purchases of short-term investments and a \$6.5 million decrease in purchases of property and equipment.

Net cash provided by (used in) financing activities. The changes in net cash provided by (used in) financing activities primarily relate to the issuance of our convertible senior notes, purchase of treasury stock, and the exercise of stock options under the 2013 Equity Plan. Net cash provided by financing activities was \$563.2 million during 2020, while net cash used in financing activities was \$66.2 million in 2019. The change in net cash provided by (used in) financing activities was due to \$650.0 million gross proceeds from our convertible senior notes and a \$44.5 million increase in proceeds from the exercise of stock options under the 2013 Equity Plan, partially offset by a \$50.5 million increase in purchases of treasury stock and \$14.6 million of issuance costs paid for our convertible senior notes.

Convertible Senior Notes

In December 2020, we issued \$650.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2025. We invested the net proceeds from the issuance of the notes in bitcoin in accordance with our Treasury Reserve Policy pending the identification of working capital needs and other general corporate purposes. The terms of the convertible notes are discussed more fully in Note 9 to the Consolidated Financial Statements.

Share repurchases. Our Board of Directors has authorized us to repurchase up to an aggregate of \$800.0 million of our class A common stock from time to time on the open market through April 29, 2023 under the Share Repurchase Program, although the program may be suspended or discontinued by us at any time. The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors. The Share Repurchase Program may be funded using working capital, as well as proceeds from any other funding arrangements that we may enter into in the future. During the year ended December 31, 2020, we repurchased an aggregate of 444,769 shares of our class A common stock at an average price per share of \$139.12 and an aggregate cost of \$61.9 million pursuant to the Share Repurchase Program. During the year ended December 31, 2019, we repurchased an aggregate of 521,843 shares of our class A common stock at an average price per share of \$139.35 and an aggregate cost of \$72.7 million pursuant to the Share Repurchase Program.

On August 11, 2020, we announced that we commenced a “modified Dutch Auction” tender offer (the “Offer”) to purchase up to \$250.0 million in value of shares of our issued and outstanding class A common stock, or such lesser number of shares as are properly tendered and not properly withdrawn, at a price not greater than \$140.00 nor less than \$122.00 per share. The Offer expired at 5:00 p.m., New York City time, on September 10, 2020. During the year ended December 31, 2020, we repurchased an aggregate of 432,313 shares of our class A common stock through the Offer at a price of \$140.00 per share for an aggregate cost of \$61.3 million, inclusive of \$0.8 million in certain fees and expenses related to the Offer.

Contractual obligations. The following table shows future minimum rent payments under noncancellable operating leases, payments related to our convertible senior notes (semi-annual interest payments and principal upon maturity), payments under purchase agreements with initial terms of greater than one year, and anticipated payments related to the Transition Tax resulting from the Tax Act, based on the expected due dates of the various installments as of December 31, 2020 (in thousands):

	Payments due by period ended December 31,				
	Total	2021	2022-2023	2024-2025	Thereafter
<i>Contractual Obligations:</i>					
Operating leases	\$ 133,481	\$ 16,738	\$ 30,884	\$ 25,785	\$ 60,074
Convertible senior notes	674,443	4,740	9,750	659,953	0
Purchase obligations	34,602	13,825	18,378	1,351	1,048
Transition Tax	28,039	2,951	8,486	16,602	0
Total	<u>\$ 870,565</u>	<u>\$ 38,254</u>	<u>\$ 67,498</u>	<u>\$ 703,691</u>	<u>\$ 61,122</u>

Unrecognized tax benefits. As of December 31, 2020, we had \$4.6 million of total gross unrecognized tax benefits, including accrued interest, recorded in “Other long-term liabilities.” The timing of any payments that could result from these unrecognized tax benefits will depend on a number of factors, and accordingly the amount and period of any future payments cannot be estimated. We do not expect any significant tax payments related to these obligations during 2021.

Off-balance sheet arrangements. As of December 31, 2020, we did not have any off-balance sheet arrangements that had a material impact on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

Recent Accounting Standards

See Note 3, Recent Accounting Standards, to the Consolidated Financial Statements for further information.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The following discussion about our market risk exposures involves forward-looking statements. Actual results could differ materially from those projected in the forward-looking statements.

We are exposed to the impact of both market price changes in bitcoin and foreign currency fluctuations.

Market Price Risk of Bitcoin. We have invested a significant portion of our cash in bitcoin and, as of December 31, 2020, we held approximately 70,469 bitcoins. The carrying value of our bitcoins as of December 31, 2020 was \$1.054 billion, which reflects cumulative impairments of \$70.7 million, on our Consolidated Balance Sheet. As discussed in Note 2, Summary of Significant Accounting Policies, to the Consolidated Financial Statements, we account for our bitcoin as indefinite-lived intangible assets, which are subject to impairment losses if the fair value of our bitcoin decreases below their carrying value at any time since their acquisition. Impairment losses cannot be recovered for any subsequent increase in fair value. For example, the market price of one bitcoin in our principal market ranged from \$10,363.76 - \$29,321.90 during the three months ended December 31, 2020, but the carrying value of each bitcoin we held at the end of the reporting period reflects the lowest price of one bitcoin quoted on the active exchange at any time since its acquisition. Therefore, negative swings in the market price of bitcoin could have a material impact on our earnings and on the carrying value of our digital assets. Positive swings in the market price of bitcoin are not reflected in the carrying value of our digital assets and impact earnings only when the bitcoin is sold at a gain. For the year ended December 31, 2020, we incurred impairment losses of \$70.7 million on our bitcoin. As of February 8, 2021, at 4:00 p.m. EST, the market price of one bitcoin in our principal market was \$44,219.06.

Foreign Currency Risk. We conduct a significant portion of our business in currencies other than the U.S. dollar, the currency in which we report our Consolidated Financial Statements. International revenues accounted for 41.9%, 43.7%, and 42.3% of our total revenues for the years ended December 31, 2020, 2019, and 2018, respectively. We anticipate that international revenues will continue to account for a significant portion of our total revenues. The functional currency of each of our foreign subsidiaries is generally the local currency.

Assets and liabilities of our foreign subsidiaries are translated into U.S. dollars at exchange rates in effect as of the applicable Balance Sheet date and any resulting translation adjustments are included as an adjustment to stockholders' equity. Revenues and expenses generated from these subsidiaries are translated at average monthly exchange rates during the quarter in which the transactions occur. Gains and losses from transactions in local currencies are included in net income (loss).

As a result of transacting in multiple currencies and reporting our Consolidated Financial Statements in U.S. dollars, our operating results may be adversely impacted by currency exchange rate fluctuations in the future. The impact of foreign currency exchange rate fluctuations on current and comparable periods is described in the "Non-GAAP Financial Measures" section under "Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations."

We cannot predict the effect of exchange rate fluctuations upon our future results. We attempt to minimize our foreign currency risk by converting our excess foreign currency held in foreign jurisdictions to U.S. dollar-denominated cash accounts.

As of December 31, 2020, a 10% adverse change in foreign currency exchange rates versus the U.S. dollar would have decreased our aggregate reported cash and cash equivalents and short-term investments by 3.9%. If average exchange rates during the year ended December 31, 2020 had changed unfavorably by 10%, our revenues for the year ended December 31, 2020 would have decreased by 3.9%. During the year ended December 31, 2020, our revenues were lower by 0.2% as a result of a 0.1% unfavorable change in weighted average exchange rates, as compared to the prior year.

Item 8. Financial Statements and Supplementary Data

Our Consolidated Financial Statements, together with the related notes and the associated Reports of Independent Registered Public Accounting Firm, are set forth on the pages indicated in Item 15.

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

None.

Item 9A. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer and Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this Annual Report. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Our disclosure controls and procedures are designed to provide reasonable assurance of achieving their control objectives. Based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this Annual Report, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is defined in Rules 13a-15(f) and 15d-15(f) promulgated under the Exchange Act as a process designed by, or under the supervision of, the Company's principal executive and principal financial officers and effected by the Company's Board of Directors, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with GAAP. Such internal control 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 GAAP, 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. Projections of any evaluation of effectiveness to future periods are subject to the risk that the control may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the oversight of our Chief Executive Officer and Chief Financial Officer, our management conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2020 based on the criteria set forth in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on its assessment, management has determined that, as of December 31, 2020, our internal control over financial reporting is effective based on those criteria.

Our independent registered public accounting firm, KPMG LLP, which audited the Consolidated Financial Statements included in this Annual Report, has issued an attestation report on our internal control over financial reporting. This report is included in the Reports of Independent Registered Public Accounting Firm in "Item 15. Exhibits, Financial Statement Schedules."

Changes in Internal Control Over Financial Reporting

During the fiscal year ended December 31, 2020, we implemented new internal controls surrounding the acquisition, safeguarding, accounting, and reporting of our digital assets and the accounting and reporting of our convertible senior notes. Other than these new controls over our digital assets and convertible senior notes, there have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal year ended December 31, 2020 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. We are continually monitoring and assessing the effect of the COVID-19 pandemic on our internal control over financial reporting to minimize the impact on the design and operating effectiveness of such internal control. We have not experienced any material impact on our internal control over financial reporting despite the fact that many of our employees are working remotely as a result of the COVID-19 pandemic.

Item 9B. Other Information

2020 Cash Bonus Determinations for Certain Executive Officers

On February 8, 2021, the Company's Chief Executive Officer determined cash bonus awards for the following executive officers of the Company in the amounts set forth opposite their respective names, in each case with respect to the executive's performance in 2020:

Timothy E. Lang <i>Senior Executive Vice President & Chief Technology Officer</i>	\$	550,000
Phong Q. Le <i>President & Chief Financial Officer</i>	\$	900,000
W. Ming Shao <i>Senior Executive Vice President & General Counsel</i>	\$	550,000

The Chief Executive Officer determined the foregoing awards based on his subjective evaluation of the applicable executive's performance in the context of general economic and industry conditions and Company performance during 2020.

Salary Determinations for Certain Executive Officers

On February 8, 2021, the Company's Chief Executive Officer approved increases to the annual salaries of the following executive officers of the Company, resulting in the amounts set forth opposite their respective names, effective January 1, 2021:

Timothy E. Lang	\$	600,000
Phong Q. Le	\$	900,000
W. Ming Shao	\$	600,000

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The information required by this Item is incorporated herein by reference to the information provided under the headings “Executive Officers of the Company,” “Election of Directors – Nominees,” and “Corporate Governance and the Board of Directors and its Committees” in our definitive proxy statement to be filed with the SEC not later than 120 days after the fiscal year ended December 31, 2020 (the “2021 Proxy Statement”).

Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference to the information provided under the headings “Executive and Director Compensation,” “Compensation Committee Report,” and “Corporate Governance and the Board of Directors and its Committees – Compensation Committee” in the 2021 Proxy Statement.

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

The information required by this Item is incorporated herein by reference to the information provided under the headings “Security Ownership of Certain Beneficial Owners and Management” and “Executive and Director Compensation” in the 2021 Proxy Statement.

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

The information required by this Item is incorporated herein by reference to the information provided under the heading “Corporate Governance and the Board of Directors and its Committees” in the 2021 Proxy Statement.

Item 14. Principal Accountant Fees and Services

The information required by this Item is incorporated herein by reference to the information provided under the heading “Independent Registered Public Accounting Firm Fees and Services” in the 2021 Proxy Statement.

PART IV

Item 15. Exhibits, Financial Statement Schedules

(a) The following documents are filed as part of this Annual Report:

1. Consolidated Financial Statements

[Reports of Independent Registered Public Accounting Firm](#)

Page
67

Consolidated Financial Statements:

[Balance Sheets](#)

71

[Statements of Operations](#)

72

[Statements of Comprehensive \(Loss\) Income](#)

73

[Statements of Stockholders' Equity](#)

74

[Statements of Cash Flows](#)

75

[Notes to Consolidated Financial Statements](#)

76

2. [Exhibits](#)

109

3. Consolidated Financial Statement Schedule

[Schedule II - Valuation and Qualifying Accounts](#)

112

(b) Exhibits

We hereby file as part of this Annual Report the exhibits listed in the Index to Exhibits.

(c) Financial Statement Schedule

The following financial statement schedule is filed herewith:

Schedule II—Valuation and Qualifying Accounts

All other items included in an Annual Report on Form 10-K are omitted because they are not applicable or the answers thereto are none.

Item 16. Form 10-K Summary

None.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors MicroStrategy Incorporated:

Opinion on Internal Control Over Financial Reporting

We have audited MicroStrategy Incorporated and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2020, and the related notes and the financial statement schedule, Schedule II, Valuation and Qualifying Accounts, (collectively, the consolidated financial statements), and our report dated February 12, 2021 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

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

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

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ KPMG LLP

McLean, Virginia
February 12, 2021

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors MicroStrategy Incorporated:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of MicroStrategy Incorporated and subsidiaries (the Company) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 2020, and the related notes and the financial statement schedule, Schedule II, Valuation and Qualifying Accounts, (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the years in the three year period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 12, 2021 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 3 to the consolidated financial statements, the Company has changed its method of accounting for leases as of January 1, 2019 due to the adoption of Accounting Standards Update No. 2016-02, Leases (Topic 842) and its subsequent amendments ("ASU 2016-02").

Basis for Opinion

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

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

Critical Audit Matters

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

Evaluation of standalone selling price for standard product support

As discussed in Note 2(n) to the consolidated financial statements, the Company typically sells its software licenses (product licenses) together with technical support services and rights to when-and-if available software upgrades (standard product support). Product license revenue is recognized at the point when control to the license is transferred to the customer while standard product support revenue is recognized ratably over the term of the product support period. The accounting for revenue from contracts with multiple performance obligations requires the transaction price to be allocated to each distinct performance obligation based on their respective relative standalone selling price (SSP). Because product licenses are not sold on a standalone basis and because pricing is highly variable, the Company establishes SSP of product licenses using a residual approach after first establishing the SSP of standard product support based on observable standalone sales with pricing within a narrow range as a percentage of the net license fee.

We identified the evaluation of the SSP for standard product support as a critical audit matter. Especially subjective auditor judgment is required in evaluating the range of prices used to establish the SSP for standard product support which directly affects the amount of product license revenue recognized using a residual approach. Changes to the product support fee range could have a significant impact on the determination of the SSP for standard product support, impacting the amount and timing of revenues recognized.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the Company's revenue process, including controls over the methodology used to determine the standard product support SSP and controls over the Company's validation of the underlying data used in the SSP analysis. We assessed the range of prices based on observable inputs the Company used to determine SSP of standard product support by comparing them to the selling prices of standalone renewals for standard product support and evaluating whether the standalone prices were sufficiently clustered within a narrow range.

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

As discussed in Notes 2(m) and 9 to the consolidated financial statements, in December 2020, the Company issued \$650.0 million aggregate principal amount of 0.750% convertible senior notes in a private offering (the Convertible Notes). The Convertible Notes will mature on December 15, 2025, unless earlier converted, redeemed or repurchased in accordance with their terms. The total net proceeds from the offering, after deducting initial purchaser discounts and issuance costs, were approximately \$634.7 million. In accounting for the issuance of the Convertible Notes, the Company separated the Convertible Notes into liability and equity components. The initial carrying amount of the liability component was determined by measuring the fair value of a similar debt instrument without a conversion feature. The excess of the principal amount of the liability component over its carrying amount (the debt discount) and the issuance costs attributable to the liability component are amortized to interest expense over the contractual term of the Convertible Notes using an effective interest rate based on the interest rate of a similar debt instrument without a conversion feature.

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

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of an internal control over the Company's process to determine the interest rate that would be available to the Company for a similar debt instrument that does not have a conversion feature. We involved valuation professionals with specialized skills and knowledge who assisted in evaluating the Company's determination of the interest rate by comparing it against a range that was independently developed using publicly available market data for similar debt instruments of comparable entities.

Evaluation of audit evidence pertaining to the existence and control of digital assets

As discussed in Notes 2(g) and 5 to the consolidated financial statements, the Company accounts for its digital assets as indefinite-lived intangible assets. The digital assets are recorded at cost, net of any impairment losses incurred since acquisition. As of December 31, 2020, the Company has \$1.054 billion of digital assets, net of \$70.7 million of impairment.

We identified the evaluation of audit evidence pertaining to the existence of the digital assets and whether the Company controls the digital assets as a critical audit matter. Subjective auditor judgment was involved in determining the nature and extent of evidence required to assess the existence of the digital assets and whether the Company controls the digital assets, as control over the digital assets is provided through private cryptographic keys stored using third-party custodial services at multiple locations that are geographically dispersed. In addition, professionals with specialized skills and knowledge in blockchain technology were needed to assist in the evaluation of the sufficiency of certain audit procedures.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls over the digital assets process, including a control over the comparison of the Company's records of digital assets held to the custodial records. We involved professionals with specialized skills and knowledge in blockchain technology, who assisted in evaluating certain internal controls over the digital assets process performed at the custodial locations, related specifically to the generation of the private cryptographic keys and the storing of these keys. We obtained confirmation of the Company's digital assets in custody as of December 31, 2020 and compared the total digital assets confirmed to the Company's record of digital asset holdings. We also compared the Company's record of digital asset holdings to the records on the public blockchain using a software audit tool. We applied auditor judgment in determining the nature and extent of audit evidence required, especially related to assessing the existence of the digital assets and whether the Company controls the digital assets. We evaluated the sufficiency and appropriateness of audit evidence obtained by assessing the results of procedures performed over the digital assets.

/s/ KPMG LLP

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

McLean, Virginia
February 12, 2021

MICROSTRATEGY INCORPORATED
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	\$ 59,675	\$ 456,727
Restricted cash	1,084	1,089
Short-term investments	0	108,919
Accounts receivable, net	197,461	163,516
Prepaid expenses and other current assets	14,400	23,195
Total current assets	272,620	753,446
Digital assets	1,054,302	0
Property and equipment, net	42,975	50,154
Right-of-use assets	73,597	85,538
Deposits and other assets	15,615	8,024
Deferred tax assets, net	6,503	19,409
Total assets	\$ 1,465,612	\$ 916,571
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable, accrued expenses, and operating lease liabilities	\$ 45,119	\$ 33,919
Accrued compensation and employee benefits	49,249	48,792
Deferred revenue and advance payments	191,250	187,107
Total current liabilities	285,618	269,818
Convertible senior notes, net	486,366	0
Deferred revenue and advance payments	14,662	4,344
Operating lease liabilities	84,328	103,424
Other long-term liabilities	33,382	30,400
Deferred tax liabilities	8,211	26
Total liabilities	912,567	408,012
Commitments and Contingencies		
Stockholders' Equity		
Preferred stock undesignated, \$0.001 par value; 5,000 shares authorized; no shares issued or outstanding	0	0
Class A common stock, \$0.001 par value; 330,000 shares authorized; 16,307 shares issued and 7,623 shares outstanding, and 15,888 shares issued and 8,081 shares outstanding, respectively	16	16
Class B convertible common stock, \$0.001 par value; 165,000 shares authorized; 1,964 shares issued and outstanding, and 2,035 shares issued and outstanding, respectively	2	2
Additional paid-in capital	763,051	593,583
Treasury stock, at cost; 8,684 shares and 7,807 shares, respectively	(782,104)	(658,880)
Accumulated other comprehensive loss	(3,885)	(9,651)
Retained earnings	575,965	583,489
Total stockholders' equity	553,045	508,559
Total liabilities and stockholders' equity	\$ 1,465,612	\$ 916,571

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Years Ended December 31,		
	2020	2019	2018
Revenues:			
Product licenses	\$ 86,743	\$ 87,471	\$ 88,057
Subscription services	33,082	29,394	29,570
Total product licenses and subscription services	119,825	116,865	117,627
Product support	284,434	292,035	296,216
Other services	76,476	77,427	83,795
Total revenues	480,735	486,327	497,638
Cost of revenues:			
Product licenses	2,293	2,131	4,864
Subscription services	14,833	15,161	13,620
Total product licenses and subscription services	17,126	17,292	18,484
Product support	23,977	28,317	20,242
Other services	49,952	54,365	60,773
Total cost of revenues	91,055	99,974	99,499
Gross profit	389,680	386,353	398,139
Operating expenses:			
Sales and marketing	148,910	191,235	205,525
Research and development	103,561	109,423	102,499
General and administrative	80,136	86,697	86,134
Digital asset impairment losses	70,698	0	0
Total operating expenses	403,305	387,355	394,158
(Loss) income from operations	(13,625)	(1,002)	3,981
Interest income, net	710	10,909	11,855
Other (expense) income, net	(7,038)	28,356	4,646
(Loss) income before income taxes	(19,953)	38,263	20,482
(Benefit from) provision for income taxes	(12,429)	3,908	(2,019)
Net (loss) income	(7,524)	34,355	22,501
Basic (loss) earnings per share (1)	\$ (0.78)	\$ 3.35	\$ 1.98
Weighted average shares outstanding used in computing basic (loss) earnings per share	9,684	10,256	11,375
Diluted (loss) earnings per share (1)	\$ (0.78)	\$ 3.33	\$ 1.97
Weighted average shares outstanding used in computing diluted (loss) earnings per share	9,684	10,328	11,412

(1) Basic and fully diluted (loss) earnings per share for class A and class B common stock are the same.

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF COMPREHENSIVE (LOSS) INCOME
(in thousands)

	Years Ended December 31,		
	2020	2019	2018
Net (loss) income	\$ (7,524)	\$ 34,355	\$ 22,501
Other comprehensive income (loss), net of applicable taxes:			
Foreign currency translation adjustment	5,913	(11)	(4,128)
Unrealized (loss) gain on short-term investments	(147)	577	(430)
Total other comprehensive income (loss)	5,766	566	(4,558)
Comprehensive (loss) income	<u>\$ (1,758)</u>	<u>\$ 34,921</u>	<u>\$ 17,943</u>

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Total	Class A Common Stock		Class B Convertible Common Stock		Additional Paid-in Capital	Treasury Stock		Accumulated Other Comprehensive Income (Loss)	Retained Earnings
		Shares	Amount	Shares	Amount		Shares	Amount		
Balance at January 1, 2018	\$ 605,726	15,817	\$ 16	2,035	\$ 2	\$ 559,918	(6,405)	\$ (475,184)	\$ (5,659)	\$ 526,633
Net income	22,501	0	0	0	0	0	0	0	0	22,501
Other comprehensive loss	(4,558)	0	0	0	0	0	0	0	(4,558)	0
Issuance of class A common stock under stock option plans	2,471	20	0	0	0	2,471	0	0	0	0
Purchases of treasury stock	(110,977)	0	0	0	0	0	(880)	(110,977)	0	0
Share-based compensation expense	14,568	0	0	0	0	14,568	0	0	0	0
Balance at December 31, 2018	\$ 529,731	15,837	\$ 16	2,035	\$ 2	\$ 576,957	(7,285)	\$ (586,161)	\$ (10,217)	\$ 549,134
Net income	34,355	0	0	0	0	0	0	0	0	34,355
Other comprehensive income	566	0	0	0	0	0	0	0	566	0
Issuance of class A common stock under stock option plans	6,569	51	0	0	0	6,569	0	0	0	0
Purchases of treasury stock	(72,719)	0	0	0	0	0	(522)	(72,719)	0	0
Share-based compensation expense	10,057	0	0	0	0	10,057	0	0	0	0
Balance at December 31, 2019	\$ 508,559	15,888	\$ 16	2,035	\$ 2	\$ 593,583	(7,807)	\$ (658,880)	\$ (9,651)	\$ 583,489
Net loss	(7,524)	0	0	0	0	0	0	0	0	(7,524)
Other comprehensive income	5,766	0	0	0	0	0	0	0	5,766	0
Conversion of class B to class A common stock	0	71	0	(71)	0	0	0	0	0	0
Issuance of class A common stock under stock option plans	51,082	348	0	0	0	51,082	0	0	0	0
Purchases of treasury stock	(123,224)	0	0	0	0	0	(877)	(123,224)	0	0
Share-based compensation expense	10,576	0	0	0	0	10,576	0	0	0	0
Equity component of convertible senior notes, net of issuance cost and deferred tax liability	107,810	0	0	0	0	107,810	0	0	0	0
Balance at December 31, 2020	\$ 553,045	16,307	\$ 16	1,964	\$ 2	\$ 763,051	(8,684)	\$ (782,104)	\$ (3,885)	\$ 575,965

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,		
	2020	2019	2018
Operating activities:			
Net (loss) income	\$ (7,524)	\$ 34,355	\$ 22,501
Adjustments to reconcile net (loss) income to net cash provided by operating activities:			
Depreciation and amortization	13,332	8,594	3,701
Reduction in carrying amount of right-of-use assets	8,210	8,105	0
Credit losses and sales allowances	2,732	124	1,912
Net realized (gain) loss on short-term investments	(94)	41	153
Deferred taxes	(20,830)	(2,614)	(8,274)
Release of liabilities for unrecognized tax benefits	0	(2,837)	0
Share-based compensation expense	11,153	10,209	14,636
Digital asset impairment losses	70,698	0	0
Gain on partial lease termination	(2,820)	0	0
Amortization of debt discount and issuance costs on convertible senior notes	1,543	0	0
Changes in operating assets and liabilities:			
Accounts receivable	(774)	(3,672)	(8,357)
Prepaid expenses and other current assets	2,346	6,415	(6,561)
Deposits and other assets	416	761	(1,201)
Accounts payable and accrued expenses	9,445	(7,321)	3,378
Accrued compensation and employee benefits	(6,827)	(2,658)	5,116
Deferred revenue and advance payments	(20,223)	20,836	(22,126)
Operating lease liabilities	(11,171)	(8,620)	0
Other long-term liabilities	4,007	(851)	5,749
Net cash provided by operating activities	53,619	60,867	10,627
Investing activities:			
Purchases of digital assets	(1,125,000)	0	0
Proceeds from redemption of short-term investments	119,886	684,356	491,800
Purchases of property and equipment	(3,651)	(10,182)	(6,846)
Purchases of short-term investments	(9,928)	(320,487)	(694,018)
Net cash (used in) provided by investing activities	(1,018,693)	353,687	(209,064)
Financing activities:			
Proceeds from convertible senior notes classified as debt	496,473	0	0
Proceeds from convertible senior notes classified as equity	153,527	0	0
Issuance costs paid for convertible senior notes	(14,625)	0	0
Proceeds from sale of class A common stock under exercise of employee stock options	51,082	6,569	2,471
Purchases of treasury stock	(123,224)	(72,719)	(110,977)
Payments on capital lease obligations and other financing arrangements prior to the adoption of ASU 2016-02	0	0	(9)
Net cash provided by (used in) financing activities	563,233	(66,150)	(108,515)
Effect of foreign exchange rate changes on cash, cash equivalents, and restricted cash	4,784	(1,374)	(3,444)
Net (decrease) increase in cash, cash equivalents, and restricted cash	(397,057)	347,030	(310,396)
Cash, cash equivalents, and restricted cash, beginning of year	457,816	110,786	421,182
Cash, cash equivalents, and restricted cash, end of year	\$ 60,759	\$ 457,816	\$ 110,786
Supplemental disclosure of cash flow information:			
Cash paid during the year for income taxes, net of tax refunds	\$ 6,803	\$ 5,911	\$ 13,214

The accompanying notes are an integral part of these Consolidated Financial Statements.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(1) Organization

MicroStrategy pursues two corporate strategies in the operation of its business. One strategy is to grow our enterprise analytics software business and the other strategy is to acquire and hold bitcoin.

(2) Summary of Significant Accounting Policies

(a) Basis of Presentation

The accompanying Consolidated Financial Statements include the accounts of the Company and its subsidiaries. All significant intercompany accounts and transactions have been eliminated in consolidation.

Certain amounts in the Consolidated Statement of Cash Flows for the year ended December 31, 2019 have been reclassified to conform to current year presentation. In particular, reductions in the carrying amount of right-of-use ("ROU") assets have been reclassified from "Depreciation and amortization" to "Reduction in carrying amount of right-of-use assets" in operating activities.

As discussed in Note 3, Recent Accounting Standards, to the Consolidated Financial Statements, the Company adopted Accounting Standards Update No. 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, and its subsequent amendments ("ASU 2016-13"), effective January 1, 2020. Comparative prior period Consolidated Financial Statements have not been restated for ASU 2016-13.

In addition, the Company previously adopted Accounting Standards Update No. 2016-02, *Leases (Topic 842)* and its subsequent amendments ("ASU 2016-02") effective January 1, 2019, and Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* and its subsequent amendments ("ASU 2014-09") effective January 1, 2018.

(b) Use of Estimates

The preparation of the Consolidated Financial Statements, in conformity with GAAP, requires management to make estimates and judgments that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. On an on-going basis, the Company evaluates its estimates, including, but not limited to, those related to revenue recognition, allowance for doubtful accounts, investments, fixed assets, digital assets, leases, debt, share-based compensation, income taxes, including the carrying value of deferred tax assets, and litigation and contingencies, including liabilities that the Company deems not probable of assertion. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets, liabilities, and equity that are not readily apparent from other sources. Actual results and outcomes could differ from these estimates and assumptions.

(c) Fair Value Measurements

The Company measures certain assets and liabilities at fair value on a recurring or nonrecurring basis. Fair value is defined as the price that is expected to be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company uses a three-level hierarchy that prioritizes fair value measurements based on the types of inputs used for the various valuation techniques. The three levels of the fair value hierarchy are described below:

- | | |
|----------|--|
| Level 1: | Quoted (unadjusted) prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities. |
| Level 2: | Inputs other than quoted prices that are either directly or indirectly observable, such as quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in inactive markets, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. |

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Level 3: Inputs that are generally unobservable, supported by little or no market activity, and typically reflect management's estimates of assumptions that market participants would use in pricing the asset or liability.

The categorization of an asset or liability within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement. The valuation techniques used by the Company when measuring fair value maximize the use of observable inputs and minimize the use of unobservable inputs.

The Company also estimates the fair value of cash and cash equivalents, restricted cash, accounts receivable, accounts payable and accrued expenses, and accrued compensation and employee benefits. The Company considers the carrying value of these instruments in the Consolidated Financial Statements to approximate fair value due to their short maturities.

(d) Cash and Cash Equivalents and Restricted Cash

Cash equivalents may include bank demand deposits, money market instruments, certificates of deposit, U.S. Treasury securities, and equivalent funds. The Company generally considers all highly liquid investments with an original maturity of three months or less to be cash equivalents. Restricted cash consists of cash balances restricted in use by contractual obligations with third parties.

(e) Short-term Investments

The Company has periodically invested a portion of its cash in short-term investment instruments. All highly liquid investments with stated maturity dates between three months and one year from the purchase date are classified as short-term investments. The Company determines the appropriate classification of its short-term investments at the time of purchase and reassesses the appropriateness of the classification at each reporting date.

Prior to their liquidation, all of the Company's short-term investments were in U.S. Treasury securities. All short-term investments have been classified as available-for-sale and are reported at fair value within "Short-term investments" on the accompanying Consolidated Balance Sheets. The fair value of the Company's short-term investments is determined based on quoted market prices in active markets for identical securities (Level 1 inputs). Premiums and discounts related to the Company's short-term investments are amortized over the life of the investment and recorded in earnings. Each reporting period, the Company determines the amount of unrealized holding gains and losses on each individual security by comparing the fair value to the amortized cost. Unrealized holding gains and unrealized holding losses that are not a result of a credit loss are reported in other comprehensive income (loss) until realized. Beginning January 1, 2020, unrealized holding losses that are a result of a credit loss are recorded in earnings, with the establishment of an allowance for credit losses. As of December 31, 2020, the Company did not hold any short-term investments.

(f) Credit Losses on Accounts Receivable

The Company maintains an allowance for credit losses on its accounts receivable balances, which represents its best estimate of current expected credit losses over the contractual life of the accounts receivable. Beginning January 1, 2020, when evaluating the adequacy of its allowance for credit losses each reporting period, the Company analyzes accounts receivable balances with similar risk characteristics on a collective basis, considering factors such as the aging of receivable balances, payment terms, geographic location, historical loss experience, current information, and future expectations. Each reporting period, the Company reassesses whether any accounts receivable no longer share similar risk characteristics and should instead be evaluated as part of another pool or on an individual basis. Changes to the allowance for credit losses are adjusted through credit loss expense, which is presented within "General and administrative" operating expenses in the Consolidated Statements of Operations.

(g) Digital Assets

During the second half of 2020, the Company purchased an aggregate of \$1.125 billion in digital assets, comprised solely of bitcoin. The Company accounts for its digital assets as indefinite-lived intangible assets in accordance with Accounting Standards Codification (“ASC”) 350, *Intangibles—Goodwill and Other*. The Company has ownership of and control over its bitcoin and uses third-party custodial services at multiple locations that are geographically dispersed to store its bitcoin. The Company’s digital assets are initially recorded at cost. Subsequently, they are measured at cost, net of any impairment losses incurred since acquisition.

The Company determines the fair value of its bitcoin on a nonrecurring basis in accordance with ASC 820, *Fair Value Measurement*, based on quoted (unadjusted) prices on the active exchange that the Company has determined is its principal market for bitcoin (Level 1 inputs). The Company performs an analysis each quarter to identify whether events or changes in circumstances, principally decreases in the quoted (unadjusted) prices on the active exchange, indicate that it is more likely than not that any of the assets are impaired. In determining if an impairment has occurred, the Company considers the lowest price of one bitcoin quoted on the active exchange at any time since acquiring the specific bitcoin held by the Company. If the carrying value of a bitcoin exceeds that lowest price, an impairment loss has occurred with respect to that bitcoin in the amount equal to the difference between its carrying value and such lowest price.

Impairment losses are recognized as “Digital asset impairment losses” in the Company’s Consolidated Statements of Operations in the period in which the impairment is identified. The impaired digital assets are written down to their fair value at the time of impairment and this new cost basis will not be adjusted upward for any subsequent increase in fair value. Gains (if any) are not recorded until realized upon sale, at which point they would be presented net of any impairment losses in the Company’s Consolidated Statements of Operations. In determining the gain to be recognized upon sale, the Company calculates the difference between the sales price and carrying value of the specific bitcoins sold immediately prior to sale.

See Note 5, Digital Assets, to the Consolidated Financial Statements for further information regarding the Company’s purchases of digital assets.

(h) Property and Equipment

Property and equipment are stated at cost, net of accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, as follows: three years for computer equipment and purchased software; five years for office equipment; 10 years for office furniture; and 19 years for the Company’s corporate aircraft, which has an estimated salvage value of 21%. Leasehold improvements are amortized using the straight-line method over the estimated useful lives of the improvements or the term of the lease, whichever is shorter. The Company periodically evaluates the appropriateness of the estimated useful lives and salvage value of all property and equipment. Any change in the estimated useful life or salvage value is treated as a change in estimate and accounted for prospectively in the period of change.

Expenditures for maintenance and repairs are charged to expense as incurred, except for certain costs related to the aircraft. The costs of normal, recurring, or periodic repairs and maintenance activities related to the aircraft are expensed as incurred. The cost of planned major maintenance activities (“PMMA”) may be treated differently because those activities may involve the acquisition of additional aircraft components or the replacement of existing aircraft components. PMMA are performed periodically based on passage of time and the use of the aircraft. The classification of a maintenance activity as part of PMMA requires judgment and can affect the amount of expense recognized in any particular period. The cost of each PMMA is expected to be capitalized and amortized over the period until the next scheduled PMMA. There have been no PMMA to date.

When assets are retired or sold, the capitalized cost and related accumulated depreciation are removed from the property and equipment accounts and any resulting gain or loss is recognized in the results of operations.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Eligible internal-use software development costs are capitalized subsequent to the completion of the preliminary project stage. Such costs include external direct material and service costs, employee payroll, and payroll-related costs. After all substantial testing and deployment is completed and the software is ready for its intended use, capitalization ceases and internal-use software development costs are amortized using the straight-line method over the estimated useful life of the software, generally three years.

The Company reviews long-lived assets for impairment whenever events or changes in business circumstances indicate that the carrying value of the assets may not be fully recoverable or that the useful lives of these assets are no longer appropriate. Each impairment test is based on a comparison of the undiscounted cash flows to the recorded value of the asset. If an asset is impaired, the asset is written down by the amount by which the carrying value of the asset exceeds the related fair value of the asset.

(i) Leases

The Company adopted ASU 2016-02 effective as of January 1, 2019. Under ASU 2016-02, a lease is a contract, or part of a contract, that conveys the right to both (i) obtain economic benefits from and (ii) direct the use of an identified asset for a period of time in exchange for consideration. The Company evaluates its contracts to determine if they contain a lease and classifies any lease components identified as an operating or finance lease. For each lease component, the Company recognizes a right-of-use ("ROU") asset and a lease liability. ROU assets and lease liabilities are presented separately for operating and finance leases; however, the Company currently has no material finance leases. The Company's operating leases are primarily related to office space in the United States and foreign locations.

In a contract that contains a lease, a component is an item or activity that transfers a good or service to the lessee. Such contracts may be comprised of lease components, non-lease components, and elements that are not components. Each lease component represents a lessee's right to use an underlying asset in the contract if the lessee can benefit from the right of use of the asset either on its own or together with other readily available resources and if the right of use is neither highly dependent nor highly interrelated with other rights of use. Non-lease components include items such as common area maintenance and utilities provided by the lessor. The Company has elected the practical expedient to not separate lease components from non-lease components for office space, which is the Company's only material underlying asset class. For each lease within this asset class, the non-lease components and related lease components are accounted for as a single lease component. Items or activities that do not transfer goods or services to the lessee, such as administrative tasks to set up the contract and reimbursement or payment of lessor costs, are not components of the contract and therefore no contract consideration is allocated to such items or activities.

Consideration in the contract is comprised of any fixed payments and variable payments that depend on an index or rate. Payments in the Company's operating lease arrangements are typically comprised of base office rent and parking fees. Costs related to the Company's non-lease components, as described above, are generally variable and do not depend on an index or rate and are therefore excluded from the contract consideration allocated to the lease components. The Company's operating lease arrangements generally do not contain any payments related to items or activities that are not components.

Operating lease liabilities are initially and subsequently measured at the present value of unpaid lease payments, discounted at the discount rate of the lease. Operating lease ROU assets are initially measured as the sum of the initial lease liability, any initial direct costs incurred, and any prepaid lease payments, less any lease incentives received. The ROU asset is amortized over the term of the lease. The amortization of operating lease ROU assets is included in "Reduction in carrying amount of right-of-use assets" within the operating activities section of the Consolidated Statements of Cash Flows. A single lease expense is recorded within operating expenses in the Consolidated Statements of Operations on a straight-line basis over the lease term. Variable lease payments that are not included in the measurement of the lease liability are recognized in the period when the obligations for those payments are incurred. In the Company's lease agreements, these variable payments typically include certain taxes, utilities, and maintenance costs, and other fees.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company uses its incremental borrowing rate as the discount rate for all of its leases, as the rate implicit in the lease is not readily determinable in any of its lease contracts. In order to estimate a collateralized borrowing rate curve, the Company first estimates a synthetic credit rating and then applies modeling methodologies to an unsecured borrowing rate curve. In determining the incremental borrowing rate of each lease, the Company uses a centralized treasury approach and considers the currency of the contract, the economic environment in which the lease exists, and the term of the lease.

The Company does not recognize lease liabilities or ROU assets for any short-term leases with a non-cancellable lease term of 12 months or less. Instead, the lease payments for these short-term leases are expensed on a straight-line basis over the lease term, and any variable payments are recognized in the period when the obligations for those payments are incurred. The Company believes that, using this methodology, the expense recorded reasonably reflects the Company's short-term lease commitments.

(j) Software Development Costs

The Company did not capitalize any software development costs during the years ended December 31, 2020, 2019, and 2018. Due to the pace of the Company's software development efforts and frequency of its software releases, the Company's software development costs are expensed as incurred within "Research and development" in the Consolidated Statements of Operations. Amortization expenses related to previously capitalized software development costs were \$2.5 million for the year ended December 31, 2018. No amortization expense was recorded for the years ended December 31, 2020 and 2019, as all previously capitalized software development costs were fully amortized.

In previous periods, software development costs were expensed as incurred until technological feasibility had been established, at which time such costs were capitalized until the software was available for general release to customers. Capitalized software development costs included direct labor costs and fringe benefit costs attributed to programmers, software engineers, and quality control and field certifiers working on the software after it reached technological feasibility, but before it was generally available to customers for sale. Technological feasibility was considered to be achieved when a software design and working model of the software had been completed. Capitalized software development costs were typically amortized on a straight-line basis over the estimated software life of three years. The amortization expense was recorded within cost of product licenses revenues in the Consolidated Statements of Operations.

(k) Loss Contingencies and Legal Costs

The Company accrues loss contingencies that are believed to be probable and can be reasonably estimated. As events evolve during the administration and litigation process and additional information becomes known, the Company reassesses its estimates related to loss contingencies. Legal costs are expensed in the period in which the costs are incurred.

(l) Deferred Revenue and Advance Payments

Deferred revenue and advance payments represent amounts received or due from customers in advance of the Company transferring its software or services to the customer under an enforceable contract. In the case of multi-year service contracts, the Company generally does not invoice more than one year in advance of services and does not record deferred revenue for amounts that have not been invoiced and that require an additional contract. Revenue is subsequently recognized in the period(s) in which control of the software or services is transferred to the customer. Deferred revenue is comprised of deferred product licenses and subscription services, product support, or other services revenue based on the transaction price allocated to the specific performance obligation in the contract with the customer.

(m) Convertible Debt Arrangement

As discussed in Note 9, Convertible Senior Notes, to the Consolidated Financial Statements, the Company issued convertible senior notes in December 2020. As the notes contain conversion features, the Company must separate the debt and equity components of the notes. The carrying amount of the liability component is determined by measuring the fair value of a similar debt instrument without any associated conversion features at the time of issuance and the carrying amount of the equity component is determined by deducting the fair value of the liability component from the initial proceeds of the notes. The Company also allocates issuance costs associated with the offering between debt and equity based on their relative carrying values at the time of issuance. Such issuance costs are taken as a direct reduction to the debt and equity components. Both the difference between the principal and the liability component's initial carrying value and the issuance costs allocated to the debt component are amortized to interest expense using the effective interest method over the expected term of the notes.

In determining the fair value of a similar debt instrument without any associated conversion features, the Company estimated a nonconvertible debt borrowing rate at the time of issuance using a blend of different methodologies, which considered Level 2 inputs such as observable market prices of the Company's debt and class A common stock, the Company's historical and implied class A common stock volatility, a synthetic credit rating consistent with that utilized for determining the incremental borrowing rate for the Company's accounting of leasing arrangements, and analysis of similar convertible debt issuances and their equivalent nonconvertible debt yields.

(n) Revenue Recognition

The Company recognizes revenue using a five-step model:

- (i) Identifying the contract(s) with a customer,
- (ii) Identifying the performance obligation(s),
- (iii) Determining the transaction price,
- (iv) Allocating the transaction price to the performance obligations in the contract, and
- (v) Recognizing revenue when, or as, the Company satisfies a performance obligation.

The Company has elected to exclude taxes assessed by government authorities in determining the transaction price, and therefore revenue is recognized net of taxes collected from customers.

Performance Obligations and Timing of Revenue Recognition

The Company primarily sells goods and services that fall into the categories discussed below. Each category contains one or more performance obligations that are either (i) capable of being distinct (i.e., the customer can benefit from the good or service on its own or together with readily available resources, including those purchased separately from the Company) and distinct within the context of the contract (i.e., separately identifiable from other promises in the contract) or (ii) a series of distinct goods or services that are substantially the same and have the same pattern of transfer to the customer. Aside from the Company's term and perpetual product licenses, which are delivered at a point in time, the majority of the Company's services are delivered over time.

Product Licenses

The Company sells different types of business intelligence software, licensed on a term or perpetual basis and installed either on premises or on a public cloud that is procured and managed by the customer. Although product licenses are sold with product support, the software is fully functional at the outset of the arrangement and is considered a distinct performance obligation. Revenue from product license sales is recognized when control of the license is transferred to the customer, which is the later of delivery or commencement of the license term. The Company may also sell through resellers and OEMs who purchase the Company's software for resale. In reseller arrangements, revenue is recognized when control of the license is transferred to the end user. In OEM arrangements, revenue is recognized when control of the license is transferred to the OEM.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Subscription Services

The Company also sells access to its software through MCE, a cloud subscription service, wherein customers access the software through a cloud environment that the Company manages on behalf of the customer. Control of the software itself does not transfer to the customer under this arrangement and is not considered a separate performance obligation. Cloud subscriptions are regularly sold on a standalone basis and include technical support, monitoring, backups, updates, and quarterly service reviews. Revenue related to cloud subscriptions is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to the software.

Product Support

In all product license transactions, customers are required to purchase a standard product support package and may also purchase a premium product support package for a fixed annual fee. All product support packages include both technical support and when-and-if-available software upgrades, which are treated as a single performance obligation as they are considered a series of distinct services that are substantially the same and have the same duration and measure of progress. Revenue from product support is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to product support.

Consulting Services

The Company sells consulting services to help customers plan and execute deployment of the Company's software. Customers are not required to use consulting services to fully benefit from the software. Consulting services are regularly sold on a standalone basis and either (i) prepaid upfront or (ii) sold on a time and materials basis. Consulting arrangements are each considered separate performance obligations because they do not integrate with each other or with other offerings to deliver a combined output to the customer, do not modify or customize (or are not modified or customized by) each other or other offerings, and do not affect the customer's ability to use the other consulting services or the Company's other offerings. Revenue under consulting arrangements is recognized over time as services are delivered. For time and materials-based consulting arrangements, the Company has elected the practical expedient of recognizing revenue upon invoicing since the invoiced amount corresponds directly to the value of the Company's service to date.

Education Services

The Company sells various education and training services to its customers. Education services are sold on a standalone basis under two different types of arrangements: (i) annual subscriptions to live and on-demand training courses and (ii) custom courses purchased on an hourly basis. Education arrangements are each considered separate performance obligations because they do not integrate with each other or with other offerings to deliver a combined output to the customer, do not modify or customize (or are not modified or customized by) each other or other offerings, and do not affect the customer's ability to use the other education services or the Company's other offerings. Revenue on annual subscriptions is recognized on a straight-line basis over the contract period, which is the period over which the customer has continuous access to the training courses. Revenue on custom courses is recognized on a time and materials basis as the services are delivered.

See Note 16, Segment Information, to the Consolidated Financial Statements for information regarding total revenues by geographic region.

Estimates and Judgments

The Company makes estimates and judgments to allocate the transaction price based on an observable or estimated SSP. The Company also makes estimates and judgments with respect to capitalizing incremental costs to obtain a customer contract and determining the subsequent amortization period. These estimates and judgments are discussed further below.

Determining the Transaction Price

The transaction price includes both fixed and variable consideration. Variable consideration is included in the transaction price to the extent it is probable that a significant reversal will not occur. The amount of variable consideration excluded from the transaction price was not material for the years ended December 31, 2020, 2019, and 2018. The Company's estimates of variable consideration are also subject to subsequent true-up adjustments and may result in changes to its transaction prices. Such true-up adjustments have not been and are not expected to be material. The Company has the following sources of variable consideration:

- (i) Performance penalties – Subscription services and product support arrangements generally contain performance response time guarantees. For subscription services arrangements, the Company estimates variable consideration using a portfolio approach because performance penalties are tied to standard up-time requirements. For product support arrangements, the Company estimates variable consideration on a contract basis because such arrangements are customer-specific. For both subscription services and product support arrangements, the Company uses an expected value approach to estimate variable consideration based on historical business practices and current and future performance expectations to determine the likelihood of incurring penalties.
- (ii) Extended payment terms – The Company's standard payment terms are generally within 180 days of invoicing. If extended payment terms are granted to customers, those terms generally do not exceed one year. For contracts with extended payment terms, the Company estimates variable consideration on a contract basis because such estimates are customer-specific and uses an expected value approach to analyze historical business experience on a customer-by-customer basis to determine the likelihood that extended payment terms lead to an implied price concession.
- (iii) Sales and usage-based royalties – Certain product license arrangements include sales or usage-based royalties, covering both product license and product support. In these arrangements, the Company uses an expected value approach to estimate and recognize revenue for royalty sales each period, utilizing historical data on a contract-by-contract basis. True-up adjustments are recorded in subsequent periods when royalty reporting is received from the OEMs.

The Company provides a standard software assurance warranty to repair, replace, or refund software that does not perform in accordance with documentation. The standard software assurance warranty period is generally less than one year. Assurance warranty claims were not material for the years ended December 31, 2020, 2019, and 2018.

The Company does not adjust the transaction price for significant financing components where the time period between cash payment and performance is one year or less. However, there are circumstances where the timing between cash payment and performance may exceed one year. These circumstances generally involve prepaid multi-year product support and subscription services arrangements where the customer determines when the service is utilized (e.g., when to request on-call support services or when to use and access the software in the cloud). In these circumstances, the Company has determined no significant financing component exists because the customer controls when to utilize the service and because there are significant business purposes behind the timing difference between payment and performance (e.g., maximizing profit in the case of product support services and ensuring collectability in the case of subscription services).

Allocating the Transaction Price Based on Standalone Selling Prices (SSP)

The Company allocates the transaction price to each performance obligation in a contract based on its relative SSP. The SSP is the price, or estimated price, of the software or service when sold on a standalone basis at contract inception. In circumstances where SSP is not directly observable, the Company estimates SSP using the following methodologies:

- (i) Product licenses – Product licenses are not sold on a standalone basis and pricing is highly variable. The Company establishes SSP of product licenses using a residual approach after first establishing the SSP of standard product support. Standard product support is sold on a standalone basis within a narrow range of the stated net license fee, and because an economic relationship exists between product licenses and standard product support, the Company has concluded that the residual method to estimate SSP of product licenses sold on both a perpetual and term basis is a fair allocation of the transaction price.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

- (ii) Subscription services – Given the highly variable selling price of subscription services, the Company establishes the SSP of its subscription services arrangements using a similar residual approach after first establishing the SSP of consulting and education services to the extent they are included in the arrangement. The Company has concluded that the residual method to estimate SSP of its subscription services is a fair allocation of the transaction price.
- (iii) Standard product support – The Company establishes SSP of standard product support as a percentage of the stated net license fee, given such pricing is consistent with its normal pricing practices and there exists sufficient history of customers renewing standard product support on a standalone basis at similar percentages. Semi-annually, the Company tracks renewal rates negotiated when standard product support is initially sold with a perpetual license in order to determine the SSP of standard product support within each geographic region for the upcoming quarter. If the stated standard product support fee falls within the SSP range, the specific rate in the contract will be used to determine SSP. If the stated fee is above or below SSP, the highest or lowest end of the range, respectively, will generally be used to determine SSP of standard product support for perpetual licenses. For term licenses, the Company determines SSP of standard product support at the lower end of the SSP range used for perpetual licenses because the term licenses are time bound, resulting in a lower value placed on product support as compared to a perpetual license.
- (iv) Premium product support, consulting services, and education services – SSP of premium product support, consulting services, and education services is established by using a bell-shaped curve approach to define a narrow range within each geographic region in which the services are discounted off of the list price on a standalone basis.

The Company often provides options to purchase future offerings at a discount. The Company analyzes the option price against the previously established SSP of the goods or services to determine if the options represent material rights that should be accounted for as separate performance obligations. In general, an option sold at or above SSP is not considered a material right because the customer could have received that right without entering into the contract. If a material right exists, revenue associated with the option is deferred and recognized when the future goods or services are transferred, or when the option expires. During the years ended December 31, 2020, 2019, and 2018, separate performance obligations arising from future purchase options have not been material.

Incremental Costs to Obtain Customer Contracts

Incremental costs incurred to obtain contracts with customers include certain variable compensation (e.g., commissions and bonuses) paid to the Company's sales team. Although the Company may bundle its goods and services into one contract, commissions are individually determined on each distinct good or service in the contract. The Company expenses as incurred those amounts earned on consulting and education services, which are generally performed within a one-year period and primarily sold on a standalone basis. The Company also expenses as incurred those amounts earned on product license sales, since the amount is earned when the license is delivered. The Company capitalizes those amounts earned on initial-year product support and cloud subscriptions and amortizes the costs over a period of time that is consistent with the pattern of transfer to the customer, which the Company has determined to be a period of three years. Although the Company typically sells product support and cloud subscriptions for a period of one year, a majority of customers renew their product support and cloud subscription arrangements. Three years is generally the period after which platforms are no longer supported by the Company's support team and when customers generally choose to upgrade their software platform. The Company does not currently pay variable compensation on product support or cloud subscription renewals. As of December 31, 2020 and 2019, capitalized costs to obtain customer contracts, net of accumulated amortization, were \$6.1 million and \$4.8 million, respectively, and are presented within "Deposits and other assets" in the Consolidated Balance Sheets. During the years ended December 31, 2020, 2019, and 2018, amortization expenses related to these capitalized costs were \$3.1 million, \$2.9 million, and \$2.3 million, respectively, and are reflected within "Sales and marketing" in the Consolidated Statements of Operations.

(o) Advertising Costs

Advertising costs include production costs, which are expensed the first time the advertisement takes place, and media placement costs, which are expensed in the month the advertising appears. Total advertising costs were \$0.1 million, \$0.9 million, and \$7.1 million for the years ended December 31, 2020, 2019, and 2018, respectively. As of December 31, 2020 and 2019, the Company had no prepaid advertising costs.

(p) Share-based Compensation

The Company maintains the 2013 Equity Plan, under which the Company's employees, officers, directors, and other eligible participants may be awarded various types of share-based compensation, including options to purchase shares of the Company's class A common stock, restricted stock units, and other stock-based awards. The Company recognizes share-based compensation expense associated with these awards on a straight-line basis over the award's requisite service period (generally, the vesting period). For options and other stock-based awards, the share-based compensation expense is based on the fair value of the awards on the date of grant, as estimated using the Black-Scholes option pricing model. For restricted stock units, the share-based compensation expense is based on the fair value of the Company's class A common stock on the date of grant. See Note 12, Share-based Compensation, to the Consolidated Financial Statements for further information regarding the 2013 Equity Plan, related share-based compensation expense, and assumptions used in determining the fair value of these awards.

(q) Income Taxes

The Company is subject to federal, state, and local income taxes in the United States and a number of foreign countries. Deferred income taxes are provided based on enacted tax laws and rates applicable to the periods in which the taxes become payable. For uncertain income tax positions, the Company uses a more-likely-than-not recognition threshold based on the technical merits of the income tax position taken. Income tax positions that meet the more-likely-than-not recognition threshold are measured in order to determine the tax benefit recognized in the financial statements. The Company recognizes accrued interest related to unrecognized tax benefits as part of income tax expense. Penalties, if incurred, are recognized as a component of income tax expense.

The Company provides a valuation allowance to reduce deferred tax assets to their estimated realizable value, when appropriate.

(r) Basic and Diluted Earnings Per Share

Basic earnings per share is determined by dividing the net income attributable to common stockholders by the weighted average number of common shares and participating securities outstanding during the period. Participating securities are included in the basic earnings per share calculation when dilutive. Diluted earnings per share is determined by dividing the net income attributable to common stockholders by the weighted average number of common shares and potential common shares outstanding during the period. Potential common shares are included in the diluted earnings per share calculation when dilutive. Potential common shares consisting of class A common stock issuable upon exercise of outstanding employee stock options and the vesting of restricted stock units are computed using the treasury stock method. Potential common shares consisting of class A common stock issuable upon conversion of the Company's convertible senior notes are computed using the treasury stock method. As discussed in Note 9, Convertible Senior Notes, to the Consolidated Financial Statements, the Company currently intends to settle the principal amount of the notes in cash and any excess value in shares of class A common stock. Therefore, only the amount by which the conversion value exceeds the aggregate principal amount of the notes ("the conversion spread") is considered in computing potential common shares issuable under the treasury stock method. The conversion spread will have a dilutive impact only when the average market price of the Company's class A common stock for a given period exceeds the conversion price, which was \$397.99 per share as of December 31, 2020.

The Company has two classes of common stock: class A common stock and class B common stock. Holders of class A common stock generally have the same rights, including rights to dividends, as holders of class B common stock, except that holders of class A common stock have one vote per share while holders of class B common stock have ten votes per share. Each share of class B common stock is convertible at any time, at the option of the holder,

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

into one share of class A common stock. As such, basic and fully diluted earnings per share for class A and class B common stock are the same. The Company has never declared or paid any cash dividends on either class A or class B common stock. As of December 31, 2020 and 2019, there were no shares of preferred stock outstanding.

(s) Foreign Currency Translation

The functional currency of the Company's international operations is generally the local currency. Accordingly, all assets and liabilities of international subsidiaries are translated using exchange rates in effect at the end of the period, and revenue and expenses are translated using average monthly exchange rates for the period in which the transactions occur. The related translation adjustments are reported in "Accumulated other comprehensive income (loss)" in stockholders' equity. In general, upon complete or substantially complete liquidation of an investment in an international subsidiary, the amount of accumulated translation adjustments attributable to that subsidiary is reclassified from stockholders' equity to the statement of operations. Transaction gains and losses arising from transactions denominated in a currency other than the functional currency of the entity involved are included in the results of operations.

As of December 31, 2020, 2019, and 2018, the cumulative foreign currency translation balances were \$(3.9) million, \$(9.8) million, and \$(9.8) million, respectively. No taxes were recognized on the temporary differences resulting from foreign currency translation adjustments for the years ended December 31, 2020, 2019, and 2018.

Transaction gains and losses arising from transactions denominated in foreign currencies resulted in net losses of \$7.6 million and \$1.0 million in 2020 and 2019, respectively, and a net gain of \$4.7 million in 2018, and are included in "Other (expense) income, net" in the Consolidated Statements of Operations.

(t) Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, restricted cash, and accounts receivable. The Company places its cash equivalents with high credit-quality financial institutions and has established guidelines relative to credit ratings and maturities that seek to maintain safety and liquidity.

The Company sells its offerings to various companies across several industries throughout the world in the ordinary course of business. The Company routinely assesses the financial strength of its customers and maintains allowances for anticipated losses. As of December 31, 2020 and 2019, no individual customer accounted for 10% or more of net accounts receivable, and for the years ended December 31, 2020, 2019, and 2018, no individual customer accounted for 10% or more of revenue.

(3) Recent Accounting Standards

Credit losses

The Company adopted ASU 2016-13 effective as of January 1, 2020. Under ASU 2016-13, the Company applies a current expected credit loss ("CECL") impairment model to its trade accounts receivable, in which lifetime expected credit losses on such financial assets are measured and recognized at each reporting date based on historical, current, and forecasted information. Under the CECL model, trade accounts receivable with similar risk characteristics are analyzed on a collective (pooled) basis. ASU 2016-13 also changed the impairment accounting for available-for-sale debt securities, requiring credit losses to be recorded through an allowance for credit losses rather than as a reduction in the amortized cost basis of the securities. Impairment due to factors other than credit loss will continue to be recorded through other comprehensive income (loss). Since adoption of this guidance, all of the Company's available-for-sale debt securities have consisted of U.S. Treasury securities with stated maturity dates between three months and one year from the purchase date and none of these investments have been impaired at periods' end. As of December 31, 2020, the Company did not hold any short-term investments. The adoption of this guidance did not have a material impact on the Company's consolidated financial position, results of operations, or cash flows. No cumulative-effect adjustment to retained earnings was made.

Cloud computing arrangements

The Company adopted Accounting Standards Update No. 2018-15, *Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15") effective as of January 1, 2020 and elected to apply the guidance prospectively. ASU 2018-15 requires customers in a hosting arrangement that is a service contract to follow existing internal-use software guidance to determine which implementation costs to capitalize and which costs to expense. Customers are required to amortize the capitalized implementation costs over the term of the hosting arrangement, which might extend beyond the noncancelable period. Financial statement presentation under ASU 2018-15 requires: (i) capitalized implementation costs be classified in the same balance sheet line item as the amounts prepaid for the related hosting arrangement; (ii) amortization of capitalized implementation costs be presented in the same income statement line item as the service fees for the related hosting arrangement; and (iii) cash flows related to capitalized implementation costs be presented within the same category of cash flow activity as the cash flows for the related hosting arrangement (i.e. operating activity). Prior to the adoption of ASU 2018-15, the Company expensed as incurred all implementation costs related to cloud computing arrangements that were service contracts. As of December 31, 2020, the Company did not have any material capitalized implementation costs related to cloud computing arrangements that are service contracts.

Lease accounting

The Company adopted ASU 2016-02 effective as of January 1, 2019 and elected the transition option to apply the new lease requirements as of the adoption date without restating comparative periods presented in its Consolidated Financial Statements. Additionally, the Company elected the package of practical expedients described in ASU 2016-02, which includes not reassessing the following: (i) lease classification of existing leases, (ii) whether expired or existing contracts contain leases, and (iii) initial direct costs for existing leases.

Upon adoption of ASU 2016-02, the Company recognized ROU assets of \$88.8 million, total lease liabilities of \$116.9 million, reductions in total deferred rent of \$28.5 million, and reductions in prepaid expenses of \$0.4 million in its 2019 beginning balances. All adjustments relate to the Company's operating leases; the Company does not have any material leases that are classified as finance leases. There was no cumulative effect adjustment to the Company's 2019 beginning retained earnings balance as the Company did not have material unamortized initial direct costs. Beginning in 2019, the Company presents the amortization of its operating ROU assets and the change in its operating lease liabilities within the operating activities section of its Consolidated Statements of Cash Flows. The adoption of ASU 2016-02 did not have a material impact on the Company's Consolidated Statements of Operations.

Revenue from contracts with customers

The Company adopted ASU 2014-09 effective as of January 1, 2018, using the full retrospective method. In adopting ASU 2014-09, the Company has made the following significant changes in accounting principles:

- (i) *Timing of revenue recognition for term license sales.* Under ASU 2014-09, the Company recognizes product licenses revenue from term licenses upon delivery of the software. Previously, this revenue was recognized over the term of the arrangement.
- (ii) *Timing of revenue recognition for sales to channel partners.* Under ASU 2014-09, the Company recognizes revenue from sales made to OEMs when control of the license transfers to the OEM, less adjustments for returns or price protection. Previously, this revenue was not recognized until the license was sold by the OEM to the end user. Revenue from sales made to resellers continues to be recognized when control of the license is transferred to the end user.
- (iii) *Allocating the transaction price to the performance obligations in the contract.* Under ASU 2014-09, the Company allocates the transaction price to the various performance obligations in the contract based on their relative SSP. Except for SSP of product support, the Company's methodologies for estimating SSP of its various performance obligations are generally consistent with the Company's previous methodologies used to establish vendor specific objective evidence ("VSOE") of fair value on multiple

element arrangements. Whereas VSOE of product support was previously based on the optional stated renewal fee within the contract, SSP of product support under ASU 2014-09 is established as a range within each geographic region as discussed in Note 2, Summary of Significant Accounting Policies, to the Consolidated Financial Statements. The impact from SSP-based allocations was not material to the Company's prior or current period Consolidated Financial Statements and is not expected to be material in future periods.

- (iv) *Material rights.* The Company's contracts with customers may include options to acquire additional goods and services at a discount. Under ASU 2014-09, certain of these options may be considered material rights if the optional goods and services can be purchased at prices below SSP and would be treated as separate performance obligations and included in the allocation of the transaction price. Previously, none of the Company's options were considered material rights. The impact from material rights was not material to the Company's prior or current period Consolidated Financial Statements and is not expected to be material in future periods.
- (v) *Presentation of accounts receivable, contract assets, and contract liabilities (deferred revenue).* Under ASU 2014-09, the Company's rights to consideration are presented separately depending on whether those rights are conditional ("contract assets") or unconditional ("accounts receivable"). See Note 6, Contract Balances, to the Consolidated Financial Statements for further discussion on Balance Sheet presentation. Under ASU 2014-09, the Company cannot net accounts receivable with contract liabilities ("deferred revenue") and the Company no longer offsets its accounts receivable and deferred revenue balances for unpaid items that are included in the deferred revenue balance and for which there is an enforceable right for payment. Previously, this offsetting of accounts receivable and deferred revenue balances for unpaid amounts was applied in the Company's prior period Consolidated Financial Statements.
- (vi) *Deferral of incremental direct costs to obtaining a contract with a customer.* Under ASU 2014-09, the Company capitalizes certain variable compensation payable to its sales force and subsequently amortizes the capitalized costs over a period of time that is consistent with the transfer of the related good or service to the customer, which the Company has determined to be three years. Previously, the Company elected to expense these incremental direct costs as incurred.

Intra-entity asset transfers

In October 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update No. 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), to improve the accounting for income tax effects of intra-entity transfers of assets other than inventory. Under ASU 2016-16, the deferral of the income tax consequences of intra-entity transfers of assets other than inventory is eliminated. Entities will be required to recognize the income tax consequences of intra-entity transfers of assets other than inventory when the transfers occur. The standard requires a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption using a modified retrospective approach. The Company adopted this guidance effective as of January 1, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial position, results of operations, or cash flows. No cumulative-effect adjustment to retained earnings was made.

Accounting for Income Taxes

In December 2019, the FASB issued Accounting Standards Update No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes* ("ASU 2019-12"). ASU 2019-12 simplifies the accounting for income taxes by eliminating certain exceptions related to the approach for intraperiod tax allocation, the methodology for calculating income taxes in an interim period, and the recognition of deferred tax liabilities related to outside basis differences. The Company will adopt this guidance on January 1, 2021, with certain amendments applied prospectively and others requiring retrospective application. The Company believes this guidance will not have a material impact on its consolidated financial position, results of operations, and cash flows.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Accounting for Convertible Instruments

In August 2020, the FASB issued Accounting Standards Update No. 2020-06, *Debt – Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging – Contracts in Entity’s Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity* (“ASU 2020-06”). ASU 2020-06 simplifies the accounting for convertible instruments, the accounting for contracts in an entity’s own equity, and the related earnings per share calculations. The new standard is effective for fiscal years beginning after December 15, 2021; however, the Company currently plans to early adopt this guidance on January 1, 2021 using the modified retrospective method, which will result in a cumulative-effect adjustment to the opening balance of retained earnings on the date of adoption. Prior period financial statements will not be restated upon adoption.

Upon adoption of ASU 2020-06, the Company expects the following significant accounting changes:

- (i) *Elimination of the cash conversion model.* Under current GAAP, instruments that may be partially settled in cash are in the scope of the “cash conversion” model, which requires the conversion feature to be separately reported in equity. Under ASU 2020-06, the Company will no longer be required to separately record the conversion feature in equity and instead will account for the convertible instrument as a single unit of debt, thereby eliminating the subsequent amortization of the debt discount as interest expense. Similarly, the portion of issuance costs previously allocated to equity under current GAAP will be reclassified to debt and amortized as interest expense. As a result of these changes, the net deferred tax liability associated with the previous equity components will also be reversed upon adoption.
- (ii) *Use of the “if-converted” method for calculating diluted earnings per share.* Under current GAAP, the Company utilizes the “treasury stock” method for computing the diluted earnings per share impact of its convertible senior notes, as its current intention is to settle the principal amount of the notes with cash. Under the treasury stock method, only the excess of the average stock price of the Company’s class A common stock for the reporting period over the conversion price is utilized in determining the impact to the diluted earnings per share denominator. Under ASU 2020-06, the Company may no longer rebut the presumption of share settlement for its convertible instrument and therefore may no longer utilize the treasury stock method. Instead, the Company will be required to use the if-converted method, which requires all underlying shares be included in the denominator regardless of the average stock price for the reporting period, in addition to adding back to the numerator the related interest expense from the stated coupon and the amortization of issuance costs, if dilutive.

The Company currently estimates the adoption of ASU 2020-06 will impact the opening consolidated balance sheet as follows (in thousands):

Consolidated Balance Sheet	December 31, 2020 As Reported	Effect of the Adoption of ASU 2020-06	January 1, 2021 As Adjusted
Deferred tax liabilities (assets)	8,211	(41,693)	(33,482)
Convertible senior notes, net	486,366	148,546	634,912
Additional paid-in-capital	763,051	(107,810)	655,241
Retained earnings	575,965	957	576,922

(4) Short-term Investments

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2020, the Company did not hold any short-term investment instruments. The amortized cost and fair value of available-for-sale investments at December 31, 2019 were \$108.8 million and \$108.9 million, respectively. The gross unrecognized holding gains accumulated in other comprehensive loss were not material as of December 31, 2019. As of December 31, 2019, none of the Company's available-for-sale investments were in unrealized loss positions.

(5) Digital Assets

During the year ended December 31, 2020, the Company purchased approximately 70,469 bitcoins for \$1.125 billion in cash, including cash from the net proceeds related to the liquidation of short-term investments and the issuance of its convertible senior notes. During the year ended December 31, 2020, the Company incurred \$70.7 million of impairment losses on its bitcoin. As of December 31, 2020, the carrying value of the Company's bitcoin was \$1.054 billion, which reflects cumulative impairments of \$70.7 million. The carrying value represents the lowest fair value of the bitcoins at any time since their acquisition. The Company did not sell any of its bitcoins during the year ended December 31, 2020.

(6) Contract Balances

The Company invoices its customers in accordance with billing schedules established in each contract. The Company's rights to consideration from customers are presented separately in the Company's Consolidated Balance Sheets depending on whether those rights are conditional or unconditional.

The Company presents unconditional rights to consideration from customers within "Accounts receivable, net" in its Consolidated Balance Sheets. All of the Company's contracts are generally non-cancellable and/or non-refundable, and therefore an unconditional right generally exists when the customer is billed or amounts are billable per the contract.

Accounts receivable (in thousands) consisted of the following, as of:

	December 31,	
	2020	2019
Billed and billable	\$ 200,221	\$ 165,153
Less: allowance for credit losses	(2,760)	(1,637)
Accounts receivable, net	<u>\$ 197,461</u>	<u>\$ 163,516</u>

Changes in the allowance for credit losses were not material for the year ended December 31, 2020. In estimating its allowance for credit losses as of December 31, 2020, the Company considered the impact from the pandemic caused by a novel strain of coronavirus ("COVID-19") and established additional risk pools and reserves relating to customers in certain geographic areas and industries, in addition to separately assessing the reserves for certain customers that have been granted extended payment terms.

Rights to consideration that are subject to a condition other than the passage of time are considered contract assets and presented within "Prepaid expenses and other current assets" in the Consolidated Balance Sheets since the rights to consideration are expected to become unconditional and transfer to accounts receivable within one year. Contract assets generally consist of accrued sales and usage-based royalty revenue. In these arrangements, consideration is not billed or billable until the royalty reporting is received, generally in the subsequent quarter, at which time the contract asset transfers to accounts receivable and a true-up adjustment is recorded to revenue. These true-up adjustments are generally not material. During the years ended December 31, 2020, 2019, and 2018, there were no significant impairments to the Company's contract assets, nor were there any significant changes in the timing of the Company's contract assets being reclassified to accounts receivable. Contract assets included in "Prepaid expenses and other current assets" in the Consolidated Balance Sheets consisted of \$1.1 million and \$1.2 million in accrued sales and usage-based royalty revenue as of December 31, 2020 and 2019, respectively.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Contract liabilities are amounts received or due from customers in advance of the Company transferring the software or services to the customer. In the case of multi-year service contracts arrangements, the Company generally does not invoice more than one year in advance of services and does not record deferred revenue for amounts that have not been invoiced and that require an additional contract. Revenue is subsequently recognized in the period(s) in which control of the software or services is transferred to the customer. The Company's contract liabilities are presented as either current or non-current "Deferred revenue and advance payments" in the Consolidated Balance Sheets, depending on whether the software or services are expected to be transferred to the customer within the next year.

The Company's "Accounts receivable, net" and "Deferred revenue and advance payments" balances in the Consolidated Balance Sheets include unpaid amounts related to contracts under which the Company has an enforceable right to invoice the customer for non-cancellable and/or non-refundable software and services. Changes in accounts receivable and changes in deferred revenue and advance payments are presented net of these unpaid amounts in "Operating activities" in the Consolidated Statements of Cash Flows.

Deferred revenue and advance payments (in thousands) from customers consisted of the following, as of:

	December 31,	
	2020	2019
Current:		
Deferred product licenses revenue	\$ 1,495	\$ 481
Deferred subscription services revenue	26,258	16,561
Deferred product support revenue	156,216	161,670
Deferred other services revenue	7,281	8,395
Total current deferred revenue and advance payments	<u>\$ 191,250</u>	<u>\$ 187,107</u>
Non-current:		
Deferred product licenses revenue	\$ 139	\$ 293
Deferred subscription services revenue	8,758	97
Deferred product support revenue	5,055	3,417
Deferred other services revenue	710	537
Total non-current deferred revenue and advance payments	<u>\$ 14,662</u>	<u>\$ 4,344</u>

During the years ended December 31, 2020, 2019, and 2018, the Company recognized revenues of \$182.6 million, \$174.7 million, and \$194.6 million, respectively, from amounts included in the total deferred revenue and advance payments balances at the beginning of the respective year. For the years ended December 31, 2020, 2019, and 2018, there were no significant changes in the timing of revenue recognition on the Company's deferred balances.

As of December 31, 2020, the Company had an aggregate transaction price of \$205.9 million allocated to remaining performance obligations related to product support, subscription services, other services, and, in limited cases, product licenses contracts. The Company expects to recognize \$191.3 million within the next 12 months and \$14.7 million thereafter.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(7) Property and Equipment

Property and equipment (in thousands) consisted of the following, as of:

	December 31,	
	2020	2019
Transportation equipment	\$ 48,645	\$ 48,645
Computer equipment and purchased software	61,299	58,920
Furniture and equipment	10,460	10,464
Leasehold improvements	31,403	31,023
Internally developed software	9,917	9,849
Property and equipment, gross	161,724	158,901
Less: accumulated depreciation and amortization	(118,749)	(108,747)
Property and equipment, net	<u>\$ 42,975</u>	<u>\$ 50,154</u>

Included in transportation equipment is the Company's corporate aircraft, including capitalizable costs related to the repairs to the aircraft, and aircraft-related equipment. As of December 31, 2020, the net carrying value of the aircraft and aircraft-related equipment was \$30.0 million, net of \$18.6 million of accumulated depreciation. As of December 31, 2019, the net carrying value of the aircraft and aircraft-related equipment was \$32.6 million, net of \$16.0 million of accumulated depreciation.

Depreciation and amortization expenses related to property and equipment were \$11.4 million, \$11.7 million, and \$8.3 million for the years ended December 31, 2020, 2019, and 2018, respectively.

(8) Leases

The Company leases office space in the United States and foreign locations under operating lease agreements. Office space is the Company's only material underlying asset class under operating lease agreements. The Company has no material finance leases.

Under the Company's office space lease agreements, fixed payments and variable payments that depend on an index or rate are typically comprised of base rent and parking fees. Additionally, under these agreements the Company is generally responsible for certain variable payments that typically include certain taxes, utilities and maintenance costs, and other fees. These variable lease payments are generally based on the Company's occupation or usage percentages and are subject to adjustments by the lessor.

As of December 31, 2020, the Company's ROU asset and total lease liability balances were \$62.2 million and \$82.9 million, respectively, for leases in the United States and \$11.4 million and \$12.2 million, respectively, for foreign leases. As of December 31, 2019, the Company's ROU assets and total lease liabilities were \$71.0 million and \$97.5 million, respectively, for leases in the United States and \$14.5 million and \$15.5 million, respectively, for foreign leases. The Company's most significant lease is for its corporate headquarters in Northern Virginia. The ROU asset and total lease liability balances related to the Company's corporate headquarters lease were \$59.0 million and \$79.7 million, respectively, as of December 31, 2020, and \$66.9 million and \$93.3 million, respectively, as of December 31, 2019. The lease agreement for the Company's corporate headquarters location is set to expire in December 2030, with an option for the Company to extend the term for an additional five or 10 consecutive years. The Company is currently not reasonably certain it will exercise this renewal option and therefore has not included the renewal option in the lease term. The lease agreement also includes an option to early terminate a portion of the leased space in exchange for a termination fee, which the Company exercised in the fourth quarter of 2020. This modification was not accounted for as a separate contract. Upon exercise of this early termination option, the Company reduced the lease liability balance by the amount of the termination fee, which was \$1.6 million, and remeasured the remaining ROU Asset and lease liability, reducing them by \$4.2 million and \$7.0 million, respectively, which resulted in a gain on partial lease termination of \$2.8 million. The \$2.8 million gain on partial lease termination was recorded as a reduction to operating lease cost and is reflected within the "Operating lease cost" line in the table below. The \$1.6 million termination fee is reflected within the "Cash paid for amounts included in the measurement of operating lease liabilities" line in the table below. In remeasuring the ROU Asset, the Company elected to do so based on the on the remaining right of use. Several of the Company's remaining leases also contain options for renewal or options to terminate all or a portion of the leased space. The Company continually assesses the likelihood of exercising these options and recognizes an option as part of its ROU assets and lease liabilities if and when it is reasonably certain that it will exercise the option.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The following table presents the Company's total lease cost and other lease details for the year ended December 31, 2020 (in thousands, except years and discount rates):

	Year Ended December 31,	
	2020	2019
<i>Lease cost:</i>		
Operating lease cost	\$ 11,772	\$ 15,020
Short-term lease cost	1,158	2,015
Variable lease cost	1,382	1,175
Total lease cost	<u>\$ 14,312</u>	<u>\$ 18,210</u>
<i>Other information:</i>		
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 17,497	\$ 15,614
ROU assets obtained in exchange for new operating lease liabilities	\$ 743	\$ 5,016
Weighted average remaining lease term in years – operating leases	9.1	10.0
Weighted average discount rate – operating leases	6.1%	6.0%

The following table presents the maturities of the Company's operating lease liabilities as of December 31, 2020 (in thousands):

For the year ended December 31,	
2021	\$ 16,186
2022	14,311
2023	13,937
2024	12,051
2025	11,649
Thereafter	55,643
Total lease payments	<u>123,777</u>
Less: imputed interest	<u>(28,636)</u>
Total	<u>\$ 95,141</u>
Reported as:	
Current operating lease liabilities	\$ 10,813
Non-current operating lease liabilities	84,328
Total	<u>\$ 95,141</u>

(9) Convertible Senior Notes

In December 2020, the Company issued \$650.0 million aggregate principal amount of 0.750% Convertible Senior Notes due 2025 (the "Notes") in a private offering. The \$650.0 million aggregate principal amount included the full exercise of the option provided to the initial purchaser to purchase an additional \$100.0 million principal amount of the Notes. The Notes are senior unsecured obligations of the Company and bear interest at a fixed rate of 0.750% per annum, payable semiannually in arrears on June 15 and December 15 of each year, beginning on June 15, 2021.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Holders of the Notes may receive additional interest under specified circumstances as outlined in the indenture relating to the issuance of the Notes (the “Indenture”). The Notes will mature on December 15, 2025, unless earlier converted, redeemed or repurchased in accordance with their terms. The total net proceeds from the offering, after deducting initial purchaser discounts and issuance costs, were approximately \$634.7 million.

The Notes are senior unsecured obligations and rank senior in right of payment to any of the Company’s indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment to any of the Company’s unsecured indebtedness that is not so subordinated; effectively junior in right of payment to any of the Company’s secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including trade payables) of the Company’s subsidiaries.

The Notes are convertible into shares of the Company’s class A common stock at an initial conversion rate of 2.5126 shares per \$1,000 principal amount of notes (equivalent to an initial conversion price of approximately \$397.99 per share of class A common stock). The conversion rate is subject to customary anti-dilution adjustments. In addition, following certain events that occur prior to the maturity date or if the Company delivers a notice of redemption, the Company will increase the conversion rate for a holder who elects to convert its notes in connection with such corporate event or notice of redemption, as the case may be, in certain circumstances as provided in the Indenture.

Prior to June 15, 2025, the Notes are convertible only under the following circumstances: (1) during any calendar quarter commencing after the calendar quarter ending on March 31, 2021 (and only during such calendar quarter), if the last reported sale price of the Company’s class A common stock for at least 20 trading days (whether or not consecutive) during the period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price on each applicable trading day; (2) during the five business day period after any five consecutive trading day period (the “measurement period”) in which the “trading price” (as defined in the Indenture) per \$1,000 principal amount of notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of the Company’s class A common stock and the conversion rate on each such trading day; (3) if the Company calls any or all of the Notes for redemption, at any time prior to the close of business on the second scheduled trading day immediately preceding the redemption date; and (4) upon occurrence of specified corporate events as described in the Indenture.

On or after June 15, 2025 until the close of business on the second scheduled trading day immediately preceding the maturity date of the Notes, holders may convert the Notes at any time. Upon conversion of the Notes, the Company will pay or deliver, as the case may be, cash, shares of the Company’s class A common stock or a combination of cash and shares of class A common stock, at the Company’s election. It is the Company’s current intent to settle the principal amount of the Notes with cash.

Prior to December 20, 2023, the Company may not redeem the Notes. The Company may redeem for cash all or a portion of the Notes, at its option, on or after December 20, 2023 if the last reported sale price of the Company’s class A common stock has been at least 130% of the conversion price then in effect for at least 20 trading days (whether or not consecutive), including the trading day immediately preceding the date on which the Company provides a notice of redemption, during any 30 consecutive trading day period ending on, and including, the trading day immediately preceding the date on which the Company provides notice of redemption. The redemption price will be equal to 100% of the principal amount of the Notes to be redeemed, plus accrued and unpaid interest to, but excluding, the redemption date.

If the Company undergoes a “fundamental change,” as defined in the Indenture, prior to maturity, subject to certain conditions, holders may require the Company to repurchase for cash all or any portion of their Notes at a fundamental change repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus any accrued and unpaid interest to, but excluding, the fundamental change repurchase date.

The Indenture contains customary terms and covenants, including that upon certain events of default occurring and continuing, either the Trustee or the holders of at least 25% in principal amount of the outstanding Notes may declare 100% of the principal of, and accrued and unpaid interest, if any, on, all the Notes to be due and payable.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

During the three months ended December 31, 2020, none of the Notes' conversion features were triggered and no conversions occurred during the three months ended December 31, 2020. The Notes may be convertible thereafter if one or more of the conversion conditions is satisfied during future measurement periods.

In accounting for the issuance of the Notes, the Company separated the Notes into liability and equity components. The initial carrying amount of the liability component was determined by measuring the fair value of a similar debt instrument without any associated conversion features. The carrying amount of the equity component (representing the conversion option) was \$153.5 million and was determined by deducting the fair value of the liability component from the par value of the Notes. The equity component was recorded in "additional paid-in-capital" in the Company's Consolidated Balance Sheet and will not be remeasured as long as it continues to meet the conditions for equity classification.

The Company incurred approximately \$15.3 million in customary offering expenses associated with the Notes ("issuance costs"). In accounting for the issuance costs, the Company allocated the total costs incurred to the liability and equity components of the Notes based on their relative values. Issuance costs attributable to the liability component of \$11.6 million were taken as a reduction to the principal amount of the Notes. Issuance costs attributable to the equity component of \$3.6 million have been netted against the equity component of the Notes in "additional paid-in-capital" in the Company's Consolidated Balance Sheet.

The excess of the principal amount of the liability component over its carrying amount (the "debt discount") and the issuance costs attributable to the liability component are amortized to interest expense over the contractual term of the Notes at an effective interest rate of 6.82%. As of December 31, 2020, the net carrying amount of the liability component of the Notes is classified as a long-term liability in the "Convertible Senior Notes" line item in the Company's Consolidated Balance Sheet as follows (in thousands):

	<u>December 31,</u> <u>2020</u>
Principal	\$ 650,000
Unamortized debt discount	(152,075)
Unamortized issuance costs	(11,559)
Net carrying amount of debt	<u>\$ 486,366</u>

As of December 31, 2020, the net carrying amount of the equity component of the Notes is classified as permanent equity and included in "additional paid in capital" in the Company's Consolidated Balance Sheet as follows (in thousands):

	<u>December 31,</u> <u>2020</u>
Debt discount for conversion option	\$ 153,527
Issuance costs allocated to equity	(3,602)
Deferred tax liability, net of deferred tax asset, related to debt discount and issuance costs	(42,115)
Net carrying amount of equity	<u>\$ 107,810</u>

For the year ended December 31, 2020, interest expense related to the Notes was as follows (in thousands):

	<u>Year Ended December 31,</u> <u>2020</u>
Contractual interest expense	\$ 271
Amortization of debt discount	1,452
Amortization of issuance costs allocated to debt	91
Total interest expense	<u>\$ 1,814</u>

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(10) Commitments and Contingencies

(a) Commitments

From time to time, the Company enters into certain types of contracts that require it to indemnify parties against third-party claims. These contracts primarily relate to agreements under which the Company assumes indemnity obligations for intellectual property infringement, as well as other obligations from time to time depending on arrangements negotiated with customers and other third parties. The conditions of these obligations vary. Thus, the overall maximum amount of the Company's indemnification obligations cannot be reasonably estimated. Historically, the Company has not been obligated to make significant payments for these obligations and does not currently expect to incur any material obligations in the future. Accordingly, the Company has not recorded an indemnification liability on its Balance Sheets as of December 31, 2020 or December 31, 2019.

As a result of the Tax Act, the Company recorded a final tax expense of \$37.2 million related to the Transition Tax, comprised of a provisional Transition Tax obligation of \$40.3 million in 2017 and a subsequent \$(3.1) million measurement-period adjustment in 2018. As of December 31, 2020, \$28.0 million of the Transition Tax was unpaid, of which \$25.1 million is included in "Other long-term liabilities" and \$3.0 million is included in "Accounts payable, accrued expenses, and operating lease liabilities" in the Company's Consolidated Balance Sheets.

The following table shows future minimum payments related to the Notes (semi-annual interest payments and principal upon maturity), noncancelable purchase agreements with initial terms of greater than one year, and anticipated payments related to the Transition Tax resulting from the Tax Act based on the expected due dates of the various installments as of December 31, 2020 (in thousands):

Year	Convertible Senior Notes	Purchase Obligations	Transition Tax
2021	\$ 4,740	\$ 13,825	\$ 2,951
2022	4,875	9,673	2,952
2023	4,875	8,705	5,534
2024	4,875	669	7,379
2025	655,078	682	9,223
Thereafter	0	1,048	0
	<u>\$ 674,443</u>	<u>\$ 34,602</u>	<u>\$ 28,039</u>

See Note 9, Convertible Senior Notes, to the Consolidated Financial Statements for information regarding the Company's commitments related to the Notes. Although the Notes will mature on December 15, 2025, they may be earlier converted, redeemed or repurchased in accordance with their terms.

See Note 8, Leases, to the Consolidated Financial Statements for information regarding the Company's commitments that are related to lease agreements.

(b) Contingencies

Following an internal review initiated in 2018, the Company believes that its Brazilian subsidiary failed or likely failed to comply with local procurement regulations in conducting business with certain Brazilian government entities.

On February 6, 2020, the Company learned that a Brazilian court has authorized the Brazilian Federal Police to use certain investigative measures in its investigation into alleged corruption and procurement fraud involving certain government officials, pertaining to a particular transaction. Pursuant to this court authorization, numerous entities and individuals across Brazil have been subject to the freezing of assets and other measures, including a former reseller and a former employee of the Company's Brazilian subsidiary. On February 6, 2020, the bank accounts of the Company's Brazilian subsidiary were also frozen up to an amount of BRL 10.0 million, or approximately \$2.3 million. On May 22, 2020, these bank accounts of the Company's Brazilian subsidiary were unfrozen on the basis of a court decision that found the alleged illicit origin of the amounts was not sufficiently evidenced. On May 25, 2020, the Federal Prosecution Office presented an appeal to this decision, but the accounts will remain unfrozen pending the outcome of the appeal. The transaction at issue is part of the basis of the previously reported failure or likely failure of the Brazilian subsidiary to comply with local procurement regulations. The Company is not a subject of the investigation, and the Company is not aware of any allegations that the former employee or the Company made any payments to Brazilian government officials. The Brazilian Federal Police has expanded the investigation to include other possible cases of procurement fraud involving Brazilian government entities and criminal penalties may be imposed against individuals; however, the Company's Brazilian subsidiary is not a target.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company has also learned that Brazil's Federal Comptroller General filed an administrative action against the Company's Brazilian subsidiary with respect to the alleged procurement violations. The Company is taking measures to attempt to resolve this matter.

While the Company believes that it is probable that the resolution of these Brazilian matters will result in a loss, the amount or range of loss is not reasonably estimable at this time. Given the stage of these matters, the outcome may result in a material impact on the Company's earnings and financial results for the period in which any such liability is accrued. However, the Company believes that the outcome of these matters will not have a material effect on the Company's financial position.

The Company is also involved in various legal proceedings arising in the normal course of business. Although the outcomes of these legal proceedings are inherently difficult to predict, management does not expect the resolution of these legal proceedings to have a material adverse effect on the Company's financial position, results of operations, or cash flows.

The Company has contingent liabilities that, in management's judgment, are not probable of assertion. If such unasserted contingent liabilities were to be asserted, or become probable of assertion, the Company may be required to record significant expenses and liabilities in the period in which these liabilities are asserted or become probable of assertion.

(11) Income Taxes

U.S. and international components of (loss) income before income taxes (in thousands) were comprised of the following for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
U.S.	\$ (53,250)	\$ 9,944	\$ (18,295)
Foreign	33,297	28,319	38,777
Total	<u>\$ (19,953)</u>	<u>\$ 38,263</u>	<u>\$ 20,482</u>

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The (benefit from) provision for income taxes (in thousands) consisted of the following for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
Current:			
Federal	\$ 1,861	\$ 1,256	\$ (1,916)
State	1,445	143	1,656
Foreign	5,221	5,135	6,460
	<u>\$ 8,527</u>	<u>\$ 6,534</u>	<u>\$ 6,200</u>
Deferred:			
Federal	\$ (15,038)	\$ (749)	\$ (6,071)
State	(6,269)	(480)	(2,047)
Foreign	351	(1,397)	(101)
	<u>\$ (20,956)</u>	<u>\$ (2,626)</u>	<u>\$ (8,219)</u>
Total (benefit) provision	<u>\$ (12,429)</u>	<u>\$ 3,908</u>	<u>\$ (2,019)</u>

The benefit from or provision for income taxes differs from the amount computed by applying the federal statutory income tax rate to the Company's loss or income before income taxes as follows for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
Income tax expense at federal statutory rate	21.0%	21.0%	21.0%
State taxes, net of federal tax effect	18.0%	(1.7)%	(1.3)%
Foreign earnings taxed at different rates	21.7%	(6.1)%	(20.5)%
Book tax difference in amortization of intangible property	0.0%	(4.6)%	0.0%
Withholding tax	(12.5)%	3.1%	5.5%
Foreign tax credit	3.8%	(3.0)%	(5.2)%
Other international components	(3.5)%	0.2%	0.3%
Change in valuation allowance	2.7%	1.6%	2.5%
Deferred tax adjustments and rate changes	(3.4)%	1.0%	(1.7)%
Meals and entertainment	(1.3)%	1.3%	2.6%
Non-deductible officers compensation	(12.5)%	1.4%	2.1%
Subpart F income	(2.0)%	3.2%	7.0%
Research and development tax credit	19.9%	(9.3)%	(11.8)%
Stock compensation	11.8%	1.8%	5.8%
GILTI, net of foreign tax credit	(1.1)%	0.9%	0.5%
FDII	3.1%	(1.9)%	(4.5)%
Transition Tax	0.0%	0.0%	(15.2)%
Other permanent differences	(3.4)%	1.3%	3.0%
Total	<u>62.3%</u>	<u>10.2%</u>	<u>(9.9)%</u>

The Company's U.S. and foreign effective tax rates for (loss) income before income taxes were as follows for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
U.S.	33.8%	1.7%	45.8%
Foreign	16.7%	13.2%	16.4%
Combined	<u>62.3%</u>	<u>10.2%</u>	<u>(9.9)%</u>

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The change in the Company's effective tax rate in 2020, as compared to the prior year, was primarily due to certain discrete items, overall income or loss level, and the change in the proportion of U.S. versus foreign income.

The Tax Act imposed a Transition Tax on previously untaxed accumulated and current earnings and profits of certain of the Company's foreign subsidiaries. The Company recorded a final tax expense of \$37.2 million related to the Transition Tax, comprised of a provisional Transition Tax obligation of \$40.3 million in 2017 and a subsequent \$(3.1) million measurement-period adjustment in 2018. As of December 31, 2020, \$28.0 million of the Transition Tax was unpaid, of which \$25.1 million is included in "Other long-term liabilities" and \$3.0 million is included in "Accounts payable, accrued expenses, and operating lease liabilities" in the Company's Consolidated Balance Sheets.

The Tax Act also reduced the U.S. corporate tax rate from 35% to 21%, effective January 1, 2018. Additionally, the Tax Act requires certain Global Intangible Low Income ("GILTI") earned by a controlled foreign corporation ("CFC") to be included in the gross income of the CFC's U.S. shareholder. The Company has elected the "period cost method" and treats taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred. The Tax Act allows a U.S. corporation a deduction equal to a certain percentage of its foreign-derived intangible income ("FDII"). The Company has estimated the impact of the GILTI tax and FDII deduction in determining its annual effective tax rate that is reflected in its (benefit from) provision for income taxes since January 1, 2018.

As of December 31, 2020 and 2019, the amount of cash and cash equivalents and short-term investments held by the Company's U.S. entities was \$13.7 million and \$289.4 million, respectively, and by the Company's non-U.S. entities was \$46.0 million and \$276.2 million, respectively. The Company earns a significant amount of its revenues outside the United States and its accumulated undistributed foreign earnings and profits as of December 31, 2020 and 2019 were \$136.3 million and \$231.2 million, respectively. Beginning in the third quarter of 2020, the Company no longer intends to indefinitely reinvest its foreign earnings and profits. After taking into account the Transition Tax and GILTI tax, the Company recorded tax expense of \$1.7 million on undistributed foreign earnings related to foreign withholding tax and U.S. state income taxes in 2020.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Deferred income taxes reflect the net tax effects of the temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities (in thousands) were as follows for the periods indicated:

	December 31,	
	2020	2019
Deferred tax assets, net:		
Net operating loss carryforwards	\$ 1,690	\$ 874
Tax credits	4,158	2,553
Intangible assets	1,707	1,878
Deferred revenue adjustment	408	423
Accrued compensation	6,527	6,257
Share-based compensation expense	11,410	14,182
Deferred rent	0	1,330
Digital asset impairment losses	19,843	0
Other	3,605	1,453
Deferred tax assets before valuation allowance	49,348	28,950
Valuation allowance	(1,259)	(2,130)
Deferred tax assets, net of valuation allowance	48,089	26,820
Deferred tax liabilities:		
Prepaid expenses and other	1,792	1,693
Property and equipment	4,233	5,092
Debt discount, net of issuance costs	41,693	0
Deferred tax on undistributed foreign earnings	1,741	0
Method change	338	652
Total deferred tax liabilities	49,797	7,437
Total net deferred tax (liability) asset	\$ (1,708)	\$ 19,383
Reported as:		
Non-current deferred tax assets, net	6,503	19,409
Non-current deferred tax liabilities	(8,211)	(26)
Total net deferred tax (liability) asset	\$ (1,708)	\$ 19,383

As of December 31, 2020, the Company had unrecognized income tax benefits of \$4.6 million, recorded in "Other long-term liabilities" in the Company's Consolidated Balance Sheets. The change in unrecognized income tax benefits (in thousands) is presented in the table below:

Unrecognized income tax benefits at January 1, 2020	\$ 1,563
Increase related to positions taken in prior period	2,580
Increase related to positions taken in current period	283
Decrease related to expiration of statute of limitations	(133)
Unrecognized income tax benefits at December 31, 2020	4,293
Accrued interest	295
Unrecognized income tax benefits recorded in other long-term liabilities at December 31, 2020	\$ 4,588

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

If recognized, \$4.3 million of the gross unrecognized income tax benefits would impact the Company's effective tax rate. Over the next 12 months, the amount of the Company's liability for unrecognized income tax benefits shown above is not expected to change materially. The Company recognizes estimated accrued interest related to unrecognized income tax benefits in the benefit from income taxes. During the years ended December 31, 2020, 2019, and 2018, the Company released or recognized an immaterial amount of accrued interest. The amount of accumulated accrued interest related to the above unrecognized income tax benefits was approximately \$0.3 million and \$0.2 million as of December 31, 2020 and 2019, respectively.

The Company files tax returns in numerous foreign countries as well as the United States and its tax returns may be subject to audit by tax authorities in all countries in which it files. Each country has its own statute of limitations for making assessment of additional tax liabilities. In 2018, the Company settled the tax examination in China for tax years 2008 to 2016 without any material audit assessments. In 2019, the Company settled the tax examination in Italy for tax years 2013 to 2015 without any material audit assessments. The Company's U.S. tax returns for tax years from 2016 and forward are subject to potential examination by the Internal Revenue Service. However, due to the Company's use of state NOL carryovers in the United States, state tax authorities may attempt to reduce or fully offset the amount of state NOL carryovers from tax years ended 2011 and forward that the Company used in later tax years. The Company's major foreign tax jurisdictions and the tax years that remain subject to potential examination are Italy, Germany, and Poland for tax years 2016 and forward; Spain for tax years 2017 and forward, and the United Kingdom for tax years 2019 and forward. To date there have been no material audit assessments related to audits in the United States or any of the applicable foreign jurisdictions.

The Company had no U.S. NOL carryforwards as of December 31, 2020 and 2019. The Company had \$7.9 million and \$4.1 million of foreign NOL carryforwards as of December 31, 2020 and 2019, respectively.

The Company's valuation allowances of \$1.3 million and \$2.1 million at December 31, 2020 and 2019, respectively, primarily relate to certain foreign tax credit carryforward tax assets that, in the Company's present estimation, more likely than not will not be realized.

In determining the Company's provision for (benefit from) income taxes, net deferred tax assets, liabilities, and valuation allowances, management is required to make estimates and judgments related to projections of domestic and foreign profitability, the timing and extent of the utilization of NOL carryforwards, applicable tax rates, transfer pricing methods, and prudent and feasible tax planning strategies. As a multinational company, the Company is required to calculate and provide for estimated income tax liabilities for each of the tax jurisdictions in which it operates. This process involves estimating current tax obligations and exposures in each jurisdiction, as well as making judgments regarding the future recoverability of deferred tax assets. Changes in the estimated level of annual pre-tax income, changes in tax laws, particularly changes related to the utilization of NOLs in various jurisdictions, and changes resulting from tax audits can all affect the overall effective income tax rate which, in turn, impacts the overall level of income tax expense or benefit and net income.

Estimates and judgments related to the Company's projections and assumptions are inherently uncertain. Therefore, actual results could differ materially from projections. Currently, the Company expects to use its deferred tax assets, subject to Internal Revenue Code limitations, within the carryforward periods. Valuation allowances have been established where the Company has concluded that it is more likely than not that such deferred tax assets are not realizable. If the Company is unable to regain profitability in future periods, it may be required to increase the valuation allowance against the deferred tax assets, which could result in a charge that would materially adversely affect net (loss) income in the period in which the charge is incurred.

(12) Share-based Compensation

The 2013 Equity Plan authorizes the issuance of various types of share-based awards to the Company's employees, officers, directors, and other eligible participants. As of December 31, 2020, a total of 2,300,000 shares of the Company's class A common stock were authorized for issuance under the 2013 Equity Plan. As of December 31, 2020, there were 415,238 shares of class A common stock reserved and available for future issuance under the 2013 Equity Plan.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Under the 2013 Equity Plan, the Company has issued stock option awards, restricted stock units, and other stock-based awards. Regardless of the type of award issued, any shares issued under the 2013 Equity Plan may consist in whole or in part of authorized but unissued shares or treasury shares. No awards may be issued more than 10 years after the 2013 Equity Plan's effective date. In determining related share-based compensation expense for any award under the 2013 Equity Plan, the Company has made an accounting policy election to account for forfeitures of awards as they occur and therefore share-based compensation expense presented below has not been adjusted for any estimated forfeitures.

Stock option awards

Stock options that are granted under the 2013 Equity Plan must have an exercise price equal to at least the fair market value of the Company's class A common stock on the date of grant, become exercisable as established by the Board of Directors or the Compensation Committee, and expire no later than 10 years following the date of grant. The Company recognizes share-based compensation expense associated with such stock option awards on a straight-line basis over the award's requisite service period (generally, the vesting period). The stock option awards granted to date vest in equal annual installments over an approximately four-year vesting period (unless accelerated in connection with a change in control event under specified conditions as set forth in the applicable option agreement or otherwise in accordance with provisions of the 2013 Equity Plan or applicable option agreement).

Share-based compensation expense related to stock option awards is based on the fair value of the stock option awards on the date of grant, as estimated using the Black-Scholes option pricing model. The Black-Scholes option pricing model requires the input of certain management assumptions, including the expected term, expected stock price volatility, risk-free interest rate, and expected dividend yield. The Company estimates the term over which option holders are expected to hold their stock options by using the simplified method for "plain-vanilla" stock option awards because the Company's stock option exercise history does not provide a reasonable basis to compute the expected term for stock options granted under the 2013 Equity Plan. The Company has relied exclusively on its historical stock price volatility to estimate the expected stock price volatility over the expected term because the Company believed at the date of grant that future volatility was unlikely to differ from the past. In estimating the expected stock price volatility, the Company uses a simple average calculation method. The risk-free interest rate is based on U.S. Treasury securities with terms that approximate the expected term of the stock options. The expected dividend yield is based on the Company's past cash dividend history and anticipated future cash dividend payments. The expected dividend yield is zero, as the Company has not previously declared cash dividends and does not currently intend to declare cash dividends in the foreseeable future. These assumptions are based on management's best judgment, and changes to these assumptions could materially affect the fair value estimates and amount of share-based compensation expense recognized.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of December 31, 2020, there were options to purchase 1,157,375 shares of class A common stock outstanding under the 2013 Equity Plan. The following table summarizes the Company's stock option activity (in thousands, except per share data and years) for the periods indicated:

	Stock Options Outstanding			
	Shares	Weighted Average Exercise Price Per Share	Aggregate Intrinsic Value	Weighted Average Remaining Contractual Term (Years)
Balance as of January 1, 2018	992	\$ 145.28		
Granted	710	130.27		
Exercised	(21)	121.13	\$ 196	
Forfeited/Expired	(201)	154.49		
Balance as of December 31, 2018	1,480	137.16		
Granted	470	150.88		
Exercised	(51)	128.17	\$ 799	
Forfeited/Expired	(265)	135.88		
Balance as of December 31, 2019	1,634	141.60		
Granted	118	146.76		
Exercised	(348)	146.80	\$ 29,994	
Forfeited/Expired	(247)	146.63		
Balance as of December 31, 2020	1,157	\$ 139.48		
Exercisable as of December 31, 2020	644	\$ 135.05	\$ 163,318	4.1
Expected to vest as of December 31, 2020	513	\$ 145.05	124,947	8.4
Total	1,157	\$ 139.48	\$ 288,265	6.0

Stock options outstanding as of December 31, 2020 are comprised of the following range of exercise prices per share (in thousands, except per share data and years):

Range of Exercise Prices per Share	Stock Options Outstanding at December 31, 2020		
	Shares	Weighted Average Exercise Price Per Share	Weighted Average Remaining Contractual Term (Years)
\$121.43 - \$140.00	710	\$ 124.45	4.8
\$140.01 - \$160.00	268	\$ 151.33	9.0
\$160.01 - \$180.00	69	\$ 169.37	6.8
\$180.01 - \$201.25	110	\$ 188.97	6.0
Total	1,157	\$ 139.48	6.0

An aggregate of 200,000, 216,250, and 251,250 stock options with an aggregate fair value of \$11.2 million, \$12.6 million, and \$15.5 million vested during the years ended December 31, 2020, 2019, and 2018, respectively.

The weighted average grant date fair value of stock option awards using the Black-Scholes option pricing model was \$49.68, \$54.36, and \$51.68 for each share subject to a stock option granted during the years ended December 31, 2020, 2019, and 2018, respectively, based on the following assumptions:

	Years Ended December 31,		
	2020	2019	2018
Expected term of options in years	6.3	6.3	6.3
Expected volatility	33.6% - 34.6%	33.2% - 33.4%	33.7% - 35.5%
Risk-free interest rate	0.3% - 0.5%	1.7% - 2.5%	2.7% - 2.9%
Expected dividend yield	0.0%	0.0%	0.0%

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

The Company recognized approximately \$10.1 million, \$10.1 million, and \$14.6 million in share-based compensation expense for the years ended December 31, 2020, 2019, and 2018, respectively, from stock options granted under the 2013 Equity Plan. As of December 31, 2020, there was approximately \$21.8 million of total unrecognized share-based compensation expense related to unvested stock options. As of December 31, 2020, the Company expects to recognize this remaining share-based compensation expense over a weighted average vesting period of approximately 2.6 years.

Restricted stock units

During the fourth quarter of 2020, the Company began granting restricted stock units under the 2013 Equity Plan. The restricted stock units entitle recipients to receive a number of shares of the Company's class A common stock over a vesting period, as specified in the applicable restricted stock unit agreement. Although the Company may in its sole discretion elect to pay fully or partially in cash in lieu of settling solely in shares, it does not currently intend to do so.

Share-based compensation expense related to restricted stock units is based on the fair value of the Company's class A common stock on the date of grant. The Company recognizes share-based compensation expense associated with such restricted stock unit awards on a straight-line basis over the award's requisite service period (generally, the vesting period). The restricted stock unit awards granted to date vest in equal annual installments over a four-year period (unless accelerated in connection with a change in control event under specified conditions as set forth in the applicable restricted stock unit agreement or otherwise in accordance with provisions of the 2013 Equity Plan or applicable restricted stock unit agreement).

As of December 31, 2020, there were 74,400 restricted stock units outstanding under the 2013 Equity Plan. The following table summarizes the Company's restricted stock unit activity (in thousands) for the periods indicated:

	Restricted Stock Units Outstanding	
	Units	Aggregate Intrinsic Value
Balance as of January 1, 2020	0	
Granted	76	
Vested	0	\$ 0
Forfeited	(2)	
Balance as of December 31, 2020	74	
Expected to vest as of December 31, 2020	74	\$ 28,908

No restricted stock units vested during the year ended December 31, 2020. The weighted average grant date fair value of restricted stock units granted during the year ended December 31, 2020 was \$192.43 based on the fair value of the Company's class A common stock. The Company recognized approximately \$0.5 million in share-based compensation expense for the year ended December 31, 2020 from restricted stock units granted under the 2013 Equity Plan. As of December 31, 2020, there was approximately \$13.8 million of total unrecognized share-based compensation expense related to unvested restricted stock units. As of December 31, 2020, the Company expects to recognize this remaining share-based compensation expense over a weighted average vesting period of approximately 3.9 years.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Other stock-based awards

During 2018, the Company granted certain awards characterized as “other stock-based awards” under the 2013 Equity Plan. These other stock-based awards are similar to stock options, except these awards are settled in cash only and not in shares of the Company’s class A common stock. These awards are classified as liabilities in the Company’s Consolidated Balance Sheets due to the required cash settlement feature and the fair value of the awards is remeasured each quarterly reporting period. Other stock-based awards were not granted in 2020 or 2019.

The Company recognized approximately \$0.6 million in share-based compensation expense for the year ended December 31, 2020 from other stock-based awards. For the years ended December 31, 2019 and 2018, the Company did not recognize a material amount in share-based compensation expense from other stock-based awards. As of December 31, 2020, there was approximately \$1.0 million of total unrecognized share-based compensation expense related to other stock-based awards. The Company expects to recognize this remaining share-based compensation expense over a weighted average vesting period of approximately 1.4 years, subject to additional fair value adjustments through the earlier of settlement or expiration.

(13) Basic and Diluted Earnings per Share

Potential shares of common stock are included in the diluted earnings per share calculation when dilutive. Potential shares of common stock, consisting of class A common stock issuable upon exercise of outstanding stock options, class A common stock issuable upon vesting of restricted stock units, and class A common stock issuable upon conversion of the Notes (as to which the Company currently intends to settle the principal in cash and excess value in shares of class A common stock) are calculated using the treasury stock method.

The following table sets forth the computation of basic and diluted earnings per share (in thousands, except per share data) for the periods indicated:

	Years Ended December 31,		
	2020	2019	2018
Numerator:			
Net income	\$ (7,524)	\$ 34,355	\$ 22,501
Denominator:			
Weighted average common shares of class A common stock	7,658	8,221	9,340
Weighted average common shares of class B common stock	2,026	2,035	2,035
Total weighted average common stock shares outstanding	9,684	10,256	11,375
Effect of dilutive securities:			
Employee stock options	0	72	37
Adjusted weighted average shares	9,684	10,328	11,412
Earnings per share:			
Basic earnings per share	\$ (0.78)	\$ 3.35	\$ 1.98
Diluted earnings per share	\$ (0.78)	\$ 3.33	\$ 1.97

For the years ended December 31, 2020, 2019, and 2018, stock options issued under the 2013 Equity Plan to purchase a weighted average of approximately 1,487,000, 933,000, and 896,000 shares of class A common stock, respectively, were excluded from the diluted earnings per share calculation because their impact would have been anti-dilutive. For the year ended December 31, 2020, restricted stock units issued under the 2013 Equity Plan to issue a weighted average of approximately 10,000 shares of class A common stock were excluded from the diluted earnings per share calculation because their impact would have been anti-dilutive. For the year-ended December 31, 2020, the average market price of the Company’s class A common stock did not exceed the conversion price of the Notes and therefore there is no dilutive impact to earnings per share arising from the Notes.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(14) Treasury Stock

The Board of Directors has authorized the Company's repurchase of up to an aggregate of \$800.0 million of its class A common stock from time to time on the open market through April 29, 2023 under the Share Repurchase Program, although the program may be suspended or discontinued by the Company at any time. The timing and amount of any shares repurchased will be determined by the Company's management based on its evaluation of market conditions and other factors. The Share Repurchase Program may be funded using the Company's working capital, as well as proceeds from any other funding arrangements that the Company may enter into in the future. During 2020, the Company repurchased an aggregate of 444,769 shares of its class A common stock at an average price per share of \$139.12 and an aggregate cost of \$61.9 million pursuant to the Share Repurchase Program. During 2019, the Company repurchased an aggregate of 521,843 shares of its class A common stock at an average price per share of \$139.35 and an aggregate cost of \$72.7 million pursuant to the Share Repurchase Program. During 2018, the Company repurchased an aggregate of 880,667 shares of its class A common stock at an average price per share of \$126.02 and an aggregate cost of \$111.0 million pursuant to the Share Repurchase Program. As of December 31, 2020, the Company had repurchased an aggregate of 5,674,226 shares of its class A common stock at an average price per share of \$104.13 and an aggregate cost of \$590.9 million pursuant to the Share Repurchase Program. As of December 31, 2020, \$209.1 million of the Company's class A common stock remained available for repurchase pursuant to the Share Repurchase Program. The average price per share and aggregate cost amounts disclosed above include broker commissions.

On August 11, 2020, the Company announced that it commenced an offer to purchase up to \$250.0 million in value of shares of its issued and outstanding class A common stock, or such lesser number of shares as are properly tendered and not properly withdrawn, at a price not greater than \$140.00 nor less than \$122.00 per share (the "Offer"). The Offer expired at 5:00 p.m., New York City time, on September 10, 2020. During the year ended December 31, 2020, the Company repurchased an aggregate of 432,313 shares of its class A common stock through the Offer at a price of \$140.00 per share for an aggregate cost of \$61.3 million, inclusive of \$0.8 million in certain fees and expenses related to the Offer.

(15) Employee Benefit Plan

The Company sponsors a benefit plan to provide retirement benefits for its employees, known as the MicroStrategy 401(k) Savings Plan (the "401(k) Plan"). Participants may make voluntary contributions to the 401(k) Plan of up to 50% of their annual base pre-tax compensation, cash bonuses, and commissions not to exceed the federally determined maximum allowable contribution amounts. Participants may designate all or a portion of the 401(k) Plan elective deferral contributions as Roth elective deferral contributions instead of pre-tax elective deferral contributions. The 401(k) Plan permits for discretionary Company contributions.

The Company currently makes a matching contribution to each 401(k) Plan participant in the amount of 50% of the first 12% of a participant's contributions, up to a maximum of \$5,000 per year. Further, all active participants become fully vested in the Company's matching contributions after completing four years of employment, vesting in increments based on the participant's years of employment with the Company. Prior to 2019, the Company made matching contributions in the amount of 50% of the first 6% of a participant's contributions, up to a maximum of \$3,000 per year, and participants became fully vested in the Company's matching contributions after completing six years of employment, vesting in increments based on the participant's years of employment with the Company.

The Company made contributions to the 401(k) Plan totaling \$3.3 million, \$4.1 million, and \$2.4 million during the years ended December 31, 2020, 2019, and 2018, respectively.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(16) Segment Information

The Company manages its business in one reportable operating segment. The Company's one reportable operating segment is engaged in the design, development, marketing, and sales of its enterprise intelligence software platform through licensing arrangements and cloud subscriptions and related services. The following table presents total revenues, gross profit, and long-lived assets, excluding long-term deferred tax assets, (in thousands) according to geographic region:

Geographic regions:	Domestic	EMEA	Other Regions	Consolidated
Year ended December 31, 2020				
Total revenues	\$ 279,220	\$ 155,478	\$ 46,037	\$ 480,735
Gross profit	\$ 229,466	\$ 124,513	\$ 35,701	\$ 389,680
Year ended December 31, 2019				
Total revenues	\$ 273,581	\$ 159,643	\$ 53,103	\$ 486,327
Gross profit	\$ 216,365	\$ 126,939	\$ 43,049	\$ 386,353
Year ended December 31, 2018				
Total revenues	\$ 287,258	\$ 156,706	\$ 53,674	\$ 497,638
Gross profit	\$ 228,310	\$ 126,315	\$ 43,514	\$ 398,139
As of December 31, 2020				
Long-lived assets	\$ 1,165,283	\$ 11,441	\$ 9,765	\$ 1,186,489
As of December 31, 2019				
Long-lived assets	\$ 118,168	\$ 13,636	\$ 11,912	\$ 143,716

The domestic region consists of the United States and Canada. The EMEA region includes operations in Europe, the Middle East, and Africa. The other regions include all other foreign countries, generally comprising Latin America and the Asia Pacific region. For the years ended December 31, 2020, 2019, and 2018, no individual foreign country accounted for 10% or more of total consolidated revenues.

For the years ended December 31, 2020, 2019, and 2018, no individual customer accounted for 10% or more of total consolidated revenues.

As of December 31, 2020 and 2019, no individual foreign country accounted for 10% or more of total consolidated assets.

(17) Sale of Domain Name

On May 30, 2019, the Company completed the sale of its Voice.com domain name for consideration of \$30.0 million in cash (the "Domain Name Sale"). As of the date of the Domain Name Sale, the Company had no unamortized costs associated with the Voice.com domain name asset. The Company did not incur any material costs related to the Domain Name Sale. The Domain Name Sale resulted in a gain of \$29.8 million in the second quarter of 2019, which was recorded as "Other income, net" for such quarter in the Consolidated Statements of Operations. The Company also recorded a discrete \$8.1 million tax provision in the second quarter of 2019 related to the Domain Name Sale.

MICROSTRATEGY INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(18) Selected Quarterly Financial Data (Unaudited)

The following tables contain unaudited Statement of Operations information for each quarter of 2020 and 2019. During the third and fourth quarters of 2020, the Company recorded impairment losses on its digital assets of \$44.2 million and \$26.5 million, respectively. During the second quarter of 2019, the Company recorded a gain of \$29.8 million and an associated discrete tax provision of \$8.1 million related to the Domain Name Sale.

	Quarter Ended				Year
	March 31	June 30	September 30	December 31	
(in thousands, except per share data)					
2020					
Revenues	\$ 111,424	\$ 110,584	\$ 127,408	\$ 131,319	\$ 480,735
Gross profit	\$ 86,879	\$ 86,595	\$ 105,672	\$ 110,534	\$ 389,680
Net income (loss)	\$ 657	\$ 3,387	\$ (14,229)	\$ 2,661	\$ (7,524)
Earnings (loss) per share:(1)					
Basic	\$ 0.07	\$ 0.35	\$ (1.48)	\$ 0.28	\$ (0.78)
Diluted	\$ 0.07	\$ 0.35	\$ (1.48)	\$ 0.27	\$ (0.78)

	Quarter Ended				Year
	March 31	June 30	September 30	December 31	
(in thousands, except per share data)					
2019					
Revenues	\$ 115,366	\$ 117,737	\$ 119,693	\$ 133,531	\$ 486,327
Gross profit	\$ 89,193	\$ 92,387	\$ 95,878	\$ 108,895	\$ 386,353
Net (loss) income	\$ (7,906)	\$ 20,394	\$ 9,700	\$ 12,167	\$ 34,355
(Loss) earnings per share:(1)					
Basic	\$ (0.77)	\$ 1.99	\$ 0.95	\$ 1.19	\$ 3.35
Diluted	\$ (0.77)	\$ 1.98	\$ 0.94	\$ 1.18	\$ 3.33

- (1) The sum of the basic and diluted earnings (loss) per share for the four quarters may differ from annual earnings (loss) per share as the weighted average shares outstanding are computed independently for each of the quarters presented.

(19) Subsequent Events

During February 2021, the Company adopted the 2021 Employee Stock Purchase Plan (the “2021 ESPP”). The purpose of the 2021 ESPP is to provide eligible employees of the Company and certain of its subsidiaries with opportunities to purchase shares of the Company’s class A common stock, commencing at such time and on such dates as the Board of Directors of the Company shall determine. An aggregate of 100,000 shares of the Company’s class A common stock has been authorized for issuance under the 2021 ESPP.

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	<u>Second Restated Certificate of Incorporation of the registrant (incorporated herein by reference to Exhibit 3.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2003 (File No. 000-24435)).</u>
3.2	<u>Amended and Restated By-Laws of the registrant (incorporated herein by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed with the SEC on January 30, 2015 (File No. 000-24435)).</u>
4.1	<u>Form of Certificate of Class A Common Stock of the registrant (incorporated herein by reference to Exhibit 4.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2003 (File No. 000-24435)).</u>
4.2	<u>Description of the registrant's registered securities (incorporated herein by reference to Exhibit 4.2 to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (File No. 000-24435)).</u>
4.3	<u>Indenture, dated as of December 11, 2020, by and between the registrant and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on December 11, 2020 (File No. 000-24435)).</u>
4.4	<u>Form of 0.750% Convertible Senior Note due 2025 (included within Exhibit 4.3 incorporated herein by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the SEC on December 11, 2020 (File No. 000-24435)).</u>
10.1†	<u>MicroStrategy Incorporated 2013 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed with the SEC on September 9, 2013 (File No. 000-24435)).</u>
10.2†	<u>Amendment No. 1 to the MicroStrategy Incorporated 2013 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed with the SEC on April 28, 2014 (File No. 000-24435)).</u>
10.3†	<u>Amendment No. 2 to the MicroStrategy Incorporated 2013 Stock Incentive Plan (incorporated herein by reference to Exhibit 99.3 to the registrant's Registration Statement on Form S-8 filed with the SEC on July 25, 2014 (File No. 333-197645)).</u>
10.4†	<u>Amendment No. 3 to the MicroStrategy Incorporated 2013 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed with the SEC on October 26, 2015 (File No. 000-24435)).</u>
10.5†	<u>Amendment No. 4 to the MicroStrategy Incorporated 2013 Stock Incentive Plan (incorporated herein by reference to Exhibit 10.4 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2018 (File No. 000-24435)).</u>
10.6†	<u>2013 Form of Nonstatutory Stock Option Agreement (incorporated herein by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed with the SEC on September 9, 2013 (File No. 000-24435)).</u>
10.7†	<u>2016 Form of Nonstatutory Stock Option Agreement (incorporated herein by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2016 (File No. 000-24435)).</u>
10.8†	<u>Form of Restricted Stock Unit Agreement.</u>
10.9†	<u>Summary of Perquisites and Associated Other Compensation Arrangements for Named Executive Officers (incorporated herein by reference to Exhibit 10.6 to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2015 (File No. 000-24435)).</u>

10.10†	<u>Summary of Director Fees and Perquisites and Associated Other Compensation Arrangements for Non-Employee Directors (incorporated herein by reference to Exhibit 10.2 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2014 (File No. 000-24435)).</u>
10.11†	<u>Sublease Agreement, dated as of January 31, 2011, by and between the Company and Aeromar Management Company, LLC (incorporated herein by reference to Exhibit 10.14 to the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2010 (File No. 000-24435)).</u>
10.12†	<u>Summary of Designated Company Vehicles Policy (incorporated herein by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 2007 (File No. 000-24435)).</u>
10.13†	<u>Amended and Restated Performance Incentive Plan (incorporated herein by reference to Exhibit 99.1 to the registrant's Current Report on Form 8-K filed with the SEC on December 28, 2012 (File No. 000-24435)).</u>
10.14†	<u>Summary of Cash Bonus and Salary Determinations for Certain Executive Officers (incorporated herein by reference to Part II Item 9B of the registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2019 (File No. 000-24435)).</u>
10.15†	<u>Summary of Annual Discretionary Cash Bonus Targets for Certain Executive Officers (incorporated herein by reference to Part II Item 5 of the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2020 (File No. 000-24435)).</u>
10.16†	<u>Agreement, dated as of April 26, 2020, by and between the registrant and Lisa Mayr (incorporated herein by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2020 (File No. 000-24435)).</u>
10.17†	<u>MicroStrategy Incorporated 2021 Employee Stock Purchase Plan (incorporated herein by reference to Exhibit 99.1 to the registrant's Registration Statement on Form S-8 filed with the SEC on February 1, 2021 (File No. 333-252608)).</u>
21.1	<u>Subsidiaries of the registrant.</u>
23.1	<u>Consent of KPMG LLP.</u>
31.1	<u>Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Chairman of the Board of Directors & Chief Executive Officer.</u>
31.2	<u>Certification pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the President & Chief Financial Officer.</u>
32.1	<u>Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.</u>
101.INS	Inline 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.
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase.
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase.
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase.
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase.
104	Cover Page Interactive Data File (formatted as inline XBRL with applicable taxonomy extension information contained in Exhibits 101).

† Management contracts and compensatory plans or arrangements.

SIGNATURES

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

MicroStrategy Incorporated
(Registrant)

By: /s/ Michael J. Saylor

Name: Michael J. Saylor

**Title: Chairman of the Board of Directors
& Chief Executive Officer**

Date: February 12, 2021

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

<u>Name</u>	<u>Position</u>	<u>Date</u>
<u>/s/ Michael J. Saylor</u> Michael J. Saylor	Chairman of the Board of Directors & Chief Executive Officer (Principal Executive Officer)	February 12, 2021
<u>/s/ Phong Le</u> Phong Le	President & Chief Financial Officer (Principal Financial Officer)	February 12, 2021
<u>/s/ Jeanine Montgomery</u> Jeanine Montgomery	Senior Vice President & Chief Accounting Officer (Principal Accounting Officer)	February 12, 2021
<u>/s/ Stephen X. Graham</u> Stephen X. Graham	Director	February 12, 2021
<u>/s/ Jarrod M. Patten</u> Jarrod M. Patten	Director	February 12, 2021
<u>/s/ Leslie Rechan</u> Leslie Rechan	Director	February 12, 2021
<u>/s/ Carl J. Rickertsen</u> Carl J. Rickertsen	Director	February 12, 2021

SCHEDULE II
VALUATION AND QUALIFYING ACCOUNTS
For the years ended December 31, 2020, 2019, and 2018
(in thousands)

	Balance at the beginning of the period	Additions (1)	Deductions	Balance at the end of the period
Allowance for credit losses:				
December 31, 2020	\$ 1,637	1,550	(427)	\$ 2,760
December 31, 2019	\$ 5,489	124	(3,976)	\$ 1,637
December 31, 2018	\$ 4,190	1,912	(613)	\$ 5,489
Deferred tax valuation allowance:				
December 31, 2020	\$ 2,130	10	(881)	\$ 1,259
December 31, 2019	\$ 1,507	633	(10)	\$ 2,130
December 31, 2018	\$ 1,015	492	0	\$ 1,507

(1) Reductions in/charges to revenues and expenses.