UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended January 31, 2019

or

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

For the transition period from to

Commission File Number: 0-14338

AUTODESK, INC.

(Exact name of registrant as specified in its charter)

Delaware	**94-2819853**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. employer Identification No.)**
111 McInnis Parkway, San Rafael, California	**94903**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (415) 507-5000

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.01 Par Value	**The Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

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

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

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 ("Exchange Act"). Yes ☐ No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act 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 x No ☐

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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 x Accelerated filer o Non-accelerated filer o Smaller reporting company o Emerging growth company o

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

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

As of July 31, 2018, the last business day of the registrant's most recently completed second fiscal quarter, there were approximately 218.9 million shares of the registrant's common stock outstanding that were held by non-affiliates, and the aggregate market value of such shares held by non-affiliates of the registrant (based on the closing sale price of such shares on the Nasdaq Global Select Market on July 31, 2018) was approximately $28.1 billion. Shares of the registrant's common stock held by each executive officer and director have been excluded in that such persons may be deemed to be affiliates. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 15, 2019, the registrant had outstanding 219,535,216 shares of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for registrant's Annual Meeting of Stockholders (the "Proxy Statement"), are incorporated by reference in Part III of this Form 10-K to the extent stated herein. The Proxy Statement will be filed within 120 days of the registrant's fiscal year ended January 31, 2019.

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FORWARD-LOOKING INFORMATION

The discussion in this Annual Report on Form 10-K contains trend analyses and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are any statements that look to future events and consist of, among other things, our business strategies, future financial results (by product type and geography) and subscriptions, the effectiveness of our efforts to successfully manage transitions to new markets, expectations for and our ability to increase annualized recurring revenue, cash flow, our subscription base, and other financial and operational metrics, the impact of past and planned acquisitions and investment activities, expected market trends, including the growth of cloud and mobile computing, the effect of unemployment, the availability of credit, the effects of global economic conditions, the effects of revenue recognition, the effects of newly recently issued accounting standards, expected trends in certain financial metrics, including expenses, expectations regarding our cash needs, the effects of fluctuations in exchange rates and our hedging activities on our financial results, our ability to successfully expand adoption of our products, our ability to gain market acceptance of new businesses and sales initiatives, and the impact of economic volatility and geopolitical activities in certain countries, particularly emerging economy countries, the timing and amount of purchases under our stock buy-back plan, and the effects of potential non-cash charges on our financial results and the resulting effect on our financial results. In addition, forward-looking statements also consist of statements involving expectations regarding product capability and acceptance, statements regarding our liquidity and short-term and long-term cash requirements, as well as statements involving trend analyses and statements including such words as "may," "believe," "could," "anticipate," "would," "might," "plan," "expect," and similar expressions or the negative of these terms or other comparable terminology. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of a number of factors, including those set forth below in Item 1A, "Risk Factors," and in our other reports filed with the U.S. Securities and Exchange Commission. We assume no obligation to update the forward-looking statements to reflect events that occur or circumstances that exist after the date on which they were made, except as required by law.

PART I

ITEM 1. BUSINESS

Note: A glossary of terms used in this Form 10-K appears at the end of this Item 1.

GENERAL

We are a global leader in 3D design, engineering and entertainment software and services, offering customers productive business solutions through powerful technology products and services. We serve customers in the architecture, engineering and construction; product design and manufacturing; and digital media and entertainment industries. Our customers are able to design, fabricate, manufacture and build anything by visualizing, simulating and analyzing real-world performance early in the design process. These capabilities allow our customers to foster innovation, optimize their designs, streamline their manufacturing and construction processes, save time and money, improve quality, communicate plans, and collaborate with others. Our professional software products are sold globally, both directly to customers and through a network of resellers and distributors.

Segments

We report segment information based on the “management” approach. The management approach designates the internal reporting used by management for making decisions, allocating resources and assessing performance as the source of our reportable segments. The Company's chief operating decision maker ("CODM") allocates resources and assesses the operating performance of the Company as a whole. As such, Autodesk has one segment manager (the CODM), and one operating segment.

A summary of our revenue by geographic area and product family is found in Note 2, “Revenue Recognition,” in the Notes to Consolidated Financial Statements.

Corporate Information

We were incorporated in California in April 1982 and were reincorporated in Delaware in May 1994. Our principal executive office is located at 111 McInnis Parkway, San Rafael, California 94903, and the telephone number at that address is (415) 507-5000. Our internet address is www.autodesk.com. The information posted on our website is not incorporated into this Annual Report on Form 10-K. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to reports filed or furnished pursuant to Sections 13(a) and 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge on the Investor Relations portion of our website at www.autodesk.com as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The public may also read and copy any material we file with the SEC at the SEC's Public Reference Room at 100 F Street N.E. Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1 (800) SEC-0330.

PRODUCTS

Our architecture, engineering and construction products improve the way building, infrastructure, and industrial projects are designed, built, and operated. Our product development and manufacturing software provides manufacturers in automotive, transportation, industrial machinery, consumer products and building product industries with comprehensive digital design, engineering, manufacturing and production solutions. These technologies bring together data from all phases of the product development and production life cycle, creating a digital pipeline that supports greater productivity and accuracy through process automation. Our digital media and entertainment products provide tools for digital sculpting, modeling, animation, effects, rendering, and compositing for design visualization, visual effects and games production. Our portfolio of products and services enables our customers to foster innovation, optimize and improve their designs, save time and money, improve quality, communicate plans, and collaborate with others.

Autodesk’s product offerings, sold through a subscription, include:

- *AutoCAD*

AutoCAD software is a customizable and extensible CAD application for professional design, drafting, detailing, and visualization. AutoCAD software provides digital tools that can be used independently and in conjunction with other specific applications in fields ranging from construction and civil engineering to manufacturing and plant design.

- *AutoCAD Civil 3D*

AutoCAD Civil 3D solution provides a surveying, design, analysis, and documentation solution for civil engineering, including land development, transportation, and environmental projects. Using a model-centric approach that automatically updates documentation as design changes are made, AutoCAD Civil 3D enables civil engineers, designers, drafters, and surveyors to significantly boost productivity and deliver higher-quality designs and construction documentation faster. With AutoCAD Civil 3D, the entire project team works from the same consistent, up-to-date model so they stay coordinated throughout all project phases.

- *AutoCAD LT*

AutoCAD LT software is purpose built for professional drafting and detailing. AutoCAD LT includes document sharing capability without the need for software customization or certain advanced functionality found in AutoCAD. Users can share all design data with team members who use AutoCAD or other Autodesk products built on AutoCAD. AutoCAD LT software is our second largest revenue-generating product.

- *BIM 360*

BIM 360 construction management cloud-based software enables almost anytime, anywhere access to project data throughout the building construction lifecycle. BIM 360 empowers those in the field to better anticipate and act, and those in the back office to optimize and manage all aspects of construction performance.

- *CAM Solutions*

Our computer-aided manufacturing ("CAM") software offers industry-leading solutions for Computer Numeric Control ("CNC") machining, inspection, and modeling for manufacturing. A comprehensive line-up of expert products, including PowerMill, FeatureCAM, PowerInspect, PowerShare, and others, help our customers manufacture complex, innovative products and components with maximum quality, control, and production efficiency.

- *Fusion 360*

Fusion 360 is the first 3D CAD, CAM, and Computer-aided Engineering ("CAE") tool of its kind. It connects the entire product development process on a single cloud-based platform.

- *Industry Collections*

Autodesk's Industry Collections provide our customers with increased access to a broader selection of Autodesk solutions, greater value, more flexibility, and a simpler way to subscribe and manage Autodesk subscriptions. The collections are tailored to provide the essential software needed by professionals within each industry: Architecture, Engineering and Construction ("AEC"), Product Design & Manufacturing, and Media & Entertainment ("M&E").

The AEC Collection, including AutoCAD, AutoCAD Civil3D, and Revit, aims to help our customers design, engineer, and construct higher quality, more predictable building and civil infrastructure projects, commonly used by AEC industry experts.

The Product Design & Manufacturing Collection offers connected, professional-grade tools that help our customers make great products today and compete in the changing manufacturing landscape of the future. The collection offers access to a wide range of our products, including AutoCAD and Inventor.

The M&E Collection provides end-to-end creative tools for entertainment creation. This collection enables animators, modelers and visual effect artists to access the tools they need, including Maya and 3ds Max, to create compelling effects, 3D characters and digital worlds.

- *Inventor*

Inventor enables manufacturers to go beyond 3D design to digital prototyping by giving engineers a comprehensive and flexible set of tools for 3D mechanical design, simulation, analysis, tooling, visualization, and documentation. Engineers can integrate AutoCAD drawings and model-based design data into a single digital model, creating a virtual representation of a final product that enables them to validate the form, fit, and function of the product before it is ever built.

- *Maya*

Maya software provides 3D modeling, animation, effects, rendering and compositing solutions that enable film and video artists, game developers, and design visualization professionals to digitally create engaging, lifelike images, realistic animations and simulations, extraordinary visual effects, and full length animated feature films.

- *PlanGrid*

PlanGrid cloud-based field collaboration software provides general contractors, subcontractors, owners and architects access to construction information in real-time. With PlanGrid technology, any construction team member can manage and update blueprints, specs, photos, requests for information (RFIs), field reports, punchlists and other critical jobsite data. The data collected within PlanGrid software acts as a digital trail during the building process, allowing for easy turnover to the owner for operations and maintenance after construction is complete. PlanGrid mobile-first technology is accessible on modern desktop, laptop or mobile devices, including native iOS, Android and Windows.

- *Revit*

Revit software is built for Building Information Modeling ("BIM") to help professionals design, build, and maintain higher-quality, more energy-efficient buildings. Using the information-rich models created with Revit, architects, engineers, and construction firms can collaborate to make better-informed decisions earlier in the design process to deliver projects with greater efficiency. Revit includes features for architectural, mechanical, electrical and plumbing design as well as structural engineering and construction, providing a comprehensive solution for the entire building project team.

- *Shotgun*

Shotgun is cloud-based software for review and production tracking in the M&E industry. Creative companies use the Shotgun platform to provide essential business tools for managers and visual collaboration tools for artists and supervisors, who often work globally with distributed teams.

- *3ds Max*

3ds Max software provides 3D modeling, animation, and rendering solutions that enable game developers, design visualization professionals and visual effects artists to digitally create realistic images, animations, and complex scenes and to digitally communicate abstract or complex mechanical, architectural, engineering, and construction concepts.

PRODUCT DEVELOPMENT AND INTRODUCTION

The technology industry is characterized by rapid technological change in computer hardware, operating systems, and software. In addition, our customers' requirements and preferences rapidly evolve, as do their expectations of the performance of our software and services. To keep pace with these changes, we maintain a vigorous program of new product development to address demands in the marketplace for our products.

The software industry has undergone a transition from developing and selling perpetual licenses and on-premises products to cloud, mobile and social applications. To address this shift, Autodesk made a strategic decision to shift its business model from selling perpetual licenses to selling subscriptions. We discontinued the sale of new commercial licenses of most individual software products in 2016. Additionally, in June 2017, we commenced a program to incentivize maintenance plan customers to move to subscription plan offerings, maintenance-to-subscription ("M2S"), while at the same time increasing maintenance plan pricing over time for customers that remain on maintenance plans. Since launching the program, over 794,000 maintenance plan customers have converted to subscription plan offerings. Autodesk seeks to convert the remaining 796,100 maintenance plan customers to subscription through this program. Subscription plan offerings are designed to give our customers increased flexibility with how they use our products and service offerings and to attract a broader range of customers such as project-based users and small businesses. Subscriptions represent a combined hybrid offering of desktop software and cloud functionality which provides a device-independent, collaborative design workflow for designers and their stakeholders.

We dedicate considerable technical and financial resources to research and development to further enhance our existing products and to create new solutions and technologies to expand our market opportunity. For example, in fiscal 2019, we continued and expanded our investments in construction. We continued to make investments in the traditional data creation tools to support the design and pre-construction phases, while expanding our investment in the areas of site execution with process and project management cloud-based tools. Recognizing the value of data continuity across the construction lifecycle of design, building and operations, we made investments in the pre-construction and site execution phases of the project through our cloud-based tools. To connect the phases of construction upstream with design, we invested in and announced our cloud-based project delivery platform that allows individuals, teams and projects to be connected across all phases in a common data platform. We anticipate ongoing investments in construction that support pre-construction, site execution as well as the handover phase of the project and will continue to invest in connecting workflows and data across the ecosystem of the project.

Research and development expenditures were $725.0 million or 28% of fiscal 2019 net revenue, $755.5 million or 37% of fiscal 2018 net revenue and $766.1 million or 38% of fiscal 2017 net revenue. Our software is primarily developed internally; however, we also use independent firms and contractors to perform some of our product development activities. Additionally, we acquire products or technology developed by others by purchasing or licensing products and technology from third parties. We continually review these investments in an effort to ensure that we are generating sufficient revenue or gaining a competitive advantage to justify their costs.

The majority of our research and product development is performed in the United States, China, Singapore, Canada, and the United Kingdom. However, we employ experienced software developers in many of our other locations. Translation and localization of our products are performed in a number of local markets, principally Singapore and Ireland. We generally localize and translate our products into German, French, Italian, Spanish, Russian, Japanese, Korean, and simplified and traditional Chinese.

We plan to continue managing significant product development operations internationally over the next several years. We believe that our ability to conduct research and development at various locations throughout the world allows us to optimize product development, lower costs, and integrate local market knowledge into our development activities. We continually assess the significant costs and challenges, including intellectual property protection, against the benefits of our international development activities.

For further discussion regarding risks from our product development and introduction efforts, see Item 1A, “Risk Factors.”

MARKETING AND SALES

We sell our products and services globally, primarily through indirect channels consisting of distributors and resellers. To a lesser extent we also transact directly with our enterprise and named account customers and with customers through our online Autodesk branded store. Our indirect channel model includes both a two-tiered distribution structure, where distributors sell to resellers, and a one-tiered structure, where Autodesk sells directly to resellers. We have a network of approximately 1,300 resellers and distributors worldwide. For fiscal 2019, approximately 71% of our revenue was derived from indirect channel sales through distributors and resellers.

We anticipate that our channel mix will continue to change, particularly as we scale our online Autodesk branded store business and our largest accounts shift towards direct-only business models. Importantly, we expect that the majority of our revenue will continue to be derived from indirect channel sales in the near future. We employ a variety of incentive programs and promotions to align our reseller channel with our business strategies. Our ability to effectively distribute our products depends in part upon the financial and business condition of our distributor and reseller networks. The loss of, or a significant reduction in, business with any one of our major distributors or large resellers could harm our business; see Item 1A, “Risk Factors,” for further discussion.

Sales through our largest distributor, Tech Data Corporation and its global affiliates, accounted for 35%, 31%, and 30% of our net revenue for fiscal years ended January 31, 2019, 2018, and 2017, respectively. We believe our business is not substantially dependent on Tech Data. Our customers through Tech Data are the resellers and end users who purchase our products. Should any of the agreements between us and Tech Data be terminated for any reason, we believe the resellers and end users who currently purchase our products through Tech Data would be able to continue to do so under substantially the same terms from one of our many other distributors without substantial disruption to our revenue. No other distributor, reseller, or direct customer accounted for 10% or more of our revenue.

Our customer-related operations are divided into three geographic regions: the Americas; Europe, Middle East and Africa (“EMEA”); and Asia Pacific (“APAC”). Each geographic region is supported by global marketing and sales organizations. These organizations develop and manage overall marketing and sales programs and work closely with a network of domestic and international sales offices. Fiscal 2019 net revenue in the Americas, EMEA, and APAC was $1,049.9 million (41%), $1,034.3 million (40%), and $485.6 million (19%), respectively. We believe that international sales will continue to comprise the majority of our total net revenue. Adverse economic conditions and currency exchange rates in the countries that contribute a significant portion of our net revenue, including emerging economies, may have an adverse effect on our business in those countries and our overall financial performance. A summary of our financial information by geographic location is found in Note 2, “Revenue Recognition,” in the Notes to Consolidated Financial Statements. Our international operations and sales subject us to a variety of risks; see Item 1A, “Risk Factors,” for further discussion.

We also work directly with reseller and distributor sales organizations, computer manufacturers, other software developers, and peripherals manufacturers in cooperative advertising, promotions, and trade-show presentations. We employ mass-marketing techniques such as webcasts, seminars, telemarketing, direct mailings, sponsorships, advertising in business and trade journals, and social media. We have a worldwide user group organization and we have created online user communities dedicated to the exchange of information related to the use of our products and services.

We generate revenue primarily through various offerings that provide recurring revenue. Under our subscription plan, customers can use our software anytime, anywhere, and get access to the latest updates to previous versions through term-based product subscriptions, cloud service offerings, and enterprise business agreements. With the discontinuation of the sale of perpetual licenses, we have transitioned away from selling a mix of perpetual licenses and maintenance plans in favor of a consolidated subscription model. However, our customers who have previously purchased a perpetual use license for the most recent version of the underlying product are able to renew a previously purchased maintenance plan that provides them with unspecified upgrades when and if available, and receive online support during the term of their maintenance contract.

CUSTOMER AND RESELLER SUPPORT

We provide technical support and training to customers through a multi-tiered support model, augmented by direct programs designed to address certain specific customer needs. Most of our customers receive support and training from the resellers and distributors from which they purchased subscriptions or licenses for our products or services, with Autodesk in turn providing second tier support to the resellers and distributors. Other customers are supported directly via self-service using the Autodesk Knowledge Network which guides customers to answers in our online support assets, support forums, webinars or to support representatives using a number of different modalities such as social media, phone, email and webchat. We also support our resellers and distributors through technical product training, sales training classes, webinars and other knowledge sharing programs.

EDUCATION, SUSTAINABILITY, AND PHILANTHROPIC PROGRAMS

Education

Autodesk is committed to helping fuel a lifelong passion for design and making among students of all ages, both within and outside the classroom. We offer free educational licenses of Autodesk's professional software to students, educators, and accredited educational institutions worldwide. We inspire and support beginners with Tinkercad, a simple online 3D design and 3D printing tool. Through Autodesk Design Academy, we provide secondary and postsecondary schools hundreds of standards-aligned class projects to support design-based disciplines in Science, Technology, Engineering, Digital Arts, and Math (STEAM) using Autodesk's professional-grade design, engineering and entertainment software. Autodesk Design Academy curricula is also syndicated on iTunes U and Udemy, where millions of students go to learn online. Classes and projects are available on our Instructables website for anyone looking to expand their "making" skills. Our intention is to make Autodesk software ubiquitous and the design and making software of choice for those poised to become the next generation of professional users.

Sustainability Programs

To help our customers imagine, design, and make a better world, our sustainability initiatives focus our efforts on the areas where we can have the greatest positive impact: enabling sustainable practices through our products, delivering free sustainable-design learning and training resources, providing software grants to qualifying nonprofits and entrepreneurs, and leading by example with our sustainable business practices. Through our products and services, we are supporting our customers to better understand and improve the environmental performance of everything they make.

Climate Change

In addressing the global challenges posed by climate change, we make it possible for our customers to innovate and respond to associated changes in regulation, building code, physical climate parameters and other climate-related developments. This effort can directly and indirectly create more demand for existing and new Autodesk products and services in the short and long-term. Furthermore, our leadership is committed to taking climate action and that commitment goes hand-in-hand with our values and reputation in the marketplace.

Climate Change Management Actions

To drive continued progress and meet growing demand, we continue to expand the solutions, education, and support we offer, helping customers secure a competitive advantage for a low-carbon future by designing high-performance buildings, resilient cities and infrastructure, and more efficient transportation and products. To continue to grow this market, we provide software and support to early stage entrepreneurs and start-up companies who are designing clean technologies. We plan to expand these offerings in the future based upon demand and opportunity in response to challenges posed by climate change.

Internally, we are investing in best practices to mitigate our greenhouse gas emissions and climate change risk through investments in renewable energy, energy efficiency, disaster management and recovery strategies, and materials innovation. We are on track to meet our science-based greenhouse gas reduction target of 43% absolute emissions by 2020.

Climate Change Governance

With oversight from our CEO, the Sustainability & Foundation Team has direct responsibility for setting and implementing our corporate sustainability strategy, including our climate change strategy.

Emissions Performance & Other Key Performance Indicators

By end of fiscal 2018, Autodesk had reduced its net greenhouse gas emissions for its operational boundary by 38% from our fiscal year 2009 baseline to 187,000 metric tons of carbon dioxide equivalent. This reduction was accomplished through increased investment in renewable energy and energy efficiency in our global real estate portfolio, and continued transition from physical software delivery to cloud and electronic software delivery. More information about our sustainability commitment can be found in our annual sustainability reports, which we have published on our website since 2008. Our fiscal 2019 sustainability report will be published in the second quarter of fiscal 2020.

Philanthropy

The Autodesk Foundation (the "Foundation"), a privately funded 501(c)(3) charity organization established and solely funded by us, leads our philanthropic efforts. The purpose of the Foundation is twofold: to support employees to create a better world at work, at home, and in the community by matching employees' volunteer time and/or donations to nonprofit organizations; and to support organizations and individuals using design to drive positive social and environmental impact. In the latter case, we use grant funding, software donations, and training to accomplish this goal, selecting the most impactful and innovative organizations around the world, thus, leading to a better future for our planet. On our behalf, the Foundation also administers a discounted software donation program to nonprofit organizations, social and environmental entrepreneurs, and others who are developing design solutions that will shape a more sustainable future.

DEVELOPER PROGRAMS

Our business and our customers benefit from our relationships with an extensive developer network. These developers create and sell their own interoperable products that further enhance the range of integrated solutions available to our customers. One of our key strategies is to maintain an open-architecture design of our software products to facilitate third-party development of complementary products and industry-specific software solutions. This approach enables customers and third-parties to customize solutions for a wide variety of highly specific uses. We offer several programs that provide strategic investment funding, technological platforms, user communities, technical support, forums, and events to developers who develop add-on applications for our products. For example, we have created our web services platform, Autodesk Forge. The Forge Platform includes a number of web services that enable software developers to rapidly develop the next generation of applications, and experiences that will power the future of making things. Forge facilitates the development of a single connected ecosystem for integrating Autodesk applications with other enterprise, web and mobile solutions.

COMPETITION

The markets for our products are highly competitive, are subject to rapid change, and can have complex interdependencies between many of the larger businesses. We strive to increase our competitive separation by investing in research and development, allowing us to bring new products to market and create exciting new versions of existing products that offer compelling efficiencies for our customers. We also compete through investments in marketing and sales to more effectively reach new customers and better serve existing customers.

Our competitors include large, global, publicly traded companies; small, geographically focused firms; startup firms; and solutions produced in-house by their users. Our primary global competitors include Adobe Systems Incorporated, ANSYS, Inc., Apple Inc., AVEVA Group plc, Avid Technology, Inc., Bentley Systems, Inc., Dassault Systèmes S.A. and its subsidiary Dassault Systèmes SolidWorks Corp., Intergraph Corporation, a wholly owned subsidiary of Hexagon AB, MSC Software Corporation, Nemetschek AG, Oracle Corporation, Procore Technologies, Inc., PTC Inc., 3D Systems Corporation, Siemens PLM, SONY Corporation, Technicolor S.A., and Trimble Navigation Limited, among others.

The software industry has limited barriers to entry, and the availability of computing power with continually expanding performance at progressively lower prices contributes to the ease of market entry. The industry is presently undergoing a platform shift from the personal computer to cloud and mobile computing. This shift further lowers barriers to entry and poses a disruptive challenge to established software companies. The design software market is characterized by vigorous competition in each of the vertical markets in which we compete, both from existing competitors and by entry of new competitors with innovative technologies. Competition is increasingly enhanced by consolidation of companies with complementary products and technologies and the possibility that competitors in one vertical segment may enter other vertical segments that we serve. In addition, some of our competitors in certain markets have greater financial, technical, sales and marketing, and other resources than we do. Because of these and other factors, competitive conditions in these industries are likely to continue to intensify in the future. Increased competition could result in price reductions, reduced net revenue and profit margins, and loss of market share, any of which could harm our business. See Item 1A, “Risk Factors,” for further discussion of risks regarding competition.

We believe that our future results depend largely upon our ability to better serve customers by offering new products, including cloud and mobile computing products, whether by internal development or acquisition, and to continue to provide existing product offerings that compete favorably with respect to ease of use, reliability, performance, range of useful features, continuing product enhancements, reputation, price, and training.

INTELLECTUAL PROPERTY AND LICENSES

We maintain an active program to legally protect our investment in technology through intellectual property rights. We protect our intellectual property through a combination of patent, copyright, trademark and trade secret protections, confidentiality procedures, and contractual provisions. The nature and extent of legal protection associated with each such intellectual property right depends on, among other things, the type of intellectual property right and the given jurisdiction in which such right arises. We believe that our intellectual property rights are valuable and important to our business.

Nonetheless, our intellectual property rights may not be successfully asserted in the future or may be invalidated, circumvented or challenged. In addition, the laws and enforcement of the laws of various foreign countries where our products are distributed do not protect our intellectual property rights to the same extent as U.S. laws. Enforcement of intellectual property rights against alleged infringers can sometimes lead to costly litigation and counterclaims. Our inability to protect our proprietary information could harm our business.

From time to time, we receive claims alleging infringement of a third party’s intellectual property rights, including patents. Disputes involving our intellectual property rights or those of another party have in the past and may in the future lead to, among other things, costly litigation or product shipment delays, which could harm our business.

We retain ownership of software we develop. Our combined hybrid offerings include both desktop software and cloud functionality. Desktop software is licensed to users pursuant to ‘click through’ or signed license agreements containing restrictions on duplication, disclosure, and transfer. Cloud software and associated services are provided to users pursuant to on-line or signed terms of service agreements containing restrictions on access and use.

We believe that because of the limitations of laws protecting our intellectual property and the rapid, ongoing technological changes in both the computer hardware and software industries, we must rely principally upon software engineering and marketing skills to continually maintain and enhance our competitive market position.

While we have recovered some revenue resulting from the unauthorized use of our software solutions, we are unable to measure the full extent to which piracy of our software products exists. We believe, however, that software piracy is and can be expected to be a persistent problem that negatively impacts our revenue and financial results. We believe that our transition from perpetual use software licenses to a subscription-based business model combined with the change from desktop to cloud-based computing will shift the incentives and means by which software is pirated.

In addition, through various licensing arrangements, we receive certain rights to intellectual property of others. We expect to maintain current licensing arrangements and to secure licensing arrangements in the future, as needed and to the extent available on reasonable terms and conditions, to support continued development and sales of our products and services. Some of these licensing arrangements require or may require royalty payments and other licensing fees. The amount of these payments and fees may depend on various factors, including but not limited to: the structure of royalty payments, offsetting considerations, if any, and the degree of use of the licensed technology.

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

PRODUCTION AND SUPPLIERS

The production of our software products and services involves duplication or hosting of software media. The way that we deliver software has evolved during our business model transition. For certain cloud-based products, we use a combination of co-located hosting facilities and increasingly Amazon Web Services and to a lesser degree other infrastructure-as-a-service providers. We offer customers an electronic software download option for both initial product fulfillment and subsequent product updates. Customers who choose electronic fulfillment receive the latest version of the software from our vendor’s secure servers. Customers may also obtain our software through media such as DVDs and USB flash drives available from multiple sources. The purchase of media and the transfer of the software programs onto media for distribution to customers are performed by us and by licensed subcontractors. Packaging materials are produced to our specifications by outside sources. Production is performed in leased facilities operated by independent third-party contractors. To date, we have not experienced any material difficulties or delays in the production of our software and documentation.

EMPLOYEES

As of January 31, 2019, we employed approximately 9,600 people. None of our employees in the United States are represented by a labor union. In certain foreign countries, our employees are represented by work councils. We have never experienced any work stoppages and believe our employee relations are good. Reliance upon employees in other countries entails various risks and changes in these foreign countries, such as government instability or regulation unfavorable to foreign-owned businesses, which could negatively impact our business in the future.

ACQUISITIONS

Over the past three years, we acquired new technology or supplemented our existing technology by purchasing businesses or technology related assets focused in specific markets or industries. For the fiscal years ended January 31, 2019, 2018, and 2017, we acquired companies all of which were accounted for as business combinations. The following were significant acquisitions for fiscal years 2019, 2018, and 2017:

Date of closing	Company	Details
January 2019	BuildingConnected, Inc. ("BuildingConnected")	The acquisition of BuildingConnected will enable Autodesk to add bid-management capabilities to its construction portfolio.
December 2018	PlanGrid, Inc. ("PlanGrid")	The acquisition of PlanGrid will enable Autodesk to offer a more comprehensive, cloud-based construction platform.
July 2018	Assemble Systems, Inc. ("Assemble Systems")	The acquisition of Assemble Systems will enable Autodesk's customers to influence, query and connect BIM data to key workflows across bid management, estimating, scheduling, site management and finance.

GLOSSARY OF TERMS

Annualized Recurring Revenue (ARR)—Represents the annualized value of our average monthly recurring revenue for the preceding three months. "Maintenance plan ARR" captures ARR relating to traditional maintenance attached to perpetual licenses. "Subscription plan ARR" captures ARR relating to subscription offerings. Refer to the definition of recurring revenue below for more details on what is included within ARR. Recurring revenue acquired with the acquisition of a business is captured when total subscriptions are captured in our systems and may cause variability in the comparison of this calculation.

ARR is currently one of our key performance metrics to assess the health and trajectory of our business. ARR should be viewed independently of revenue and deferred revenue as ARR is a performance metric and is not intended to be combined with any of these items.

Annualized Revenue Per Subscription (ARPS)—Is calculated by dividing our annualized recurring revenue by the total number of subscriptions.

Billings—Represents total revenue plus net change in deferred revenue from the beginning to the end of the period.

Cloud Service Offerings—Represents individual term-based offerings deployed through web browser technologies or in a hybrid software and cloud configuration. Cloud service offerings that are bundled with other product offerings are not captured as a separate cloud service offering.

Constant Currency (CC) Growth Rates—We attempt to represent the changes in the underlying business operations by eliminating fluctuations caused by changes in foreign currency exchange rates as well as eliminating hedge gains or losses recorded within the current and comparative periods. We calculate constant currency growth rates by (i) applying the applicable prior period exchange rates to current period results and (ii) excluding any gains or losses from foreign currency hedge contracts that are reported in the current and comparative periods.

Core Business—Represents the combination of maintenance, product, and EBA.

Enterprise Business Agreements (EBAs)—Represents programs providing enterprise customers with token-based access or a fixed maximum number of seats to a broad pool of Autodesk products over a defined contract term.

Free Cash Flow—Represents cash flow from operating activities minus capital expenditures.

Industry Collections—Autodesk Industry Collections are a combination of products and services that target a specific user objective and support a set of workflows for that objective. Our Industry Collections consist of: Autodesk Architecture, Engineering and Construction Collection, Autodesk Product Design & Manufacturing Collection, and Autodesk Media and Entertainment Collection. We introduced Industry Collections effective August 1, 2016 to replace our suites.

Other Revenue—Consists of revenue from consulting, training and other services, and is recognized over time as the services are performed. Other revenue also includes software license revenue from the sale of products which do not incorporate substantial cloud services and is recognized up front.

Subscription Plan—Comprises our term-based product subscriptions, cloud service offerings, and EBAs. Subscriptions represent a combined hybrid offering of desktop software and cloud functionality which provides a device-independent, collaborative design workflow for designers and their stakeholders. With subscription, customers can use our software anytime, anywhere, and get access to the latest updates to previous versions.

Maintenance Plan—Our maintenance plans provide our customers with a cost effective and predictable budgetary option to obtain the productivity benefits of our new releases and enhancements when and if released during the term of their contracts. Under our maintenance plans, customers are eligible to receive unspecified upgrades when and if available, and technical support. We recognize maintenance revenue over the term of the agreements, generally one year.

Product Subscription—Provides customers the most flexible, cost-effective way to access and manage 3D design, engineering, and entertainment software tools. Our product subscriptions currently represent a hybrid of desktop and SaaS functionality, which provides a device-independent, collaborative design workflow for designers and their stakeholders.

Recurring Revenue—Consists of the revenue for the period from our traditional maintenance plans and revenue from our subscription plan offerings. It excludes subscription revenue related to consumer product offerings, select Creative Finishing product offerings, education offerings, and third party products. Recurring revenue acquired with the acquisition of a business is captured when total subscriptions are captured in our systems and may cause variability in the comparison of this calculation.

Subscription Revenue—Includes subscription fees from product subscriptions, cloud service offerings, and EBAs.

Total Deferred Revenue—Is calculated by adding together total short term, long term, and unbilled deferred revenue.

Total Subscriptions—Consists of subscriptions from our maintenance plans and subscription plan offerings that are active and paid as of the fiscal year end date. For certain cloud service offerings and EBAs, subscriptions represent the monthly average activity reported within the last three months of the fiscal quarter end date. Total subscriptions do not include education offerings, consumer product offerings, select Creative Finishing product offerings, Autodesk Buzzsaw, Autodesk Constructware, and third party products. Subscriptions acquired with the acquisition of a business are captured once the data conforms to our subscription count methodology and when added, may cause variability in the comparison of this calculation.

Unbilled Deferred Revenue—Unbilled deferred revenue represents contractually stated or committed orders under early renewal and multi-year billing plans for subscription, services and maintenance for which the associated deferred revenue has not been recognized. Under FASB Accounting Standards Codification ("ASC") Topic 606, unbilled deferred revenue is not included as a receivable or deferred revenue on our Consolidated Balance Sheet.

ITEM 1A. RISK FACTORS

We operate in a rapidly changing environment that involves significant risks, a number of which are beyond our control. In addition to the other information contained in this Form 10-K, the following discussion highlights some of these risks and the possible impact of these factors on our business, financial condition, and future results of operations. If any of the following risks actually occur, our business, financial condition, or results of operations may be adversely impacted, causing the trading price of our common stock to decline. In addition, these risks and uncertainties may impact the “forward-looking” statements described elsewhere in this Form 10-K and in the documents incorporated herein by reference. They could affect our actual results of operations, causing them to differ materially from those expressed in “forward-looking” statements.

Global economic and political conditions may further impact our industries, business and financial results.

Our overall performance depends largely upon domestic and worldwide economic and political conditions. The United States and other international economies have experienced cyclical downturns from time to time in which economic activity was impacted by falling demand for a variety of goods and services, restricted credit, poor liquidity, decreased government spending, reduced corporate profitability, volatility in credit, equity and foreign exchange markets, bankruptcies and overall uncertainty with respect to the economy. These economic conditions can occur abruptly. If economic growth in countries where we do business slows or if such countries experience further economic recessions, customers may delay or reduce technology purchases. Our customers include government entities, including the U.S. federal government, and if spending cuts impede the ability of governments to purchase our products and services, our revenue could decline. In addition, a number of our customers rely, directly and indirectly, on government spending.

Geopolitical trends toward nationalism and protectionism and the weakening or dissolution of international trade pacts may increase the cost of, or otherwise interfere with, conducting business. These trends have increased levels of political and economic unpredictability globally, and may increase the volatility of global financial markets; the impact of such developments on the global economy remains uncertain. Political instability or adverse political developments in any of the countries in which we do business could harm our business, results of operations and financial condition.

A financial sector credit crisis could impair credit availability and the financial stability of our customers, including our distribution partners and channels. A disruption in the financial markets may also have an effect on our derivative counter-parties and could also impair our banking partners, on which we rely for operating cash management. Any of these events could harm our business, results of operations and financial condition.

Our strategy to develop and introduce new products and services exposes us to risks such as limited customer acceptance, costs related to product defects, and large expenditures, each of which may not result in additional net revenue or could result in decreased net revenue.

Rapid technological changes, as well as changes in customer requirements and preferences, characterize the software industry. Just as the transition from mainframes to personal computers transformed the industry 30 years ago, the software industry has undergone a transition from developing and selling perpetual licenses and on-premises products to cloud, mobile and social applications. Customers are also reconsidering the manner in which they purchase software products, which requires us to constantly evaluate our business model and strategy. In response, we are focused on providing solutions to enable our customers to be more agile and collaborative on their projects. We devote significant resources to the development of new technologies. In addition, we frequently introduce new business models or methods that require a considerable investment of technical and financial resources such as our introduction of flexible subscription and service offerings. It is uncertain whether these strategies will prove successful or whether we will be able to develop the necessary infrastructure and business models more quickly than our competitors. We are making such investments through further development and enhancement of our existing products and services, as well as through acquisitions. Such investments may not result in sufficient revenue generation to justify their costs and could result in decreased net revenue or profitability. If we are not able to meet customer requirements, either with respect to our software or the manner in which we provide such products, or if we are not able to adapt our business model to meet our customers' requirements, our business, financial condition or results of operations may be adversely impacted.

In particular, a critical component of our growth strategy is to have customers of our AutoCAD and AutoCAD LT products expand their portfolios to include our other offerings and cloud-based functionality. We want customers using individual Autodesk products to expand their portfolio with our other offerings and cloud-based functionality, and we are taking steps to accelerate this migration. At times, sales of our AutoCAD and AutoCAD LT or individual Autodesk flagship products have decreased without a corresponding increase in Industry Collections or cloud-based functionality revenue or without purchases of customer seats to our Industry Collections. Should this continue, our results of operations will be adversely affected.

Our executive management team must act quickly, continuously, and with vision, given the rapidly changing customer expectations and technology advancements inherent in the software industry, the extensive and complex efforts required to create useful and widely accepted products and the rapid evolution of cloud computing, mobile devices, new computing platforms, and other technologies, such as consumer products. Although we have articulated a strategy that we believe will fulfill these challenges, if we fail to execute properly on that strategy or adapt that strategy as market conditions evolve, we may fail to meet our customers' expectations, fail to compete with our competitors' products and technology, and lose the confidence of our channel partners and employees. This in turn could adversely affect our business and financial performance.

Our business could suffer as a result of risks, costs, charges and integration risks associated with strategic acquisitions and investments such as the recent acquisitions of Assemble Systems, Inc., PlanGrid, Inc. and BuildingConnected, Inc.

We regularly acquire or invest in businesses, software solutions and technologies that are complementary to our business through acquisitions, strategic alliances or equity or debt investments. For example, we recently acquired Assemble Systems, PlanGrid and BuildingConnected. The risks associated with such acquisitions include, among others, the difficulty of assimilating solutions, operations and personnel, inheriting liabilities such as intellectual property infringement claims, the failure to realize anticipated revenue and cost projections, the requirement to test and assimilate the internal control processes of the acquired business in accordance with the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, and the diversion of management's time and attention.

In addition, such acquisitions and investments involve other risks such as:

- the inability to retain customers, key employees, vendors, distributors, business partners, and other entities associated with the acquired business;
- the potential that due diligence of the acquired business or solution does not identify significant problems;
- exposure to litigation or other claims in connection with, or inheritance of claims or litigation risk as a result of, an acquisition, including but not limited to, claims from terminated employees, customers, or other third parties;
- the potential for incompatible business cultures;
- significantly higher than anticipated transaction or integration-related costs;
- the potential additional exposure to fluctuations in currency exchange rates; and
- the potential impact on relationships with existing customers, vendors, and distributors as business partners as a result of acquiring another business.

We may not be successful in overcoming such risks, and such acquisitions and investments may negatively impact our business. In addition, such acquisitions and investments have in the past and may in the future contribute to potential fluctuations in our quarterly financial results. These fluctuations could arise from transaction-related costs and charges associated with eliminating redundant expenses or write-offs of impaired assets recorded in connection with acquisitions and investments. These costs or charges could negatively impact our financial results for a given period, cause quarter to quarter variability in our financial results or negatively impact our financial results for several future periods.

We are dependent on international revenue and operations, exposing us to significant regulatory, global economic, intellectual property, collections, currency exchange rate, taxation, political instability and other risks, which could adversely impact our financial results.

We are dependent on our international operations for a significant portion of our revenue. International net revenue represented 66% and 64% of our net revenue in fiscal 2019 and 2018, respectively. Our international revenue, including that from emerging economies, is subject to general economic and political conditions in foreign markets, including conditions in foreign markets resulting from economic and political conditions in the U.S. Our revenue is also impacted by the relative geographical and country mix of our revenue over time. At times, these factors adversely impact our international revenue, and consequently our business as a whole. Our dependency on international revenue makes us much more exposed to global economic and political trends, which can negatively impact our financial results, even if our results in the U.S. are strong for a particular period.

We anticipate that our international operations will continue to account for a significant portion of our net revenue, and, as we expand our international development, sales and marketing expertise, will provide significant support to our overall efforts in countries outside of the U.S.

Risks inherent in our international operations include:

- economic volatility;
- tariffs, quotas, and other trade barriers and restrictions;
- fluctuating currency exchange rates, including devaluations, currency controls and inflation, and risks related to any hedging activities we undertake;
- unexpected changes in regulatory requirements and practices;
- delays resulting from difficulty in obtaining export licenses for certain technology;
- different purchase patterns as compared to the developed world;

- operating in locations with a higher incidence of corruption and fraudulent business practices, particularly in emerging economies;
- increasing enforcement by the U.S. under the Foreign Corrupt Practices Act, and adoption of stricter anti-corruption laws in certain countries, including the United Kingdom;
- difficulties in staffing and managing foreign sales and development operations;
- local competition;
- longer collection cycles for accounts receivable;
- U.S. and foreign tax law changes impacting how multinational companies are taxed;
- tax arrangements with foreign governments, including our ability to meet and renew the terms of those tax arrangements;
- laws regarding the management of and access to data and public networks;
- possible future limitations upon foreign owned businesses;
- increased financial accounting and reporting burdens and complexities;
- inadequate local infrastructure;
- greater difficulty in protecting intellectual property;
- software piracy; and
- other factors beyond our control, including popular uprisings, terrorism, war, natural disasters, and diseases.

Some of our business partners also have international operations and are subject to the risks described above.

The "Brexit" vote has exacerbated and may further exacerbate many of the risks and uncertainties described above. The withdrawal of the United Kingdom from the European Union could, among other potential outcomes, adversely affect the tax, tax treaty, currency, operational, legal and regulatory regimes to which our businesses in the region are subject. The withdrawal could also, among other potential outcomes, disrupt the free movement of goods, services and people between the United Kingdom and the European Union and significantly disrupt trade between the United Kingdom and the European Union and other parties. There remains significant risk that the United Kingdom will exit from the European Union without agreement between the European Union and United Kingdom on terms addressing customs and trade matters. Further, uncertainty around these and related issues could lead to adverse effects on the economy of the United Kingdom, European Union and the other economies in which we operate.

In addition, the current U.S. administration has instituted or proposed changes to foreign trade policy including the negotiation or termination of trade agreements, the imposition of tariffs on products imported from certain countries, economic sanctions on individuals, corporations or countries and other government regulations affecting trade between the United States and other countries in which we do business. New or increased tariffs and other changes in U.S. trade policy could trigger retaliatory actions by affected countries, and certain foreign governments, including the Chinese government, have instituted or are considering imposing trade sanctions on certain U.S. manufactured goods. The escalation of protectionist or retaliatory trade measures in either the United States or any other countries in which we do business, such as a change in tariff structures, export compliance or other trade policies, may increase the cost of, or otherwise interfere with, conducting our business.

Even if we are able to successfully manage the risks of international operations, our business may be adversely affected if our business partners are not able to successfully manage these risks.

Security incidents may compromise the integrity of our or our customers' offerings, services, data or intellectual property, harm our reputation, damage our competitiveness, create additional liability and adversely impact our financial results.

As we digitize Autodesk and use cloud and web-based technologies to leverage customer data to deliver the total customer experience, we are exposed to increased security risks and the potential for unauthorized access to, or improper use of, our and our customers' information. Like other software offerings and systems, ours are vulnerable to security incidents. We devote resources to maintain the security and integrity of our systems, offerings, services and applications (online, mobile and desktop). We accomplish this by enhancing security features, conducting penetration tests, code hardening, releasing security vulnerability updates and accelerating our incident response time. Despite these efforts, we may not prevent security incidents.

Hackers regularly have targeted our systems, offerings, services and applications, and we expect them to do so in the future. Security incidents could disrupt the proper functioning of our systems, solutions or services; cause errors in the output of our customers' work; allow unauthorized access to sensitive data or intellectual property, including proprietary or confidential information of ours or our customers; or cause other destructive outcomes.

The risk of a security incident, particularly through cyber attack or cyber intrusion, including by computer hackers, foreign governments and cyber terrorists, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. These threats include but are not limited to identity theft, unauthorized access, DNS attacks, wireless network attacks, viruses and worms, advanced persistent threat (APT), application centric attacks, peer-to-peer attacks, phishing, malicious file uploads, backdoor trojans and distributed denial of service (DDoS) attacks. In addition, third parties may attempt to fraudulently induce our employees, vendors, partners or users to disclose information to gain access to our data or our users' data and there is the risk of employee, contractor, or vendor error or malfeasance. Despite efforts to create security barriers to such threats, it is virtually impossible for us to entirely eliminate this risk.

If any of the foregoing security incidents were to occur, our reputation may suffer, our competitive position may be diminished, customers may stop paying for our solutions and services, we could face regulator inquiry, lawsuits and potential liability, and our financial performance could be negatively impacted.

Increasing regulatory focus on privacy issues and expanding laws may impact our business or expose us to increased liability.

Our strategy to digitize Autodesk involves increasing our use of cloud and web-based technologies and applications to leverage customer data to improve our offerings for the benefit of our customers. To accomplish this strategy, we must collect customer data, which may include personal data. Federal, state and foreign government privacy and data security laws apply to the treatment of personal data. Governments, regulators, the plaintiffs' bar, privacy advocates and customers have increased their focus on how companies collect, process, use, store, share and transmit personal data.

The General Data Protection Regulation ("GDPR") is applicable in all EU member states The GDPR introduced new data protection requirements in the EU and substantial fines for non-compliance. In addition, in June 2018, California enacted the California Consumer Privacy Act (the "CCPA"), which takes effect in January 2020. The CCPA will, among other things, give California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA was amended in September 2018, and it is unclear whether further modifications will be made to this legislation or how it will be interpreted. We cannot yet predict the impact of the CCPA on our business or operations, but it may require us to modify our data processing practices and policies and to incur substantial costs and expenses in an effort to comply.

The GDPR, CCPA and other state and global laws and regulations increased our responsibility and potential liability in relation to personal data, and we have and will continue to put in place additional processes and programs to demonstrate compliance. Any failure to comply with the GDPR or other data privacy laws could lead to government enforcement actions and significant penalties. Any perceived privacy right violation could result in reputational harm, third-party claims, lawsuits or investigations.

Additionally, we store customer information and content and if our customers fail to comply with contractual obligations or applicable laws, it could result in litigation or reputational harm to us. The GDPR, CCPA other laws and self-regulatory codes may affect our ability to reach current and prospective customers, to understand how our offerings and services are being used, to respond to customer requests allowed under the laws, and to implement our new business models effectively. These new laws and regulations would similarly affect our competitors as well as our customers. These requirements could impact demand for our offerings and services and result in more onerous contract obligations.

We rely on third-parties to provide us with a number of operational and technical services; third-party security incidents could expose us to liability, harm our reputation, damage our competitiveness and adversely impact our financial performance.

We rely on third parties, such as Amazon Web Services, to provide us with operational and technical services. These third parties may have access to our systems, provide hosting services, or otherwise process data about us or our customers, employees, or partners. Any third-party security incident could compromise the integrity of, or availability or result in the theft of, data. In addition, our operations, or the operations of our customers or partners, could be negatively affected in the event of a security breach, and could be subject to the loss or theft of confidential or proprietary information, including source code. Unauthorized access to data and other confidential or proprietary information may be obtained through break-ins, network breaches by unauthorized parties, employee theft or misuse, or other misconduct. If any of the foregoing were to occur, our reputation may suffer, our competitive position may be diminished, customers may buy fewer of our offerings and services, we could face lawsuits and potential liability, and our financial performance could be negatively impacted.

Delays in service from third-party service providers could expose us to liability, harm our reputation, damage our competitiveness and adversely impact our financial performance.

From time to time, we may rely on a single or limited number of suppliers, or upon suppliers in a single country, for the provision of various services and materials that we use in the operation of our business and production of our solutions. The inability of such third parties to satisfy our requirements could disrupt our business operations or make it more difficult for us to implement our business strategy. If any of these situations were to occur, our reputation could be harmed, we could be subject to third party liability, including under data protection and privacy laws in certain jurisdictions, and our financial performance could be negatively impacted.

We are investing in resources to update and improve our information technology systems to digitize Autodesk and support our customers. Should our investments not succeed, or if delays or other issues with new or existing information technology systems disrupt our operations, our business could be harmed.

We rely on our network and data center infrastructure, technology systems and our websites for our development, marketing, operational, support, sales, accounting and financial reporting activities. We continually invest resources to update and improve these systems in order to meet the evolving requirements of our business and customers. In particular, our transition to cloud-based products and a subscription-only business model involves considerable investment in the development of technologies, as well as back-office systems for technical, financial, compliance and sales resources.

Such improvements are often complex, costly and time consuming. In addition, such improvements can be challenging to integrate with our existing technology systems, or may uncover problems with our existing technology systems. Unsuccessful implementation of hardware or software updates and improvements could result in disruption in our business operations, loss of customers, loss of revenue, errors in our accounting and financial reporting or damage to our reputation, all of which could harm our business.

We may not be able to predict subscription renewal rates and their impact on our future revenue and operating results.

Our customers are not obligated to renew their subscriptions for our offerings, and they may elect not to renew. We cannot assure renewal rates, or the mix of subscriptions renewals. Customer renewal rates may decline or fluctuate due to a number of factors, including offering pricing, competitive offerings, customer satisfaction, and reductions in customer spending levels or customer activity due to economic downturns or financial markets uncertainty. If our customers do not renew their subscriptions or if they renew on less favorable terms, our revenues may decline.

Our software is highly complex and may contain undetected errors, defects or vulnerabilities, each of which could harm our business and financial performance.

The software solutions that we offer are complex and, despite extensive testing and quality control, may contain errors, defects or vulnerabilities. Some errors, defects and vulnerabilities in our software solutions may only be discovered after they have been released. Any errors, defects or vulnerabilities could result in the need for corrective releases to our software solutions, damage to our reputation, loss of revenue, an increase in subscription cancellations or lack of market acceptance of our offerings, any of which would likely harm our business and financial performance.

Existing and increased competition and rapidly evolving technological changes may reduce our revenue and profits.

The software industry has limited barriers to entry, and the availability of computing devices with continually expanding performance at progressively lower prices contributes to the ease of market entry. The software industry has undergone a transition from developing and selling perpetual licenses and on-premises products to cloud, mobile and social applications. This shift further lowers barriers to entry and poses a disruptive challenge to established software companies. The markets in which we compete are characterized by vigorous competition, both by entry of competitors with innovative technologies and by consolidation of companies with complementary offerings and technologies. In addition, some of our competitors in certain markets have greater financial, technical, sales and marketing, and other resources. Furthermore, a reduction in the number and availability of compatible third-party applications, or our inability to rapidly adapt to technological and customer preference changes, including those related to cloud computing, mobile devices, and new computing platforms, may adversely affect the sale of our solutions. Because of these and other factors, competitive conditions in the industry are likely to intensify in the future. Increased competition could result in price reductions, reduced net revenue and profit margins and loss of market share, any of which would likely harm our business.

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

Our offerings are subject to U.S. export controls and economic sanctions laws and regulations that prohibit the delivery of certain solutions and services without the required export authorizations or export to locations, governments, and persons targeted by U.S. sanctions. While we have processes in place to prevent our offerings from being exported in violation of these laws, including obtaining authorizations as appropriate and screening against U.S. government and international lists of restricted and prohibited persons, we cannot guarantee that these processes will prevent all violations of export control and sanctions laws.

We also note that if our channel partners fail to obtain appropriate import, export or re-export licenses or permits, we may also be adversely affected, through reputational harm as well as other negative consequences including government investigations and penalties. We presently incorporate export control and sanctions compliance requirements in our channel partner agreements. Complying with export control and sanctions regulations for a particular sale may be time-consuming and may result in the delay or loss of sales opportunities. Violations of U.S. sanctions or export control laws can result in fines or penalties.

We are exposed to fluctuations in currency exchange rates that could negatively impact our financial results and cash flows.

Because we conduct a substantial portion of our business outside the U.S., we face exposure to adverse movements in foreign currency exchange rates. These exposures may change over time as business practices evolve and economic conditions change. Our exposure to adverse movements in foreign currency exchange rates could have a material adverse impact on our financial results and cash flows.

We use derivative instruments to manage a portion of our cash flow exposure to fluctuations in foreign currency exchange rates. As part of our risk management strategy, we use foreign currency contracts to manage a portion of our exposures of underlying assets, liabilities, and other obligations, which exist as part of our ongoing business operations. These foreign currency instruments have maturities that extend for one to twelve months in the future, and provide us with some protection against currency exposures. However, our attempts to hedge against these risks may not be completely successful, resulting in an adverse impact on our financial results.

The fluctuations of currencies in which we conduct business can both increase and decrease our overall revenue and expenses for any given fiscal period. Although our foreign currency cash flow hedge program extends beyond the current quarter in order to reduce our exposure to foreign currency volatility, we do not attempt to completely mitigate this risk, and in any case, will incur transaction fees in adopting such hedging programs. Such volatility, even when it increases our revenues or decreases our expenses, impacts our ability to accurately predict our future results and earnings.

In addition, countries in which we operate may be classified as highly inflationary economies, requiring special accounting and financial reporting treatment for such operations, or such countries' currencies may be devalued, or both, which may adversely impact our business operations and financial results.

If we do not maintain good relationships with the members of our distribution channel, our ability to generate revenue will be adversely affected. If our distribution channel suffers financial losses, becomes financially unstable or insolvent, or is not provided the right mix of incentives to sell our subscriptions, our ability to generate revenue will be adversely affected.

We sell our software products both directly to end-users and through a network of distributors and resellers. For fiscal 2019 and fiscal 2018, approximately 71% and 70%, respectively, of our revenue was derived from indirect channel sales through distributors and resellers and we expect that the majority of our revenue will continue to be derived from indirect channel sales in the near future. Our ability to effectively distribute our solutions depends in part upon the financial and business condition of our distributor and reseller network. Computer software distributors and resellers typically are not highly capitalized, have previously experienced difficulties during times of economic contraction and experienced difficulties during the past several years. We have processes to ensure that we assess the creditworthiness of distributors and resellers prior to our sales to them. In the past we have taken steps to support them, and may take additional steps in the future, such as extending credit terms and providing temporary discounts. These steps, if taken, could harm our financial results. If our distributors and resellers were to become insolvent, they would not be able to maintain their business and sales, or provide customer support services, which would negatively impact our business and revenue.

We rely significantly upon major distributors and resellers in both the U.S. and international regions, including the distributor Tech Data. Tech Data accounted for 35% and 31% of our total net revenue for fiscal 2019 and 2018, respectively. Although we believe that we are not substantially dependent on Tech Data, if Tech Data were to experience a significant disruption with its business or if our relationship with Tech Data were to significantly deteriorate, it is possible that our ability to sell to end users would be, at least temporarily, negatively impacted. This could in turn negatively impact our financial results.

Over time, we have modified and will continue to modify aspects of our relationship with our distributors and resellers, such as their incentive programs, pricing to them and our distribution model to motivate and reward them for aligning their businesses with our strategy and business objectives. Changes in these relationships and underlying programs could negatively impact their business and harm our business. Further, our distributors and resellers may lose confidence in our business, move to competitive products, or may not have the skills or ability to support customers. The loss of or a significant reduction in business with those distributors or resellers could harm our business. In particular, if one or more of such distributors or resellers were unable to meet their obligations with respect to accounts payable to us, we could be forced to write off such accounts and may be required to delay the recognition of revenue on future sales to these customers. These events could have a material adverse effect on our financial results.

Our financial results fluctuate within each quarter and from quarter to quarter making our future revenue and financial results difficult to predict.

Our quarterly financial results have fluctuated in the past and will continue to do so in the future. These fluctuations could cause our stock price to change significantly or experience declines. We also provide investors with quarterly and annual financial forward-looking guidance that could prove to be inaccurate as a result of these fluctuations. In addition to the other factors described in this Part I, Item 1A, some of the factors that could cause our financial results to fluctuate include:

- general market, economic, business, and political conditions in particular geographies, including Europe, APAC, and emerging economies;
- failure to produce sufficient revenue, ARR, billings, subscription, profitability and cash flow growth;
- failure to accurately predict the impact of acquired businesses or to identify and realize the anticipated benefits of acquisitions, and successfully integrate such acquired businesses and technologies;
- failure to manage spend;
- changes in subscription mix, pricing pressure or changes in subscription pricing;
- weak or negative growth in one or more of the industries we serve, including AEC, manufacturing, and digital media and entertainment markets;
- the success of new business or sales initiatives;

- security breaches, related reputational harm, and potential financial penalties to customers and government entities;
- restructuring or other accounting charges and unexpected costs or other operating expenses;
- timing of additional investments in our technologies or deployment of our services;
- changes in revenue recognition or other accounting guidelines employed by us and/or established by the Financial Accounting Standards Board, Securities Exchange Commission or other rule-making bodies;
- fluctuations in foreign currency exchange rates and the effectiveness of our hedging activity;
- dependence on and the timing of large transactions;
- changes in billings linearity;
- adjustments arising from ongoing or future tax examinations;
- the ability of governments around the world to adopt fiscal policies, meet their financial and debt obligations, and to finance infrastructure projects;
- lower renewals of our maintenance program;
- failure to expand our AutoCAD and AutoCAD LT customer base to related design products and services;
- our ability to rapidly adapt to technological and customer preference changes, including those related to cloud computing, mobile devices and new computing platforms;
- the timing of the introduction of new products by us or our competitors;
- the financial and business condition of our reseller and distribution channels;
- perceived or actual technical or other problems with a product or combination of subscriptions;
- unexpected or negative outcomes of matters and expenses relating to litigation or regulatory inquiries;
- increases in cloud functionality-related expenses;
- timing of releases and retirements of offerings;
- changes in tax laws or regulations, tax arrangements with foreign governments or accounting rules, such as increased use of fair value measures;
- changes in sales compensation practices;
- failure to effectively implement and maintain our copyright legalization programs, especially in developing countries;
- renegotiation or termination of royalty or intellectual property arrangements;
- interruptions or terminations in the business of our consultants or third-party developers;
- the timing and degree of expected investments in growth and efficiency opportunities;
- failure to achieve continued success in technology advancements;
- catastrophic events or natural disasters;
- regulatory compliance costs;

- potential goodwill impairment charges related to prior acquisitions; and
- failure to appropriately estimate the scope of services under consulting arrangements.

We have also experienced fluctuations in financial results in interim periods in certain geographic regions due to seasonality or regional economic or political conditions. In particular, our financial results in Europe during our third quarter are usually affected by a slower summer period, and our APAC operations typically experience seasonal slowing in our third and fourth quarters.

Our operating expenses are based in part on our expectations for future revenue and are relatively fixed in the short term. Accordingly, any revenue shortfall below expectations has had, and in the future could have, an immediate and significant adverse effect on our profitability. Greater than anticipated expenses or a failure to maintain rigorous cost controls would also negatively affect profitability.

Because we derive a substantial portion of our net revenue from a small number of solutions, including our AutoCAD-based software products and collections, if these offerings are not successful, our revenue will be adversely affected.

We derive a substantial portion of our net revenue from sales of subscriptions of a limited number of our offerings, including AutoCAD software, solutions based on AutoCAD, which include our collections that serve specific markets and products that are interoperable with AutoCAD. Any factor adversely affecting sales of these subscriptions, including the product release cycle, market acceptance, product competition, performance and reliability, reputation, price competition, economic and market conditions and the availability of third-party applications, would likely harm our financial results. During fiscal 2019 and fiscal 2018, combined revenue from our AutoCAD and AutoCAD LT products, not including collections having AutoCAD or AutoCAD LT as a component, represented 28% and 27% of our total net revenue, respectively.

Our debt service obligations may adversely affect our financial condition and cash flows from operations.

We have $2.1 billion of debt, consisting of notes due at various times from June 2020 to June 2027 and a delayed draw term loan facility in the aggregate principal amount of $500.0 million due in December 2020, each as described in Part 2, Item 8. We also entered into a credit agreement that provides for an unsecured revolving loan facility in the aggregate principal amount of $650.0 million, with an option to be increased up to $1.0 billion, as described in Part 2, Item 8. Maintenance of our indebtedness, contractual restrictions, and additional issuances of indebtedness could:

- cause us to dedicate a substantial portion of our cash flows from operations towards debt service obligations and principal repayments;
- increase our vulnerability to adverse changes in general economic, industry and competitive conditions;
- limit our flexibility in planning for, or reacting to, changes in our business and our industry;
- impair our ability to obtain future financing for working capital, capital expenditures, acquisitions, general corporate or other purposes; and
- due to limitations within the debt instruments, restrict our ability to grant liens on property, enter into certain mergers, dispose of all or substantially all of the assets of Autodesk and its subsidiaries, taken as a whole, materially change our business and incur subsidiary indebtedness, subject to customary exceptions.

We are required to comply with the covenants set forth in our debt instruments, such as an interest coverage ratio in effect January 31, 2019 and a leverage ratio in effect July 31, 2019. If we breach any of the covenants and do not obtain a waiver from the note holders or lenders, then, subject to applicable cure periods, we would not be able to incur additional indebtedness under the credit agreement described in Part 2, Item 8 and any outstanding indebtedness may be declared immediately due and payable. In addition, changes by any rating agency to our credit rating may negatively impact the value and liquidity of our securities. Under certain circumstances, if our credit ratings are downgraded or other negative action is taken, the interest rate payable by us under our credit agreement could increase. Downgrades in our credit ratings could also restrict our ability to obtain additional financing in the future and could affect the terms of any such financing.

If we are not able to adequately protect our proprietary rights, our business could be harmed.

We rely on a combination of patent, copyright and trademark laws, trade secret protections, confidentiality procedures and contractual provisions to protect our proprietary rights. Despite such efforts to protect our proprietary rights, unauthorized parties from time to time have copied aspects of our software or have obtained and used information that we regard as proprietary. Policing unauthorized use of our software is time-consuming and costly. We are unable to measure the extent to which piracy of our software exists and we expect that software piracy will remain a persistent problem, particularly in emerging economies. Furthermore, our means of protecting our proprietary rights may not be adequate.

Additionally, we actively protect the secrecy of our confidential information and trade secrets, including our source code. If unauthorized disclosure of our source code occurs, we could potentially lose future trade secret protection for that source code. The loss of future trade secret protection could make it easier for third-parties to compete with our offerings by copying functionality, which could adversely affect our financial performance and our reputation. We also seek to protect our confidential information and trade secrets through the use of non-disclosure agreements with our customers, contractors, vendors and partners. However, it is possible that our confidential information and trade secrets may be disclosed or published without our authorization. If this were to occur, it may be difficult and/or costly for us to enforce our rights, and our financial performance and reputation could be negatively impacted.

We may face intellectual property infringement claims that could be costly to defend and result in the loss of significant rights.

As more software patents are granted worldwide, the number of offerings and competitors in our industries grows and the functionality of products in different industries overlaps, we expect that software developers will be increasingly subject to infringement claims. Infringement or misappropriation claims have in the past been, and may in the future be, asserted against us, and any such assertions could harm our business. Additionally, certain patent holders without products have become more aggressive in threatening and pursuing litigation in attempts to obtain fees for licensing the right to use patents. Any such claims or threats, whether with or without merit, have been and could in the future be time-consuming to defend, result in costly litigation and diversion of resources, cause product delays or require us to enter into royalty or licensing agreements. In addition, such royalty or license agreements, if required, may not be available on acceptable terms, if at all, which would likely harm our business.

From time to time we realign or introduce new business and sales initiatives; if we fail to successfully execute and manage these initiatives, our results of operations could be negatively impacted.

As part of our effort to accommodate our customers' needs and demands and the rapid evolution of technology, we from time to time evolve our business and sales initiatives such as realigning our development and marketing organizations, offering software as a service, and realigning our internal resources in an effort to improve efficiency. We may take such actions without clear indications that they will prove successful, and at times, we have been met with short-term challenges in the execution of such initiatives. Market acceptance of any new business or sales initiative is dependent on our ability to match our customers' needs at the right time and price. Often we have limited prior experience and operating history in these new areas of emphasis. If any of our assumptions about expenses, revenue or revenue recognition principles from these initiatives proves incorrect, or our attempts to improve efficiency are not successful, our actual results may vary materially from those anticipated, and our financial results will be negatively impacted.

Net revenue, ARR, billings, earnings, cash flow or subscriptions shortfalls or the volatility of the market generally may cause the market price of our stock to decline.

The market price for our common stock has experienced significant fluctuations and may continue to fluctuate significantly. The market price for our common stock may be affected by a number of factors, including the other factors described in this Part I, Item 1A and the following:

- shortfalls in our expected financial results, including net revenue, ARR, billings, earnings and cash flow or key performance metrics, such as subscriptions;
- quarterly variations in our or our competitors' results of operations;
- general socio-economic, political or market conditions;
- changes in estimates of future results or recommendations or confusion on the part of analysts and investors about the

short-term and long-term impact to our business;

- uncertainty about certain governments' abilities to repay debt or effect fiscal policy;
- the announcement of new offerings or enhancements by us or our competitors;
- unusual events such as significant acquisitions, divestitures, regulatory actions, and litigation;
- changes in laws, rules, or regulations applicable to our business;
- outstanding debt service obligations; and
- other factors, including factors unrelated to our operating performance, such as instability affecting the economy or the operating performance of our competitors.

Significant changes in the price of our common stock could expose us to costly and time-consuming litigation. Historically, after periods of volatility in the market price of a company's securities, a company becomes more susceptible to securities class action litigation. This type of litigation is often expensive and diverts management's attention and resources.

Our business could be adversely affected if we are unable to attract and retain key personnel.

Our success and ability to invest and grow depend largely on our ability to attract and retain highly skilled technical, professional, managerial, sales, and marketing personnel. Historically, competition for these key personnel has been intense. The loss of services of any of our key personnel (including key personnel joining our company through acquisitions), the inability to retain and attract qualified personnel in the future, or delays in hiring required personnel, particularly engineering and sales personnel, could make it difficult to meet key objectives, such as timely and effective product introductions and financial goals.

Our investment portfolio consists of a variety of investment vehicles in a number of countries that are subject to interest rate trends, market volatility, and other economic factors. If general economic conditions decline, this could cause the credit ratings of our investments to deteriorate, illiquidity in the financial marketplace, and we may experience a decline in interest income and an inability to sell our investments, leading to impairment in the value of our investments.

It is our policy to invest our cash, cash equivalents and marketable securities in highly liquid instruments with, and in the custody of, financial institutions with high credit ratings and to limit the amounts invested with any one institution, type of security and issuer. However, we are subject to general economic conditions, interest rate trends and volatility in the financial marketplace that can affect the income that we receive from our investments, the net realizable value of our investments (including our cash, cash equivalents and marketable securities) and our ability to sell them. Any one of these factors could reduce our investment income, or result in material charges, which in turn could impact our overall net income (loss) and earnings (loss) per share.

From time to time we make direct investments in privately held companies. Privately held company investments are considered inherently risky. The technologies and products these companies have under development are typically in the early stages and may never materialize, which could result in a loss of all or a substantial part of our initial investment in these companies. The evaluation of privately held companies is based on information that we request from these companies, which is not subject to the same disclosure regulations as U.S. publicly traded companies, and as such, the basis for these evaluations is subject to the timing and accuracy of the data received from these companies.

A loss on any of our investments may cause us to record an other-than-temporary impairment charge. The effect of this charge could impact our overall net income (loss) and earnings (loss) per share. In any of these scenarios, our liquidity may be negatively impacted, which in turn may prohibit us from making investments in our business, taking advantage of opportunities and potentially meeting our financial obligations as they come due.

We are subject to legal proceedings and regulatory inquiries, and we may be named in additional legal proceedings or become involved in regulatory inquiries in the future, all of which are costly, distracting to our core business and could result in an unfavorable outcome, or a material adverse effect on our business, financial condition, results of operations, cash flows or the trading prices for our securities.

We are involved in legal proceedings and receive inquiries from regulatory agencies. As the global economy has changed and our business has evolved, we have seen an increase in litigation activity and regulatory inquiries. Like many other high technology companies, the number and frequency of inquiries from U.S. and foreign regulatory agencies we have received regarding our business and our business practices, and the business practices of others in our industry, have increased in recent years. In the event that we are involved in significant disputes or are the subject of a formal action by a regulatory agency, we could be exposed to costly and time consuming legal proceedings that could result in any number of outcomes. Any claims or regulatory actions initiated by or against us, whether successful or not, could result in expensive costs of defense, costly damage awards, injunctive relief, increased costs of business, fines or orders to change certain business practices, significant dedication of management time, diversion of significant operational resources, or otherwise harm our business. In any of these cases, our financial results, results of operations, cash flows or the trading prices for our securities could be negatively impacted.

We are subject to risks related to taxation in multiple jurisdictions.

We are a U.S.-based multinational company subject to tax in multiple U.S. and foreign tax jurisdictions. Our effective tax rate is primarily based on our expected geographic mix of earnings, statutory rates, intercompany arrangements, including the manner in which we develop, value and license our intellectual property, and enacted tax rules. Significant judgment is required in determining our effective tax rate and in evaluating our tax positions on a worldwide basis. While we believe our tax positions, including intercompany transfer pricing policies, are consistent with the tax laws in the jurisdictions in which we conduct our business, it is possible that these positions may be overturned by jurisdictional tax authorities and may have a significant impact on our effective tax rate.

Tax laws are dynamic and subject to change as new laws are passed and new interpretations of the law are issued or applied. For example, the U.S. government enacted significant tax law changes in December 2017, the Tax Act, which impacted our tax obligations and effective tax rate beginning in our fiscal 2018 tax year. Increasingly, governmental tax authorities are scrutinizing corporate tax strategies. Many countries in the European Union, as well as other countries and organizations such as the Organization for Economic Cooperation and Development, are actively considering changes to existing tax laws that, if enacted, could increase our tax obligations in many countries where we do business. If U.S. or other foreign tax authorities change applicable tax laws or successfully challenge the manner in which our profits are currently recognized, our overall taxes could increase, and our business, financial condition or results of operations may be adversely impacted.

Uncertainties in the interpretation and application of the Tax Act could materially affect our tax obligations and effective tax rate.

The Tax Act was enacted on December 22, 2017, and provides broad and significant changes to the U.S. tax code and how the U.S. imposes income tax on multinational corporations. Due to the complexity and varying interpretations of the Tax Act, the U.S. Department of Treasury and other standard-setting bodies have been issuing and will be issuing regulations and interpretative guidance that could significantly impact how we will apply the law and the ultimate impact to our results of operations from the Tax Act.

The Tax Act requires complex computations to be performed that were not previously provided for in the U.S. tax law. These computations require significant judgments to be made regarding the interpretation of the provisions within the Tax Act and treasury regulations issued thereunder, along with preparation and analysis of information not previously required. As additional regulatory guidance is issued, we may make amendments to prior year tax returns.

Changes in existing financial accounting standards or practices, or taxation rules or practices may adversely affect our results of operations.

Changes in existing accounting or taxation rules or practices, new accounting pronouncements or taxation rules, or varying interpretations of current accounting pronouncements or taxation practice could have a significant adverse effect on our results of operations or the manner in which we conduct our business. Further, such changes could potentially affect our reporting of transactions completed before such changes are effective.

We are required to evaluate our internal control over financial reporting under Section 404 of the Sarbanes-Oxley Act of 2002 and any adverse results from such evaluation could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish a report by our management on our internal control over financial reporting. The report contains, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether or not our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management.

If our management or independent registered public accounting firm identifies one or more material weaknesses in our internal control over financial reporting, we would be unable to assert that such internal control over financial reporting is effective. If we are unable to assert that our internal control over financial reporting is effective (or if our independent registered public accounting firm is unable to express an opinion that our internal controls are effective), we could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our business and stock price.

In preparing our financial statements we make certain assumptions, judgments and estimates that affect amounts reported in our consolidated financial statements, which, if not accurate, may significantly impact our financial results.

We make assumptions, judgments and estimates for a number of items, including revenue recognition for our hybrid desktop software and cloud service subscriptions, the fair value of financial instruments, goodwill, long-lived assets and other intangible assets, the realizability of deferred tax assets and the fair value of stock awards. We also make assumptions, judgments and estimates in determining the accruals for employee related liabilities including commissions, bonuses, and sabbaticals; and in determining the accruals for uncertain tax positions, partner incentive programs, product returns reserves, allowances for doubtful accounts, asset retirement obligations and legal contingencies. These assumptions, judgments and estimates are drawn from historical experience and various other factors that we believe are reasonable under the circumstances as of the date of the consolidated financial statements. Actual results could differ materially from our estimates, and such differences could significantly impact our financial results.

We rely on third party technologies and if we are unable to use or integrate these technologies, our solutions and service development may be delayed and our financial results negatively impacted.

We rely on certain software that we license from third parties, including software that is integrated with internally developed software and used in our offerings to perform key functions. These third-party software licenses may not continue to be available on commercially reasonable terms, and the software may not be appropriately supported, maintained or enhanced by the licensors. The loss of licenses to, or inability to support, maintain and enhance any such software could result in increased costs or delays until equivalent software can be developed, identified, licensed and integrated, which would likely harm our business.

Disruptions with licensing relationships and third party developers could adversely impact our business.

We license certain key technologies from third parties. Licenses may be restricted in the term or the use of such technology in ways that negatively affect our business. Similarly, we may not be able to obtain or renew license agreements for key technology on favorable terms, if at all, and any failure to do so could harm our business.

Our business strategy has historically depended in part on our relationships with third-party developers who provide products that expand the functionality of our design software. Some developers may elect to support other products or may experience disruption in product development and delivery cycles or financial pressure during periods of economic downturn. In particular markets, such disruptions have in the past, and would likely in the future, negatively impact these third-party developers and end users, which could harm our business.

Additionally, technology created by outsourced product development, whether outsourced to third parties or developed externally and transferred to us through business or technology acquisitions, has certain additional risks such as effective integration into existing products, adequate transfer of technology know-how and ownership and protection of transferred intellectual property.

As a result of our strategy of partnering with other companies for product development, our product delivery schedules could be adversely affected if we experience difficulties with our product development partners.

We partner with certain independent firms and contractors to perform some of our product development activities. We believe our partnering strategy allows us to, among other things, achieve efficiencies in developing new products and maintaining and enhancing existing product offerings. Our partnering strategy creates a dependency on such independent developers. Independent developers, including those who currently develop solutions for us in the U.S. and throughout the world, may not be able or willing to provide development support to us in the future. In addition, use of development resources through consulting relationships, particularly in non-U.S. jurisdictions with developing legal systems, may be adversely impacted by, and expose us to risks relating to, evolving employment, export and intellectual property laws. These risks could, among other things, expose our intellectual property to misappropriation and result in disruptions to product delivery schedules.

Our business may be significantly disrupted upon the occurrence of a catastrophic event.

Our business is highly automated and relies extensively on the availability of our network and data center infrastructure, our internal technology systems and our websites. We also rely on hosted computer services from third parties for services that we provide to our customers and computer operations for our internal use. The failure of our systems or hosted computer services due to a catastrophic event, such as an earthquake, fire, flood, tsunami, weather event, telecommunications failure, power failure, cyber attack, terrorism, or war, could adversely impact our business, financial results and financial condition. We have developed disaster recovery plans and maintain backup systems in order to reduce the potential impact of a catastrophic event, however there can be no assurance that these plans and systems would enable us to return to normal business operations. In addition, any such event could negatively impact a country or region in which we sell our products. This could in turn decrease that country's or region's demand for our products, thereby negatively impacting our financial results.

If we were required to record an impairment charge related to the value of our long-lived assets, or an additional valuation allowance against our deferred tax assets, our results of operations would be adversely affected.

Our long-lived assets are tested for impairment if indicators of impairment exist. If impairment testing shows that the carrying value of our long-lived assets exceeds their estimated fair values, we would be required to record a non-cash impairment charge, which would decrease the carrying value of our long-lived assets, as the case may be, and our results of operations would be adversely affected. Our deferred tax assets include net operating loss, amortizable tax assets and tax credit carryforwards that can be used to offset taxable income and reduce income taxes payable in future periods. Each quarter, we assess the need for a valuation allowance, considering both positive and negative evidence to determine whether all or a portion of the deferred tax assets are more likely than not to be realized. In fiscal 2016,and in fiscal 2018, we determined that it was more likely than not that Autodesk would not realize our U.S. and Singapore deferred tax assets, respectively, and established a valuation allowance against the deferred tax assets. We continued to have a full valuation allowance against our U.S. and Singapore deferred tax assets in fiscal 2019. Changes in the amount of the valuation allowance could result in a material non-cash expense or benefit in the period in which the valuation allowance is adjusted and our results of operations could be materially affected. We will continue to perform these tests and any future adjustments may have a material effect on our financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We lease approximately 2,200,000 square feet of office space in 107 locations in the United States and internationally through our foreign subsidiaries. Our executive offices are located in leased office space in San Francisco, California, and our corporate headquarters are located in leased office space in San Rafael, California. Our San Rafael facilities consist of approximately 162,000 square feet under leases that have an expiration date of December 2019. Our San Francisco facilities consist of approximately 287,000 square feet under leases that have expiration dates ranging from April 2019 to December 2023. We and our foreign subsidiaries lease additional space in various locations throughout the world for local sales, product development, and technical support personnel.

All facilities are in good condition. Our facilities are operating at capacities averaging 86% occupancy worldwide as of January 31, 2019. We believe that our existing facilities and offices are adequate to meet our requirements for the foreseeable future. See Note 9, “Commitments and Contingencies,” in the Notes to Consolidated Financial Statements for more information about our lease commitments.

ITEM 3. LEGAL PROCEEDINGS

We are involved in a variety of claims, suits, investigations, and proceedings in the normal course of business activities including claims of alleged infringement of intellectual property rights, commercial, employment, piracy prosecution, business practices, and other matters. In our opinion, resolution of pending matters is not expected to have a material adverse impact on our consolidated results of operations, cash flows, or financial position. Given the unpredictable nature of legal proceedings, there is a reasonable possibility that an unfavorable resolution of one or more such proceedings could in the future materially affect our results of operations, cash flows, or financial position in a particular period, however, based on the information known by us as of the date of this filing and the rules and regulations applicable to the preparation of our financial statements, any such amount is either immaterial or it is not possible to provide an estimated amount of any such potential loss.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

MARKET INFORMATION FOR COMMON STOCK

Our common stock is traded on the Nasdaq Global Select Market under the symbol ADSK.

DIVIDEND POLICY

We anticipate that, for the foreseeable future, we will not pay any cash or stock dividends.

STOCKHOLDERS

As of January 31, 2019, the number of common stockholders of record was 376. Because many of our shares of common stock are held by brokers or other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by the record holders.

ISSUER PURCHASES OF EQUITY SECURITIES

Autodesk's stock repurchase program provides Autodesk with the ability to offset the dilution from the issuance of stock under our employee stock plans and reduce shares outstanding over time, and has the effect of returning excess cash generated from our business to stockholders. Under the share repurchase program, Autodesk may repurchase shares from time to time in open market transactions, privately-negotiated transactions, accelerated share repurchase programs, tender offers, or by other means. The share repurchase program does not have an expiration date and the pace and timing of repurchases will depend on factors such as cash generation from operations, available surplus, the volume of employee stock plan activity, remaining shares available in the authorized pool, cash requirements for acquisitions, economic and market conditions, stock price and legal and regulatory requirements.

The following table provides information about the repurchase of common stock in open-market transactions during the quarter ended January 31, 2019:

(Shares in millions)	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs(1)	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs(2)
November 1- November 30	0.2	$ 133.83	0.2	17.4
December 1 - December 31	—	—	—	17.4
January 1 - January 31	—	—	—	17.4
Total	0.2	$ 133.83	0.2	

(1) Represents shares purchased in open-market transactions under the stock repurchase program approved by the Board of Directors.
(2) These amounts correspond to the plan publicly announced and approved by the Board of Directors in September 2016 that authorizes the repurchase of 30.0 million shares. The plan does not have a fixed expiration date.

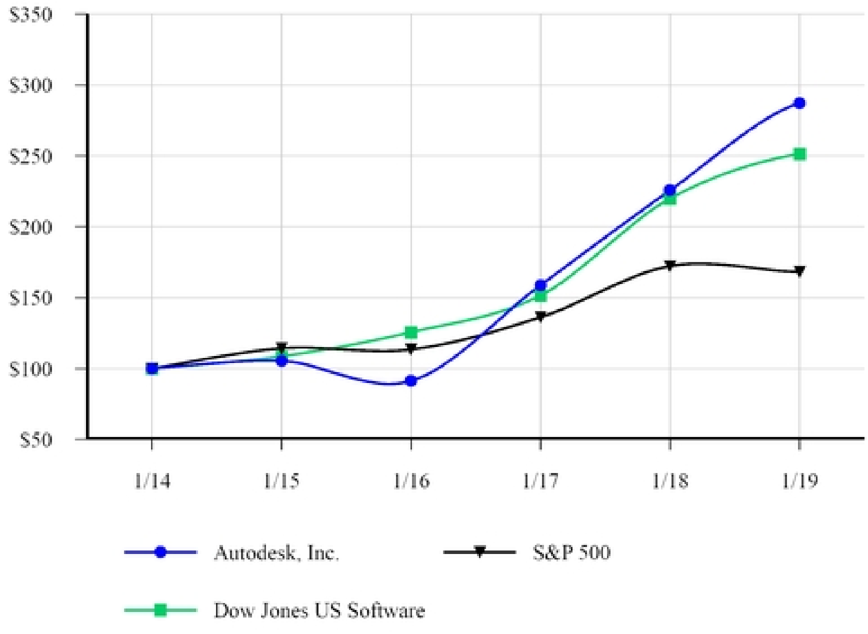
SALES OF UNREGISTERED SECURITIES

There were no sales of unregistered securities during the three months ended January 31, 2019.

COMPANY STOCK PERFORMANCE

The following graph shows a five-year comparison of cumulative total return (equal to dividends plus stock appreciation) for our Common Stock, the Standard & Poor's 500 Stock Index, and the Dow Jones U.S. Software Index. The following graph and related information will not be deemed to be "soliciting material" or to be "filed" with the SEC, nor will such information be incorporated by reference into any filing pursuant to the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent that we specifically incorporate it by reference into such filing.

Comparison of Five Year Cumulative Total Stockholder Return (1)



(1) Assumes $100 invested on January 31, 2014, in Autodesk's stock, the Standard & Poor's 500 Stock Index, and the Dow Jones U.S. Software Index, with reinvestment of all dividends. Total stockholder returns for prior periods are not an indication of future investment returns.

ITEM 6. SELECTED FINANCIAL DATA

The following selected consolidated financial data is not necessarily indicative of results of future operations, and should be read in conjunction with Item 7, “Management's Discussion and Analysis of Financial Condition and Results of Operations,” and the consolidated financial statements and related notes thereto included in Item 8 of this Form 10-K to fully understand factors that may affect the comparability of the information presented below. The financial data for the fiscal years ended January 31, 2019 and 2018 are derived from, and are qualified by reference to, the audited consolidated financial statements that are included in this Form 10-K. The Consolidated Statements of Operations and the Consolidated Statements of Cash Flows data for the fiscal year ended January 31, 2017 are derived from, and are qualified by reference to, the audited consolidated financial statements that are included in this Form 10-K. The Consolidated Balance Sheet data for the fiscal year ended January 31, 2017 and the remaining financial data for the fiscal years ended January 31, 2016 and 2015 are derived from audited, consolidated financial statements which are not included in this Form 10-K.

	Fiscal Year Ended January 31,				
	2019 (1)	**2018**	**2017**	**2016**	**2015**
	(In millions, except per share data)				
For the fiscal year:					
Net revenue	$ 2,569.8	$ 2,056.6	$ 2,031.0	$ 2,504.1	$ 2,512.2
(Loss) income from operations	(25.0)	(509.1)	(499.6)	1.3	120.7
Net (loss) income	(80.8)	(566.9)	(582.1)	(330.5)	81.8
Cash flow from operations	$ 377.1	$ 0.9	$ 169.7	$ 414.0	$ 708.6
Common stock data:					
Basic net (loss) income per share	$ (0.37)	$ (2.58)	$ (2.61)	$ (1.46)	$ 0.36
Diluted net (loss) income per share	$ (0.37)	$ (2.58)	$ (2.61)	$ (1.46)	$ 0.35
At year end:					
Total assets	$ 4,729.2	$ 4,113.6	$ 4,798.1	$ 5,515.3	$ 4,909.7
Long-term liabilities	2,638.9	2,246.4	1,879.1	2,304.7	1,290.4
Stockholders’ (deficit) equity	$ (210.9)	$ (256.0)	$ 733.6	$ 1,619.6	$ 2,219.2

(1) Reflects the impact of the adoption of new accounting standards in fiscal year 2019 related to revenue recognition. See Part II, Item 8, Note 1, Business and Summary of Significant Accounting Policies, Accounting Standards Adopted, of our consolidated financial statements for additional information.

ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The discussion in our MD&A and elsewhere in this Form 10-K contains trend analyses and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. Forward-looking statements are any statements that look to future events and consist of, among other things, our business strategies, including those discussed in “Strategy” and “Overview of Fiscal 2019” below, future net revenue, operating expenses, recurring revenue, annualized recurring revenue, cash flow, other future financial results (by product type and geography), subscriptions and annualized revenue per subscription, the effectiveness of our efforts to successfully manage transitions to new markets, our ability to increase our subscription base, expected market trends, the impact of planned and past acquisitions and investment activities, the effects of global economic conditions, the effects of revenue recognition, the effects of recently issued accounting standards, expectations regarding our cash needs, the effects of fluctuations in exchange rates and our hedging activities on our financial results, our ability to successfully expand adoption of our products, our ability to gain market acceptance of new business and sales initiatives, the impact of economic volatility and geopolitical activities in certain countries, particularly emerging economy countries, the timing and amount of purchases under our stock buy-back plan, and the effects of potential non-cash charges on our financial results and the resulting effect on our financial results. In addition, forward-looking statements also consist of statements involving expectations regarding product capability and acceptance, statements regarding our liquidity and short-term and long-term cash requirements, as well as statements involving trend analyses and statements including such words as “may,” “believe,” “could,” “anticipate,” “would,” “might,” “plan,” “expect,” and similar expressions or the negative of these terms or other comparable terminology. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to business and economic risks. As such, our actual results could differ materially from those set forth in the forward-looking statements as a result of a number of factors, including those set forth above in Part I, Item 1A, “Risk Factors,” and in our other reports filed with the U.S. Securities and Exchange Commission. We assume no obligation to update the forward-looking statements to reflect events that occur or circumstances that exist after the date on which they were made, except as required by law.

STRATEGY

Autodesk makes software for people who make things. If you have ever driven a high-performance car, admired a towering skyscraper, used a smartphone, or watched a great film, chances are you have experienced what millions of Autodesk customers are doing with our software. Autodesk gives you the power to make anything.

Autodesk was founded during the platform transition from mainframe computers and engineering workstations to personal computers. We developed and sustained a compelling value proposition based upon desktop software for the personal computer. Just as the transition from mainframes to personal computers transformed the industry over 30 years ago, the software industry has undergone a transition from developing and selling perpetual licenses and on-premises products to cloud, mobile and social applications.

To address this shift, Autodesk made a strategic decision to shift its business model from selling perpetual licenses and maintenance plans to selling subscriptions.

Today, we offer subscriptions for individual products and Industry Collections, flexible enterprise business agreements ("EBAs"), and cloud service offerings (collectively referred to as "subscription plan"). Subscription plans are designed to give our customers more flexibility with how they use our offerings and to attract a broader range of customers, such as project-based users and small businesses.

Our product subscriptions currently represent a hybrid of desktop software and cloud functionality, which provides a device-independent, collaborative design workflow for designers and their stakeholders. Our cloud offerings, for example, BIM 360, Shotgun, Fusion, and AutoCAD 360 Pro, provide tools, including mobile and social capabilities, to streamline design, collaboration, building and manufacturing and data management processes. We believe that customer adoption of these new offerings will continue to grow as customers across a range of industries begin to take advantage of the scalable computing power and flexibility provided through these new services.

Industry Collections provide our customers with increased access to a broader selection of Autodesk solutions and services that exceeds those previously available in suites — simplifying the customers' ability to get access to a complete set of tools for their industry.

We discontinued the sale of new commercial licenses of most individual software products in 2016. Additionally, in June 2017, we commenced a program to incentivize maintenance plan customers to move to subscription plan offerings, maintenance-to-subscription ("M2S"), while at the same time increasing maintenance plan pricing over time for customers that remain on maintenance plans. Since launching the program, over 794,000 maintenance plan customers have converted to subscription plan offerings. Autodesk seeks to convert the remaining 796,100 maintenance plan customers to subscription through this program.

To support our strategic priority of re-imagining construction, in fiscal 2019, we strengthened the foundation of our construction solutions with both organic and inorganic investments. In addition to investing in our BIM 360 portfolio, we purchased Assemble Systems for quantity take off functionality, PlanGrid for document-centric workflows and field execution, and BuildingConnected for bidding and estimation processes. The broadened product portfolio will help us expand our presence with sub-contractors, trades people, and building owners.

As part of our manufacturing strategy we continue to attract global manufacturing leaders with our generative design and our Fusion technology enhancements.

We sell our products and services globally, through a combination of indirect and direct channels. Our indirect channels include value added resellers, direct market resellers, distributors, computer manufacturers, and other software developers. Our direct channels include internal sales resources dedicated to selling in our largest accounts, our highly specialized solutions, and business transacted through our online Autodesk branded store. See Note 2, "Revenue Recognition" in the Notes to the Consolidated Financial Statements for further detail on the results of our indirect and direct channel sales for the fiscal years ended January 31, 2019, 2018, and 2017.

We anticipate that our channel mix will continue to change as we scale our online Autodesk branded store business and our largest accounts shift towards direct-only business models. However, we expect our indirect channel will continue to transact and support the majority of our customers and revenue. We employ a variety of incentive programs and promotions to align our direct and indirect channels with our business strategies. In addition, we have a worldwide user group organization and we have created online user communities dedicated to the exchange of information related to the use of our products.

One of our key strategies is to maintain an open-architecture design of our software products to facilitate third-party development of complementary products and industry-specific software solutions. This approach enables customers and third parties to customize solutions for a wide variety of highly specific uses. We offer several programs that provide strategic investment funding, technological platforms, user communities, technical support, forums, and events to developers who develop add-on applications for our products. For example, we have established the Autodesk Forge program to support innovators that build solutions to facilitate the development of a single connected ecosystem for the future of how things are designed, made, and used as well as support ideas that push the boundaries of 3D printing.

In addition to the competitive advantages afforded by our technology, our large global network of distributors, resellers, third-party developers, customers, educational institutions, educators, and students is a key competitive advantage which has been cultivated over an extensive period of time. This network of partners and relationships provides us with a broad and deep reach into volume markets around the world. Our distributor and reseller network is extensive and provides our customers with the resources to purchase, deploy, learn, and support our solutions quickly and easily. We have a significant number of registered third-party developers who create products that work well with our solutions and extend them for a variety of specialized applications.

Autodesk is committed to helping fuel a lifelong passion for making with students of all ages. We offer free educational licenses of Autodesk software worldwide to students, educators, and accredited educational institutions. We inspire and support beginners with Tinkercad, a simple online 3D design and 3D printing tool. Through Autodesk Design Academy, we provide secondary and postsecondary school markets hundreds of standards-aligned class projects to support design-based disciplines in Science, Technology, Engineering, Digital Arts, and Math (STEAM) while using Autodesk's professional-grade 3D design, engineering and entertainment software used in industry. We also have made Autodesk Design Academy curricula available on Udemy and Coursera. Our intention is to make Autodesk software ubiquitous and the design and making software of choice for those poised to become the next generation of professional users.

Our strategy includes improving our product functionality and expanding our product offerings through internal development as well as through the acquisition of products, technology, and businesses. For example, we recently acquired Assemble Systems, a leading provider of key workflow software solutions, PlanGrid, Inc., a leading provider of construction productivity software, and BuildingConnected, a leading pre-construction platform. We believe that the acquisitions of Assemble Systems, PlanGrid and BuildingConnected will enable us to offer a more comprehensive, cloud-based construction platform. Acquisitions often increase the speed at which we can deliver product functionality to our customers; however, they entail cost and integration challenges and may, in certain instances, negatively impact our operating margins. We continually review these trade-offs in making decisions regarding acquisitions. We currently anticipate that we will continue to acquire products, technology, and businesses as compelling opportunities become available.

In our current business model, annualized recurring revenue ("ARR"), growth of billings, and total deferred revenue better reflect business momentum. To analyze progress, we have disaggregated our growth between the original maintenance model ("maintenance plan") and the subscription plan model. Maintenance plan subscriptions peaked in the fourth quarter of our fiscal 2016 as we discontinued selling new maintenance plan subscriptions in fiscal 2017, and we expect them to keep declining over time as maintenance plan customers continue to convert to our subscription plans.

Our strategy depends upon a number of assumptions, including: making our technology available to mainstream markets; leveraging our large global network of distributors, resellers, third-party developers, customers, educational institutions, and students; improving the performance and functionality of our products; and adequately protecting our intellectual property. If the outcome of any of these assumptions differs from our expectations, we may not be able to implement our strategy, which could potentially adversely affect our business. For further discussion regarding these and related risks, see Part I, Item 1A, “Risk Factors.”

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our Consolidated Financial Statements are prepared in conformity with U.S. generally accepted accounting principles. In preparing our Consolidated Financial Statements, we make assumptions, judgments, and estimates that can have a significant impact on amounts reported in our Consolidated Financial Statements. We base our assumptions, judgments, and estimates on historical experience and various other factors that we believe to be reasonable under the circumstances. Actual results could differ materially from these estimates under different assumptions or conditions. We regularly reevaluate our assumptions, judgments, and estimates. Our significant accounting policies are described in Part II, Item 8, Note 1, “Business and Summary of Significant Accounting Policies,” in the Notes to Consolidated Financial Statements. We believe that of all our significant accounting policies, the following policies involve a higher degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our financial condition and results of operations.

Revenue Recognition. Autodesk’s revenue is divided into three categories: subscription revenue, maintenance revenue, and other revenue. Revenue is recognized when control for these offerings is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for products and services.

Our contracts with customers may include promises to provide multiple subscriptions and services to a customer. Determining whether the offerings and services are considered distinct performance obligations that should be accounted for separately or as one combined performance obligation may require significant judgment. Judgment is required to determine the level of integration and interdependency between individual components of software and cloud functionality. This determination influences whether the software is considered distinct and accounted for separately as a license performance obligation, or not distinct and accounted for together with the cloud functionality as a single subscription performance obligation recognized over time.

For product subscriptions, Industry Collections, and enterprise business agreement ("EBA") subscriptions in which the desktop software and related cloud functionality are highly interrelated, the combined performance obligation is recognized ratably over the contract term as the obligation is satisfied. For contracts involving distinct software licenses, the license performance obligation is satisfied at a point in time when control is transferred to the customer. For standalone maintenance subscriptions, cloud subscriptions, and technical support services, the performance obligation is satisfied ratably over the contract term as those services are delivered. For consulting services, the performance obligation is satisfied over a period of time as those services are delivered.

When an arrangement includes multiple performance obligations which are concurrently delivered and have the same pattern of transfer to the customer (the services transfer to the customer over the contract period), we account for those performance obligations as a single performance obligation.

For contracts with more than one performance obligation, the transaction price is allocated among the performance obligations in an amount that depicts the relative standalone selling price ("SSP") of each obligation. Judgment is required to determine the SSP for each distinct performance obligation. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount that should be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that includes market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customer and circumstance. In these instances, we use relevant information such as the sales channel and geographic region to determine the SSP.

Our indirect channel model includes both a two-tiered distribution structure, where Autodesk sells to distributors that subsequently sell to resellers, and a one-tiered structure where Autodesk sells directly to resellers. For these arrangements, transfer of control begins at the time access to our subscriptions is made available electronically to our end customer, provided all other criteria for revenue recognition are met. Judgment is required to determine whether our distributors and resellers have the ability to honor their commitment to pay, regardless of whether they collect payment from their customers. If we were to change this assessment, it could cause a material increase or decrease in the amount of revenue that we report in a particular period.

As part of the indirect channel model, we have a partner incentive program that uses quarterly attainment of monetary rewards to motivate distributors and resellers to achieve mutually agreed upon business goals in a specified time period. Incentives related to our subscription program are recorded as a reduction to deferred revenue in the period the subscription transaction is billed, and are subsequently recognized as a reduction to subscription revenue over the contract period. A small portion of partner incentives reduce other revenue in the current period. These incentive balances do not require significant assumptions or judgments. Depending on how the payments are made, the reserves associated with the partner incentive program are recorded on the balance sheet as either contra accounts receivable or accounts payable.

The new revenue recognition standard had a material impact in our consolidated financial statements. Refer to Part II, Item 8, Note 1, Business and Summary of Significant Accounting Policies, Accounting Standards Adopted, of our consolidated financial statements and to discussions below under the heading “Overview” for additional information.

Marketable Securities and Privately Held Company Investments. As described in Part II, Item 8, Note 3, “Financial Instruments,” in the Notes to Consolidated Financial Statements, our investments in marketable securities are measured at the end of each reporting period and reported at fair value. Fair value is defined as the price that would be received from the sale of an asset or paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. In determining the fair value of our investments, we are sometimes required to use various alternative valuation techniques. Inputs to valuation techniques are either observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. These two types of inputs have created the following fair value hierarchy:

- Level 1 - Quoted prices for identical instruments in active markets;

- Level 2 - Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets; and

- Level 3 - Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

This hierarchy requires us to minimize the use of unobservable inputs and to use observable market data, if available, when determining fair value. This is generally true for our cash and cash equivalents and the majority of our marketable securities, which we consider to be Level 1 assets and Level 2 assets.

Privately held debt and equity securities (Level 3) are valued using significant unobservable inputs or data in an inactive market and the valuation requires our judgment due to the absence of market prices and inherent lack of liquidity. These assumptions are inherently subjective and involve significant management judgment. Whenever possible, we use observable market data and rely on unobservable inputs only when observable market data is not available, when determining fair value.

The carrying value is not adjusted for our privately held equity securities if there are no observable price changes in a same or similar security from the same issuer or if there are no identified events or changes in circumstances that may indicate impairment, as discussed below. In determining the estimated fair value of its strategic investments in privately held companies, we utilize the most recent data available to us. In addition, the determination of whether an orderly transaction is for a same or similar investment requires significant management judgment including: the rights and obligations of the investments, the extent to which those differences would affect the fair values of those investments, and the impact of any differences based on the stage of operational development of the investee.

All of Autodesk’s marketable securities and privately held company investments are subject to a periodic impairment review. For any marketable debt securities, declines in fair value judged to be other-than-temporary on securities available for sale are included as a reduction to investment income. To determine whether a decline in value is other-than-temporary, we evaluate, among other factors: the duration and extent to which the fair value has been less than the carrying value and its intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value. For the purposes of computing realized and unrealized gains and losses, the cost of securities sold is based on the specific-identification method. Interest on securities classified as available for sale is also included as a component of investment income.

For Autodesk's quarterly impairment assessment of privately held debt and equity securities strategic investment portfolio, the analysis encompasses an assessment of the severity and duration of the impairment and qualitative and quantitative analysis of other key factors including: the investee’s financial metrics, the investee’s products and technologies meeting or exceeding predefined milestones, market acceptance of the product or technology, other competitive products or technology in the market, general market conditions, management and governance structure of the investee, the investee’s liquidity, debt ratios and the rate at which the investee is using its cash. If the investment is considered to be impaired, the Company will record the investment at fair value by recognizing an impairment through the consolidated statement of operations and establishing a new carrying value for the investment.

Business Combinations. The assets acquired and liabilities assumed in a business combination are recorded based on their estimated fair values at the acquisition date. Any residual purchase price is recorded as goodwill. Accounting for business combinations requires us to make significant estimates and assumptions, especially at the acquisition date with respect to intangible assets and deferred revenue obligations.

Although we believe the assumptions and estimates we have made are reasonable, they are based in part on historical experience and information obtained from the management of the acquired companies and are inherently uncertain. Examples of critical estimates used in valuing certain of the intangible assets we have acquired or may acquire in the future include but are not limited to:

- future expected cash flows from sales, maintenance agreements, and acquired developed technologies;

- the acquired company's trade name, trademark and existing customer relationship, as well as assumptions about the period of time the acquired trade name and trademark will continue to be used in our product portfolio;

- expected costs to develop the in-process research and development into commercially viable products and estimated cash flows from the projects when completed; and

- discount rates used to determine the present value of estimated future cash flows.

These estimates are inherently uncertain and unpredictable. Unanticipated events and circumstances may occur which may affect the accuracy or validity of such assumptions, estimates or actual results.

Realizability of Long-Lived Assets. We assess the realizability of our long-lived assets and related intangible assets, other than goodwill, quarterly, or sooner should events or changes in circumstances indicate the carrying values of such assets may not be recoverable. We consider the following factors important in determining when to perform an impairment review: significant under-performance of a business or product line relative to budget; shifts in business strategies which affect the continued uses of the assets; significant negative industry or economic trends; and the results of past impairment reviews. When such events or changes in circumstances occur, we assess recoverability of these assets.

We assess recoverability of these assets by comparing the carrying amounts to the future undiscounted cash flows the assets are expected to generate. If impairment indicators were present based on our undiscounted cash flow models, which include assumptions regarding projected cash flows, we would perform a discounted cash flow analysis to assess impairments on long-lived assets. Variances in these assumptions could have a significant impact on our conclusion as to whether an asset is impaired or the amount of any impairment charge. Impairment charges, if any, result in situations where any fair values of these assets are less than their carrying values.

In addition to our recoverability assessments, we routinely review the remaining estimated useful lives of our long-lived assets. Any reduction in the useful life assumption will result in increased depreciation and amortization expense in the quarter when such determinations are made, as well as in subsequent quarters.

We will continue to evaluate the values of our long-lived assets in accordance with applicable accounting rules. As changes in business conditions and our assumptions occur, we may be required to record impairment charges.

Income Taxes. We account for income taxes under the asset and liability approach. Under this method, deferred tax assets, including those related to tax loss carryforwards and credits, and deferred tax liabilities are determined based on the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. We recognize the tax benefit for an uncertain tax position when it meets a more likely than not threshold. We recognize potential accrued interest and penalties related to unrecognized tax benefits as income tax expense.

A valuation allowance is recorded to reduce deferred tax assets when management cannot conclude that it is more likely than not that the net deferred tax asset will be recovered. The valuation allowance is determined by assessing both positive and negative evidence to determine whether it is more likely than not that deferred tax assets are recoverable; such assessment is required on a jurisdiction-by-jurisdiction basis. Significant judgment is required in determining whether the valuation allowance should be recorded against deferred tax assets. In assessing the need for valuation allowance, we consider all available evidence including past operating results and estimates of future taxable income. As a result of cumulative losses arising from our transition to a subscription model, we considered cumulative losses as a significant source of negative evidence and recorded a valuation allowance against our deferred tax attributes in Singapore, Canada and the U.S. jurisdictions.

As we continually strive to optimize our overall business model, tax planning strategies may become feasible and prudent whereby management may determine that it is more likely than not that the federal and state deferred tax assets will be realized; therefore, we will continue to evaluate the evidence around our ability to utilize our net deferred tax assets each quarter, both in the U.S. and in foreign jurisdictions, based on all available evidence, both positive and negative.

Stock-Based Compensation. We measure stock-based compensation cost at the grant date fair value of the award, and recognize expense ratably over the requisite service period, which is generally the vesting period. We estimate the fair value of certain stock-based payment awards (including grants of employee stock purchases related to the employee stock purchase plan) using either the Black-Scholes-Merton option-pricing model or a binomial-lattice model (e.g., Monte Carlo simulation model). To determine the grant-date fair value of our stock-based payment awards, we use a Black-Scholes model or the quoted stock price on the date of grant, unless the awards are subject to market conditions, in which case we use the Monte Carlo simulation model. The Monte Carlo simulation model utilizes multiple input variables to estimate the probability that market conditions will be achieved. These variables include our expected stock price volatility over the expected term of the award, actual and projected employee stock option exercise behaviors, the risk-free interest rate for the expected term of the award, and expected dividends. The variables used in these models are reviewed on a quarterly basis and adjusted, as needed. Share-based compensation cost for restricted stock is measured on the closing fair market value of our common stock on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense in our Consolidated Statements of Operations.

Legal Contingencies. As described in Part I, Item 3, “Legal Proceedings” and Part II, Item 8, Note 9, “Commitments and Contingencies,” in the Notes to Consolidated Financial Statements, we are periodically involved in various legal claims and proceedings. We routinely review the status of each significant matter and assess our potential financial exposure. If the potential loss from any matter is considered probable and the amount can be reasonably estimated, we record a liability for the estimated loss. Because of inherent uncertainties related to these legal matters, we base our loss accruals on the best information available at the time. As additional information becomes available, we reassess our potential liability and may revise our estimates. Such revisions could have a material impact on future quarterly or annual results of operations.

Restructuring and other exit costs, net. Our restructuring plans include one–time termination benefits as well as certain contractual termination benefits. We record costs associated with exit activities related to restructuring plans in accordance with the ASC Topic 420, *Exit or Disposal Obligations*. Liabilities for costs associated with an exit or disposal activity are recognized in the period in which the liability is incurred. The timing of associated cash payments is dependent upon the type of exit cost and may extend over a 12-month period or longer. We record restructuring liabilities in “Other accrued liabilities,” or "Other liabilities" in the consolidated balance sheet.

Restructuring and other exit costs, net includes employee termination costs, facility closure, accelerated depreciation of certain assets and relocation costs, and contract termination costs. One–time termination benefits are recognized as a liability at estimated fair value when the approved plan of termination has been communicated to employees, unless employees must provide future service that is longer than the statutory requirement, in which case the benefits are recognized ratably over the future service period. For the facility-related restructuring, we recognize upon exiting all or a portion of a leased facility and meeting cease-use and other requirements. The amount of restructuring is based on the fair value of the lease obligation for the abandoned space, which includes a sublease assumption that could be reasonably obtained. We also recognize accelerated depreciation related to assets at the time we commit to a plan to abandon.

Restructuring and other exit costs, net requires significant estimates and assumptions, including sub-lease income and expenses for severance and other employee separation costs. Our estimates involve a number of risks and uncertainties, some of which are beyond our control, including future real estate market conditions and our ability to successfully enter into subleases or termination agreements with terms as favorable as those assumed when arriving at our estimates. We monitor these estimates and assumptions on at least a quarterly basis for changes in circumstances and any corresponding adjustments to the accrual are recorded in our statement of operations in the period when such changes are known.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Part II, Item 8, Note 1, “Business and Summary of Significant Accounting Policies,” in the Notes to Consolidated Financial Statements for a full description of recent accounting pronouncements, including the expected dates of adoption and estimated effects on results of operations and financial condition.

OVERVIEW OF FISCAL 2019

- Total net revenue was $2.57 billion during fiscal 2019, an increase of 25% compared to the prior fiscal year.
- Total ARR was $2.75 billion, an increase of 34% compared to the prior fiscal year.
- Subscription plan ARR was $2.20 billion, an increase of 87% compared to the prior fiscal year.
- Total subscriptions increased 0.6 million from the prior fiscal year to 4.3 million.
- Deferred revenue was $2.09 billion, an increase of 7% compared to the prior fiscal year. Total deferred revenue (deferred revenue plus unbilled deferred revenue) was $2.68 billion, an increase of approximately 18 percent compared to prior fiscal year.
- We adopted ASC Topic 606 and ASC Topic 340-40 during the first quarter of fiscal 2019. See discussion below for additional information regarding certain metrics that were affected by the new standards under the heading “Impact of New Revenue Accounting Standard."

Revenue Analysis

During fiscal 2019, net revenue increased 25%, as compared to the prior fiscal year, primarily due to a 102% increase in subscription revenue. The increase in subscription revenue was partially offset by a 36% decrease in maintenance revenue.

Further discussion of the drivers of these results are discussed below under the heading “Results of Operations.”

We rely significantly upon major distributors and resellers in both the U.S. and international regions, including Tech Data Corporation and its global affiliates (collectively, “Tech Data”). Total sales to Tech Data accounted for 35%, 31%, and 30% of Autodesk's total net revenue during fiscal 2019, 2018, and 2017, respectively. Our customers through Tech Data are the resellers and end users who purchase our software subscription services. Should any of our agreements with Tech Data be terminated for any reason, we believe the resellers and end users who currently purchase our products through Tech Data would be able to continue to do so under substantially the same terms from one of our many other distributors without substantial disruption to our revenue. Consequently, we believe our business is not substantially dependent on Tech Data.

Recurring Revenue and Subscriptions

In order to help better understand our financial performance we use several metrics including recurring revenue, ARR, total subscriptions, and annualized revenue per subscription ("ARPS"). ARR, ARPS, total subscriptions, and recurring revenue are performance metrics and should be viewed independently of revenue and deferred revenue as ARR, ARPS, total subscriptions, and recurring revenue are not intended to be combined with those items. Our determination and presentation may differ from that of other companies. Please refer to the Glossary of Terms for the definitions of these metrics.

The following table outlines our recurring revenue metric for the fiscal years ended January 31, 2019, 2018, and 2017:

	Fiscal Year Ended January 31, 2019	Change compared to prior fiscal year end		Fiscal Year Ended January 31, 2018	Change compared to prior fiscal year end		Fiscal Year Ended January 31, 2017
		$	%		$	%	
Recurring Revenue *(in millions)* (1)	$ 2,437.2	$ 554.9	29%	$ 1,882.3	$ 342.0	22%	$ 1,540.3
As a percentage of net revenue	95%			92%			76%

(1) The acquisition of a business may cause variability in the comparison of recurring revenue in this table above and recurring revenue derived from the revenue reported in the Consolidated Statements of Operations.

The following table outlines our ARR, subscriptions, and ARPS metrics as of fiscal years ended January 31, 2019 and 2018. For purposes of clarification, the ARR and ARPS balances in the following table as of January 31, 2019 are calculated under ASC Topic 606. For comparison of ARR and ARPS as of January 31, 2019 under the old revenue standard, ASC Topic 605, refer to the table under the title "Impact of New Revenue Accounting Standard" further below.

	January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	January 31, 2018
ARR *(in millions)*				
Subscription plan ARR	$ 2,200.1	$ 1,025.1	87 %	$ 1,175.0
Maintenance plan ARR	549.3	(329.8)	(38)%	879.1
Total ARR (1)	$ 2,749.4	$ 695.3	34 %	$ 2,054.1
Number of subscriptions *(in thousands)* (2)				
Subscription plan	3,533.9	1,267.1	56 %	2,266.8
Maintenance plan	796.1	(652.8)	(45)%	1,448.9
Total subscriptions	4,330.0	614.3	17 %	3,715.7
ARPS *(ARR divided by number of subscriptions)* (2)				
Subscription plan ARPS	$ 623	$ 105	20 %	$ 518
Maintenance plan ARPS	$ 690	$ 83	14 %	$ 607
Total ARPS (3)	$ 635	$ 82	15 %	$ 553

(1) The acquisition of a business may cause variability in the comparison of ARR reported in this table above and ARR derived from the revenue reported in the Consolidated Statements of Operations.
(2) In the first quarter of fiscal 2020, we will discontinue presenting subscriptions and ARPS on a quarterly basis.
(3) There are small variances between ARR and total subscriptions due in part to the inherent limitation with collecting all subscriptions information. For example, Buzzsaw and Constructware are included with ARR but not in total subscriptions due to these inherent limitations. We do not view these variances as meaningful to amounts or quarterly comparisons presented here for ARPS.

Total ARR increased 34% as of January 31, 2019 as compared to the end of fiscal 2018, primarily due to a 87% increase in subscription plan ARR driven by product subscriptions, including the M2S program. The increase was partially offset by a 38% decrease in maintenance plan ARR driven by the migration from maintenance plan subscriptions to subscription plan subscriptions. Under ASC 605, total ARR increased 32% as compared to the end of the prior fiscal year primarily due to an 84% increase in subscription plan ARR, partially offset by a 36% decrease in maintenance plan ARR.

Subscription plan subscriptions increased 56% or approximately 1.3 million as compared to the end of fiscal 2018, driven by growth in all subscription plan types, led by new product subscriptions. Subscription plan subscriptions benefited from approximately 452,000 maintenance subscribers that were converted to product subscription under the maintenance-to-subscription program during the fiscal year ended January 31, 2019.

Maintenance plan subscriptions decreased 45% or approximately 652,800 as compared to the end of fiscal 2018, primarily as a result of the strong performance of the M2S program in which approximately 452,000 maintenance plan subscriptions converted to product subscription during the fiscal year ended January 31, 2019. The net decrease is expected and we expect to see ongoing declines in maintenance plan subscriptions going forward as part of the business model transition. The rate of decline will vary based on the number of subscriptions subject to renewal, the renewal rate, and our ability to incentivize customers to switch over to EBAs or product subscriptions.

As of January 31, 2019, when adjusted for the impact of the M2S program, subscription plan ARPS and maintenance plan ARPS would have been $631 and $641, respectively.

ARPS as of January 31, 2019, was $635 under ASC 606, a 15% increase compared to the prior fiscal year primarily due to an increase in subscription plan ARPS. The increase in subscription plan ARPS was driven by growth in all subscription plan types, led by product subscription ARPS. Under ASC 605, ARPS was $628 as of January 31, 2019.

Our ARPS is currently, and will continue to be, affected by various factors including the M2S program, geography and product mix, promotions, acquisitions, sales linearity within a quarter, pricing changes, and foreign currency.

Impact of New Revenue Accounting Standard

Effective in the first quarter of fiscal 2019, we adopted Accounting Standard Update No. 2014-09, which codified new revenue recognition guidance under ASC Topic 606. Previously, we followed revenue accounting guidance under ASC Topic 605. Under the modified retrospective adoption, Autodesk calculated the impact of the adoption during fiscal 2019, as the first year of adoption. The table below shows what some of our key metrics would have been under ASC Topic 605 (see Part II, Item 8, Note 1, "Business and Summary of Significant Accounting Policies" for more details on our adoption and impacts).

	Fiscal Year Ended January 31, 2019		Fiscal Year Ended January 31, 2018
(in millions except ARPS)	ASC 606	ASC 605	ASC 605
Key Income Statement Metrics			
Subscription revenue	$ 1,802.3	$ 1,785.7	$ 894.3
Maintenance revenue	635.1	640.8	989.6
Other revenue	132.4	121.1	172.7
Total net revenue	2,569.8	2,547.6	2,056.6
Gross profit	2,283.9	2,260.7	1,753.2
Total spend (1)	2,594.8	2,577.9	2,565.7
Net loss	$ (80.8)	$ (90.9)	$ (566.9)
Basic and diluted net loss per share	$ (0.37)	$ (0.42)	$ (2.58)
ARR			
Subscription plan ARR	$ 2,200.1	$ 2,160.1	$ 1,175.0
Maintenance plan ARR	549.3	558.5	879.1
Total ARR	$ 2,749.4	$ 2,718.6	$ 2,054.1
ARPS (2)			
Subscription plan ARPS	$ 623	$ 611	$ 518
Maintenance plan ARPS	690	702	607
Total ARPS	$ 635	$ 628	$ 553
Net Revenue by Product Family (3)			
Architecture, Engineering and Construction ("AEC")	$ 1,021.6	$ 1,014.5	$ 787.5
AutoCAD and AutoCAD LT ("ACAD")	731.8	730.5	561.4
Manufacturing ("MFG")	616.2	607.2	528.8
Media and Entertainment ("M&E")	182.0	176.7	152.1
Other	18.2	18.7	26.8
Total Net Revenue	$ 2,569.8	$ 2,547.6	$ 2,056.6
Net Revenue by Geography			
Americas	$ 1,049.9	$ 1,034.6	$ 871.1
Europe, Middle East and Africa ("EMEA")	1,034.3	1,028.8	815.4
Asia Pacific ("APAC")	485.6	484.2	370.1
Total net revenue	$ 2,569.8	$ 2,547.6	$ 2,056.6

(1) Our total spend is defined as cost of revenue plus operating expenses.
(2) In the first quarter of fiscal 2020, we will discontinue presenting subscriptions and ARPS on a quarterly basis.
(3) Due to changes in the go-to-market offerings of our AutoCAD product subscription, prior period balances have been adjusted to conform to current period presentation.

The adoption of ASC Topic 606 required a change to our reporting of deferred revenue. See discussions below under the heading "Total deferred revenue."

Foreign Currency Analysis

We generate a significant amount of our revenue in the United States, Germany, Japan, the United Kingdom and Canada.

The following table shows the impact of foreign exchange rate changes on our net revenue and total spend:

	Fiscal Year Ended January 31, 2019		
	Percent change compared to prior fiscal year (as reported)	Constant currency percent change compared to prior fiscal year (1)	Positive/negative/neutral impact from foreign exchange rate changes
Revenue	25%	24%	Positive
Total spend	1%	1%	Neutral

(1) Please refer to the Glossary of Terms for the definitions of our constant currency growth rates.

Changes in the value of the U.S. dollar may have a significant effect on net revenue, total spend, and income (loss) from operations in future periods. We use foreign currency contracts to reduce the exchange rate effect on a portion of the net revenue of certain anticipated transactions but do not attempt to completely mitigate the impact of fluctuations of such foreign currency against the U.S. dollar.

Total Deferred Revenue

The adoption of ASC Topic 606 required a change to the definition of unbilled deferred revenue and new qualitative and quantitative disclosures around our performance obligations. Unbilled deferred revenue represents contractually stated or committed orders under early renewal and multi-year billing plans primarily for subscription, services and maintenance for which the associated deferred revenue has not been recognized. Under ASC Topic 606, unbilled deferred revenue is not included as a receivable or deferred revenue on our Consolidated Balance Sheet. See Part II, Item 8, Note 2, "Revenue Recognition" for more details on Autodesk's performance obligations.

	January 31, 2019		January 31, 2018
(in millions)	ASC 606	ASC 605	ASC 605
Deferred revenue	$ 2,091.4	$ 2,269.2	$ 1,955.1
Unbilled deferred revenue	591.0	491.6	326.4
Total deferred revenue	$ 2,682.4	$ 2,760.8	$ 2,281.5

We expect that the amount of billed and unbilled deferred revenue will change from quarter to quarter for several reasons, including the specific timing, duration and size of customer subscription and support agreements, varying billing cycles of such agreements, the specific timing of customer renewals, and foreign currency fluctuations.

Balance Sheet and Cash Flow Items

At January 31, 2019, we had $953.6 million in cash and marketable securities. Our cash flow from operations increased to $377.1 million for the fiscal year ended January 31, 2019 from $0.9 million for the fiscal year ended January 31, 2018. We repurchased 2.2 million shares of our common stock for $292.5 million during fiscal 2019. Comparatively, we repurchased 6.9 million shares of our common stock for $690.1 million during fiscal 2018. Further discussion regarding the balance sheet and cash flow activities are discussed below under the heading "Liquidity and Capital Resources."

RESULTS OF OPERATIONS

The revenue and spend balances included in the tables below during the fiscal year ended January 31, 2019, are calculated under ASC Topic 606. For comparison of subscription revenue, maintenance revenue, other revenue and total spend during the fiscal year ended January 31, 2019, under ASC Topic 605, refer to the table within Item 7, "Overview" under the title "Impact of New Revenue Accounting Standard."

Net Revenue by Income Statement Presentation

Subscription revenue consists of our term-based product subscriptions, cloud service offerings, and flexible enterprise business arrangements. Revenue from these arrangements is recognized ratably over the contract term commencing with the date our service is made available to customers and when all other revenue recognition criteria have been satisfied.

Maintenance revenue consists of renewal fees for existing maintenance plan agreements that were initially purchased with a perpetual software license. Under our maintenance plan, customers are eligible to receive unspecified upgrades, when and if available, and technical support. We recognize maintenance revenue ratably over the term of the agreements, which is generally one year.

Other revenue consists of revenue from consulting, training and other services, and is recognized over time as the services are performed. Other revenue also includes software license revenue from the sale of products which do not incorporate substantial cloud services and is recognized up front.

(in millions)	Fiscal year ended January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Fiscal year ended January 31, 2018	Management comments
Net revenue:					
Subscription	$ 1,802.3	$ 908.0	102 %	$ 894.3	Up due to growth across all subscription types, led by product subscription renewal revenue, which benefited from the success of the M2S program. Also contributing to the growth was an increase in revenue from new product subscriptions and EBA offerings.
Maintenance (1)	635.1	(354.5)	(36)%	989.6	Down primarily due to the migration of maintenance plan subscriptions to subscription plan subscriptions with the M2S program.
Total subscription and maintenance revenue	2,437.4	553.5	29 %	1,883.9	
Other (2)	132.4	(40.3)	(23)%	172.7	
	$ 2,569.8	$ 513.2	25 %	$ 2,056.6	

(1) We expect maintenance revenue will continue to decline; however, the rate of decline will vary based on the number of renewals, the renewal rate, and our ability to incentivize maintenance plan customers to switch over to subscription plan offerings.
(2) Previously labeled as "License and other" in prior periods.

(in millions)	Fiscal year ended January 31, 2018	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Fiscal Year Ended January 31, 2017	Management Comments
Net revenue:					
Subscription	$ 894.3	$ 451.2	102 %	$ 443.1	Up due to growth across all subscription types, led by product subscriptions and EBA offerings, primarily as a result of the business model transition.
Maintenance (1)	989.6	(113.5)	(10)%	1,103.1	Down due to the discontinued sale of new maintenance agreements and the migration of customers moving from maintenance to subscription.
Total subscription and maintenance revenue	1,883.9	337.7	22 %	1,546.2	
Other (2)	172.7	(312.1)	(64)%	484.8	
	$ 2,056.6	$ 25.6	1 %	$ 2,031.0	

(1) We expect maintenance revenue will continue to decline; however, the rate of decline will vary based on the number of renewals, the renewal rate, and our ability to incentivize maintenance plan customers to switch over to subscription plan offerings.
(2) Previously labeled as "License and other" in prior periods.

Net Revenue by Product Family

Our product offerings are focused in four primary product families: AEC, ACAD, MFG, and M&E.

(in millions)	Fiscal year ended January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Fiscal year ended January 31, 2018	Management Comments
Net revenue by product family (1):					
AEC	$ 1,021.6	234.1	30 %	$ 787.5	Up due to an increase in AEC collections as well as an increase in revenue from EBAs and our individual product offering, Revit.
ACAD	731.8	170.4	30 %	561.4	Up due to increases in revenue from both AutoCAD and AutoCAD LT.
MFG	616.2	87.4	17 %	528.8	Up due to an increase in MFG collections as well as an increase in revenue from EBAs.
M&E	182.0	29.9	20 %	152.1	Up due to an increase in revenue from our individual product offerings 3DS Max and Maya.
Other	18.2	(8.6)	(32)%	26.8	
	$ 2,569.8	$ 513.2	25 %	$ 2,056.6	

(in millions)	Fiscal year ended January 31, 2018	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Fiscal Year Ended January 31, 2017	Management Comments
Net revenue by product family (1):					
AEC	$ 787.5	$ (22.9)	(3)%	$ 810.4	Down due to a net decrease in AEC collections and legacy suites due to the discontinuation of perpetual licenses. The decrease was partially offset by an increase in revenue from individual AEC product offerings and EBAs.
ACAD	561.4	88.7	19 %	472.7	Up due to increases in both AutoCAD LT and AutoCAD.
MFG	528.8	(46.4)	(8)%	575.2	Down due to a net decrease in MFG collections and legacy suites due to the discontinuation of perpetual licenses, partially offset by an increase in revenue from MFG EBAs.
M&E	152.1	13.3	10 %	138.8	Up due to an increase in Animation, partially offset by a decrease in Creative Finishing.
Other	26.8	(7.1)	(21)%	33.9	
	$ 2,056.6	$ 25.6	1 %	$ 2,031.0	

(1) Due to changes in the go-to-market offerings of our AutoCAD product subscription, prior period balances have been adjusted to conform to current period presentation.

Net Revenue by Geographic Area

(in millions)	Fiscal Year Ended January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Constant currency change compared to prior fiscal year %	Fiscal Year Ended January 31, 2018	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Constant currency change compared to prior fiscal year %	Fiscal Year Ended January 31, 2017
Net revenue:									
Americas									
U.S.	$ 874.6	$ 134.2	18%	*	$ 740.4	$ (1.7)	— %	*	$ 742.1
Other Americas	175.3	44.6	34%	*	130.7	0.9	1 %	*	129.8
Total Americas	1,049.9	178.8	21%	20%	871.1	(0.8)	— %	—%	871.9
EMEA	1,034.3	218.9	27%	24%	815.4	15.0	2 %	4%	800.4
APAC	485.6	115.5	31%	31%	370.1	11.4	3 %	2%	358.7
Total net revenue (1)	$ 2,569.8	$ 513.2	25%	24%	$ 2,056.6	$ 25.6	1 %	2%	$ 2,031.0
Emerging economies	$ 307.4	$ 80.9	36%	34%	$ 226.5	$ (1.0)	— %	—%	$ 227.5

(1) Totals may not sum due to rounding.
* Constant currency data not provided at this level.

We believe that international revenue will continue to comprise a majority of our net revenue. Unfavorable economic conditions in the countries that contribute a significant portion of our net revenue, including in emerging economies such as Brazil, Russia, India, and China, may have an adverse effect on our business in those countries and our overall financial performance. Changes in the value of the U.S. dollar relative to other currencies have significantly affected, and could continue to significantly affect, our financial results for a given period even though we hedge a portion of our current and projected revenue. Increases to the levels of political and economic unpredictability in the global market may impact our future financial results.

Net Revenue by Sales Channel

(in millions)	Year ended January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Year ended January 31, 2018	Management comments
Net revenue by sales channel:					
Indirect	$ 1,830.8	$ 387.0	27%	$ 1,443.8	Up due to an increase in subscription revenue.
Direct	739.0	126.2	21%	612.8	Up due to an increase in revenue from EBAs and our online Autodesk branded store.
Total net revenue	$ 2,569.8	$ 513.2	25%	$ 2,056.6	

(in millions)	Year ended January 31, 2018	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Year ended January 31, 2017	Management comments
Net revenue by sales channel:					
Indirect	$ 1,443.8	$ (25.1)	(2)%	$ 1,468.9	Down due to a decrease in sales with resellers.
Direct	612.8	50.7	9 %	562.1	Up due to an increase in revenue from EBAs and our online Autodesk branded store.
Total net revenue	$ 2,056.6	$ 25.6	1 %	$ 2,031.0	

Cost of Revenue and Operating Expenses

Cost of subscription and maintenance revenue includes the labor costs of providing product support to our subscription and maintenance customers, including allocated IT and facilities costs, professional services fees related to operating our network and cloud infrastructure, royalties, depreciation expense and operating lease payments associated with computer equipment, data center costs, salaries, related expenses of network operations, and stock-based compensation expense.

Cost of other revenue includes labor costs associated with product setup, costs of consulting and training services contracts, and collaborative project management services contracts. Cost of other revenue also includes stock-based compensation expense, direct material and overhead charges, allocated IT and facilities costs, professional services fees and royalties. Direct material and overhead charges include the cost associated with electronic and physical fulfillment.

Cost of revenue, at least over the near term, is affected by the volume and mix of product sales, fluctuations in consulting costs, amortization of developed technology, new customer support offerings, royalty rates for licensed technology embedded in our products and employee stock-based compensation expense.

Marketing and sales expenses include salaries, bonuses, benefits and stock-based compensation expense for our marketing and sales employees, the expense of travel, entertainment and training for such personnel, sales and dealer commissions, and the costs of programs aimed at increasing revenue, such as advertising, trade shows and expositions, and various sales and promotional programs. Marketing and sales expenses also include payment processing fees, the cost of supplies and equipment, gains and losses on our operating expense cash flow hedges, allocated IT and facilities costs, and labor costs associated with sales and order management.

Research and development expenses, which are expensed as incurred, consist primarily of salaries, bonuses, benefits and stock-based compensation expense for research and development employees, the expense of travel, entertainment and training for such personnel, professional services such as fees paid to software development firms and independent contractors, gains and losses on our operating expense cash flow hedges, and allocated IT and facilities costs.

General and administrative expenses include salaries, bonuses, acquisition-related transition costs, benefits and stock-based compensation expense for our CEO, finance, human resources and legal employees, as well as professional fees for legal and accounting services, certain foreign business taxes, gains and losses on our operating expense cash flow hedges, expense of travel, entertainment and training, net IT and facilities costs, and the cost of supplies and equipment.

(in millions)	Fiscal year ended January 31, 2019	Change compared to prior fiscal year $	Change compared to prior fiscal year %	Fiscal year ended January 31, 2018	Management comments
Cost of revenue:					
Subscription and maintenance	$ 216.0	$ 1.6	1 %	$ 214.4	Up primarily due to an increase in cloud hosting costs partially offset by a decrease in royalty and depreciation expense.
Other (1)	54.4	(18.2)	(25)%	72.6	Down primarily due to lower employee-related costs from reduced headcount associated with the Fiscal 2018 Plan restructuring and lower professional fees.
Amortization of developed technology	15.5	(0.9)	(5)%	16.4	Down as previously acquired developed technologies continue to become fully amortized.
Total cost of revenue	$ 285.9	$ (17.5)	(6)%	$ 303.4	
Marketing and sales	$ 1,183.9	$ 96.6	9 %	$ 1,087.3	Up due to increased employee-related costs driven by higher headcount, as well as higher cloud hosting costs and professional fees.
Research and development	725.0	(30.5)	(4)%	755.5	Down due to a decrease in employee-related costs from lower headcount associated with the Fiscal 2018 plan restructuring partially offset by higher professional fees.
General and administrative	340.1	34.9	11 %	305.2	Up primarily due to higher professional fees, employee-related costs and facilities costs, partially offset by lower employee benefits costs.
Amortization of purchased intangibles	18.0	(2.2)	(11)%	20.2	Down as previously acquired intangible assets continue to become fully amortized.
Restructuring and other exit costs, net	41.9	(52.2)	(55)%	94.1	Down as we substantially completed the reduction in force and facilities consolidation of the Fiscal 2018 Plan.
	$ 2,308.9	$ 46.6	2 %	$ 2,262.3	

(in millions)	Fiscal year ended January 31, 2018	Change compared to prior fiscal year $	%	Fiscal year ended January 31, 2017	Management comments
Cost of revenue:					
Subscription and maintenance	$ 214.4	$ 22.7	12 %	$ 191.7	Up due to an increase in employee-related costs driven by increased headcount associated with maintenance and subscription services in support of the business model transition.
Other (1)	72.6	(37.6)	(34)%	110.2	Down due to lower employee-related costs from reduced headcount associated with license and other revenue products and services as a result of our move to a subscription based business model.
Amortization of developed technology	16.4	(23.6)	(59)%	40.0	Down as previously acquired developed technologies continue to become fully amortized while fewer assets are acquired compared to the prior year.
Total cost of revenue	$ 303.4	$ (38.5)	(11)%	$ 341.9	
Marketing and sales	$ 1,087.3	$ 64.8	6 %	$ 1,022.5	Up due to increase in employee-related costs from higher headcount, increased commissions, and increased stock-based compensation expense from a higher fair value of awards granted.
Research and development	755.5	(10.6)	(1)%	766.1	Down due to a decrease in employee-related costs from lower headcount.
General and administrative	305.2	17.4	6 %	287.8	Up driven by costs associated with the CEO transition and an increase in stock-based compensation expense from a higher fair value of awards granted, partially offset by a decrease in employee-related costs from lower headcount.
Amortization of purchased intangibles	20.2	(11.6)	(36)%	31.8	Down as previously acquired intangible assets continue to become fully amortized and fewer assets are acquired compared to the prior year.
Restructuring and other exit costs, net	94.1	13.6	17 %	80.5	Driven by the Fiscal 2018 Plan to re-balance resources to better align with the Company's strategic priorities and position itself to meet long-term goals. Costs associated with the Fiscal 2018 Plan are principally from employee termination benefits, lease termination costs and other exit costs.
	$ 2,262.3	$ 73.6	3 %	$ 2,188.7	

(1) Previously labeled as "License and other" in prior periods.

The following table highlights our expectation for the absolute dollar change and percent of revenue change for fiscal 2020 as compared to fiscal 2019:

	Absolute dollar impact	Percent of net revenue impact
Cost of revenue	Increase	Slight decrease
Marketing and sales	Increase	Decrease
Research and development	Increase	Decrease
General and administrative	Increase	Decrease
Amortization of purchased intangibles	Increase	Slight increase

Interest and Other Expense, Net

The following table sets forth the components of interest and other expense, net:

	Fiscal year ended January 31,		
	2019	2018	2017
	(in millions)		
Interest and investment expense, net	$ (52.1)	$ (34.5)	$ (29.7)
Gain (loss) on foreign currency	5.1	(3.3)	(3.3)
Gain (loss) on strategic investments	12.5	(16.4)	0.3
Other income	16.8	6.0	8.5
Interest and other expense, net	$ (17.7)	$ (48.2)	$ (24.2)

Interest and other expense, net, positively changed by $30.5 million during fiscal 2019, as compared to fiscal 2018, primarily driven by curtailment gains on our pension plans, mark-to-market gains on certain of our privately-held strategic investments, realized gains on sales of strategic investments, offset by an increase in interest expense resulting from our term loan entered into on December 17, 2018 in aggregate principal amount of $500 million and mark-to-market losses on marketable securities.

Interest and other expense, net, increased $24.0 million during fiscal 2018, as compared to fiscal 2017, primarily related to increases in impairment losses on certain of our privately-held strategic investments and interest expense resulting from our June 2017 issuance of $500.0 million aggregate principal amount of 3.5% notes due June 15, 2027.

Interest expense and investment income fluctuates based on average cash, marketable securities and debt balances, average maturities and interest rates.

Gains and losses on foreign currency are primarily due to the impact of re-measuring foreign currency transactions and net monetary assets into the functional currency of the corresponding entity. The amount of the gain or loss on foreign currency is driven by the volume of foreign currency transactions and the foreign currency exchange rates for the year.

Provision for Income Taxes

We account for income taxes and the related accounts under the liability method. Deferred tax liabilities and assets are determined based on the difference between the financial statement and tax bases of assets and liabilities, using enacted rates expected to be in effect during the year in which the basis differences reverse.

Income tax expense was $38.1 million and $9.6 million for fiscal 2019 and 2018, respectively, relative to pre-tax losses of $42.7 million and $557.3 million, respectively, for the same periods. Tax expense for fiscal 2019 consists primarily of foreign tax expense including withholding tax and tax amortization on indefinite-lived intangibles offset by a benefit for the release of uncertain tax positions upon finalization of IRS examination during the current fiscal year. In addition, we had a tax benefit from the release of valuation allowance from acquired deferred tax liabilities during the current fiscal year. Tax expense for fiscal 2018 consisted primarily of foreign tax expense including withholding tax and tax amortization on indefinite-lived intangibles offset by the revaluation of our deferred tax liability due to the corporate rate reduction under the Tax Act. We recorded a tax benefit of the Tax Act in our financial statements as of January 31, 2018 of approximately $32.3 million mainly driven by the corporate rate remeasurement of the indefinite-lived intangible deferred tax liability.

The Tax Act was signed into law on December 22, 2017 and provided broad and significant changes to the U.S. corporate income tax regime. In light of our fiscal year-end, the Tax Act reduced the statutory federal corporate rate from 35% to 33.81% for fiscal 2018 and to 21% for fiscal 2019 and forward. The Tax Act also, among many other provisions, imposed a one-time mandatory tax on accumulated earnings of foreign subsidiaries (commonly referred to as the "transition tax"), subjected the deemed intangible income of our foreign subsidiaries to current U.S. taxation (commonly referred to as "GILTI"), provided for a full dividends received deduction upon repatriation of untaxed earnings of our foreign subsidiaries, imposed a minimum taxation (without most tax credits) on modified taxable income, which is generally taxable income without deductions for payments to related foreign companies (commonly referred to as “BEAT”), modified the accelerated depreciation deduction rules, and made updates to the deductibility of certain expenses. We have completed our determination of the accounting implications of the Tax Act on our tax accruals.

As of January 31, 2018, we estimated taxable income associated with offshore earnings of $831.5 million, and as of January 31, 2019, we adjusted the taxable income to $819.6 million to reflect the impact of Treasury Regulations issued in the fourth quarter of fiscal 2019. Transition tax related to adjustments in offshore earnings resulted in no impact to the effective tax rate as it is primarily offset by net operating losses that are subject to a full valuation allowance. As a result of the transition tax, we recorded a deferred tax asset of approximately $45.1 million for foreign tax credits, which are also subject to a full valuation allowance.

We are subject to GILTI in fiscal 2019, primarily offset by current year operating losses, resulting in no impact to the effective tax rate.

We anticipate that the U.S. Department of Treasury and other standard-setting bodies will continue to interpret or issue guidance on how provisions of the Tax Act will be applied or otherwise administered. As future guidance is issued, we may make adjustments to amounts that we have previously recorded that may materially impact our financial statements in the period in which the adjustments are made.

A valuation allowance is recorded to reduce deferred tax assets when management cannot conclude that it is more likely than not that the net deferred tax asset will be recovered. The valuation allowance is determined by assessing both positive and negative evidence to determine whether it is more likely than not that deferred tax assets are recoverable; such assessment is required on a jurisdiction-by-jurisdiction basis. Significant judgment is required in determining whether the valuation allowance should be recorded against deferred tax assets. In assessing the need for a valuation allowance, we consider all available evidence including past operating results and estimates of future taxable income. Beginning in the second quarter of fiscal 2016, we considered recent cumulative losses in the U.S. arising from our business model transition as a significant source of negative evidence. Considering this negative evidence and the absence of sufficient positive objective evidence that we would generate sufficient taxable income in the U.S. to realize the deferred tax assets, we determined that it was more likely than not that we would not realize the U.S. federal and state deferred tax assets and recorded a full valuation allowance. Furthermore, in the first quarter of fiscal 2018, our Singapore operation, similar to the U.S. incurred cumulative losses and recorded a full valuation allowance against the net deferred tax asset. As we continually strive to optimize our overall business model, tax planning strategies may become feasible whereby management may determine that it is more likely than not that the federal and state deferred tax assets will be realized; as a result, we will continue to evaluate the realizability of our net deferred tax assets each quarter, both in the U.S. and in foreign jurisdictions, based on all available evidence, both positive and negative.

As of January 31, 2019, we had $209.0 million of gross unrecognized tax benefits, of which $190.6 million would reduce our valuation allowance, if recognized. The remaining $18.4 million would impact the effective tax rate. It is possible that the amount of unrecognized tax benefits will change in the next twelve months; however, an estimate of the range of the possible change cannot be made at this time.

Our future effective annual tax rate may be materially impacted by the amount of benefits and charges from tax amounts associated with our foreign earnings that are taxed at rates different from the federal statutory rate, changes in valuation allowances, level of profit before tax, accounting for uncertain tax positions, business combinations, closure of statute of limitations or settlement of tax audits, and changes in tax laws including impacts of the Tax Act. A significant amount of our earnings is generated by our Europe and Asia Pacific subsidiaries. Our future effective tax rates may be adversely affected to the extent earnings are lower than anticipated in countries where we have lower statutory tax rates.

At January 31, 2019, we had non-current foreign net deferred tax assets of $54.3 million that management believes are more likely than not to be realized in future years.

For additional information regarding our income tax provision and reconciliation of our effective rate to the federal statutory rate of 21%, see Part II, Item 8, Note 5, "Income Taxes," in the Notes to Consolidated Financial Statements.

OTHER FINANCIAL INFORMATION

In addition to our results determined under U.S. generally accepted accounting principles ("GAAP") discussed above, we believe the following non-GAAP measures are useful to investors in evaluating our operating performance. For the fiscal years ended January 31, 2019, 2018, and 2017, our gross profit, gross margin, (loss) income from operations, operating margin, net (loss) income, diluted net (loss) income per share and diluted shares used in per share calculation on a GAAP and non-GAAP basis were as follows (in millions except for gross margin, operating margin, and per share data):

	Fiscal Year Ended January 31,		
	2019	**2018**	**2017**
		(Unaudited)	
Gross profit	$ 2,283.9	$ 1,753.2	$ 1,689.1
Non-GAAP gross profit	$ 2,317.0	$ 1,785.5	$ 1,743.2
Gross margin	89 %	85 %	83 %
Non-GAAP gross margin	90 %	87 %	86 %
Loss from operations	$ (25.0)	$ (509.1)	$ (499.6)
Non-GAAP income (loss) from operations	$ 316.0	$ (112.0)	$ (125.5)
Operating margin	(1)%	(25)%	(25)%
Non-GAAP operating margin	12 %	(5)%	(6)%
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Non-GAAP net income (loss)	$ 223.3	$ (106.3)	$ (111.0)
Diluted net loss per share	$ (0.37)	$ (2.58)	$ (2.61)
Non-GAAP diluted net income (loss) per share	$ 1.01	$ (0.48)	$ (0.50)
GAAP diluted weighted average shares used in per share calculation	218.9	219.5	222.7
Non-GAAP diluted weighted average shares used in per share calculation	222.0	219.5	222.7

For our internal budgeting and resource allocation process and as a means to provide consistency in period-to-period comparisons, we use non-GAAP measures to supplement our consolidated financial statements presented on a GAAP basis. These non-GAAP measures do not include certain items that may have a material impact upon our reported financial results. We also use non-GAAP measures in making operating decisions because we believe those measures provide meaningful supplemental information regarding our earning potential and performance for management by excluding certain benefits, credits, expenses and charges that may not be indicative of our core business operating results. For the reasons set forth below, we believe these non-GAAP financial measures are useful to investors both because (1) they allow for greater transparency with respect to key metrics used by management in its financial and operational decision-making and (2) they are used by our institutional investors and the analyst community to help them analyze the health of our business. This allows investors and others to better understand and evaluate our operating results and future prospects in the same manner as management, compare financial results across accounting periods and to those of peer companies and to better understand the long-term performance of our core business. We also use some of these measures for purposes of determining company-wide incentive compensation.

There are limitations in using non-GAAP financial measures because non-GAAP financial measures are not prepared in accordance with GAAP and may be different from non-GAAP financial measures used by other companies. The non-GAAP financial measures included above are limited in value because they exclude certain items that may have a material impact upon our reported financial results. In addition, they are subject to inherent limitations as they reflect the exercise of judgments by management about which charges are excluded from the non-GAAP financial measures. We compensate for these limitations by analyzing current and future results on a GAAP basis as well as a non-GAAP basis and also by providing GAAP measures in our public disclosures. The presentation of non-GAAP financial information is meant to be considered in addition to, not as a substitute for or in isolation from, the directly comparable financial measures prepared in accordance with GAAP. We urge investors to review the reconciliation of our non-GAAP financial measures to the comparable GAAP financial measures included below, and not to rely on any single financial measure to evaluate our business.

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RECONCILIATION OF GAAP FINANCIAL MEASURES TO NON-GAAP FINANCIAL MEASURES

(In millions except for gross margin, operating margin, and per share data) (1):

	Fiscal Year Ended January 31,		
	2019	2018	2017
		(Unaudited)	
Gross profit	$ 2,283.9	$ 1,753.2	$ 1,689.1
Stock-based compensation expense	17.6	15.9	14.1
Amortization of developed technologies	15.5	16.4	40.0
Non-GAAP gross profit	$ 2,317.0	$ 1,785.5	$ 1,743.2
Gross margin	89 %	85 %	83 %
Stock-based compensation expense	1 %	1 %	1 %
Amortization of developed technologies	1 %	1 %	2 %
Non-GAAP gross margin (1)	90 %	87 %	86 %
Loss from operations	$ (25.0)	$ (509.1)	$ (499.6)
Stock-based compensation expense	249.5	245.0	221.8
Amortization of developed technologies	15.5	16.4	40.0
Amortization of purchased intangibles	18.0	20.2	31.8
CEO transition costs (2)	(0.1)	21.4	—
Acquisition related costs	16.2	—	—
Restructuring and other exit costs, net	41.9	94.1	80.5
Non-GAAP income (loss) from operations	$ 316.0	$ (112.0)	$ (125.5)
Operating margin	(1)%	(25)%	(25)%
Stock-based compensation expense	10 %	12 %	11 %
Amortization of developed technologies	1 %	1 %	2 %
Amortization of purchased intangibles	1 %	1 %	2 %
CEO transition costs (2)	— %	1 %	— %
Acquisition related costs	1 %	— %	— %
Restructuring and other exit costs, net	1 %	5 %	4 %
Non-GAAP operating margin (1)	12 %	(5)%	(6)%
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Stock-based compensation expense	249.5	245.0	221.8
Amortization of developed technologies	15.5	16.4	40.0
Amortization of purchased intangibles	18.0	20.2	31.8
CEO transition costs (2)	(0.1)	21.4	—
Acquisition related costs	16.2	—	—
Restructuring and other exit costs, net	31.7	94.1	80.5
(Gain) loss on strategic investments	(12.5)	16.5	(0.3)
Discrete tax provision items	(31.4)	(20.7)	(2.7)
Income tax effect of non-GAAP adjustments	17.2	67.7	100.0
Non-GAAP net income (loss)	$ 223.3	$ (106.3)	$ (111.0)

	Fiscal Year Ended January 31,		
	2019	2018	2017
	(Unaudited)		
Diluted net (loss) income per share	$ (0.37)	$ (2.58)	$ (2.61)
Stock-based compensation expense	1.12	1.11	1.00
Amortization of developed technologies	0.08	0.08	0.18
Amortization of purchased intangibles	0.08	0.09	0.14
CEO transition costs (2)	—	0.09	—
Acquisition related costs	0.07	—	—
Restructuring and other exit costs, net	0.14	0.43	0.35
(Gain) loss on strategic investments	(0.05)	0.08	—
Discrete tax provision items	(0.14)	(0.09)	(0.01)
Income tax effect of non-GAAP adjustments	0.08	0.31	0.45
Non-GAAP diluted income (loss) per share	$ 1.01	$ (0.48)	$ (0.50)

(1) Totals may not sum due to rounding.
(2) CEO transition costs include stock-based compensation of $16.4 million related to the acceleration of eligible stock awards in conjunction with the Company's former CEOs' transition agreements for the fiscal year ended January 31, 2018.

Our non-GAAP financial measures may exclude the following:

Stock-based compensation expenses. We exclude stock-based compensation expenses from non-GAAP measures primarily because they are non-cash expenses and management finds it useful to exclude certain non-cash charges to assess the appropriate level of various operating expenses to assist in budgeting, planning and forecasting future periods. Moreover, because of varying available valuation methodologies, subjective assumptions and the variety of award types that companies can use under FASB ASC Topic 718, we believe excluding stock-based compensation expenses allows investors to make meaningful comparisons between our recurring core business operating results and those of other companies.

Amortization of developed technologies and purchased intangibles. We incur amortization of acquisition-related developed technology and purchased intangibles in connection with acquisitions of certain businesses and technologies. Amortization of developed technologies and purchased intangibles is inconsistent in amount and frequency and is significantly affected by the timing and size of our acquisitions. Management finds it useful to exclude these variable charges from our cost of revenues to assist in budgeting, planning and forecasting future periods. Investors should note that the use of intangible assets contributed to our revenues earned during the periods presented and will contribute to our future period revenues as well. Amortization of developed technologies and purchased intangible assets will recur in future periods.

CEO transition costs. We exclude amounts paid to the Company's former CEOs upon departure under the terms of their transition agreements, including severance payments, acceleration of restricted stock units, and continued vesting of performance stock units, and legal fees incurred with the transition. Also excluded from our non-GAAP measures are recruiting costs related to the search for a new CEO. These costs represent non-recurring expenses and are not indicative of our ongoing operating expenses. We further believe that excluding the CEO transition costs from our non-GAAP results is useful to investors in that it allows for period-over-period comparability.

Goodwill impairment. This is a non-cash charge to write-down goodwill to fair value when there was an indication that the asset was impaired. As explained above, management finds it useful to exclude certain non-cash charges to assess the appropriate level of various operating expenses to assist in budgeting, planning and forecasting future periods.

Restructuring and other exit costs, net. These expenses are associated with realigning our business strategies based on current economic conditions. In connection with these restructuring actions or other exit actions, we recognize costs related to termination benefits for former employees whose positions were eliminated, the closure of facilities and cancellation of certain contracts. We exclude these charges because these expenses are not reflective of ongoing business and operating results. We believe it is useful for investors to understand the effects of these items on our total operating expenses.

Acquisition related costs. We exclude certain acquisition related costs, including due diligence costs, professional fees in connection with an acquisition, certain financing costs, and certain integration related expenses. These expenses are unpredictable, and dependent on factors that may be outside of our control and unrelated to the continuing operations of the acquired business, or our Company. In addition, the size and complexity of an acquisition, which often drives the magnitude of acquisition related costs, may not be indicative of such future costs. We believe excluding acquisition related costs facilitates the comparison of our financial results to the Company's historical operating results and to other companies in our industry.

(Gain) loss on strategic investments and dispositions. We exclude gains and losses related to our strategic investments and dispositions from our non-GAAP measures primarily because management finds it useful to exclude these variable gains and losses on these investments and dispositions in assessing our financial results. Included in these amounts are non-cash unrealized gains and losses on the derivative components, dividends received, realized gains and losses on the sales or losses on the impairment of these investments and dispositions. We believe excluding these items is useful to investors because these excluded items do not correlate to the underlying performance of our business and these losses or gains were incurred in connection with strategic investments and dispositions which do not occur regularly.

Discrete tax items. We exclude the GAAP tax provision, including discrete items, from the non-GAAP measure of net (loss) income, and include a non-GAAP tax provision based upon the projected annual non-GAAP effective tax rate. Discrete tax items include income tax expenses or benefits that do not relate to ordinary income from continuing operations in the current fiscal year, unusual or infrequently occurring items, or the tax impact of certain stock-based compensation. Examples of discrete tax items include, but are not limited to, certain changes in judgment and changes in estimates of tax matters related to prior fiscal years, certain costs related to business combinations, certain changes in the realizability of deferred tax assets or changes in tax law. Management believes this approach assists investors in understanding the tax provision and the effective tax rate related to ongoing operations. We believe the exclusion of these discrete tax items provides investors with useful supplemental information about our operational performance.

Establishment of a valuation allowance on certain net deferred tax assets. This is a non-cash charge to record a valuation allowance on certain deferred tax assets. As explained above, management finds it useful to exclude certain non-cash charges to assess the appropriate level of various cash expenses to assist in budgeting, planning and forecasting future periods.

Income tax effects on the difference between GAAP and non-GAAP costs and expenses. The income tax effects that are excluded from the non-GAAP measures relate to the tax impact on the difference between GAAP and non-GAAP expenses, primarily due to stock-based compensation, amortization of purchased intangibles and restructuring charges and other exit costs (benefits) for GAAP and non-GAAP measures.

LIQUIDITY AND CAPITAL RESOURCES

Our primary source of cash is from the sale of our software and related services. Our primary use of cash is payment of our operating costs, which consist primarily of employee-related expenses, such as compensation and benefits, as well as general operating expenses for marketing, facilities and overhead costs. In addition to operating expenses, we also use cash to fund our stock repurchase program and invest in our growth initiatives, which include acquisitions of products, technology and businesses. See further discussion of these items below.

At January 31, 2019, our principal sources of liquidity were cash, cash equivalents, and marketable securities totaling $953.6 million and net accounts receivable of $474.3 million.

On December 17, 2018, Autodesk entered into a new Credit Agreement (the “Credit Agreement”) for an unsecured revolving loan facility in the aggregate principal amount of $650.0 million, with an option to request increases in the amount of the credit facility by up to an additional $350.0 million. The Credit Agreement replaced and terminated our $400.0 million Amended and Restated Credit Agreement. The maturity date on the line of credit facility is December 2023. At January 31, 2019, Autodesk had no outstanding borrowings on this line of credit. As of March 25, 2019, we have no amounts outstanding under the credit facility. See Part II, Item 8, Note 8, "Borrowing Arrangements," in the Notes to Consolidated Financial Statements for further discussion on our covenant requirements. If we are unable to remain in compliance with the covenants, we will not be able to draw on our credit facility.

On December 17, 2018, we also entered into a Term Loan Agreement (the “Term Loan Agreement”) which provided for a delayed draw term loan facility in the aggregate principal amount of $500.0 million. On December 19, 2018, we borrowed a $500.0 million term loan under the Term Loan Agreement in connection with the acquisition of PlanGrid. See Part II, Item 8, Note 8, "Borrowing Arrangements," in the Notes to Consolidated Financial Statements for further discussion on the Term Loan Agreement terms and Part II, Item 8, Note 6, "Acquisitions" for further discussion on the PlanGrid acquisition.

In addition to the term loan, as of January 31, 2019, we have $1.6 billion aggregate principal amount of Notes outstanding. See Part II, Item 8, Note 8, "Borrowing Arrangements," in the Notes to Consolidated Financial Statements for further discussion.

Our cash and cash equivalents are held by diversified financial institutions globally. Our primary commercial banking relationship is with Citigroup and its global affiliates. In addition, Citibank N.A., an affiliate of Citigroup, is one of the lead lenders and agent in the syndicate of our $650.0 million line of credit.

Long-term cash requirements for items other than normal operating expenses are anticipated for the following: repayment of debt; common stock repurchases; the acquisition of businesses, software products, or technologies complementary to our business; and capital expenditures, including the purchase and implementation of internal-use software applications.

Our cash, cash equivalents, and marketable securities balances are concentrated in a few locations around the world, with substantial amounts held outside of the United States. As of January 31, 2019, approximately 52% of our total cash or cash equivalents and marketable securities are located in foreign jurisdictions and that percentage will fluctuate subject to business needs. There are several factors that can impact our ability to utilize foreign cash balances, such as foreign exchange restrictions, foreign regulatory restrictions or adverse tax costs. The Tax Act includes a mandatory one-time tax on accumulated earnings of foreign subsidiaries and generally eliminates U.S. taxes on foreign subsidiary distributions in future periods. As a result, earnings in foreign jurisdictions are generally available for distribution to the U.S. with little to no incremental U.S. taxes. We regularly review our capital structure and consider a variety of potential financing alternatives and planning strategies to ensure we have the proper liquidity available in the locations in which it is needed. We expect to meet our liquidity needs through a combination of current cash balances, ongoing cash flows, and external borrowings.

Cash from operations could also be affected by various risks and uncertainties, including, but not limited to the risks detailed in Part I, Item 1A titled “Risk Factors.” However, based on our current business plan and revenue prospects, we believe that our existing balances, our anticipated cash flows from operations and our available credit facility will be sufficient to meet our working capital and operating resource expenditure requirements for at least the next 12 months.

Our revenue, earnings, cash flows, receivables, and payables are subject to fluctuations due to changes in foreign currency exchange rates, for which we have put in place foreign currency contracts as part of our risk management strategy. See Part II, Item 7A, “Quantitative and Qualitative Disclosures about Market Risk” for further discussion.

	Fiscal year ended January 31,		
(in millions)	**2019**	**2018**	**2017**
Net cash provided by operating activities	$ 377.1	$ 0.9	$ 169.7
Net cash (used in) provided by investing activities	(710.4)	506.4	272.0
Net cash provided by (used in) financing activities	151.9	(656.6)	(578.3)

Net cash provided by operating activities of $377.1 million for fiscal 2019 consisted of $371.8 million of non-cash expenses, including stock-based compensation expense, restructuring charges, net, depreciation, amortization and accretion expense, offsetting our net loss of $80.8 million, and included $86.1 million of cash flow provided by changes in operating assets and liabilities.

The primary working capital source of cash was an increase in deferred revenue from $1,955.1 million as of January 31, 2018, to $2,091.4 million as of January 31, 2019. The primary working capital uses of cash were decreases in accounts payable and other accrued liabilities.

Net cash used in investing activities was $710.4 million for fiscal 2019 and was primarily due to acquisitions, net of cash acquired and purchases of marketable securities. These cash outflows were partially offset by sales and maturities of marketable securities.

At January 31, 2019, our short-term investment portfolio had an estimated fair value of $67.6 million and a cost basis of $62.8 million. The portfolio fair value consisted of $60.3 million of trading securities that were invested in a defined set of mutual funds as directed by the participants in our Deferred Compensation Plan (see Note 7, “Deferred Compensation,” in the Notes to Consolidated Financial Statements for further discussion) and $7.3 million invested in other available-for-sale short-term securities.

Net cash provided by financing activities was $151.9 million in fiscal 2019 and was primarily due to proceeds from debt issuance, net of discount and proceeds from issuance of stock. These cash inflows were partially offset by repurchases of our common stock and taxes paid related to net share settlement of equity awards.

CONTRACTUAL OBLIGATIONS

The following table summarizes our significant financial contractual obligations at January 31, 2019, and the effect such obligations are expected to have on our liquidity and cash flows in future periods.

	Total	Fiscal year 2020	Fiscal years 2021-2022	Fiscal years 2023-2024	Thereafter
			(in millions)		
Notes	$ 1,898.3	$ 57.3	$ 541.7	$ 422.3	$ 877.0
Term loan	533.8	18.0	515.8	—	—
Operating lease obligations	409.8	75.4	115.3	92.1	127.0
Purchase obligations	82.7	47.8	17.0	11.7	6.2
Deferred compensation obligations	60.3	5.0	9.2	8.8	37.3
Pension obligations	25.5	2.4	4.6	4.6	13.9
Asset retirement obligations	10.4	6.7	1.1	1.2	1.4
Total (1)	$ 3,020.8	$ 212.6	$ 1,204.7	$ 540.7	$ 1,062.8

(1) This table generally excludes amounts already recorded on the balance sheet as current liabilities, certain purchase obligations as discussed below, long term deferred revenue, and amounts related to income tax liabilities for uncertain tax positions, since we cannot predict with reasonable reliability the timing of cash settlements to the respective taxing authorities (see Part II, Item 8, Note 5, “Income Taxes” in the Notes to Consolidated Financial Statements).

Notes consist of the Notes issued in December 2012, June 2015 and June 2017. See Part II, Item 8, Note 8, "Borrowing Arrangements," in the Notes to Consolidated Financial Statements for further discussion..

Term loan consists of the Term Loan Agreement entered into on December 17, 2018 as described above.

Operating lease obligations consist primarily of obligations for facilities, net of sublease income, computer equipment and other equipment leases.

Purchase obligations are contractual obligations for purchase of goods or services and are defined as agreements that are enforceable and legally binding on Autodesk and that specify all significant terms, including: fixed or minimum quantities to be purchased; fixed, minimum, or variable price provisions; and the approximate timing of the transaction. Purchase obligations relate primarily to enterprise subscription agreements, IT infrastructure costs, and marketing costs.

Deferred compensation obligations relate to amounts held in a rabbi trust under our non-qualified deferred compensation plan. See Part II, Item 8, Note 7, “Deferred Compensation,” in our Notes to Consolidated Financial Statements for further information regarding this plan.

Pension obligations relate to our obligations for pension plans outside of the U.S. See Part II, Item 8, Note 15, “Retirement Benefit Plans,” in our Notes to Consolidated Financial Statements for further information regarding these obligations.

Asset retirement obligations represent the estimated costs to bring certain office buildings that we lease back to their original condition after the termination of the lease.

Purchase orders or contracts for the purchase of supplies and other goods and services are not included in the table above. We are not able to determine the aggregate amount of such purchase orders that represent contractual obligations, as purchase orders may represent authorizations to purchase rather than binding agreements. Our purchase orders are based on our current procurement or development needs and are fulfilled by our vendors within short time horizons. We do not have significant agreements for the purchase of supplies or other goods specifying minimum quantities or set prices that exceed our expected requirements for three months. In addition, we have certain software royalty commitments associated with the shipment and licensing of certain products.

The expected timing of payment of the obligations discussed above is estimated based on current information. Timing of payments and actual amounts paid may be different depending on the time of receipt of goods or services or changes to agreed-upon amounts for some obligations.

We provide indemnifications of varying scopes and certain guarantees, including limited product warranties. Historically, costs related to these warranties and indemnifications have not been significant, but because potential future costs are highly variable, we are unable to estimate the maximum potential impact of these guarantees on our future results of operations.

ISSUER PURCHASES OF EQUITY SECURITIES

Autodesk's stock repurchase program provides Autodesk with the ability to offset the dilution from the issuance of stock under our employee stock plans and reduce shares outstanding over time, and has the effect of returning excess cash generated from our business to stockholders. Under the share repurchase program, Autodesk may repurchase shares from time to time in open market transactions, privately-negotiated transactions, accelerated share repurchase programs, tender offers, or by other means. The share repurchase program does not have an expiration date and the pace and timing of repurchases will depend on factors such as cash generation from operations, available surplus, the volume of employee stock plan activity, remaining shares available in the authorized pool, cash requirements for acquisitions, economic and market conditions, stock price and legal and regulatory requirements.

During the three and twelve months ended January 31, 2019, we repurchased 0.2 million and 2.2 million shares of our common stock, respectively. At January 31, 2019, 17.4 million shares remained available for repurchase under the repurchase program approved by the Board of Directors. This program does not have a fixed expiration date. See Part II, Item 8, Note 10, “Stockholders' (Deficit) Equity,” in the Notes to Consolidated Financial Statements for further discussion.

OFF-BALANCE SHEET ARRANGEMENTS

As of January 31, 2019, we did not have any significant off-balance sheet arrangements other than operating leases, as defined in Item 303(a)(4)(ii) of Regulation S-K.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

FOREIGN CURRENCY EXCHANGE RISK

Our revenue, earnings, cash flows, receivables, and payables are subject to fluctuations due to changes in foreign currency exchange rates. Our risk management strategy utilizes foreign currency contracts to manage our exposure to foreign currency volatility that exists as part of our ongoing business operations. We utilize cash flow hedge contracts to reduce the exchange rate impact on a portion of the net revenue or operating expense of certain anticipated transactions. In addition, we use balance sheet hedge contracts to reduce the exchange rate risk associated primarily with foreign currency denominated receivables and payables. As of January 31, 2019, and 2018, we had open cash flow and balance sheet hedge contracts with future settlements within one to twelve months. Contracts were primarily denominated in euros, Japanese yen, British pounds, Canadian dollars, Australian dollars, Singapore dollars, Swiss francs, Swedish krona, and Czech krona. We do not enter into foreign exchange derivative instruments for trading or speculative purposes. The notional amount of our option and forward contracts was $1,383.3 million and $949.5 million at January 31, 2019, and 2018, respectively.

We use foreign currency contracts to reduce the exchange rate impact on the net revenue and operating expenses of certain anticipated transactions. A sensitivity analysis performed on our hedging portfolio as of January 31, 2019, indicated that a hypothetical 10% appreciation of the U.S. dollar from its value at January 31, 2019 and 2018 would increase the fair value of our foreign currency contracts by $123.4 million and $57.9 million, respectively. A hypothetical 10% depreciation of the dollar from its value at January 31, 2019, and 2018 would decrease the fair value of our foreign currency contracts by $98.3 million and $83.2 million, respectively.

INTEREST RATE RISK

Interest rate movements affect both the interest income we earn on our short-term investments and the market value of certain longer term securities. At January 31, 2019, we had $443.7 million of cash equivalents and marketable securities, including $67.6 million classified as short-term marketable securities. If interest rates were to move up by 50 or 100 basis points over a twelve month period, the market value change of our marketable securities would not have a meaningful unrealized gain or loss.

In December 2018, we entered into a $500.0 million term loan facility, all of which was outstanding as of January 31, 2019. The term loan bears interest, at Autodesk's option, at either (i) a floating rate per annum equal to the base rate plus a margin between 0.000% and 0.625%, depending on Autodesk's Public Debt Rating or (ii) a per annum rate equal to the rate at which dollar deposits are offered in the London interbank market, plus a margin of between 0.875% and 1.625%, depending on Autodesk's Public Debt Rating. Based on Autodesk's current credit ratings the term loan bears interest at a per annum rate equal to the rate at which dollar deposits are offered in the London interbank market, plus a margin of 1.125% per annum. A hypothetical increase or decrease of 50 or 100 basis points would not have a material impact on our results of operations. The term loan facility matures in December 2020.

OTHER MARKET RISK

From time to time we make direct investments in privately held companies. Privately held company investments generally are considered inherently risky. The technologies and products these companies have under development are typically in the early stages and may never materialize, which could result in a loss of all or a substantial part of our initial investment in these companies. The evaluation of privately held companies is based on information that we request from these companies, which is not subject to the same disclosure regulations as U.S. publicly traded companies, and as such, the basis for these evaluations is subject to the timing and accuracy of the data received from these companies. See Part II, Item 8, Note 3, "Financial Instruments" in the Notes to Consolidated Financial Statements for further discussion regarding our privately held investments.

For information about exposure to counter-party credit-related losses, see Part II, Item 8, Note 1, “Business and Summary of Significant Accounting Policies - Concentration of Credit Risk."

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

AUTODESK, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(In millions, except per share data)

	Fiscal year ended January 31,		
	2019	2018	2017
Net revenue:			
Subscription	$ 1,802.3	$ 894.3	$ 443.1
Maintenance	635.1	989.6	1,103.1
Total subscription and maintenance revenue	2,437.4	1,883.9	1,546.2
Other (1)	132.4	172.7	484.8
Total net revenue	2,569.8	2,056.6	2,031.0
Cost of revenue:			
Cost of subscription and maintenance revenue	216.0	214.4	191.7
Cost of other revenue (2)	54.4	72.6	110.2
Amortization of developed technology	15.5	16.4	40.0
Total cost of revenue	285.9	303.4	341.9
Gross profit	2,283.9	1,753.2	1,689.1
Operating expenses:			
Marketing and sales	1,183.9	1,087.3	1,022.5
Research and development	725.0	755.5	766.1
General and administrative	340.1	305.2	287.8
Amortization of purchased intangibles	18.0	20.2	31.8
Restructuring and other exit costs, net	41.9	94.1	80.5
Total operating expenses	2,308.9	2,262.3	2,188.7
Loss from operations	(25.0)	(509.1)	(499.6)
Interest and other expense, net	(17.7)	(48.2)	(24.2)
Loss before income taxes	(42.7)	(557.3)	(523.8)
Provision for income taxes	(38.1)	(9.6)	(58.3)
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Basic net loss per share	$ (0.37)	$ (2.58)	$ (2.61)
Diluted net loss per share	$ (0.37)	$ (2.58)	$ (2.61)
Weighted average shares used in computing basic net loss per share	218.9	219.5	222.7
Weighted average shares used in computing diluted net loss per share	218.9	219.5	222.7

(1) Previously labeled as "License and other" in prior periods.
(2) Previously labeled as "Cost of license and other revenue" in prior periods.

See accompanying Notes to Consolidated Financial Statements.

AUTODESK, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(In millions)

	Fiscal year ended January 31,		
	2019	**2018**	**2017**
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Other comprehensive (loss) income, net of reclassifications:			
Net gain (loss) on derivative instruments (net of tax effect of ($1.1), $3.2, and ($1.1))	31.6	(31.2)	(1.1)
Change in net unrealized gain (loss) on available-for-sale securities (net of tax effect of $0.0, $0.1, and ($0.5))	2.0	(0.2)	1.3
Change in defined benefit pension items (net of tax effect of ($2.0), ($0.7), and ($0.9))	13.0	4.5	(5.5)
Net change in cumulative foreign currency translation (loss) gain (net of tax effect of $0.5, ($4.8), and $0.2))	(57.8)	81.6	(52.1)
Total other comprehensive (loss) income	(11.2)	54.7	(57.4)
Total comprehensive loss	$ (92.0)	$ (512.2)	$ (639.5)

See accompanying Notes to Consolidated Financial Statements.

AUTODESK, INC.
CONSOLIDATED BALANCE SHEETS
(In millions, except per share data)

	January 31, 2019	January 31, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	$ 886.0	$ 1,078.0
Marketable securities	67.6	245.2
Accounts receivable, net	474.3	438.2
Prepaid expenses and other current assets	192.1	116.5
Total current assets	1,620.0	1,877.9
Marketable securities	—	190.8
Computer equipment, software, furniture, and leasehold improvements, net	149.7	145.0
Developed technologies, net	105.6	27.1
Goodwill	2,450.8	1,620.2
Deferred income taxes, net	65.3	81.7
Other assets	337.8	170.9
Total assets	$ 4,729.2	$ 4,113.6
LIABILITIES AND STOCKHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable	$ 101.6	$ 94.7
Accrued compensation	280.8	250.9
Accrued income taxes	13.2	28.0
Deferred revenue	1,763.3	1,551.6
Other accrued liabilities	142.3	198.0
Total current liabilities	2,301.2	2,123.2
Long-term deferred revenue	328.1	403.5
Long-term income taxes payable	21.5	41.6
Long-term deferred income taxes	79.8	66.6
Long-term notes payable, net	2,087.7	1,586.0
Long-term other liabilities	121.8	148.7
Commitments and contingencies		
Stockholders' deficit:		
Preferred stock, $0.01 par value; shares authorized 2.0; none issued or outstanding at January 31, 2019 and 2018	—	—
Common stock and additional paid-in capital, $0.01 par value; shares authorized 750.0; 219.4 outstanding at January 31, 2019 and 218.3 outstanding at January 31, 2018	2,071.5	1,952.7
Accumulated other comprehensive loss	(135.0)	(123.8)
Accumulated deficit	(2,147.4)	(2,084.9)
Total stockholders' deficit	(210.9)	(256.0)
Total liabilities and stockholders' deficit	$ 4,729.2	$ 4,113.6

See accompanying Notes to Consolidated Financial Statements.

AUTODESK, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

	Fiscal year ended January 31,		
	2019	2018	2017
Operating activities			
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Adjustments to reconcile net loss to net cash provided by operating activities:			
Depreciation, amortization, and accretion	95.2	108.4	139.2
Stock-based compensation expense	249.5	261.4	221.8
Deferred income taxes	(6.8)	(39.1)	(38.8)
Restructuring and other exit costs, net	31.7	94.1	80.5
Other operating activities	2.2	7.3	(7.7)
Changes in operating assets and liabilities, net of business combinations:			
Accounts receivable	(25.4)	13.3	201.5
Prepaid expenses and other current assets	7.5	(9.9)	(13.5)
Accounts payable and accrued liabilities	(58.5)	(13.9)	2.7
Deferred revenue	197.0	168.3	267.0
Accrued income taxes	(34.5)	(22.1)	(100.9)
Net cash provided by operating activities	377.1	0.9	169.7
Investing activities			
Purchases of marketable securities	(138.2)	(514.0)	(1,867.9)
Sales of marketable securities	319.6	489.0	1,257.7
Maturities of marketable securities	211.4	594.3	1,057.2
Acquisitions, net of cash acquired	(1,040.2)	—	(85.2)
Capital expenditures	(67.0)	(50.7)	(76.0)
Other investing activities	4.0	(12.2)	(13.8)
Net cash (used in) provided by investing activities	(710.4)	506.4	272.0
Financing activities			
Proceeds from issuance of common stock	90.9	94.4	119.6
Taxes paid related to net share settlement of equity awards	(143.4)	(143.1)	(76.2)
Repurchase and retirement of common shares	(293.5)	(699.0)	(621.7)
Proceeds from debt, net of discount	500.0	496.9	—
Repayments of debt	—	(400.0)	—
Other financing activities	(2.1)	(5.8)	—
Net cash provided by (used in) financing activities	151.9	(656.6)	(578.3)
Effect of exchange rate changes on cash and cash equivalents	(10.6)	14.2	(3.3)
Net decrease in cash and cash equivalents	(192.0)	(135.1)	(139.9)
Cash and cash equivalents at beginning of fiscal year	1,078.0	1,213.1	1,353.0
Cash and cash equivalents at end of fiscal year	$ 886.0	$ 1,078.0	$ 1,213.1
Supplemental cash flow information:			
Cash paid during the year for interest	$ 59.0	$ 54.6	$ 47.6
Cash paid for income taxes, net of tax refunds	$ 78.0	$ 84.5	$ 77.7
Non-cash investing and financing activities:			
Fair value of equity awards assumed (See Note 6)	$ 10.3	$ —	$ —
Fair value of common stock issued as consideration for business combination (See Note 6)	$ 44.8	$ —	$ —

See accompanying Notes to Consolidated Financial Statements.

AUTODESK, INC.

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' (DEFICIT) EQUITY

(In millions)

	Common stock and additional paid-in capital								
	Shares		Amount		Accumulated other comprehensive loss		Accumulated deficit		Total stockholders' (deficit) equity
Balances, January 31, 2016	224.4	$	1,821.5	$	(121.1)	$	(80.8)	$	1,619.6
Common shares issued under stock plans	5.6		43.4		—		—		43.4
Stock-based compensation expense	—		221.8		—		—		221.8
Tax benefits from employee stock plans	—		6.9		—		113.0		119.9
Net loss	—		—		—		(582.1)		(582.1)
Other comprehensive loss	—		—		(57.4)		—		(57.4)
Repurchase and retirement of common shares	(9.7)		(217.3)		—		(414.3)		(631.6)
Balances, January 31, 2017	220.3		1,876.3		(178.5)		(964.2)		733.6
Common shares issued under stock plans	4.9		(48.7)		—		—		(48.7)
Stock-based compensation expense	—		261.4		—		—		261.4
Net loss	—		—		—		(566.9)		(566.9)
Other comprehensive income	—		—		54.7		—		54.7
Repurchase and retirement of common shares	(6.9)		(136.3)		—		(553.8)		(690.1)
Balances, January 31, 2018	218.3		1,952.7		(123.8)		(2,084.9)		(256.0)
Common shares issued under stock plans	3.0		(52.5)		—		—		(52.5)
Stock-based compensation expense	—		249.5		—		—		249.5
Pre-combination expense related to equity awards assumed	—		10.3		—		—		10.3
Cumulative effect of accounting changes	—		—		—		177.5		177.5
Net loss	—		—		—		(80.8)		(80.8)
Other comprehensive loss	—		—		(11.2)		—		(11.2)
Shares issued as consideration for business combination	0.3		44.8		—		—		44.8
Repurchase and retirement of common shares	(2.2)		(133.3)		—		(159.2)		(292.5)
Balances, January 31, 2019	219.4	$	2,071.5	$	(135.0)	$	(2,147.4)	$	(210.9)

See accompanying Notes to Consolidated Financial Statements.

AUTODESK, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

January 31, 2019

(Tables in millions of dollars, except per share data, unless otherwise indicated)

1. Business and Summary of Significant Accounting Policies

Business

Autodesk, Inc. (“Autodesk” or the “Company”) is a world leading design software and services company, offering customers productive business solutions through powerful technology products and services. The Company serves customers in the architecture, engineering, and construction; manufacturing; and digital media, consumer, and entertainment industries. The Company’s sophisticated software products, offered through a hybrid of desktop and cloud functionality, enable its customers to experience their ideas before they are real by allowing them to imagine, design, and create their ideas and to visualize, simulate, and analyze real-world performance early in the design process by creating digital prototypes. These capabilities allow Autodesk’s customers to foster innovation, optimize and improve their designs, help save time and money, improve quality, and collaborate with others. Autodesk software products are sold globally, both directly to customers and through a network of resellers and distributors.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Autodesk and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("GAAP") requires management to make estimates and assumptions that affect the amounts reported in Autodesk’s consolidated financial statements and notes thereto. These estimates are based on information available as of the date of the consolidated financial statements. On a regular basis, management evaluates these estimates and assumptions. Actual results may differ materially from these estimates.

Examples of significant estimates and assumptions made by management involve revenue recognition for our hybrid desktop software and cloud service subscriptions, the determination of the fair value of acquired assets and liabilities, goodwill, financial instruments including strategic investments, long-lived assets and other intangible assets, the realizability of deferred tax assets, and the fair value of stock awards. The Company also makes assumptions, judgments, and estimates in determining the accruals for uncertain tax positions, variable compensation, partner incentive programs, product returns reserves, allowances for doubtful accounts, asset retirement obligations, and legal contingencies.

Foreign Currency Translation and Transactions

The assets and liabilities of Autodesk’s foreign subsidiaries are translated from their respective functional currencies into U.S. dollars at the rates in effect at the balance sheet date, and revenue and expense amounts are translated at exchange rates that approximate those rates in effect during the period in which the underlying transactions occur. Foreign currency translation adjustments are recorded as other comprehensive (loss) income.

Gains and losses realized from foreign currency transactions, those transactions denominated in currencies other than the foreign subsidiary’s functional currency, are included in "Interest and other expense, net". Monetary assets and liabilities are remeasured using foreign currency exchange rates at the end of the period, and non-monetary assets are remeasured based on historical exchange rates.

Derivative Financial Instruments

Autodesk accounts for its derivative instruments as either assets or liabilities on the balance sheet and carries them at fair value. Gains and losses resulting from changes in fair value are accounted for depending on the use of the derivative and whether it is designated and qualifies for hedge accounting. Derivatives that do not qualify for hedge accounting are adjusted to fair value through earnings. See Note 3, "Financial Instruments" for information regarding Autodesk's hedging activities.

Cash and Cash Equivalents

Autodesk considers all highly liquid investments with insignificant interest rate risk and remaining maturities of three months or less at the date of purchase to be cash equivalents. Cash equivalents are recorded at cost, which approximates fair value.

Marketable Securities and Privately Held Company Investments

Marketable securities are stated at fair value. Marketable securities maturing within one year that are not restricted are classified as current assets. Substantially all marketable debt and equity investments held by Autodesk are classified as current based on the nature of the investments and their availability for use in current operations.

Autodesk determines the appropriate classification of its marketable securities at the time of purchase and re-evaluates such classification as of each balance sheet date. Autodesk carries all “available-for-sale securities” at fair value, with unrealized gains and losses, net of tax, reported in stockholders’ equity (deficit) until disposition or maturity. Autodesk carries all “trading securities” at fair value, with unrealized gains and losses, recorded in “Interest and other expense, net” in the Company’s Consolidated Statements of Operations. The cost of securities sold is based on the specific-identification method.

Privately held debt and equity securities (Level 3) are valued using significant unobservable inputs or data in an inactive market and the valuation requires the Company's judgment due to the absence of market prices and inherent lack of liquidity. These assumptions are inherently subjective and involve significant management judgment. Whenever possible, we use observable market data and rely on unobservable inputs only when observable market data is not available, when determining fair value.

The carrying value is not adjusted for the Company's privately held equity securities if there are no observable price changes in a same or similar security from the same issuer or if there are no identified events or changes in circumstances that may indicate impairment, as discussed below. In determining the estimated fair value of its strategic investments in privately held companies, the Company utilizes the most recent data available to the Company. In addition, the determination of whether an orderly transaction is for a same or similar investment requires significant management judgment including: the rights and obligations of the investments, the extent to which those differences would affect the fair values of those investments, and the impact of any differences based on the stage of operational development of the investee.

All of Autodesk’s marketable securities and privately held company investments are subject to a periodic impairment review. For any marketable debt securities, declines in fair value judged to be other-than-temporary on securities available for sale are included as a reduction to investment income. To determine whether a decline in value is other-than-temporary, the Company evaluates, among other factors: the duration and extent to which the fair value has been less than the carrying value and its intent and ability to retain the investment for a period of time sufficient to allow for any anticipated recovery in fair value. For the purposes of computing realized and unrealized gains and losses, the cost of securities sold is based on the specific-identification method. Interest on securities classified as available for sale is also included as a component of investment income.

For Autodesk's quarterly impairment assessment of privately held debt and equity securities strategic investment portfolio, the analysis encompasses an assessment of the severity and duration of the impairment and qualitative and quantitative analysis of other key factors including: the investee’s financial metrics, the investee’s products and technologies meeting or exceeding predefined milestones, market acceptance of the product or technology, other competitive products or technology in the market, general market conditions, management and governance structure of the investee, the investee’s liquidity, debt ratios and the rate at which the investee is using its cash. If the investment is considered to be impaired, the Company will record the investment at fair value by recognizing an impairment through the consolidated statement of operations and establishing a new carrying value for the investment.

For additional information, see “Concentration of Credit Risk” within this Note 1 and Note 3, “Financial Instruments.”

Accounts Receivable, Net

Accounts receivable, net, consisted of the following as of January 31:

	2019	2018
Trade accounts receivable	$ 526.6	$ 469.2
Less: Allowance for doubtful accounts	(2.2)	(2.3)
Product returns reserve	(0.3)	(0.2)
Partner programs and other obligations	(49.8)	(28.5)
Accounts receivable, net (1)	$ 474.3	$ 438.2

(1) Autodesk adopted ASU No. 2014-09, “Revenue from Contracts with Customers" regarding Accounting Standards Codification (ASC Topic 606) during the first quarter of fiscal 2019. As such, current year balances are shown under ASC Topic 606 and prior year balances are shown under ASC Topic 605. See Note 1, "Business and Summary of Significant Accounting Policies-Accounting Standards Adopted", of our consolidated financial statements for additional information.

Allowances for uncollectible trade receivables are based upon historical loss patterns, the number of days that billings are past due, and an evaluation of the potential risk of loss associated with problem accounts.

As part of the indirect channel model, Autodesk has a partner incentive program that uses quarterly attainment of monetary rewards to motivate distributors and resellers to achieve mutually agreed upon business goals in a specified time period. A portion of these incentives reduce maintenance and other revenue in the current period. The remainder, which relates to incentives on our Subscription Program, is recorded as a reduction to deferred revenue in the period the subscription transaction is billed and subsequently recognized as a reduction to subscription revenue over the contract period. These incentive balances do not require significant assumptions or judgments. Depending on how the payments are made, the reserves associated with the partner incentive program are treated on the balance sheet as either contra accounts receivable or accounts payable.

Concentration of Credit Risk

Autodesk places its cash, cash equivalents, and marketable securities in highly liquid instruments with, and in the custody of, multiple diversified financial institutions globally with high credit ratings and limits the amounts invested with any one institution, type of security, and issuer. Autodesk’s primary commercial banking relationship is with Citigroup Inc. and its global affiliates. Citibank, N.A., an affiliate of Citigroup, is one of the lead lenders and an agent in the syndicate of Autodesk’s $650.0 million line of credit facility.

The bank counterparties to the derivative contracts potentially expose Autodesk to credit-related losses in the event of their nonperformance. However, to mitigate that risk, Autodesk only contracts with counterparties who meet the Company's minimum requirements under its counterparty risk assessment process. Autodesk monitors counterparty risk on at least a quarterly basis and will adjust its exposure to various counterparties as necessary. Autodesk generally enters into master netting arrangements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. However, Autodesk does not have any master netting arrangements in place with collateral features.

Autodesk’s accounts receivable are derived from sales to a large number of resellers, distributors, and direct customers in the Americas, EMEA, and APAC geographies. Autodesk performs ongoing evaluations of these partners' and customers' financial condition and limits the amount of credit extended when deemed necessary, but generally does not require collateral from such parties. Total sales to the Company's largest distributor Tech Data Corporation, and its global affiliates (“Tech Data”), accounted for 35%, 31%, and 30% of Autodesk's net revenue for fiscal years ended January 31, 2019, 2018, and 2017, respectively. The majority of the net revenue from sales to Tech Data is for sales made outside of the United States. In addition, Tech Data accounted for 29% and 31% of trade accounts receivable as of January 31, 2019, and 2018, respectively. No other customer accounted for more than 10% of Autodesk's total net revenue or trade accounts receivable for each of the respective periods.

Computer Equipment, Software, Furniture, and Leasehold Improvements, Net

Computer equipment, software, and furniture are depreciated using the straight-line method over the estimated useful lives of the assets, which range from three to five years. Leasehold improvements are amortized on a straight-line basis over the shorter of their estimated useful lives or the lease term. Depreciation expense was $59.2 million in fiscal 2019, $67.6 million in fiscal 2018, and $73.1 million in fiscal 2017.

Computer equipment, software, furniture, leasehold improvements and the related accumulated depreciation at January 31 were as follows:

	2019	2018
Computer hardware, at cost	$ 190.2	$ 217.1
Computer software, at cost	66.7	72.6
Leasehold improvements, land and buildings, at cost	247.8	228.9
Furniture and equipment, at cost	67.2	63.4
Computer software, hardware, leasehold improvements, furniture, and equipment, at cost	571.9	582.0
Less: Accumulated depreciation	(422.2)	(437.0)
Computer software, hardware, leasehold improvements, furniture, and equipment, net	$ 149.7	$ 145.0

Costs incurred for computer software developed or obtained for internal use are capitalized for application development activities, if material, and immediately expensed for preliminary project activities and post-implementation activities. These capitalized costs are amortized over the software's expected useful life, which is generally three years.

Software Development Costs

Software development costs incurred prior to the establishment of technological feasibility are included in research and development expenses. Autodesk defines establishment of technological feasibility as the completion of a working model. Software development costs incurred subsequent to the establishment of technological feasibility through the period of general market availability of the products are capitalized and generally amortized over a three-year period, if material. Autodesk had no material capitalized software development costs at January 31, 2019, and January 31, 2018.

Other Intangible Assets, Net

Other intangible assets include developed technologies, customer relationships, trade names, patents, user lists and the related accumulated amortization. These assets are shown as "Developed technologies, net" and as part of "Other assets" in the Consolidated Balance Sheet. The majority of Autodesk's other intangible assets are amortized to expense over the estimated economic life of the product, which ranges from two to ten years. Amortization expense for developed technologies, customer relationships, trade names, patents, and user lists was $33.5 million in fiscal 2019, $36.6 million in fiscal 2018 and $72.2 million in fiscal 2017.

Other intangible assets and related accumulated amortization at January 31 were as follows:

	2019	2018
Developed technologies, at cost	$ 670.2	$ 578.5
Customer relationships, trade names, patents, and user lists, at cost (1)	533.1	372.5
Other intangible assets, at cost (2)	1,203.3	951.0
Less: accumulated amortization	(922.5)	(895.8)
Other intangible assets, net	$ 280.8	$ 55.2

(1) Included in "Other assets" in the accompanying Consolidated Balance Sheets.
(2) Includes the effects of foreign currency translation.

The weighted average amortization period for developed technologies, customer relationships, trade names, patents, and user lists during fiscal 2019 was 5.4 years. Excluding in-process research and development, expected future amortization expense for developed technologies, customer relationships, trade names, patents, and user lists for each of the fiscal years ended thereafter is as follows:

	Fiscal Year ended January 31,
2020	$ 73.6
2021	64.8
2022	49.1
2023	37.6
Thereafter	19.2
Total	$ 244.3

Goodwill

Goodwill consists of the excess of the consideration transferred over the fair value of net assets acquired in business combinations. Autodesk tests goodwill for impairment annually in its fourth fiscal quarter or more often if circumstances indicate a potential impairment may exist, or if events have affected the composition of reporting units.

When goodwill is assessed for impairment, Autodesk has the option to perform an assessment of qualitative factors of impairment (“optional assessment”) prior to necessitating a quantitative impairment test. Should the optional assessment be used for any given fiscal year, qualitative factors to consider include cost factors; financial performance; legal, regulatory, contractual, political, business, or other factors; entity specific factors; industry and market considerations, macroeconomic conditions, and other relevant events and factors affecting the reporting unit. If, after assessing the totality of events or circumstances, it is more likely than not that the fair value of the reporting unit is greater than its carrying value, then performing the quantitative impairment test is unnecessary.

The quantitative impairment test is necessary when either Autodesk does not use the optional assessment or, as a result of the optional assessment, it is not more likely than not that the fair value of the reporting unit is greater than its carrying value. In situations in which an entity's reporting unit is publicly traded, the fair value of the Company may be approximated by its market capitalization, in performing the quantitative impairment test.

Goodwill impairment exists when the estimated fair value of goodwill is less than its carrying value. If impairment exists, the carrying value of the goodwill is reduced to fair value through an impairment charge recorded in the Company's statements of operations. The process of evaluating the potential impairment of goodwill is subjective and requires significant judgment at many points during the analysis. The value of Autodesk’s goodwill could also be impacted by future adverse changes such as: (i) declines in Autodesk’s actual financial results, (ii) a sustained decline in Autodesk’s market capitalization, (iii) a significant slowdown in the worldwide economy or the industries Autodesk serves, or (iv) changes in Autodesk’s business strategy.

For the annual impairment test, Autodesk's market capitalization was substantially in excess of the carrying value of the Company as of January 31, 2019. Accordingly, Autodesk has determined there was no goodwill impairment during the fiscal year ended January 31, 2019. In addition, Autodesk did not recognize any goodwill impairment losses in fiscal 2018 or 2017.

The following table summarizes the changes in the carrying amount of goodwill during the fiscal years ended January 31, 2019 and 2018:

	January 31, 2019	January 31, 2018
Goodwill, beginning of the year	$ 1,769.4	$ 1,710.3
Less: accumulated impairment losses, beginning of the year	(149.2)	(149.2)
Additions arising from acquisitions during the year	866.9	—
Effect of foreign currency translation, measurement period adjustments, and other (1)	(36.3)	59.1
Goodwill, end of the year	$ 2,450.8	$ 1,620.2

(1) Purchase accounting adjustments reflect revisions made to the Company's preliminary determination of estimated fair value of assets and liabilities assumed during fiscal 2019 and 2018.

Impairment of Long-Lived Assets

At least annually or more frequently as circumstances dictate, Autodesk reviews its long-lived assets for impairment whenever impairment indicators exist. Autodesk continually monitors events and changes in circumstances that could indicate the carrying amounts of its long-lived assets may not be recoverable. When such events or changes in circumstances occur, Autodesk assesses recoverability of these assets. Recoverability is measured by comparison of the carrying amounts of the assets to the future undiscounted cash flow the assets are expected to generate. If the long-lived assets are considered to be impaired, the impairment to be recognized is equal to the amount by which the carrying value of the assets exceeds its fair market value. Autodesk did not recognize any material impairments of long-lived assets during the fiscal years ended January 31, 2019, 2018, and 2017, respectively.

In addition to the recoverability assessments, Autodesk routinely reviews the remaining estimated useful lives of its long-lived assets. Any reduction in the useful life assumption will result in increased depreciation and amortization expense in the quarter when such determinations are made, as well as in subsequent quarters.

Deferred Tax Assets

Deferred tax assets arise primarily from tax credits, net operating losses, and timing differences for reserves, accrued liabilities, stock options, deferred revenue, purchased technologies, and capitalized intangibles, partially offset by U.S. deferred tax liabilities on acquired intangibles, and valuation allowances against U.S. and foreign deferred tax assets. Autodesk performed a quarterly assessment of the recoverability of these net deferred tax assets and believes it will generate sufficient future taxable income in appropriate tax jurisdictions to realize the net deferred tax assets. They are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to reverse. Valuation allowances are established when necessary to reduce gross deferred tax assets to the amount that is "more likely than not" to be realized.

Stock-based Compensation Expense

The following table summarizes stock-based compensation expense for fiscal 2019, 2018, and 2017, respectively, as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Cost of subscription and maintenance revenue	$ 13.2	$ 11.9	$ 8.6
Cost of other revenue	4.3	4.0	5.5
Marketing and sales	109.4	107.3	94.1
Research and development	82.6	82.9	81.3
General and administrative	40.0	55.3	32.3
Stock-based compensation expense related to stock awards and Employee Qualified Stock Purchase Plan ("ESPP") purchases	249.5	261.4	221.8
Tax benefit	(2.6)	(2.6)	(2.6)
Stock-based compensation expense related to stock awards and ESPP purchases, net	$ 246.9	$ 258.8	$ 219.2

Autodesk determines the grant date fair value of its share-based payment awards using a Black-Scholes Merton ("BSM") option pricing model or the quoted stock price on the date of grant, unless the awards are subject to market conditions, in which case Autodesk uses a binomial-lattice model (e.g., Monte Carlo simulation model). The Monte Carlo simulation model utilizes multiple input variables to estimate the probability that market conditions will be achieved. Autodesk uses the following assumptions to estimate the fair value of stock-based awards:

	Fiscal Year Ended January 31, 2019			Fiscal Year Ended January 31, 2018		Fiscal Year Ended January 31, 2017	
	Stock Option Plans	**Performance Stock Unit**	**ESPP**	**Performance Stock Unit**	**ESPP**	**Performance Stock Unit**	**ESPP**
Range of expected volatilities	37 - 42%	36%	33 - 38%	32%	31 - 34%	38 - 39%	30 - 40%
Range of expected lives (in years)	0.5 - 3.8	N/A	0.5 - 2.0	N/A	0.5 - 2.0	N/A	0.5 - 2.0
Expected dividends	—%	—%	—%	—%	—%	—%	—%
Range of risk-free interest rates	2.3 - 2.7%	2.0%	1.9 - 2.8%	1.0 - 1.2%	0.9 - 1.4%	0.6 - 0.7%	0.5 - 0.9%

Autodesk estimates expected volatility for stock-based awards based on the average of the following two measures: (1) a measure of historical volatility in the trading market for the Company’s common stock, and (2) the implied volatility of traded forward call options to purchase shares of the Company’s common stock. The expected volatility for performance stock units subject to market conditions includes the expected volatility of Autodesk's peer companies within the S&P Computer Software Select Index or S&P North American Technology Software Index with a market capitalization over $2.00 billion, depending on the award type.

Autodesk estimates the expected life of stock-based awards using both exercise behavior and post-vesting termination behavior as well as consideration of outstanding options. The range of expected lives of ESPP awards are based upon the four, six-month exercise periods within a 24-month offering period.

Autodesk did not pay cash dividends in fiscal 2019, 2018, or 2017 and does not anticipate paying any cash dividends in the foreseeable future. Consequently, an expected dividend yield of zero is used in the BSM option pricing model and the Monte Carlo simulation model.

The risk-free interest rate used in the BSM option pricing model and the Monte Carlo simulation model for stock-based awards is the historical yield on U.S. Treasury securities with equivalent remaining lives.

Autodesk recognizes expense only for the stock-based awards that ultimately vest. Autodesk accounts for forfeitures of stock-based awards as those forfeitures occur.

Advertising Expenses

Advertising costs are expensed as incurred. Total advertising expenses incurred were $37.5 million in fiscal 2019, $31.1 million in fiscal 2018, and $33.6 million in fiscal 2017.

Net Loss Per Share

Basic net loss per share is computed based on the weighted average number of shares of common stock outstanding for the period, excluding stock options and restricted stock. Diluted net loss per share is computed based upon the weighted average shares of common shares outstanding for the period and potentially dilutive common shares, including the effect of stock options and restricted stock units under the treasury stock method.

Defined Benefit Pension Plans

The funded status of Autodesk's defined benefit pension plans is recognized in the Consolidated Balance Sheets. The funded status is measured as the difference between the fair value of plan assets and the projected benefit obligation for the fiscal years presented. The projected benefit obligation represents the actuarial present value of benefits expected to be paid upon retirement based on employee services already rendered and estimated future compensation levels. The fair value of plan assets represents the current market value of Autodesk's cumulative company and participant contributions made to the various plans in effect.

Net periodic benefit cost is recorded in the Consolidated Statements of Operations and includes service cost, interest cost, expected return on plan assets, amortization of prior service costs, and gains or losses previously recognized as a component of other comprehensive loss. Certain events, such as changes in the employee base, plan amendments, and changes in actuarial assumptions may result in a change in the defined benefit obligation and the corresponding change to other comprehensive loss.

Gains and losses and prior service costs not recognized as a component of net periodic benefit cost in the Consolidated Statements of Operations as they arise are recognized as a component of other comprehensive (loss) income in the Consolidated Statements of Comprehensive Loss. Those gains and losses and prior service costs are subsequently amortized as a component of net periodic benefit cost over the average remaining service lives of the plan participants using a corridor approach to determine the portion of gain or loss subject to amortization.

The measurement of projected benefit obligations and net periodic benefit cost is based on estimates and assumptions that reflect the terms of the plans and use participant-specific information such as compensation, age and years of services, as well as certain assumptions, including estimates of discount rates, expected return of plan assets, rate of compensation increases, interest rates, and mortality rates.

Accounting Standards in Fiscal 2019

With the exception of those discussed below, there have been no recent changes in accounting pronouncements issued by FASB or adopted by the Company during the fiscal year ended January 31, 2019, that are applicable to the Company.

Accounting Standards Adopted

Effective in the third quarter of fiscal 2019, Autodesk early adopted ASU No. 2018-15, "Intangibles—Goodwill and Other—Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract." The ASU allows implementation costs incurred by customers in cloud computing arrangements to be deferred and recognized over the term of the arrangement. The ASU also requires amortization expense be recognized in the same line item as the related fees associated with the arrangement and related capitalized implementation costs be presented in the same line as the prepayment for the hosting fee. Changes to Autodesk's disclosures appear in this filing. The new guidance was applied prospectively to eligible costs as of August 1, 2018, and did not have a material impact on our Consolidated Financial Statements.

In August 2018, as part of FASB's Disclosure Framework project, FASB issued ASU No. 2018-14, "Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework—Changes to the Disclosure Requirements for Defined Benefit Plans," and ASU No. 2018-13, "Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement." FASB issued these ASUs to help improve the effectiveness of disclosures in the notes to financial statements by facilitating clear communication of the information required by GAAP that is most important to users of each entity's financial statements. Effective in the third quarter of fiscal 2019, Autodesk early adopted ASU No. 2018-14 and ASU No. 2018-13. Most changes required retrospective application with a few exceptions in ASU No. 2018-13 that allowed for prospective adoption.

Effective in the first quarter of fiscal 2019, Autodesk adopted FASB Accounting Standards Update ("ASU") No. 2017-05, "Other Income– Gains and Losses from the Derecognition of Nonfinancial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Nonfinancial Assets." The ASU, among other things, clarifies the scope of the derecognition of nonfinancial assets, provides the definition of in-substance financial assets, and impacts the accounting for partial sales of nonfinancial assets by requiring full gain recognition upon the sale. The new guidance was adopted prospectively as there was no impact on the Company's prior periods consolidated statements of financial position and results of operations which would be reflected in either the full or modified retrospective transition approach. The future effect of the adoption will depend upon the nature of the Company's future dispositions, if any.

Effective in the first quarter of fiscal 2019, Autodesk adopted FASB ASU No. 2017-01, "Business Combinations: Clarifying the Definition of a Business" which provides a more robust framework to use in determining when a set of assets and activities is considered a business. The new guidance was applied on a prospective basis and the adoption did not have any impact on Autodesk's consolidated financial statements. Any future effect of the adoption will depend upon the nature of the Company's future acquisitions, if any.

Effective in the first quarter of fiscal 2019, Autodesk adopted FASB ASU No. 2016-16, “Income Taxes: Intra-Entity Transfers of Assets Other than Inventory” which requires that entities recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. The new guidance was applied on a modified retrospective basis with a cumulative increase of $1.9 million to the opening balance of "Accumulated deficit" at February 1, 2018. The ASU did not have any other material impacts on Autodesk's Consolidated Financial Statements.

Effective in the first quarter of fiscal 2019, Autodesk adopted FASB ASU No. 2016-01 regarding Accounting Standards Codification ("ASC") Topic 825-10, "Financial Instruments - Overall." The amendments address certain aspects of recognition, measurement, presentation, and disclosure of financial instruments, and require equity securities to be measured at fair value, unless the measurement alternative method has been elected for equity investments without readily determinable fair values ("non-marketable equity securities"), with changes in fair value recognized through net income. The amendments also simplify the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment for impairment quarterly at each reporting period. Under the measurement alternative method, the non-marketable equity securities will be measured at cost, less any impairment, plus or minus adjustments resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer, which will be recorded within the Consolidated Statement of Operations. The determination of whether a transaction is for a similar investment will require significant management judgment including consideration of the rights and obligations between the investments and the extent to which those differences would affect the fair values of those investments with additional consideration for the stage of development of the investee company.

Autodesk prospectively adopted the amendments related to non-marketable equity securities existing as of the date of adoption. The new standard may add volatility to the Company's statements of operations in future periods, due to changes in market prices of the Company's investments in publicly held equity investments and the valuation and timing of observable price changes and impairments of its investments in non-marketable securities. See Note 3, "Financial Instruments" for more information.

Revenue from contracts with customers

Effective in the first quarter of fiscal 2019, Autodesk adopted ASU No. 2014-09, “Revenue from Contracts with Customers" regarding Accounting Standards Codification (ASC Topic 606)” and the subsequent and related ASU No. 2015-14, ASU No. 2016-08, ASU No. 2016-10, ASU No. 2016-12, and ASU No. 2016-20.

Under ASC Topic 606, the Company has concluded that the desktop software and related substantial cloud functionality that are included in the majority of its product subscription offerings and enterprise arrangements are not distinct in the context of the contract as they are considered highly interrelated and represent a single combined performance obligation that should be recognized over time. Therefore, the adoption of ASC Topic 606 has not resulted in a material change in the timing and amount of the recognition of revenue for the majority of the Company's product subscription offerings and enterprise arrangements.

One impact of the new standard relates to product subscriptions that do not incorporate substantial cloud functionality. A limited number of Autodesk's product subscriptions do not incorporate substantial cloud functionality, and therefore are not considered highly interrelated. Under ASU No. 2014-09, these limited number of product subscriptions are recognized as separate and distinct license and service performance obligations. Under ASU No. 2009-13, "Revenue Recognition" regarding Accounting Standards Codification (ASC Topic 605), licenses sold with undelivered elements without vendor-specific objective evidence ("VSOE") are recognized ratably over the term of the undelivered elements. Under ASC Topic 606, Autodesk is no longer required to establish VSOE to recognize software license revenue separately from the other elements and recognizes software licenses once the customer obtains control of the license, which is generally upon delivery of the license. Therefore, revenue allocated to the licenses in these offerings under ASC Topic 606 is recognized at a point in time instead of over the contract term.

Autodesk adopted ASC Topic 606 using the modified retrospective method, with a cumulative decrease of $89.0 million to the opening balance of "Accumulated deficit" at February 1, 2018. Autodesk applied the standard only to contracts that are not completed as of the date of initial application. The comparative information has not been adjusted and continues to be reported under ASC Topic 605. The details of the quantitative impact of the adoption on the fiscal year ended January 31, 2019, are shown below. See the Note 2, "Revenue Recognition" for more details.

Costs to acquire a contract from a customer

With the adoption of ASC Topic 606, Autodesk also adopted ASC Topic 340-40, "Other Assets and Deferred Costs—Contracts with Customers." Prior to the adoption of ASC Topic 340-40, Autodesk previously recognized compensation paid to sales employees and certain resellers related to obtaining customer contracts in marketing and sales expense in the Consolidated Statements of Operations when incurred. Under ASC Topic 340-40, Autodesk capitalizes this sales compensation as contract costs when they are incremental, directly incurred to obtain a contract with a customer and expected to be recoverable. The contract costs are amortized based on the transfer of goods or services to which the contract costs relate.

Under the modified retrospective method, Autodesk booked a cumulative decrease of $90.4 million to the opening balance of "Accumulated deficit" at February 1, 2018. The comparative information has not been adjusted and continues to be reported as incurred. The details of the quantitative impact of the adoption on the fiscal year ended January 31, 2019, are shown below. See Note 7, "Deferred Compensation" for disclosures under the new standard.

Quantitative effect of ASC Topics 606 and 340-40 adoption

Under the modified retrospective adoption, Autodesk calculated the impact of the adoption during fiscal 2019, as the first year of adoption. The following table shows select line items that were materially impacted by the adoption of ASC Topics 606 and 340-40 on Autodesk’s Consolidated Statements of Operations for the fiscal year ended January 31, 2019:

	For the Fiscal Year ended January 31, 2019		
	As reported	**Impact from the adoption of ASC 606 and 340-40**	**As adjusted**
Net revenue (1)			
Subscription	$ 1,802.3	$ (16.6)	$ 1,785.7
Maintenance	635.1	5.7	640.8
Other	132.4	(11.3)	121.1
Cost of revenue (1)			
Cost of subscription and maintenance revenue	216.0	(0.1)	215.9
Cost of other revenue	54.4	1.1	55.5
Operating expenses (1):			
Marketing and sales	1,183.9	(17.9)	1,166.0
Provision for income taxes	(38.1)	(4.8)	(42.9)
Net loss (2)	$ (80.8)	$ (10.1)	$ (90.9)
Basic net loss per share	$ (0.37)	$ (0.05)	$ (0.42)
Diluted net loss per share	$ (0.37)	$ (0.05)	$ (0.42)

(1) While not shown here, gross margin, loss from operations, and loss before income taxes have consequently been affected as a result of the net effect of the adjustments noted above.
(2) The impact on the Consolidated Statements of Comprehensive Loss is limited to the net effects of the impacts noted above on the Consolidated Statements of Operations, specifically on the line item "Net loss."

The following table shows select line items that were materially impacted by the adoption of ASC Topics 606 and 340-40 on Autodesk's Consolidated Balance Sheet as of January 31, 2019:

	As reported	Impact from the adoption of ASC 606 and 340-40	As adjusted
ASSETS			
Current assets:			
Accounts receivable, net	$ 474.3	$ 73.4	$ 547.7
Prepaid expenses and other current assets (1)	192.1	(79.4)	112.7
Deferred income taxes, net	65.3	7.0	72.3
Other assets (1)	337.8	(17.9)	319.9
LIABILITIES AND STOCKHOLDERS' DEFICIT			
Current liabilities:			
Deferred revenue	1,763.3	140.6	1,903.9
Other accrued liabilities	142.3	1.7	144.0
Long-term deferred revenue	328.1	37.2	365.3
Long-term income taxes payable	21.5	(0.2)	21.3
Long-term deferred income taxes	79.8	(6.7)	73.1
Stockholders' deficit:			
Accumulated deficit (2)	$ (2,147.4)	$ (189.5)	$ (2,336.9)

(1) Short term and long term "contract assets" under ASC Topic 606 are included within "Prepaid expenses and other current assets" and "Other assets", respectively, on the Consolidated Balance Sheet.
(2) Included in the "Accumulated deficit" adjustment is $179.4 million for the cumulative effect adjustment of adopting ASC Topic 606 and 340-40 on the opening balance as of February 1, 2018.

Adoption of the standard had no impact to net cash provided by or (used in) operating, financing, or investing activities on the Company's Consolidated Statements of Cash Flows.

Recently Issued Accounting Standards But Not Yet Adopted

In February 2018, FASB issued ASU No. 2018-02, "Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The amendment allows entities to reclassify stranded tax effects resulting from the Tax Cuts and Jobs Act from accumulated other comprehensive income to retained earnings. The amendment only impacts the income tax effect of the passage of the Tax Cuts and Jobs Act but does not affect the underlying guidance that requires that the effect of a change in tax laws or rates be included in income from continuing operations. The amendment is effective for Autodesk's fiscal year beginning February 1, 2019. Autodesk currently expects the impact to stockholders' deficit and other comprehensive loss to be approximately $1.3M.

In August 2017, FASB issued ASU No. 2017-12, "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities." The amendment helps simplify certain aspects of hedge accounting and results in a more accurate portrayal of the economics of an entity's risk management activities in its financial statements. For cash flow and net investment hedges as of the adoption date, the guidance requires a modified retrospective approach. The amended presentation and disclosure guidance is required only prospectively. Autodesk will adopt the amendment for the fiscal year beginning February 1, 2019, the required adoption date. The transition impact, if any, is expected to be immaterial and no substantive changes are expected to Autodesk's current processes, accounting, or disclosures for cash flow hedges.

In June 2016, FASB issued ASU No. 2016-13 regarding ASC Topic 326, "Financial Instruments - Credit Losses," which modifies the measurement of expected credit losses of certain financial instruments. Autodesk plans to adopt ASU No. 2016-13 as of the effective date which represents Autodesk's fiscal year beginning February 1, 2020. Autodesk does not believe the ASU will have a material impact on its consolidated financial statements.

In February 2016, FASB issued ASU No. 2016-02, Leases (ASC Topic 842) to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing transactions. The new standard requires entities to reflect the net present value of all future fixed lease payments for both operating and finance leases. It also requires entities to disclose fixed and variable lease payments separately and by lease type (operating vs. finance leases). In addition, FASB issued ASU No. 2018-10 and 2018-11 in July 2018 and ASU No. 2018-20 in December 2018 to help provide interpretive clarifications on various issues raised by stakeholders. ASU No. 2018-10 clarifies ambiguous or potentially conflicting guidance in ASU No. 2016-02 but is not expected to have a material impact on Autodesk. ASU No. 2018-11 provides an additional transition option to apply ASU No. 2016-02 upon adoption of the new standard. ASU No. 2018-20 allows lessors, as an accounting policy election, to treat sales taxes and other similar taxes as lessee costs only. ASU No. 2018-20 also requires lessors to exclude certain lessor costs paid by lessees directly to third parties from its variable payments, and therefore revenue, and requires lessors to allocate other variable payments to be allocated between lease and nonlease components.

Autodesk will adopt ASU No. 2016-02 as of February 1, 2019 using the modified retrospective method permitted under ASC No. 2018-11 for all existing leases. Under ASU No. 2016-02, Autodesk is required to recognize an asset and offsetting liability upon adoption. The asset and liability are measured by taking the present value of all future fixed lease payments, discounted using the Company’s incremental borrowing rate. Autodesk has elected to opt for the practical expedients to not reassess whether any existing contracts are leases or contain a lease, not reassess the lease classification of existing leases, not reassess initial direct costs for existing leases, and to combine lease and non-lease components for new leases post adoption.

In preparation for adoption of the standard, Autodesk is implementing key systems, processes and internal controls to enable the preparation of financial information. ASC No. 2016-02 will have a material impact on the Company’s consolidated balance sheet because of the capitalization of future fixed lease payments. ASU No. 2016-02 is not expected to have a material impact to the Company’s consolidated statement of operations or net cash provided by operating activities.

2. Revenue Recognition

Revenue Recognition

Autodesk’s revenue is divided into three categories: subscription revenue, maintenance revenue, and other revenue. Revenue is recognized when control for these offerings is transferred to our customers, in an amount that reflects the consideration we expect to be entitled to in exchange for products and services.

Our contracts with customers may include promises to transfer multiple products and services to a customer. Determining whether the products and services are considered distinct performance obligations that should be accounted for separately or as one combined performance obligation may require significant judgment. Judgment is required to determine the level of integration and interdependency between individual components of software and cloud functionality. This determination influences whether the software is considered distinct and accounted for separately as a license performance obligation, or not distinct and accounted for together with the cloud functionality as a single subscription performance obligation recognized over time.

For product subscriptions and enterprise business agreement ("EBA") subscriptions in which the desktop software and related cloud functionality are highly interrelated, the combined performance obligation is recognized ratably over the contract term as the obligation is delivered. For contracts involving distinct software licenses, the license performance obligation is satisfied at a point in time when control is transferred to the customer. For standalone maintenance subscriptions, cloud subscriptions, and technical support services, the performance obligation is satisfied ratably over the contract term as those services are delivered. For consulting services, the performance obligation is satisfied over a period of time as those services are delivered.

When an arrangement includes multiple performance obligations which are concurrently delivered and have the same pattern of transfer to the customer (the services transfer to the customer over the contract period), we account for those performance obligations as a single performance obligation.

For contracts with more than one performance obligation, the transaction price is allocated among the performance obligations in an amount that depicts the relative standalone selling price ("SSP") of each obligation. Judgment is required to determine the SSP for each distinct performance obligation. We use a range of amounts to estimate SSP when we sell each of the products and services separately and need to determine whether there is a discount that should be allocated based on the relative SSP of the various products and services.

In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that includes market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customer and circumstance. In these instances, we use relevant information such as the sales channel and geographic region to determine the SSP.

Our indirect channel model includes both a two-tiered distribution structure, where Autodesk sells to distributors that subsequently sell to resellers, and a one-tiered structure where Autodesk sells directly to resellers. For these arrangements, transfer of control begins at the time access to our subscriptions is made available electronically to our customer, provided all other criteria for revenue recognition are met. Judgment is required to determine whether our distributors and resellers have the ability to honor their commitment to pay, regardless of whether they collect payment from their customers. If we were to change this assessment, it could cause a material increase or decrease in the amount of revenue that we report in a particular period.

As part of the indirect channel model, we have a partner incentive program that uses quarterly attainment of monetary rewards to motivate distributors and resellers to achieve mutually agreed upon business goals in a specified time period. Incentives related to our subscription program are recorded as a reduction to deferred revenue in the period the subscription transaction is billed, and are subsequently recognized as a reduction to subscription revenue over the contract period. A small portion of partner incentives reduce other revenue in the current period. These incentive balances do not require significant assumptions or judgments. Depending on how the payments are made, the reserves associated with the partner incentive program are recorded on the balance sheet as either contra accounts receivable or accounts payable.

Revenue Disaggregation

Autodesk recognizes revenue from the sale of (1) product subscriptions, cloud service offerings, and flexible enterprise business agreements ("EBAs"), (2) renewal fees for existing maintenance plan agreements that were initially purchased with a perpetual software license, and (3) consulting, training and other goods and services. The three categories are presented as line items on Autodesk's Consolidated Statements of Operations.

Information regarding the components of Autodesk's net revenue from contracts with customers by geographic location, product family, and sales channel is as follows:

	Fiscal Year ended January 31,		
	2019	2018	2017
Net revenue by product family (1):			
Architecture, Engineering and Construction	$ 1,021.6	$ 787.5	$ 810.4
Manufacturing	616.2	528.8	575.2
AutoCAD and AutoCAD LT	731.8	561.4	472.7
Media and Entertainment	182	152.1	138.8
Other	18.2	26.8	33.9
Total net revenue	$ 2,569.8	$ 2,056.6	$ 2,031.0
Net revenue by geographic area:			
Americas			
U.S.	$ 874.6	$ 740.4	$ 742.1
Other Americas	175.3	130.7	129.8
Total Americas	1,049.9	871.1	871.9
Europe, Middle East and Africa	1,034.3	815.4	800.4
Asia Pacific	485.6	370.1	358.7
Total net revenue	$ 2,569.8	$ 2,056.6	$ 2,031.0
Net revenue by sales channel:			
Indirect	$ 1,830.8	$ 1,443.8	$ 1,468.9
Direct	739.0	612.8	562.1
Total net revenue	$ 2,569.8	$ 2,056.6	$ 2,031.0

(1) Due to changes in the go-to-market offerings of our AutoCAD product subscription, prior period balances have been adjusted to conform to current period presentation.

Payments for product subscriptions, industry collections, cloud subscriptions, and maintenance subscriptions are typically due up front with payment terms of 30 to 45 days. Payments on EBAs are typically due in annual installments over the contract term, with payment terms of 30 to 60 days. Autodesk does not have any material variable consideration, such as obligations for returns, refunds, or warranties or amounts payable to customers for which significant estimation or judgment is required as of the reporting date.

As of January 31, 2019, Autodesk had total billed and unbilled deferred revenue of $2.7 billion, which represents the total contract price allocated to undelivered performance obligations, which are generally recognized over the next three years. We expect to recognize $1.9 billion or 72% of this revenue during the next 12 months. We expect to recognize the remaining $0.8 billion or 28% of this revenue thereafter.

We expect that the amount of billed and unbilled deferred revenue will change from quarter to quarter for several reasons, including the specific timing, duration and size of customer subscription and support agreements, varying billing cycles of such agreements, the specific timing of customer renewals, and foreign currency fluctuations.

Contract Balances

We receive payments from customers based on a billing schedule as established in our contracts. Contract assets relate to performance completed in advance of scheduled billings. Contract assets were not material as of January 31, 2019. Deferred revenue relates to payments received in advance of performance under the contract. The primary changes in our contract assets and deferred revenues are due to our performance under the contracts and billings.

Revenue recognized during the fiscal year ended January 31, 2019, that was included in the deferred revenue balances at January 31, 2018, was $1.5 billion. The satisfaction of performance obligations typically lags behind payments received under revenue contracts from customers, which may lead to an increase in our deferred revenue balance over time.

3. Financial Instruments

The following tables summarize the Company's financial instruments' amortized cost, gross unrealized gains, gross unrealized losses, and fair value by significant investment category as of January 31, 2019 and 2018.

	January 31, 2019						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Level 1	Level 2	Level 3
Cash equivalents (1):							
Certificates of deposit	$ 1.0	$ —	$ —	$ 1.0	$ —	$ 1.0	$ —
Commercial paper	87.9	—	—	87.9	—	87.9	—
Corporate debt securities	5.0	—	—	5.0	—	5.0	—
Custody cash deposit	0.8	—	—	0.8	0.8	—	—
Money market funds	281.4	—	—	281.4	281.4	—	—
Marketable securities:							
Short-term available-for-sale							
Other (2)	6.2	1.1	—	7.3	2.7	4.6	—
Short-term trading securities							
Mutual funds	56.6	3.7	—	60.3	60.3	—	—
Convertible debt securities (3)	4.6	1.9	(2.1)	4.4	—	—	4.4
Derivative contract assets (4)	1.7	8.6	(1.8)	8.5	—	7.7	0.8
Derivative contract liabilities (5)	—	—	(7.4)	(7.4)	—	(7.4)	—
Total	$ 445.2	$ 15.3	$ (11.3)	$ 449.2	$ 345.2	$ 98.8	$ 5.2

(1) Included in “Cash and cash equivalents” in the accompanying Consolidated Balance Sheets.
(2) Consists of corporate bonds, commercial paper, and common stock.
(3) Considered “available for sale” and included in “Other assets” in the accompanying Consolidated Balance Sheets.
(4) Included in “Prepaid expenses and other current assets,” “Other assets,” or “Other accrued liabilities” in the accompanying Consolidated Balance Sheets.
(5) Included in “Other accrued liabilities” in the accompanying Consolidated Balance Sheets.

	January 31, 2018						
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Level 1	Level 2	Level 3
Cash equivalents (1):							
Agency bonds	$ 5.0	$ —	$ —	$ 5.0	$ 5.0	$ —	$ —
Certificates of deposit	17.4	—	—	17.4	17.4	—	—
Commercial paper	324.2	—	—	324.2	—	324.2	—
Corporate debt securities	5.0	—	—	5.0	5.0	—	—
Custody cash deposit	5.2	—	—	5.2	5.2	—	—
Money market funds	278.8	—	—	278.8	—	278.8	—
Municipal bonds	5.0	—	—	5.0	5.0	—	—
Sovereign debt	2.0	—	—	2.0	—	2.0	—
U.S. government securities	—	—	—	—	—	—	—
Marketable securities:							
Short-term available-for-sale							
Agency bonds	—	—	—	—	—	—	—
Asset backed securities	13.1	—	—	13.1	—	13.1	—
Certificates of deposit	—	—	—	—	—	—	—
Commercial paper	27.5	—	—	27.5	—	27.5	—
Corporate debt securities	99.4	—	(0.1)	99.3	99.3	—	—
Municipal bonds	—	—	—	—	—	—	—
Sovereign debt	9.2	—	—	9.2	7.7	1.5	—
U.S. government securities	37.1	—	—	37.1	37.1	—	—
Short-term trading securities							
Mutual funds	50.1	8.9	—	59.0	59.0	—	—
Long-term available-for-sale							
Agency bonds	13.7	—	(0.1)	13.6	13.6	—	—
Asset backed securities	36.8	—	(0.2)	36.6	—	36.6	—
Corporate debt securities	100.2	0.1	(0.4)	99.9	99.9	—	—
Municipal bonds	12.7	—	(0.1)	12.6	12.6	—	—
Sovereign debt	2.8	—	—	2.8	—	2.8	—
U.S. government securities	25.5	—	(0.2)	25.3	25.3	—	—
Convertible debt securities (2)	7.5	0.5	(0.2)	7.8	—	—	7.8
Derivative contract assets (3)	2.0	7.5	(1.3)	8.2	—	7.2	1.0
Derivative contract liabilities (4)	—	—	(26.6)	(26.6)	—	(26.6)	—
Total	$ 1,080.2	$ 17.0	$ (29.2)	$ 1,068.0	$ 392.1	$ 667.1	$ 8.8

(1) Included in “Cash and cash equivalents” in the accompanying Consolidated Balance Sheets.
(2) Considered "available for sale" securities and included in "Other assets" in the accompanying Consolidated Balance Sheets.
(3) Included in “Prepaid expenses and other current assets,” "Other assets," or “Other accrued liabilities” in the accompanying Consolidated Balance Sheets.
(4) Included in “Other accrued liabilities” in the accompanying Consolidated Balance Sheets.

Autodesk classifies its marketable securities as either short-term or long-term based on each instrument’s underlying contractual maturity date. Generally marketable securities with remaining maturities of less than 12 months are classified as short-term and marketable securities with remaining maturities greater than 12 months are classified as long-term. Autodesk may sell certain of its marketable securities prior to their stated maturities for strategic purposes or in anticipation of credit deterioration.

Autodesk applies fair value accounting for certain financial assets and liabilities, which consist of cash equivalents, marketable securities, and other financial instruments, on a recurring basis. The Company defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Fair value is estimated by applying the following hierarchy, which prioritizes the inputs used to measure fair value into three levels and bases the categorization within the hierarchy upon the lowest level of input that is available and significant to the fair value measurement: (Level 1) observable inputs such as quoted prices in active markets; (Level 2) inputs other than quoted prices in active markets for identical assets and 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; and (Level 3) unobservable inputs for which there is little or no market data, which require Autodesk to develop its own assumptions. When determining fair value, Autodesk uses observable market data and relies on unobservable inputs only when observable market data is not available. Autodesk reviews for any potential changes on a quarterly basis, in conjunction with our fiscal quarter-end close.

Autodesk's cash equivalents, marketable securities, and financial instruments are primarily classified within Level 1 or Level 2 of the fair value hierarchy. Autodesk values its securities on pricing from pricing vendors, who may use quoted prices in active markets for identical assets (Level 1) or inputs other than quoted prices that are observable either directly or indirectly in determining fair value (Level 2). Autodesk's Level 2 securities are valued primarily using observable inputs other than quoted prices in active markets for identical assets and liabilities. Autodesk's Level 3 securities consist of investments held in convertible debt securities, and derivative contracts.

A reconciliation of the change in Autodesk’s Level 3 items for the fiscal year ended January 31, 2019 was as follows:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)		
	Derivative Contracts	**Convertible Debt Securities**	**Total**
Balances, January 31, 2018	$ 1.0	$ 7.8	$ 8.8
Settlements	—	(3.5)	(3.5)
(Losses) Gains included in earnings (1)	(0.2)	0.5	0.3
Losses included in OCI	—	(0.4)	(0.4)
Balances, January 31, 2019	$ 0.8	$ 4.4	$ 5.2

(1) Included in “Interest and other expense, net” in the accompanying Consolidated Statements of Operations.

The following table summarizes the estimated fair value of Autodesk's “available-for-sale securities” classified by the contractual maturity date of the security:

	January 31, 2019	
	Cost	**Fair Value**
Due within 1 year	$ 10.8	$ 11.7
Total	$ 10.8	$ 11.7

As of January 31, 2019 and 2018, Autodesk had no securities, individually and in the aggregate, in a continuous unrealized loss position for greater than twelve months.

The sales or redemptions of “available-for-sale securities” in fiscal 2019 and 2018 resulted in a loss of $1.3 million and $0.3 million, respectively, and a gain of $1.5 million in 2017. The loss and gains were recorded in "Interest and other expense, net" on the Company's Consolidated Statements of Operations.

Proceeds from the sale and maturity of marketable securities for fiscal 2019 and fiscal 2018 were $531.0 million and $1.08 billion, respectively.

Non-marketable equity securities

As of January 31, 2019 and 2018, Autodesk had $111.6 million and $112.3 million, respectively, in direct investments in privately held companies. These non-marketable equity securities investments do not have readily determined fair value and with the adoption of ASU No. 2016-01 during the first quarter of fiscal 2019, Autodesk elected to use the measurement alternative to account for the adjustment of these investments in a given quarter. See "Note 1, "Business and Summary of Significant Accounting Policies" for more details of the adoption.

Under the measurement alternative method, these investments are measured at cost, less any impairments, plus or minus changes resulting from observable price changes in orderly transactions for the identical or similar investment of the same issuer in the current period. To determine if a transaction is for a similar investment, Autodesk considers the rights and obligations between the investments and the extent to which those differences would affect the fair values of those investments with additional consideration for the stage of development of the investee company. The fair value would then be adjusted positively or negatively based on available information such as pricing in recent rounds of financing. During the fiscal year ended January 31, 2019, Autodesk recorded $6.2 million as a positive adjustment on certain of its privately held investments, reflected as a gain in "Interest and other income (expense), net" on the Company's Consolidated Statement of Operations.

Non-marketable equity securities investments are periodically assessed for impairment based on available information such as current cash positions, earnings and cash flow positions, earnings and cash flow forecasts, recent operational performance and any other readily available market data. Autodesk does not intend to sell these investments and it is not more likely than not that Autodesk will be required to sell the investment before recovery of the cost basis. If Autodesk determines that an impairment has occurred, Autodesk writes down the investment to its fair value. During fiscal 2019, fiscal 2018 and fiscal 2017, Autodesk recorded $4.8 million, $15.5 million and $1.3 million, respectively, in impairments on its privately held investments, reflected as a loss in "Interest and other expense, net" on the Company's Consolidated Statements of Operations. Autodesk does not consider the remaining investments to be impaired at January 31, 2019.

Derivative Financial Instruments

Under its risk management strategy, Autodesk uses derivative instruments to manage its short-term exposures to fluctuations in foreign currency exchange rates which exist as part of ongoing business operations. Autodesk's general practice is to hedge a portion of transaction exposures denominated in euros, Japanese yen, Swiss francs, British pounds, Canadian dollars, Australian dollars, Singapore dollars, Swiss francs Swedish krona, and Czech krona. These instruments have maturities between one and twelve months in the future. Autodesk does not enter into derivative instrument transactions for trading or speculative purposes.

The bank counterparties to the derivative contracts potentially expose Autodesk to credit-related losses in the event of their nonperformance. However, to mitigate that risk, Autodesk only contracts with counterparties who meet the Company's minimum requirements under its counterparty risk assessment process. Autodesk monitors counterparty risk on at least a quarterly basis and will adjust its exposure to various counterparties as necessary. Autodesk generally enters into master netting arrangements, which reduce credit risk by permitting net settlement of transactions with the same counterparty. However, Autodesk does not have any master netting arrangements in place with collateral features.

Foreign currency contracts designated as cash flow hedges

Autodesk uses foreign currency contracts to reduce the exchange rate impact on a portion of the net revenue or operating expense of certain anticipated transactions. These contracts are designated and documented as cash flow hedges. The effectiveness of the cash flow hedge contracts is assessed quarterly using regression analysis as well as other timing and probability criteria. To receive cash flow hedge accounting treatment, all hedging relationships are formally documented at the inception of the hedge and the hedges are expected to be highly effective in offsetting changes to future cash flows on hedged transactions. The gross gains and losses on these hedges are included in “Accumulated other comprehensive loss” and are reclassified into earnings at the time the forecasted revenue or expense is recognized. In the event the underlying forecasted transaction does not occur, or it becomes probable that it will not occur, Autodesk reclassifies the gain or loss on the related cash flow hedge from “Accumulated other comprehensive loss” to “Interest and other expense, net” in the Company's Consolidated Financial Statements at that time.

The notional amounts of these contracts are presented net settled and were $803.5 million at January 31, 2019, and $619.9 million at January 31, 2018. Outstanding contracts are recognized as either assets or liabilities on the balance sheet at fair value. The majority of the net gain of $15.0 million remaining in "Accumulated other comprehensive loss" as of January 31, 2019, is expected to be recognized into earnings within the next twelve months.

Derivatives not designated as hedging instruments

Autodesk uses foreign currency contracts that are not designated as hedging instruments to reduce the exchange rate risk associated primarily with foreign currency denominated receivables, payables, and cash. These forward contracts are marked-to-market at the end of each month with gains and losses recognized as "Interest and other expense, net." These derivative instruments do not subject the Company to material balance sheet risk due to exchange rate movements because gains and losses on these derivative instruments are intended to offset the gains or losses resulting from the revaluation and settlement of the underlying foreign currency denominated receivables, payables, and cash. The notional amounts of these foreign currency contracts are presented net settled and were $579.8 million at January 31, 2019, and $329.6 million at January 31, 2018.

In addition to these foreign currency contracts, Autodesk holds derivative instruments issued by privately held companies, which are not designated as hedging instruments. These derivatives consist of certain conversion options on the convertible debt securities held by Autodesk and an option to acquire a privately held company. These derivatives are recorded at fair value as of each balance sheet date and are recorded in "Other assets." Changes in the fair values of these instruments are recognized in "Interest and other expense, net."

Fair Value of Derivative Instruments:

The fair value of derivative instruments in Autodesk's Consolidated Balance Sheets were as follows as of January 31, 2019, and January 31, 2018:

		Fair Value at	
	Balance Sheet Location	**January 31, 2019**	**January 31, 2018**
Derivative Assets			
Foreign currency contracts designated as cash flow hedges	Prepaid expenses and other current assets	$ 4.3	$ 6.2
Derivatives not designated as hedging instruments	Prepaid expenses and other current assets and Other assets	4.2	2.0
Total derivative assets		$ 8.5	$ 8.2
Derivative Liabilities			
Foreign currency contracts designated as cash flow hedges	Other accrued liabilities	$ 3.3	$ 18.7
Derivatives not designated as hedging instruments	Other accrued liabilities	4.1	7.9
Total derivative liabilities		$ 7.4	$ 26.6

The effects of derivatives designated as hedging instruments on Autodesk's Consolidated Statements of Operations were as follows for the fiscal years ended January 31, 2019, 2018, and 2017, respectively (amounts presented include any income tax effects):

	Foreign Currency Contracts		
	Fiscal Year Ended January 31,		
	2019	2018	2017
Amount of gain (loss) recognized in accumulated other comprehensive loss on derivatives (effective portion)	$ 19.6	$ (21.3)	$ 6.3
Amount and location of (loss) gain reclassified from accumulated other comprehensive loss into (loss) income (effective portion)			
Net revenue	$ (8.5)	$ 8.0	$ 9.2
Operating expenses	(3.6)	1.9	(1.8)
Total	$ (12.1)	$ 9.9	$ 7.4
Amount and location of gain (loss) recognized in income (loss) on derivatives (ineffective portion and amount excluded from effectiveness testing)			
Interest and other expense, net	$ 0.2	$ (0.2)	$ (0.3)

The effects of derivatives not designated as hedging instruments on Autodesk's Consolidated Statements of Operations were as follows for the fiscal years ended January 31, 2019, 2018, and 2017, respectively (amounts presented include any income tax effects):

	Fiscal Year Ended January 31,		
	2019	2018	2017
Amount and location of loss recognized in loss (income) on derivatives			
Interest and other expense, net	$ 6.6	$ (19.1)	$ (11.1)

4. Employee and Director Stock Plans

Stock Plans

As of January 31, 2019, Autodesk maintained four active stock plans for the purpose of granting equity awards to employees and to non-employee members of Autodesk's Board of Directors: the 2012 Employee Stock Plan (as amended, the "2012 Employee Plan"), which is available only to employees, the Autodesk 2012 Outside Directors' Stock Plan ("2012 Directors' Plan"), which is available only to non-employee directors, the PlanGrid 2012 Equity Incentive Plan ("PlanGrid 2012 Plan"), which is available to employees who held outstanding unvested options and restricted stock units that were assumed as part of our acquisition of PlanGrid, Inc. and the BuildingConnected, Inc. 2013 Stock Plan ("BuildingConnected 2013 Plan"), which is available to employees who held outstanding unvested options that were assumed as part of our acquisition of BuildingConnected, Inc. Additionally, there is one terminated plan with options outstanding.

The 2012 Employee Plan was approved by Autodesk's stockholders and became effective on January 6, 2012. Since the 2012 Stock Plan was adopted by stockholders in January 2012, Autodesk has received stockholder approval to increase the number of shares subject to the plan by 36.1 million shares. The 2012 Employee Plan replaced the 2008 Employee Stock Plan, as amended ("2008 Plan"), and no further equity awards may be granted under the 2008 Plan. The 2012 Employee Plan reserves up to 57.3 million shares which includes 51.3 million shares reserved under the 2012 Employee Plan, as well as up to 6.0 million shares forfeited under certain prior employee stock plans during the life of the 2012 Employee Plan. The 2012 Employee Plan permits the grant of stock options, restricted stock units, and restricted stock awards. Each restricted stock unit or restricted stock award granted will be counted against the shares authorized for issuance under the 2012 Employee Plan as 1.79 shares. If a granted option, restricted stock unit, or restricted stock award expires or becomes unexercisable for any reason, the unpurchased or forfeited shares that were granted may be returned to the 2012 Employee Plan and may become available for future grant under the 2012 Employee Plan. As of January 31, 2019, 45.0 million shares subject to options or restricted stock awards have been granted under the 2012 Employee Plan. Options and restricted stock that were granted under the 2012 Employee Plan vest over periods ranging from immediately upon grant to over a three year period and options expire 10 years from the date of grant. The 2012 Employee Plan will expire on June 30, 2022. At January 31, 2019, 18.6 million shares were available for future issuance under the 2012 Employee Plan.

The 2012 Directors' Plan was approved by Autodesk's stockholders and became effective on January 6, 2012. The 2012 Directors' Plan replaced the 2010 Outside Directors' Stock Plan, as amended ("2010 Plan"). The 2012 Directors' Plan permits the grant of stock options, restricted stock units, and restricted stock awards to non-employee members of Autodesk’s Board of Directors. Each restricted stock unit or restricted stock award granted will be counted against the shares authorized for issuance under the 2012 Directors' Plan as 2.11 shares. As of January 31, 2019, 0.9 million shares subject to restricted stock unit awards have been granted under the 2012 Directors' Plan. Restricted stock units that were granted under the 2012 Outside Directors' Plan vest over one to three years from the date of grant. On March 12, 2015, the Board reduced the number of shares reserved for issuance under the 2012 Directors' Plan by 0.9 million shares, so that 1.7 million shares are now reserved for issuance under the 2012 Directors' Plan. The 2012 Directors' Plan will expire on June 30, 2022. At January 31, 2019, 0.8 million shares were available for future issuance under the 2012 Director's Plan.

Pursuant to the PlanGrid acquisition on December 19, 2018, the Company assumed the unvested options and restricted stock units under the PlanGrid 2012 Plan. No further equity awards will be granted under the PlanGrid 2012 Plan. As of January 31, 2019, 0.6 million shares subject to options remain outstanding under the PlanGrid 2012 Plan. Options that were granted under the PlanGrid 2012 Plan vest over a four year period and expire 10 years from the date of grant. The PlanGrid 2012 Plan will expire on June 18, 2022.

Pursuant to the BuildingConnected acquisition on January 23, 2019, the Company assumed the unvested options under the BuildingConnected 2013 Plan. No further equity awards will be granted under the BuildingConnected 2013 Plan. As of January 31, 2019, 0.1 million shares subject to options remain outstanding under the BuildingConnected 2013 Plan. Options that were granted under the BuildingConnected 2013 Plan vest over a four year period and expire 10 years from the date of grant. The BuildingConnected 2013 Plan will expire on May 6, 2023.

The following sections summarize activity under Autodesk’s stock plans.

Stock Options:

A summary of stock option activity for the fiscal year ended January 31, 2019 is as follows:

	Number of Shares (in millions)	Weighted average exercise price per share	Weighted average remaining contractual term (in years)	Aggregate Intrinsic Value (1) (in millions)
Options outstanding at January 31, 2018	0.2	$ 40.49		
Assumed from acquisitions	0.7	20.82		
Granted	—	—		
Exercised	(0.1)	37.64		
Canceled/Forfeited	—	—		
Options vested, exercisable and outstanding at January 31, 2019	0.8	$ 23.95	7.7	$ 100.7
Options vested and exercisable at January 31, 2019	0.2	$ 37.10	2.6	$ 17.2
Options vested and exercisable as of January 31, 2019 and expected to vest thereafter	0.8	$ 23.95	7.7	$ 100.7
Shares available for grant at January 31, 2019	19.4			

(1) Represents the total pre-tax intrinsic value, based on Autodesk’s closing stock price of $147.20 per share as of January 31, 2019.

As of January 31, 2019, compensation cost of $66.5 million related to non-vested stock options is expected to be recognized over a weighted average period of 2.8 years.

The following table summarizes information about the pre-tax intrinsic value of options exercised and the weighted average grant date fair value per share of options granted during the fiscal years ended January 31, 2019, 2018, and 2017:

	Fiscal year ended January 31,		
	2019	2018	2017
Pre-tax intrinsic value of options exercised (1)	$ 9.7	$ 22.8	$ 32.0
Weighted average grant date fair value per share of stock options assumed from acquisition	$ 110.40	$ —	$ —

(1) The intrinsic value of options exercised is calculated as the difference between the exercise price of the option and the market value of the stock on the date of exercise.

The following table summarizes information about options vested and exercisable, and outstanding at January 31, 2019:

	Options Vested and Exercisable				Options Outstanding			
	Number of Shares (in thousands)	Weighted average contractual life (in years)	Weighted average exercise price per share	Aggregate intrinsic value (in millions)	Number of Shares (in thousands)	Weighted average contractual life (in years)	Weighted average exercise price per share	Aggregate intrinsic value (in millions)
Range of per-share exercise prices:								
$2.90 - $16.12	2.6		$ 9.51		122.7		$ 14.62	
$19.32 - $20.65	5.4		20.03		85.7		20.19	
$21.13 - $21.13	2.8		21.13		292.9		21.13	
$21.32 - $21.32	11.7		21.32		85.1		21.32	
$22.17 - $31.88	8.5		25.58		105.3		27.50	
$32.58 - $33.92	4.0		33.82		4.0		33.82	
$36.06 - $36.06	2.5		36.06		2.5		36.06	
$36.44 - $36.44	5.2		36.44		5.2		36.44	
$38.55 - $38.55	1.4		38.55		1.4		38.55	
$41.62 - $41.62	112.3		41.62		112.3		41.62	
	156.4	2.6	$ 37.10	$ 17.2	817.1	7.7	$ 23.95	$ 100.7

These options will expire if not exercised at specific dates ranging through October 2028.

Restricted Stock Units:

A summary of restricted stock activity for the fiscal year ended January 31, 2019 is as follows:

	Unreleased Restricted Stock Units (in thousands)	Weighted average grant date fair value per share
Unvested restricted stock at January 31, 2018	5,670.7	$ 82.94
Granted	2,250.7	144.37
Vested	(2,982.0)	76.30
Canceled/Forfeited	(681.9)	94.70
Performance Adjustment (1)	29.9	101.74
Unvested restricted stock at January 31, 2019	4,287.4	$ 120.07

(1) Based on Autodesk's financial results and relative total stockholder return for the fiscal 2018 performance period. The performance stock units were attained at rates ranging from 90.0% to 117.6% of the target award.

For the restricted stock granted during fiscal years ended January 31, 2019, 2018, and 2017, the weighted average grant date fair values were $144.37, $106.55, and $65.95, respectively. The fair values of the shares vested during fiscal years ended January 31, 2019, 2018, and 2017 were $425.4 million, $399.7 million, and $232.2 million, respectively.

During the fiscal year ended January 31, 2019, Autodesk granted 2.1 million restricted stock units. Restricted stock units vest over periods ranging from immediately upon grant to a pre-determined date that is typically within three years from the date of grant. Restricted stock units are not considered outstanding stock at the time of grant, as the holders of these units are not entitled to any of the rights of a stockholder, including voting rights. The fair value of the restricted stock units is expensed ratably over the vesting period. Autodesk recorded stock-based compensation expense related to restricted stock units of $189.3 million, $202.1 million, and $173.0 million during fiscal years ended January 31, 2019, 2018, and 2017, respectively. As of January 31, 2019, total compensation cost not yet recognized of $364.5 million related to non-vested awards is expected to be recognized over a weighted average period of 1.76 years. At January 31, 2019, the number of restricted stock units granted but unvested was 3.9 million.

During the fiscal year ended January 31, 2019, Autodesk granted 0.2 million performance stock units for which the ultimate number of shares earned is determined based on the achievement of performance criteria at the end of the stated service and performance period. The performance criteria for the performance stock units are based on Annualized Recurring Revenue ("ARR") and free cash flow per share goals adopted by the Compensation and Human Resources Committee, as well as total stockholder return compared against companies in the S&P Computer Software Select Index or the S&P North American Technology Software Index ("Relative TSR"). These performance stock units vest over a three-year period and have the following vesting schedule:

- Up to one third of the performance stock units may vest following year one, depending upon the achievement of the performance criteria for fiscal 2019 as well as 1-year Relative TSR (covering year one).
- Up to one third of the performance stock units may vest following year two, depending upon the achievement of the performance criteria for year two as well as 2-year Relative TSR (covering years one and two).
- Up to one third of the performance stock units may vest following year three, depending upon the achievement of the performance criteria for year three as well as 3-year Relative TSR (covering years one, two and three).

Performance stock units are not considered outstanding stock at the time of grant, as the holders of these units are not entitled to any of the rights of a stockholder, including voting rights. Autodesk has determined the grant-date fair value for these awards using the stock price on the date of grant or if the awards are subject to a market condition, a Monte Carlo simulation model. The fair value of the performance stock units is expensed using the accelerated attribution over the vesting period. Autodesk recorded stock-based compensation expense related to performance stock units of $28.6 million, $33.7 million, and $22.9 million during fiscal years ended January 31, 2019, 2018, and 2017 respectively. As of January 31, 2019, total compensation cost not yet recognized of $5.6 million related to unvested performance stock units, is expected to be recognized over a weighted average period of 0.81 years. At January 31, 2019, the number of performance stock units granted but unvested was 0.4 million.

1998 Employee Qualified Stock Purchase Plan (“ESPP”)

Under Autodesk’s ESPP, which was approved by stockholders in 1998, eligible employees may purchase shares of Autodesk’s common stock at their discretion using up to 15% of their eligible compensation, subject to certain limitations, at 85% of the lower of Autodesk's closing price (fair market value) on the offering date or the exercise date. The offering period for ESPP awards consists of four, six-month exercise periods within a 24-month offering period.

At January 31, 2019, a total of 8.1 million shares were available for future issuance. Under the ESPP, the Company issues shares on the first trading day following March 31 and September 30 of each fiscal year. The ESPP does not have an expiration date.

A summary of the ESPP activity for the fiscal years ended January 31, 2019, 2018 and 2017 is as follows:

	Fiscal year ended January 31,		
	2019	**2018**	**2017**
Issued shares	1.0	2.0	2.3
Average price of issued shares	$ 90.25	$ 39.03	$ 36.99
Weighted average grant date fair value of awards granted under the ESPP	$ 42.75	$ 32.41	$ 19.20

Autodesk recorded $27.2 million, $25.7 million, and $25.9 million of compensation expense associated with the ESPP in fiscal 2019, 2018, and 2017, respectively.

Equity Compensation Plan Information

The following table summarizes the number of outstanding options and awards granted to employees and directors, as well as the number of securities remaining available for future issuance under these plans as of January 31, 2019:

Plan category	(a) Number of securities to be issued upon exercise or vesting of outstanding options and awards (in millions)	(b) Weighted-average exercise price of outstanding options	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (in millions)
Equity compensation plans approved by security holders	5.1	$ 23.95	27.6 (1)
Total	5.1	$ 23.95	27.6

(1) Included in this amount are 8.1 million securities available for future issuance under Autodesk's ESPP.

5. Income Taxes

The provision for income taxes consists of the following:

	Fiscal year ended January 31,		
	2019	2018	2017
Federal:			
Current	$ (13.3)	$ (0.8)	$ 1.6
Deferred	(6.7)	(19.3)	8.4
State:			
Current	(1.8)	(0.3)	(1.9)
Deferred	0.1	2.2	1.3
Foreign:			
Current	65.3	50.9	93.9
Deferred	(5.5)	(23.1)	(45.0)
	$ 38.1	$ 9.6	$ 58.3

Foreign pretax (loss) income was $181.4 million in fiscal 2019, $(76.2) million in fiscal 2018, and $(27.6) million in fiscal 2017.

The differences between the U.S. statutory rate and the aggregate income tax provision are as follows:

	Fiscal year ended January 31,		
	2019	2018	2017
Income tax provision (benefit) at U.S. Federal statutory rate	$ (9.0)	$ (188.4)	$ (177.0)
State income tax benefit, net of the U.S. Federal benefit	(11.4)	(21.9)	(17.3)
Foreign income taxed at rates different from the U.S. statutory rate	117.8	(53.3)	22.3
U.S. valuation allowance	18.8	(82.5)	233.0
Transition tax	(16.0)	408.4	—
Increase in attributes due to ASU 2016-9 adoption	—	—	(119.4)
Change in valuation allowance from ASU 2016-9 adoption	—	—	119.4
Tax effect of non-deductible stock-based compensation	7.6	20.7	18.8
Stock compensation windfall / shortfall	(39.4)	(67.7)	(23.0)
Research and development tax credit benefit	(23.5)	(11.3)	(10.3)
Closure of income tax audits and changes in uncertain tax positions	(12.7)	1.2	8.2
Tax effect of officer compensation in excess of $1.0 million	5.0	2.2	2.2
Non-deductible expenses	1.5	2.1	2.0
Other	(0.6)	0.1	(0.6)
	$ 38.1	$ 9.6	$ 58.3

Significant components of Autodesk’s deferred tax assets and liabilities are as follows:

	January 31,	
	2019	2018
Stock-based compensation	$ 25.9	$ 26.7
Research and development tax credit carryforwards	238.7	170.3
Foreign tax credit carryforwards	198.6	162.2
Accrued compensation and benefits	6.5	25.9
Other accruals not currently deductible for tax	19.0	22.9
Purchased technology and capitalized software	32.6	43.4
Fixed assets	15.0	16.5
Tax loss carryforwards	237.2	85.7
Deferred revenue	49.0	120.3
Other	28.4	32.4
Total deferred tax assets	850.9	706.3
Less: valuation allowance	(797.8)	(634.2)
Net deferred tax assets	53.1	72.1
Indefinite lived intangibles	(67.6)	(57.0)
Total deferred tax liabilities	(67.6)	(57.0)
Net deferred tax assets (liabilities)	$ (14.5)	$ 15.1

Autodesk’s tax expense is primarily driven by tax expense in foreign locations, withholding taxes on payments made to the U.S. from foreign sources, and tax amortization on indefinite-lived intangibles offset by a tax benefit resulting from release of uncertain tax positions upon finalization of IRS examination and release of valuation allowance from acquired deferred tax liabilities.

Autodesk regularly assesses the need for a valuation allowance against its deferred tax assets. In making that assessment, Autodesk considers both positive and negative evidence, whether it is more likely than not that some or all of the deferred tax assets will not be realized. In evaluating the need for a valuation allowance, Autodesk considered cumulative losses arising from the Company's business model transition as a significant piece of negative evidence. Consequently, Autodesk determined that a valuation allowance was required on the accumulated U.S., Canada and Singapore tax attributes. In the current year, the U.S. created incremental deferred tax assets, primarily operating losses, foreign tax and R&D credits, Singapore generated operating losses and Canada generated R&D credits. These U.S. and Singapore deferred tax attributes have been offset by a full valuation allowance. The valuation allowance increased by $163.6 million in fiscal 2019 primarily due to the generation of deferred tax attributes. The valuation allowance decreased by $113.8 million, and increased $352.4 million in fiscal 2018, and 2017, respectively, primarily related to U.S. Tax Act reduction in rate in fiscal 2018 and U.S. and Canadian deferred tax attributes generated in fiscal 2017. As Autodesk continually strives to optimize the overall business model, tax planning strategies may become feasible and prudent allowing the Company to realize many of the deferred tax assets that are offset by a valuation allowance; therefore, Autodesk will continue to evaluate the ability to utilize the net deferred tax assets each quarter, both in the U.S. and in foreign jurisdictions, based on all available evidence, both positive and negative.

The Tax Act was signed into law on December 22, 2017 and provided broad and significant changes to the U.S. corporate income tax regime. In light of our fiscal year-end, the Tax Act reduced the statutory federal corporate rate from 35% to 33.81% for fiscal 2018 and to 21% for fiscal 2019 and forward. The Tax Act also, among many other provisions, imposed a one-time mandatory tax on accumulated earnings of foreign subsidiaries (commonly referred to as the "transition tax"), subjected the deemed intangible income of our foreign subsidiaries to current U.S. taxation (commonly referred to as "GILTI"), provided for a full dividends received deduction upon repatriation of untaxed earnings of our foreign subsidiaries, imposed a minimum taxation (without most tax credits) on modified taxable income, which is generally taxable income without deductions for payments to related foreign companies (commonly referred to as “BEAT”), modified the accelerated depreciation deduction rules, and made updates to the deductibility of certain expenses. We have completed our determination of the accounting implications of the Tax Act on our tax accruals.

We recorded a tax benefit of the Tax Act in our financial statements as of January 31, 2018 of approximately $32.3 million mainly driven by the corporate rate remeasurement of the indefinite-lived intangible deferred tax liability.

As of January 31, 2018, we estimated taxable income associated with offshore earnings of $831.5 million, and as of January 31, 2019, we adjusted the taxable income to $819.6 million to reflect the impact of Treasury Regulations issued in the fourth quarter of fiscal 2019. Transition tax related to adjustments in the offshore earnings resulted in no impact to the effective tax rate as it is primarily offset by net operating losses that are subject to a full valuation allowance. As a result of the transition tax, we recorded a deferred tax asset of approximately $45.1 million for foreign tax credits, which are also subject to a full valuation allowance.

We are subject to GILTI in fiscal 2019, primarily offset by current year operating losses, resulting in no impact to the effective tax rate.

We anticipate that the U.S. Department of Treasury and other standard-setting bodies will continue to interpret or issue guidance on how provisions of the Tax Act will be applied or otherwise administered. As future guidance is issued, we may make adjustments to amounts that we have previously recorded that may materially impact our financial statements in the period in which the adjustments are made.

Realization of foreign non-current net deferred tax assets of $54.3 million is dependent upon the Company's ability to generate future taxable income in appropriate tax jurisdictions to obtain benefit from the reversal of temporary differences, net operating loss carryforwards and tax credits. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income are reduced and Autodesk then determines that it is not more likely than not to realize such deferred tax assets.

As of January 31, 2019, Autodesk had $531.4 million of cumulative federal tax loss carryforwards and $1,465.7 million of cumulative state tax loss carryforwards, which may be available to reduce future income tax liabilities in federal and state jurisdictions. In addition to U.S. federal and state tax loss carryforwards, Ireland, Netherlands, and Singapore jurisdictions incurred federal tax losses totaling $521.8 million, which may be available to reduce future income tax liabilities indefinitely. As discussed above, with the exception of our Irish losses, of $238.8 million, these cumulative assets have full valuation allowance against them on our balance sheet as the Company has determined it is more likely than not that these losses will not be utilized. The pre-fiscal 2019 federal tax loss carryforward will expire beginning fiscal 2021 through fiscal 2038. Federal losses generated in fiscal 2019 do not have an expiration pursuant to the Tax Act and are carried forward indefinitely. The state tax loss carryforward will expire beginning fiscal 2020 through fiscal 2040.

As of January 31, 2019, Autodesk had $164.9 million of cumulative federal research tax credit carryforwards, $68.8 million of cumulative California state research tax credit carryforwards, and $59.0 million of cumulative Canadian federal tax credit carryforwards, which may be available to reduce future income tax liabilities in the respective jurisdictions. The federal tax credit carryforwards will expire beginning fiscal 2021 through fiscal 2040, the state credit carryforwards may reduce future California income tax liabilities indefinitely, and the Canadian tax credit carryforwards will expire beginning fiscal 2027 through fiscal 2040. Autodesk also has $242.4 million of cumulative foreign tax credit carryforwards, which may be available to reduce future U. S. tax liabilities. The foreign tax credit will expire beginning fiscal 2020 through fiscal 2030. As discussed above, these cumulative assets have full valuation allowance against them on our balance sheet as the Company has determined it is more likely than not that these losses will not be utilized.

Utilization of net operating losses and tax credits may be subject to an annual limitation due to ownership change limitations provided in the Internal Revenue Code and similar state provisions. This annual limitation may result in the expiration of net operating losses and credits before utilization. No ownership change has occurred through the balance sheet date that would limit a material amount of U.S. federal and state tax attributes.

As of January 31, 2019, the Company had $209.0 million of gross unrecognized tax benefits, of which $190.6 million would reduce our valuation allowance, if recognized. The remaining $18.4 million would impact the effective tax rate.

It is possible that the amount of unrecognized tax benefits will change in the next twelve months; however, an estimate of the range of the possible change cannot be made at this time.

A reconciliation of the beginning and ending amount of the gross unrecognized tax benefits is as follows:

	Fiscal Year Ended January 31,		
	2019	**2018**	**2017**
Gross unrecognized tax benefits at the beginning of the fiscal year	$ 337.6	$ 261.4	$ 254.3
Increases for tax positions of prior years	7.9	22.8	11.9
Decreases for tax positions of prior years	(146.3)	(22.5)	(4.1)
Increases for tax positions related to the current year	10.3	78.4	11.1
Decreases relating to settlements with taxing authorities	—	(0.8)	(10.8)
Reductions as a result of lapse of the statute of limitations	(0.5)	(1.7)	(1.0)
Gross unrecognized tax benefits at the end of the fiscal year	$ 209.0	$ 337.6	$ 261.4

It is the Company's continuing practice to recognize interest and/or penalties related to income tax matters in income tax expense. Autodesk had $3.1 million, $2.8 million, and $2.5 million, net of tax benefit, accrued for interest and penalties related to unrecognized tax benefits as of January 31, 2019, 2018, and 2017, respectively. There was $0.3 million, $0.3 million, and $1.5 million of net expense for interest and penalties related to tax matters recorded through the consolidated statements of operations for the years ended January 31, 2019, 2018, and 2017, respectively.

Autodesk's U.S. and state income tax returns for fiscal year 2003 through fiscal year 2019 remain open to examination due to either net operating loss or credit carryforward. The Internal Revenue Service has examined the Company's U.S. consolidated federal income tax returns for fiscal years 2014 and 2015. This audit was finalized on January 31, 2019 and impacts from the finalization of the audit were recorded in the January 31, 2019 financial statements. While it is possible that the Company's tax positions may be challenged, the Company believes its positions are consistent with the tax law, and the balance sheet reflects appropriate liabilities for uncertain federal tax positions for the years being examined.

Autodesk files tax returns in multiple foreign taxing jurisdictions with open tax years ranging from fiscal year 2005 to 2019.

As a result of certain business and employment actions and capital investments undertaken by Autodesk, income earned in certain Europe and Asia Pacific countries is subject to reduced tax rates through fiscal 2019. In fiscal 2019, the Company incurred $11.4 million net benefit ($0.05 basic net income per share) from the tax status of these business arrangements, compared to zero benefit in fiscal 2018, and $27.1 million ($0.12 basic net income per share) in fiscal 2017.

6. Acquisitions

During the fiscal years ended January 31, 2019, and January 31, 2018, Autodesk completed the business combinations described below. The results of operations for the following acquisitions are included in the accompanying Consolidated Statements of Operations since their respective acquisition dates. Pro forma results of operations have been presented for acquisitions that were material to Autodesk's Consolidated Financial Statements. The adoption of ASU No. 2017-01 in the first quarter of fiscal 2019 did not impact the accounting for these acquisitions.

Fiscal 2019 Acquisitions

BuildingConnected, Inc.

On January 23, 2019, Autodesk acquired BuildingConnected, Inc. ("BuildingConnected"). BuildingConnected is a leading provider of construction bid-management software and this acquisition is expected to enable Autodesk to offer a more comprehensive construction workflow.

The acquisition-date fair value of the consideration transferred totaled $253.2 million, which consisted of $248.1 million of cash, and $5.1 million attributable to the fair value of equity awards related to pre-combination services. Under the terms of the merger agreement, Autodesk was obligated to replace BuilidingConnected's unvested options with 116,279 Autodesk options.

PlanGrid, Inc.

On December 19, 2018, Autodesk acquired PlanGrid, Inc. ("PlanGrid"). PlanGrid is a leading provider of construction productivity software and this acquisition is expected to enable Autodesk to offer a more comprehensive, cloud-based construction platform.

The acquisition-date fair value of the consideration transferred totaled $777.6 million, which consisted of $772.4 million of cash and $5.2 million attributed to the fair value of assumed PlanGrid equity awards for pre-combination services. Under the terms of the merger agreement, Autodesk was obligated to replace PlanGrid's unvested options and restricted stock awards with 602,051 Autodesk options and 41,069 Autodesk RSUs. Autodesk entered in to a term loan agreement in the aggregate principal amount of $500.0 million to fund a portion of the purchase. See Note 8, "Borrowing Arrangements" for more information.

Assemble Systems, Inc.

On July 3, 2018, Autodesk acquired Assemble Systems, Inc. ("Assemble Systems"). Assemble Systems is a provider of software solutions that enable construction professionals to influence, query and connect BIM data to key workflows across bid management, estimating, scheduling, site management and finance. Over time, Assemble Systems' software solution will be integrated with Autodesk's BIM 360 project management platform.

The acquisition-date fair value of the consideration transferred totaled $93.6 million, which consisted of $38.2 million of cash, $44.8 million of Autodesk common stock (340,769 shares) and ascribed a value of $10.6 million to Autodesk's existing equity interest in Assemble Systems.

Prior to the acquisition date, Autodesk accounted for its approximate 14% equity interest in Assemble Systems as a cost-method investment. The acquisition-date fair value of Autodesk's existing equity interest was $10.6 million and is included in the measurement of the consideration transferred. Autodesk recognized a gain of $4.6 million as a result of remeasuring its prior equity interest in Assemble Systems held before the business combination using a control premium to calculate a discount for lack of control. The gain is included in “Interest and other expense, net” in the Consolidated Statements of Operations.

Preliminary Purchase Price Allocation

For the Assemble Systems, PlanGrid, and BuildingConnected acquisitions that were accounted for as business combinations, Autodesk recorded the tangible and intangible assets acquired and liabilities assumed based on their estimated fair values at the date of acquisition. The fair values assigned to the identifiable intangible assets acquired were based on estimates and assumptions determined by management. Autodesk recorded the excess of consideration transferred over the aggregate fair values as goodwill. The goodwill recorded is primarily attributable to synergies expected to arise after the acquisition. There is no amount of goodwill that is deductible for U.S. income tax purposes.

The following table summarizes the fair value of the assets acquired and liabilities assumed by major class for the business combinations that were completed during the fiscal year ended January 31, 2019:

	Assemble Systems (1)	PlanGrid	BuildingConnected	Total
Developed technologies	$ 4.4	$ 78.0	$ 12.5	$ 94.9
Customer relationships and other non-current intangible assets	12.0	98.0	26.9	136.9
Trade name	2.8	20.0	6.8	29.6
Goodwill	72.0	588.7	206.3	867.0
Deferred revenue (current and non-current)	(1.7)	(25.5)	(2.8)	(30.0)
Net tangible assets	4.1	18.4	3.5	26.0
Total	$ 93.6	$ 777.6	$ 253.2	$ 1,124.4

(1) During Q4 of fiscal 2019, Autodesk recorded a measurement period adjustment related to the valuation of the deferred tax liability associated with the Assemble Systems acquisition. This adjustment increased goodwill and reduced net tangible assets by $0.1 million.

For the three business combinations in fiscal 2019, the determination of estimated fair values of certain assets and liabilities is derived from estimated fair value assessments and assumptions by Autodesk. For PlanGrid and BuildingConnected, Autodesk's estimates and assumptions are subject to change within the measurement period (up to one year from the acquisition date). For the three business combinations in fiscal 2019, the tax impact of the acquisition is also subject to change within the measurement period. Different estimates and assumptions could result in different valuations assigned to the individual assets acquired and liabilities assumed, and the resulting amount of goodwill.

Unaudited Pro Forma Results of Acquirees

Autodesk has included the financial results of each of the acquirees in the consolidated financial statements from the respective dates of acquisition; the revenues and the results of each of the acquirees, except for PlanGrid, have not been material both individually or in the aggregate to Autodesk's fiscal 2019 and 2018 results.

The following unaudited pro forma financial information summarizes the combined results of operations for Autodesk and PlanGrid, as though the companies were combined as of the beginning of Autodesk's fiscal year 2018. The unaudited pro forma financial information was as follows (in millions):

	Fiscal Year ended January 31,	
	2019	2018
Total revenues	$ 2,632.6	$ 2,099.2
Pretax loss	(157.5)	(724.9)
Net loss	(200.1)	(734.5)

The pro forma financial information for all periods presented includes the business combination accounting effects from the acquisition of PlanGrid including amortization expense from acquired intangible assets, compensation expense, and the interest expense and debt issuance costs related to the term loan agreement. The historical financial information has been adjusted to give effect to pro forma events that are directly attributable to the business combinations and factually supportable. The pro forma financial information is for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisition had taken place at the beginning of the Company’s fiscal 2018.

The pro forma financial information for fiscal 2019 and 2018 combines the historical results of the Company, the adjusted historical results of PlanGrid for fiscal 2019 and 2018 considering the date the Company acquired PlanGrid and the effects of the pro forma adjustments described above.

Fiscal 2018 Acquisitions

During the fiscal year ended January 31, 2018, Autodesk did not complete any business combinations or technology acquisitions.

7. Deferred Compensation

At January 31, 2019, Autodesk had marketable securities totaling $67.6 million, of which $60.3 million related to investments in debt and equity securities that are held in a rabbi trust under non-qualified deferred compensation plans. Of the $60.3 million related to the deferred compensation liability at January 31, 2019, $5.0 million was classified as current and $55.3 million was classified as non-current liabilities. Of the $59.0 million related to the deferred compensation liability at January 31, 2018, $3.4 million was classified as current and $55.6 million was classified as non-current liabilities. The securities are recorded in the Consolidated Balance Sheets under the current portion of "Marketable securities." The current and non-current portions of the liability are recorded in the Consolidated Balance Sheets under “Accrued compensation” and “Long-Term Other liabilities,” respectively.

Costs to obtain a contract with a customer

Sales commissions earned by our internal sales personnel and our reseller partners are considered incremental and recoverable costs of obtaining a contract with a customer. The commission costs are capitalized and included in "Prepaid expenses and other current assets" and "Other assets" on our Consolidated Balance Sheets. The deferred costs are then amortized over the period of benefit. Autodesk determined that sales commissions earned by internal sales personnel that are related to contract renewals are commensurate with sales commissions earned on the initial contracts, and we determined the period of benefit to be the term of the respective customer contract. Commissions paid to our reseller partners that are related to contract renewals are not commensurate with commissions earned on the initial contract, and we determined the estimated period of benefit by taking into consideration customer retention data, customer contracts, our technology and other factors. Deferred costs are periodically reviewed for impairment. Amortization expense is included in sales and marketing expenses in the Consolidated Statements of Operations.

The ending balance of assets recognized from costs to obtain a contract with a customer was $93.0 million as of January 31, 2019. Amortization expense related to assets recognized from costs to obtain a contract with a customer was $108.8 million during the fiscal year ended January 31, 2019. Autodesk did not recognize any contract cost impairment losses during the fiscal year ended January 31, 2019.

8. Borrowing Arrangements

On December 17, 2018, Autodesk entered into a credit agreement by and among Autodesk, the lenders from time to time party therto and Citibank, N.A., as agent, which provides for an unsecured revolving loan facility in the aggregate principal amount of $650.0 million with an option, subject to customary conditions, to request an increase in the amount of the credit facility by up to an additional $350.0 million, and is available for working capital or other business needs. The credit agreement replaced and terminated Autodesk’s prior $400.0 million revolving credit facility. The credit agreement contains customary covenants that could, among other things, restrict the imposition of liens on Autodesk's assets, and restrict Autodesk's ability to incur additional indebtedness or make dispositions of assets if Autodesk fails to maintain compliance with the financial covenants. The credit agreement financial covenants consist of (1) a minimum interest coverage ratio of 2.50:1.0 starting with the fiscal quarter ending January 31, 2019 and increasing to 3.00:1.0 starting with the fiscal quarter ending April 30, 2019, and (2) a maximum leverage ratio of 3.50:1.0 starting with the fiscal quarter ending July 31, 2019 and dropping to 3.00:1.0 in the fiscal quarter ending January 31, 2020. At January 31, 2019, Autodesk was in compliance with the credit agreement covenants. Revolving loans under the credit agreement bear interest, at Autodesk's option, at either (i) a floating rate per annum equal to the base rate plus a margin of between 0.000% and 0.500%, depending on Autodesk’s Public Debt Rating (as defined in the credit agreement) or (ii) a per annum rate equal to the rate at which dollar deposits are offered in the London interbank market, plus a margin of between 0.900% and 1.500%, depending on Autodesk’s Public Debt Rating. The maturity date on the credit agreement is December 2023. At January 31, 2019, Autodesk had no outstanding borrowings under the credit agreement.

On December 17, 2018, Autodesk also entered into a term loan agreement by and among Autodesk, the lenders from time to time party thereto and Citibank, N.A., as agent, which provides for a delayed draw term loan facility in the aggregate principal amount of $500.0 million and was borrowed in full to consummate the PlanGrid acquisition in Note 6**,** "Acquisitions**.**" The term loan bears interest, at Autodesk's option, at either (i) a floating rate per annum equal to the base rate plus a margin between 0.000% and 0.625%, depending on Autodesk's Public Debt Rating or (ii) a per annum rate equal to the rate at which dollar deposits are offered in the London interbank market, plus a margin of between 0.875% and 1.625%, depending on Autodesk's Public Debt Rating. Based on Autodesk's current credit ratings the term loan bears interest at a per annum rate equal to the rate at which dollar deposits are offered in the London interbank market, plus a margin of 1.125% per annum. Interest under the term loan was 3.628% at January 31, 2019. The term loan agreement contains customary covenants that could, among other things, restrict the imposition of liens on Autodesk's assets, and restrict Autodesk’s ability to incur additional indebtedness or make dispositions of assets if Autodesk fails to maintain the financial covenants. The term loan agreement has the same financial covenants as those included in the credit agreement governing its revolving loan facility described above. The term loan will mature on December 2020 and will not be subject to amortization prior to the maturity date.

In June 2017, Autodesk issued $500.0 million aggregate principal amount of 3.5% notes due June 15, 2027 (collectively, the “2017 Notes”). Net of a discount of $3.1 million and issuance costs of $4.9 million, Autodesk received net proceeds of $492.0 million from issuance of the 2017 Notes. Both the discount and issuance costs are being amortized to interest expense over the term of the 2017 Notes using the effective interest method. The proceeds of the 2017 Notes have been used for the repayment of $400.0 million of debt originally due December 15, 2017 and the remainder is available for general corporate purposes. Autodesk may redeem the 2017 Notes at any time, subject to a make whole premium. In addition, upon the occurrence of certain change of control triggering events, Autodesk may be required to repurchase the 2017 Notes at a price equal to 101.0% of their principal amount, plus accrued and unpaid interest to the date of repurchase. The 2017 Notes contain restrictive covenants that limit Autodesk's ability to create certain liens, to enter into certain sale and leaseback transactions and to consolidate or merge with, or convey, transfer or lease all or substantially all of its assets, subject to important qualifications and exceptions. Based on quoted market prices, the fair value of the 2017 Notes was approximately $474.3 million as of January 31, 2019.

In June 2015, Autodesk issued $450.0 million aggregate principal amount of 3.125% senior notes due June 15, 2020 and $300.0 million aggregate principal amount of 4.375% senior notes due June 15, 2025 (collectively, the “2015 Notes”). Net of a discount of $1.7 million and issuance costs of $6.3 million, Autodesk received net proceeds of $742.0 million from issuance of the 2015 Senior Notes. Both the discount and issuance costs are being amortized to interest expense over the respective terms of the 2015 Notes using the effective interest method. The proceeds of the 2015 Notes are available for general corporate purposes. Autodesk may redeem the 2015 Notes at any time, subject to a make whole premium. In addition, upon the occurrence of certain change of control triggering events, Autodesk may be required to repurchase the 2015 Notes, at a price equal to 101% of their principal amount, plus accrued and unpaid interest to the date of repurchase. The 2015 Notes contain restrictive covenants that limit Autodesk's ability to create certain liens, to enter into certain sale and leaseback transactions and to consolidate or merge with, or convey, transfer or lease all or substantially all of its assets, subject to significant qualifications and exceptions. Based on quoted market prices, the fair value of the 2015 Notes was approximately $754.2 million as of January 31, 2019.

In December 2012, Autodesk issued $400.0 million aggregate principal amount of 1.95% senior notes due December 15, 2017 ("$400.0 million 2012 Notes") and $350.0 million aggregate principal amount of 3.6% senior notes due December 15, 2022 ("$350.0 million 2012 Notes" and collectively with the $400.0 million 2012 Notes, the "2012 Notes"). Autodesk received net proceeds of $739.3 million from issuance of the 2012 Notes, net of a discount of $4.5 million and issuance costs of $6.1 million. Both the discount and issuance costs are being amortized to interest expense over the respective terms of the 2012 Notes using the effective interest method. The proceeds of the 2012 Notes are available for general corporate purposes. On July 27, 2017, Autodesk redeemed in full the $400.0 million 2012 Notes. The redemption was completed pursuant to the optional redemption provisions of the first supplemental indenture dated December 13, 2012. To redeem the notes, Autodesk used the proceeds of the 2017 Notes to pay a redemption price of approximately $400.9 million, plus accrued and unpaid interest. Total cash repayment was $401.8 million. Autodesk did not incur any additional early termination penalties in connection with such redemption. Based on the quoted market price, the fair value of the $350.0 million 2012 Notes was approximately $349.6 million as of January 31, 2019.

9. Commitments and Contingencies

Lease commitments

Autodesk leases office space and computer equipment under non-cancellable operating lease agreements that expire at various dates through 2090. The leases generally provide that Autodesk pay taxes, insurance, and maintenance expenses related to the leased assets. Certain of these lease arrangements contain escalation clauses whereby monthly rent increases over time.

At January 31, 2019, the aggregate future minimum lease payments required were as follows:

2020	$	76.2
2021		61.7
2022		53.6
2023		50.7
2024		41.4
Thereafter		127.0
		410.6
Less: Sublease income		0.8
	$	409.8

Rent expense related to these operating leases recognized on a straight-line basis over the lease period, was as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Rent expense	$ 60.7	$ 55.9	$ 65.3

Purchase commitments

In the normal course of business, Autodesk enters into various purchase commitments for goods or services. Total non-cancellable purchase commitments as of January 31, 2019, were approximately $82.7 million for periods through fiscal 2028. These purchase commitments primarily result from contracts entered into for the acquisition of IT infrastructure, marketing, and software development services, as well as commitments related to our investment agreements with limited liability partnership funds.

Autodesk has certain royalty commitments associated with the sale and licensing of certain products. Royalty expense is generally based on a dollar amount per unit sold or a percentage of the underlying revenue. Royalty expense, which was recorded under cost of maintenance and subscription revenue and cost of license and other revenue on Autodesk's Consolidated Statements of Operations, was $6.4 million in fiscal 2019, $15.3 million in fiscal 2018, and $16.2 million in fiscal 2017.

Guarantees and Indemnifications

In the normal course of business, Autodesk provides indemnifications of varying scopes, including limited product warranties and indemnification of customers against claims of intellectual property infringement made by third parties arising from the use of its products or services. Autodesk accrues for known indemnification issues if a loss is probable and can be reasonably estimated. Historically, costs related to these indemnifications have not been significant, and because potential future costs are highly variable, Autodesk is unable to estimate the maximum potential impact of these indemnifications on its future results of operations.

In connection with the purchase, sale, or license of assets or businesses with third parties, Autodesk has entered into or assumed customary indemnification agreements related to the assets or businesses purchased, sold or licensed. Historically, costs related to these indemnifications have not been significant, and because potential future costs are highly variable, Autodesk is unable to estimate the maximum potential impact of these indemnifications on its future results of operations.

As permitted under Delaware law, Autodesk has agreements whereby it indemnifies its officers and directors for certain events or occurrences while the officer or director is, or was, serving at Autodesk's request in such capacity. The maximum potential amount of future payments Autodesk could be required to make under these indemnification agreements is unlimited; however, Autodesk has directors' and officers' liability insurance coverage that is intended to reduce its financial exposure and may enable Autodesk to recover a portion of any future amounts paid. Autodesk believes the estimated fair value of these indemnification agreements in excess of applicable insurance coverage is minimal.

Legal Proceedings

Autodesk is involved in a variety of claims, suits, inquiries, investigations, and proceedings in the normal course of business including claims of alleged infringement of intellectual property rights, commercial, employment, tax, piracy prosecution, business practices, and other matters. Autodesk routinely reviews the status of each significant matter and assesses its potential financial exposure. If the potential loss from any matter is considered probable and the amount can be reasonably estimated, Autodesk records a liability for the estimated loss. Because of inherent uncertainties related to these legal matters, Autodesk bases its loss accruals on the best information available at the time. As additional information becomes available, Autodesk reassesses its potential liability and may revise its estimates. In the Company's opinion, resolution of pending matters is not expected to have a material adverse impact on its consolidated results of operations, cash flows, or its financial position. Given the unpredictable nature of legal proceedings, there is a reasonable possibility that an unfavorable resolution of one or more such proceedings could in the future materially affect the Company's results of operations, cash flows, or financial position in a particular period, however, based on the information known by the Company as of the date of this filing and the rules and regulations applicable to the preparation of the Company's financial statements, any such amount is either immaterial or it is not possible to provide an estimated amount of any such potential loss.

10. Stockholders' (Deficit) Equity

Preferred Stock

Under Autodesk's Certificate of Incorporation, 2.0 million shares of preferred stock are authorized. At January 31, 2019, there were no preferred shares issued or outstanding. The Board of Directors has the authority to issue the preferred stock in one or more series and to fix rights, preferences, privileges, and restrictions, including dividends and the number of shares constituting any series or the designation of such series, without any further vote or action by the stockholders.

Common Stock Repurchase Program

Autodesk has a stock repurchase program that is used to offset dilution from the issuance of stock under the Company's employee stock plans and for such other purposes as may be in the interests of Autodesk and its stockholders, which has the effect of returning excess cash generated from the Company's business to stockholders. Autodesk repurchased and retired approximately 2.2 million shares in fiscal 2019 at an average repurchase price of $130.15 per share, 6.9 million shares in fiscal 2018 at an average repurchase price of $100.45 per share, and 9.7 million shares in fiscal 2017 at an average repurchase price of $64.73.

At January 31, 2019, 17.4 million shares remained available for repurchase under the repurchase program approved by the Board of Directors. The share repurchase program does not have an expiration date and the pace and timing of repurchases will depend on factors such as cash generation from operations, available surplus, the volume of employee stock plan activity, cash requirements for acquisitions, economic and market conditions, stock price and legal and regulatory requirements.

11. Interest and Other Expense, net

Interest and other expense, net, consists of the following:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Interest and investment expense, net	$ (52.1)	$ (34.5)	$ (29.7)
Gain (loss) on foreign currency	5.1	(3.3)	(3.3)
Gain (loss) on strategic investments	12.5	(16.4)	0.3
Other income	16.8	6.0	8.5
Interest and other expense, net	$ (17.7)	$ (48.2)	$ (24.2)

12. Accumulated Other Comprehensive Loss

Accumulated other comprehensive loss, net of taxes, consisted of the following:

	Net Unrealized Gains (Losses) on Derivative Instruments	Net Unrealized Gains (Losses) on Available for Sale Securities	Defined Benefit Pension Components	Foreign Currency Translation Adjustments	Total
Balances, January 31, 2017	$ 14.6	$ 1.5	$ (33.8)	$ (160.8)	$ (178.5)
Other comprehensive (loss) income before reclassifications	(24.5)	(0.6)	4.3	86.3	65.5
Pre-tax losses (gains) reclassified from accumulated other comprehensive income	(9.9)	0.3	0.9	0.1	(8.6)
Tax effects	3.2	0.1	(0.7)	(4.8)	(2.2)
Net current period other comprehensive (loss) income	(31.2)	(0.2)	4.5	81.6	54.7
Balances, January 31, 2018	(16.6)	1.3	(29.3)	(79.2)	(123.8)
Other comprehensive income (loss) before reclassifications	20.6	0.7	14.7	(58.3)	(22.3)
Pre-tax gains reclassified from accumulated other comprehensive income	12.1	1.3	0.3	—	13.7
Tax effects	(1.1)	—	(2.0)	0.5	(2.6)
Net current period other comprehensive income (loss)	31.6	2.0	13.0	(57.8)	(11.2)
Balances, January 31, 2019	$ 15.0	$ 3.3	$ (16.3)	$ (137.0)	$ (135.0)

Reclassifications related to gains and losses on available-for-sale debt securities are included in "Interest and other expense, net". Refer to Note 3, "Financial Instruments" for the amount and location of reclassifications related to derivative instruments. Reclassifications of the defined benefit pension components of net periodic benefit cost are included in "Interest and other expense, net". Refer to Note 15, "Retirement Benefit Plans."

13. Net Loss Per Share

Basic net loss per share is computed using the weighted average number of shares of common stock outstanding for the period, excluding stock options and restricted stock units. Diluted net loss per share is based upon the weighted average number of shares of common stock outstanding for the period and potentially dilutive common shares, including the effect of stock options and restricted stock units under the treasury stock method. The following table sets forth the computation of the numerators and denominators used in the basic and diluted net loss per share amounts:

	Fiscal Year Ended January 31,		
	2019	**2018**	**2017**
Numerator:			
Net loss	$ (80.8)	$ (566.9)	$ (582.1)
Denominator:			
Denominator for basic net loss per share—weighted average shares	218.9	219.5	222.7
Effect of dilutive securities (1)	—	—	—
Denominator for dilutive net loss per share	218.9	219.5	222.7
Basic net loss per share	$ (0.37)	$ (2.58)	$ (2.61)
Diluted net loss per share	$ (0.37)	$ (2.58)	$ (2.61)

(1) The effect of dilutive securities of 3.1 million, 4.5 million, and 4.6 million shares for the fiscal years ended January 31, 2019, 2018, and 2017, respectively, have been excluded from the calculation of diluted net loss per share as those shares would have been anti-dilutive due to the net loss incurred during those fiscal years.

The computation of diluted net loss per share does not include shares that are anti-dilutive under the treasury stock method because their exercise prices are higher than the average market value of Autodesk's stock during the fiscal year. The effect of 0.5 million, 0.5 million, and 0.1 million potentially anti-dilutive shares were excluded from the computation of net loss per share for the fiscal years ended January 31, 2019, 2018, and 2017, respectively.

14. Segments

Autodesk reports segment information based on the "management" approach. The management approach designates the internal reporting used by management for making decisions, allocating resources and assessing performance as the source of the Company's reportable segments. The Company's chief operating decision maker ("CODM") allocates resources and assesses the operating performance of the Company as a whole. As such, Autodesk has one segment manager (the CODM), and one operating segment.

15. Retirement Benefit Plans

Pretax Savings Plan

Autodesk has a 401(k) plan that covers nearly all U.S. employees. Eligible employees may contribute up to 75% of their pretax salary, subject to limitations mandated by the Internal Revenue Service. Autodesk makes voluntary cash contributions and matches a portion of employee contributions in cash. Autodesk's contributions were $17.1 million in fiscal 2019, $17.3 million in fiscal 2018, and $16.4 million in fiscal 2017. Autodesk does not allow participants to invest in Autodesk common stock through the 401(k) plan.

Defined Benefit Pension Plans

Autodesk maintains certain defined benefit pension plans to employees primarily located in countries outside of the U.S, particularly the United Kingdom, Switzerland, and Japan. The Company deposits funds for specific plans, consistent with the requirements of local law, with insurance companies, third-party trustees, or into government-managed accounts, and accrues for the unfunded portion of the obligation, where material. Depending on the design of the plan, local customs, and market circumstances, the liabilities of a plan may exceed qualified plan assets.

Benefit Obligation and Plan Assets

The changes in the projected benefit obligations and plan assets for the plans described above were as follows:

	Fiscal year ended January 31,	
	2019	2018
Beginning projected benefit obligation	$ 158.1	$ 146.4
Service cost	4.1	5.2
Interest cost	2.3	2.7
Actuarial (gain) loss	(4.3)	(2.8)
Benefits paid	(2.6)	(3.3)
Foreign currency exchange rate changes	(10.0)	13.9
Curtailments and settlements	(61.0)	(8.2)
Contributions by plan participants	5.0	4.0
Plan amendment	—	0.2
Ending projected benefit obligation	$ 91.6	$ 158.1
Beginning fair value of plan assets	$ 121.1	$ 107.4
Actual return on plan assets	1.4	3.8
Contributions paid by employer	5.9	6.5
Contributions paid by plan participants	5.0	4.0
Benefit payments	(2.6)	(3.3)
Curtailments and settlements	(42.3)	(8.0)
Foreign currency exchange rate changes	(7.7)	10.7
Ending fair value of plan assets	$ 80.8	$ 121.1
Funded status	$ (10.8)	$ (37.0)

The amounts recognized on the consolidated balance sheets at the end of each period were as follows:

	Fiscal Year Ended January 31,	
	2019	2018
Other long-term liabilities	$ 10.8	$ 37.0
Accumulated other comprehensive loss, before tax	16.3	31.7
Net amount recognized	$ 27.1	$ 68.7

On a worldwide basis, the Company's defined benefit pension plans were 88% funded as of January 31, 2019.

As of January 31, 2019, the aggregate accumulated benefit obligation was $85.1 million for the defined benefit pension plans compared to $139.5 million as of January 31, 2018. Included in the aggregate data in the following tables are the amounts applicable to the Company's defined benefit pension plans, with accumulated benefit obligations in excess of plan assets, as well as plans with projected benefit obligations in excess of plan assets. Amounts related to such plans at the end of each period were as follows:

	Fiscal Year Ended January 31,	
	2019	2018
Plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligations	$ 75.6	$ 130.7
Plan assets	70.0	112.1
Plans with projected benefit obligations in excess of plan assets:		
Projected benefit obligations	$ 91.6	$ 158.1
Plan assets	80.8	121.1

Defined Benefit Pension Plan Assets

The investments of the plans are managed by insurance companies or third-party investment managers selected by Autodesk's Trustees, consistent with regulations or market practice of the country where the assets are invested. Investments managed by qualified insurance companies or third-party investment managers under standard contracts follow local regulations, and Autodesk is not actively involved in their investment strategies.

Defined benefit pension plan assets measured at fair value on a recurring basis consisted of the following investment categories at the end of each period as follows:

	Fiscal Year Ended January 31,				
	2019				2018
	Level 1	Level 2	Level 3	Total	Total
Insurance contracts	$ —	$ 28.0	$ —	$ 28.0	$ 53.0
Other investments	—	14.5	—	14.5	17.0
Total assets measured at fair value	$ —	$ 42.5	$ —	42.5	70.0
Cash				4.3	0.2
Investment Fund valued using net asset value				34.0	50.9
Total pension plan assets at fair value				$ 80.8	$ 121.1

The insurance contracts in the preceding table represent the immediate cash surrender value of assets managed by qualified insurance companies. Autodesk does not have control over the target allocation or visibility of the investment strategies of those investments. Insurance contracts and investments held by insurance companies made up 35% and 44% of total plan assets as of January 31, 2019 and January 31, 2018, respectively.

The assets held in the investment fund in the preceding table are invested in a diversified growth fund actively managed by Russell Investments in association with Aon Hewitt. The objective of the fund is to generate capital appreciation on a long-term basis through a diversified portfolio of investments. The fund aims to deliver equity-like returns in the medium to long term with around two-thirds the volatility of equity markets. The fair value of the assets held in the investment fund are priced monthly at net asset value without restrictions on redemption.

Estimated Future Benefit Payments

Estimated benefit payments over the next 10 fiscal years are as follows:

	Pension Benefits
2020	$ 2.4
2021	2.3
2022	2.3
2023	2.3
2024	2.3
2025-2029	13.9
Total	$ 25.5

Funding Expectations

Our expected required funding for the plans during fiscal 2020 is approximately $4.6 million.

Net Periodic Benefit Cost

The components of net periodic pension cost for the defined benefit pension plans for fiscal 2019, 2018, and 2017 are as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Service cost for benefits earned during the period	$ 4.1	$ 5.2	$ 5.6
Interest cost on projected benefit obligation (1)	2.3	2.7	3.0
Expected return on plan assets (1)	(3.2)	(3.9)	(4.2)
Amortization of prior service credit (1)	(0.2)	(0.3)	(0.3)
Amortization of loss (1)	0.5	1.2	1.5
Settlement loss (1)	4.3	1.9	1.2
Curtailment gain (1)	(10.9)	(0.1)	—
Net periodic (benefit) cost	$ (3.1)	$ 6.7	$ 6.8

(1) Included in Interest and other expense, net in Autodesk's fiscal 2019 Consolidated Statements of Operations as a result of the adoption of ASU No. 2017-07 in the first quarter of fiscal 2019.

Amounts Recorded in OCI

The components of other comprehensive income (loss) for the defined benefit pension plans before taxes for fiscal 2019, 2018, and 2017 are as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Prior service credit for period	$ (0.1)	$ 0.2	$ —
Net (gain) loss for period	(2.4)	(2.5)	7.2
Effect of settlement	(4.3)	(1.9)	(1.2)
Effect of curtailment	(7.9)	(0.2)	—
Amortization of prior service credit	0.2	0.3	0.3
Amortization of net loss	(0.5)	(1.2)	(1.5)
Other comprehensive (income) loss	$ (15.0)	$ (5.3)	$ 4.8

Amounts Recorded in Accumulated Other Comprehensive Loss

The amounts recorded in accumulated other comprehensive loss before taxes at the end of each period were as follows:

	Fiscal Year Ended January 31,	
	2019	2018
Net prior service credit	$ (1.4)	$ (3.1)
Net actuarial loss	17.7	34.8
Accumulated other comprehensive loss, before tax	$ 16.3	$ 31.7

Assumptions

Weighted average actuarial assumptions used to determine costs for the plans for each period were as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Discount rate	2.5%	2.4%	3.2%
Expected long-term rate of return on plan assets	3.3%	3.3%	4.3%
Rate of compensation increase	2.3%	2.3%	2.2%

The weighted-average expected long-term rate of return for the plan assets is 3.3%. The weighted-average expected long-term rate of return on plan assets is based on the interest rates guaranteed under the insurance contracts, and the expected rate of return appropriate for each category of assets weighted for the distribution within the diversified investment fund. The assumptions used for the plans are based upon customary rates and practices for the location of the plans. Factors such as asset class allocations, long-term rates of return (actual and expected), and results of periodic asset liability modeling studies are considered when constructing the long-term rate of return assumption for our defined benefit pension plans.

Weighted average actuarial assumptions used to determine benefit obligations for the plans at the end of each period were as follows:

	Fiscal Year Ended January 31,		
	2019	2018	2017
Discount rate	2.0%	1.8%	1.7%
Rate of compensation increase	2.7%	2.6%	2.6%

In selecting the appropriate discount rate for the plans, the Company uses country-specific information, adjusted to reflect the duration of the particular plan. The discount rate was based on highly rated long-term bond indexes and yield curves that match the duration of the plan’s benefit obligations.

Defined Contribution Plans

Autodesk also provides defined contribution plans in certain foreign countries where required by statute. Autodesk’s funding policy for foreign defined contribution plans is consistent with the local requirements in each country. Autodesk’s contributions to these plans were $29.6 million in fiscal 2019, $27.2 million in fiscal 2018, and $26.6 million in fiscal 2017.

Cash Balance Plans

Autodesk provides a cash balance plan that insures the risks of disability, death, and longevity, in which the vested pension capital is reinvested and provides a 100% capital and interest guarantee. The weighted-average guaranteed interest crediting rate for cash balance plans was 1.0%, 1.0%, and 1.3% for mandatory retirement savings and 0.3%, 0.3%, and 0.8% for supplementary retirement savings for fiscal 2019, 2018, and 2017, respectively.

Other Plans

In addition, Autodesk offers a non-qualified deferred compensation plan to certain key employees whereby they may defer a portion (or all) of their annual compensation until retirement or a different date specified by the employee in accordance with terms of the plan. See Note 7, “Deferred Compensation,” for further discussion.

16. Restructuring and other exit costs, net

During the fourth quarter of fiscal year 2018, the Board of Directors approved a world-wide restructuring plan (“Fiscal 2018 Plan”) to support the Company's strategic priorities of completing the subscription transition, digitizing the Company, and re-imagining manufacturing, construction, and production. Through the restructuring, Autodesk seeks to reduce its investments in areas not aligned with its strategic priorities, including in areas related to research and development and go-to-market activities. At the same time, Autodesk plans to further invest in strategic priority areas related to digital infrastructure, customer success, and construction. By re-balancing resources to better align with the Company’s strategic priorities, Autodesk is positioning itself to meet its long-term goals. This world-wide restructuring plan included a reduction in force of approximately 11% of the Company’s workforce, or 1,027 employees, and the consolidation of certain leased facilities. By January 31, 2019, the personnel and facilities related actions included in this restructuring plan were substantially complete.

During Fiscal 2019, restructuring charges under the Fiscal 2018 Plan included $39.2 million in employee termination benefits and $3.2 million in lease termination and other exit costs.

The following tables set forth the restructuring charges and other facility exit costs, net during the fiscal years ended January 31, 2019 and 2018:

	Balances, January 31, 2018	Additions	Payments	Adjustments (1)	Balances, January 31, 2019
Fiscal 2018 Plan					
Employee terminations costs	$ 53.0	$ 39.2	$ (89.7)	$ (0.5)	$ 2.0
Facility terminations and other exit costs	2.5	3.2	(5.7)	0.1	0.1
Total	$ 55.5	$ 42.4	$ (95.4)	$ (0.4)	$ 2.1
Current portion (2)	$ 55.5				$ 2.1
Total	$ 55.5				$ 2.1

(1) Adjustments primarily relate to the impact of foreign exchange rate changes, settlement of lease contracts, and certain write offs related to fixed assets.
(2) The current portions of the reserve are recorded in the Consolidated Balance Sheets under “Other accrued liabilities.” There was no non-current portion as of January 31, 2019.

	Balances, January 31, 2017	Additions	Payments	Adjustments (1)	Balances, January 31, 2018
Fiscal 2018 Plan					
Employee terminations costs	$ —	$ 87.3	$ (35.1)	$ 0.8	$ 53.0
Facility terminations and other exit costs	—	6.3	(1.3)	(2.5)	2.5
Fiscal 2017 Plan					
Employee termination costs	1.1	0.1	(1.5)	0.3	—
Facility terminations and other exit costs	1.9	0.1	(1.5)	(0.3)	0.2
Other facility termination costs					
Facility termination costs	4.5	0.3	(3.0)	(0.3)	1.5
Total	$ 7.5	$ 94.1	$ (42.4)	$ (2.0)	$ 57.2
Current portion (2)	$ 5.9				$ 57.2
Non-current portion (2)	1.6				—
Total	$ 7.5				$ 57.2

(1) Adjustments primarily relate to the accelerated depreciation of fixed assets and the impact of foreign exchange rate changes.
(2) The current and non-current portions of the reserve are recorded in the Consolidated Balance Sheets under “Other accrued liabilities” and “Other liabilities,” respectively.

17. Selected Quarterly Financial Information (Unaudited)

Summarized quarterly financial information for fiscal year 2019 and 2018 is as follows:

2019	1st quarter	2nd quarter	3rd quarter	4th quarter	Fiscal year
Net revenue (1)	$ 559.9	$ 611.7	$ 660.9	$ 737.3	$ 2,569.8
Gross profit (1)	493.1	541.9	588.6	660.3	2,283.9
(Loss) Income from operations (1)	(55.3)	(24.7)	14.7	40.3	(25.0)
Provision for income taxes	(18.6)	(16.0)	(35.2)	31.7	(38.1)
Net (loss) income (1)	(82.4)	(39.4)	(23.7)	64.7	(80.8)
Basic net (loss) income per share (1) (2)	$ (0.38)	$ (0.18)	$ (0.11)	$ 0.30	$ (0.37)
Diluted net (loss) income per share (1) (2)	$ (0.38)	$ (0.18)	$ (0.11)	$ 0.29	$ (0.37)
(Loss) Income from operations includes the following items:					
Stock-based compensation expense	$ 54.4	$ 56.9	$ 64.2	$ 74.0	$ 249.5
Amortization of acquisition related intangibles	7.4	7.2	7.8	11.1	33.5
CEO transition costs	—	(0.1)	—	—	(0.1)
Acquisition related costs	—	2.5	1.8	11.9	16.2
Restructuring and other exit costs, net	$ 22.5	$ 13.8	$ 3.7	$ 1.9	$ 41.9

2018	1st quarter	2nd quarter	3rd quarter	4th quarter	Fiscal year
Net revenue	$ 485.7	$ 501.8	$ 515.3	$ 553.8	$ 2,056.6
Gross profit	407.5	427.2	437.8	480.7	1,753.2
Loss from operations	(119.6)	(107.6)	(100.0)	(181.9)	(509.1)
(Provision) Benefit for income taxes	(8.2)	(17.6)	(8.6)	24.8	(9.6)
Net loss	(129.6)	(144.0)	(119.8)	(173.5)	(566.9)
Basic net loss per share (2)	$ (0.59)	$ (0.66)	$ (0.55)	$ (0.79)	$ (2.58)
Diluted net loss per share (2)	$ (0.59)	$ (0.66)	$ (0.55)	$ (0.79)	$ (2.58)
Loss from operations includes the following items:					
Stock-based compensation expense	$ 59.0	$ 58.8	$ 65.1	$ 62.1	$ 245.0
Amortization of acquisition related intangibles	10.4	8.9	8.7	8.6	36.6
CEO transition costs	11.0	10.6	—	(0.2)	21.4
Restructuring and other exit costs, net	$ (0.3)	$ 0.5	$ —	$ 93.9	$ 94.1

(1) Reflects the impact of the adoption of new accounting standards in fiscal year 2019 related to revenue recognition. See Note 1, "Business and Summary of Significant Accounting Policies, Accounting Standards Adopted", of our consolidated financial statements for additional information.
(2) Net (loss) income per share were computed independently for each of the periods presented; therefore the sum of the net (loss) income per share amount for the quarters may not equal the total for the fiscal year.

18. Subsequent Events

In February 2019 and March 2019, Autodesk repaid $75.0 million and $50.0 million, respectively for a total payment of $125.0 million on the $500.0 million Term Loan Agreement entered into in December 2018 in connection with the consummation of the PlanGrid acquisition described in Note 6, "Acquisitions." See Note 8,"Borrowing Arrangements" for more details on the Term Loan Agreement. Autodesk did not incur any early termination penalties in connection with such repayment.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Autodesk, Inc. (the Company) as of January 31, 2019, and 2018, the related consolidated statements of operations, comprehensive loss, stockholders' (deficit) equity, and cash flows for each of the three years in the period ended January 31, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at January 31, 2019, and 2018, and the results of its operations and its cash flows for each of the three years in the period ended January 31, 2019, 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 January 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 25, 2019 expressed an unqualified opinion thereon.

Adoption of New Accounting Standard

As discussed in Note 1 to the consolidated financial statements, the Company changed its method of accounting for recognizing revenue from contracts with customers and recognizing costs related to obtaining a customer contract in the year ended January 31, 2019 due to the adoption of ASU No. 2014-09, *Revenue from Contracts with Customers*.

Basis for Opinion

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

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

/s/ ERNST & YOUNG LLP

We have served as the Company's auditor since 1983.
San Francisco, California
March 25, 2019

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

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

Opinion on Internal Control over Financial Reporting

We have audited Autodesk, Inc.'s internal control over financial reporting as of January 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Autodesk, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of January 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the accompanying consolidated balance sheets of the Company as of January 31, 2019, and 2018, the related consolidated statements of operations, comprehensive loss, stockholders' (deficit) equity, and cash flows for each of the three years in the period ended January 31, 2019, and the related notes and the financial statement schedule listed in the Index at Item 15(a)(2) and our report dated March 25, 2019 expressed an unqualified opinion thereon.

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 included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ ERNST & YOUNG LLP

San Francisco, California
March 25, 2019

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

We maintain "disclosure controls and procedures," as defined in Rule 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Our disclosure controls and procedures are designed to ensure that information required to be disclosed in our Exchange Act reports is (i) recorded, processed, summarized and reported within the time periods specified in the rules of the Securities and Exchange Commission ("SEC"), and (ii) accumulated and communicated to Autodesk management, including our Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. We conducted an evaluation, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Annual Report on Form 10-K. Based upon this evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective as of January 31, 2019.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended). Our management assessed the effectiveness of our internal control over financial reporting as of January 31, 2019. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in the 2013 Internal Control—Integrated Framework. Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal control over financial reporting will necessarily prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within Autodesk have been detected.

Our management has concluded that, as of January 31, 2019, our internal control over financial reporting was effective 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. Our independent registered public accounting firm, Ernst & Young LLP, has issued an audit report on our internal control over financial reporting, which is included in Item 8 herein.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) during the three months ended January 31, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

Certain information required by Part III is omitted from this Annual Report because we intend to file a definitive proxy statement pursuant to Regulation 14A for our Annual Meeting of Stockholders not later than 120 days after the end of the fiscal year covered by this Annual Report (the "Proxy Statement") and certain information included therein is incorporated herein by reference. Only those sections of the Proxy Statement that specifically address the items set forth herein are incorporated by reference.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated herein by reference to the sections entitled "Proposal One—Election of Directors," "Section 16(a) Beneficial Ownership Reporting Compliance," and "Corporate Governance" in our Proxy Statement.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information as of March 25, 2019, regarding our executive officers.

Name	Age	Position
Andrew Anagnost	54	President and Chief Executive Officer
R. Scott Herren	57	SVP and Chief Financial Officer
Steve M. Blum	54	SVP, Worldwide Field Operations
Pascal W. Di Fronzo	54	SVP, Corporate Affairs, Chief Legal Officer & Secretary
Carmel Galvin	50	SVP, People and Places and Chief Human Resources Officer

Andrew Anagnost joined Autodesk in September 1997 and has served as President and Chief Executive Officer since June 2017. Dr. Anagnost served as Co-CEO from February 2017 to June 2017, Chief Marketing Officer from December 2016 to June 2017 and as the Company's Senior Vice President, Business Strategy & Marketing, from March 2012 to June 2017. From December 2009 to March 2012, Dr. Anagnost was Vice President, Product Suites and Web Services of the Company. Prior to this position, Dr. Anagnost served as Vice President of CAD/CAE products for the manufacturing division of the Company from March 2007 to December 2009. Previously, Dr. Anagnost held other senior management positions at the Company. Prior to joining the Company, Dr. Anagnost held various engineering, sales, marketing and product management positions at Lockheed Aeronautical Systems Company and EXA Corporation. He also served as an NRC post-doctoral fellow at NASA Ames Research Center.

R. Scott Herren joined Autodesk in November 2014 and serves as Senior Vice President and Chief Financial Officer. Prior to joining Autodesk, Mr. Herren was the Senior Vice President of Finance for Citrix Systems, Inc. from September 2011 to October 2014 where he led the company's finance, accounting, tax, treasury, investor relations, real estate, and facilities teams. From March 2000 to September 2011, Mr. Herren held a variety of leadership positions at Citrix including Vice President and Managing Director for EMEA and Vice President and General Manager of the Virtualization Systems Group. Prior to Citrix, Mr. Herren served at FedEx Corporation as Vice President, Financial Planning. Prior to FedEx, he spent 13 years at International Business Machines Corporation in senior financial positions.

Steven M. Blum joined Autodesk in January 2003 and has served as Senior Vice President, Worldwide Field Operations since September 2017. Mr. Blum served as Senior Vice President, Worldwide Sales and Services from February 2011 to September 2017. From January 2003 to February 2011, he served as Senior Vice President of Americas Sales. Prior to this position, Blum was Executive Vice President of Sales and Account Management for Parago, Inc. Blum also held positions at Mentor Graphics, most recently serving as Vice President of America's sales. Before joining Mentor Graphics, he held engineering and sales positions at NCR Corporation and Advanced Micro Devices.

Pascal W. Di Fronzo joined Autodesk in June 1998 and has served as Senior Vice President, Corporate Affairs, Chief Legal Officer & Secretary since December 2016. Mr. Di Fronzo served as Senior Vice President, General Counsel and Secretary from March 2007 to December 2016. From March 2006 to March 2007, Mr. Di Fronzo served as Vice President, General Counsel and Secretary, and served as Vice President, Assistant General Counsel and Assistant Secretary from March 2005 through March 2006. Previously, Mr. Di Fronzo served in other business and legal capacities in our Legal Department.

Prior to joining Autodesk, he advised high technology and emerging growth companies on business and intellectual property transactions and litigation while in private practice.

Carmel Galvin joined Autodesk in March 2018 and serves as Senior Vice President, People and Places and Chief Human Resources Officer (“CHRO”). Prior to joining Autodesk, from April 2016 to February 2018, Ms. Galvin was the Senior Vice President, CHRO for Glassdoor, Inc. where she led all people functions of the company, including human resources planning, learning and development, talent acquisition, employee relations and engagement. From October 2014 to April 2016, Ms. Galvin served as Senior Vice President and CHRO at Advent Software, Inc., where she oversaw the company’s global people strategies and programs. Prior to Advent, she served as Vice President of Talent & Culture Development for Deloitte’s new-venture accelerator, advising a growing portfolio of innovative companies on how to scale and adjust their culture and talent programs. Prior to Deloitte, Ms. Galvin gained 20 years of human resources experience at global companies including Moody’s KMV, Barra Inc., Visa International and IBM (Ireland) Ltd.

There is no family relationship among any of our directors or executive officers.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated herein by reference to the sections entitled "Corporate Governance" and “Executive Compensation” in our 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 sections entitled “Security Ownership of Certain Beneficial Owners and Management” and “Executive Compensation—Equity Compensation Plan Information” in our 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 sections entitled “Certain Relationships and Related Party Transactions” and “Corporate Governance—Independence of the Board of Directors” in our Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated herein by reference to the sections entitled “Proposal Two—Ratification of the Appointment of Independent Registered Public Accounting Firm” in our Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

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

1. *Financial Statements*: The information concerning Autodesk's financial statements, and the Report of Ernst & Young LLP, Independent Registered Public Accounting Firm required by this Item is incorporated by reference herein to the section of this Report in Item 8, entitled "Financial Statements and Supplementary Data."

2. *Financial Statement Schedule*: The following financial statement schedule of Autodesk, Inc., for the fiscal years ended January 31, 2019, 2018, and 2017, is filed as part of this Report and should be read in conjunction with the Consolidated Financial Statements of Autodesk, Inc.:

   Schedule II Valuation and Qualifying Accounts

   Schedules not listed above have been omitted because they are not applicable or are not required or the information required to be set forth therein is included in the Consolidated Financial Statements or Notes thereto.

3. *Exhibits*: See Item 15(b) below. We have filed, or incorporated into this Report by reference, the exhibits listed on the accompanying Index to Exhibits immediately following the signature page of this Form 10-K.

(b) Exhibits:

We have filed, or incorporated into this Report by reference, the exhibits listed on the accompanying Index to Exhibits immediately following the signature page of this Form 10-K.

(c) Financial Statement Schedules: See Item 15(a), above.

ITEM 15(A)(2) FINANCIAL STATEMENT SCHEDULE II

Description	Balance at Beginning of Fiscal Year	Additions Charged to Costs and Expenses or Revenues	Deductions and Write-Offs	Balance at End of Fiscal Year
	(in millions)			
Fiscal Year Ended January 31, 2019				
Partner Program reserves (1)	36.5	294.7	279.5	51.7
Restructuring and other facility exit costs	57.2	41.9	97.0	2.1
Fiscal Year Ended January 31, 2018				
Partner Program reserves (1)	28.1	224.3	215.9	36.5
Restructuring and other facility exit costs	8.4	94.1	45.3	57.2
Fiscal Year Ended January 31, 2017				
Partner Program reserves (1)	45.2	240.3	257.4	28.1
Restructuring and other facility exit costs	1.3	77.8	70.7	8.4

(1) The partner program reserves balance impacts "Accounts receivable, net" and "Accounts payable" on the accompanying Consolidated Balance Sheets.

ITEM 16 FORM 10-K SUMMARY

None.

SIGNATURES

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

AUTODESK, INC.

By: /s/ ANDREW ANAGNOST

Andrew Anagnost

President and Chief Executive Officer

Dated: March 25, 2019

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Andrew Anagnost and R. Scott Herren each as his or her attorney-in-fact, each with the power of substitution, for him or her in any and all capacities, to sign any amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities as of March 25, 2019.

Signature	Title
/s/ ANDREW ANAGNOST Andrew Anagnost	President and Chief Executive Officer, Director (Principal Executive Officer)
/s/ R. SCOTT HERREN R. Scott Herren	Senior Vice President and Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
/s/ STACY J. SMITH Stacy J. Smith	Director (Non-executive Chairman of the Board)
/s/ CRAWFORD W. BEVERIDGE Crawford W. Beveridge	Director
/s/ KAREN BLASING Karen Blasing	Director
/s/ REID FRENCH Reid French	Director
/s/ MARY T. MCDOWELL Mary T. McDowell	Director
Blake J. Irving	Director
/s/ STEPHEN D. MILLIGAN Stephen D. Milligan	Director
/s/ LORRIE M. NORRINGTON Lorrie M. Norrington	Director
/s/ ELIZABETH RAFAEL Elizabeth Rafael	Director

Index to Exhibits

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of Registrant (incorporated by reference to Exhibit 3.1 filed with the Registrant’s Annual Report on Form 10-K filed on March 30, 2006)
3.2	Amended and Restated Bylaws of Registrant (incorporated by reference to Exhibit 3.1 filed with the Registrant’s Current Report on Form 8-K filed on June 15, 2018)
4.1	Indenture dated December 13, 2012, by and between the Registrant and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 filed with the Registrant's Current Report on Form 8-K filed on December 13, 2012)
4.2	First Supplemental Indenture (including Form of Notes) dated December 13, 2012, by and between the Registrant and U.S. Bank National Association (incorporated by reference to Exhibit 4.2 filed with the Registrant's Current Report on Form 8-K filed on December 13, 2012)
4.3	Second Supplemental Indenture (including Form of Notes) dated June 5, 2015, by and between the Registrant and U.S. Bank National Association (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on June 8, 2015)
4.4	Third Supplemental Indenture (including Form of Notes) dated June 8, 2017, by and between the Registrant and U.S. Bank National Association. (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K filed on June 8, 2017)
10.1*	Description of Registrant's Performance Stock Unit Program (incorporated by reference to Item 5.02 of the Registrant's Current Report on Form 8-K filed on March 26, 2018)
10.2*	Registrant’s 1998 Employee Qualified Stock Purchase Plan, as amended and restated effective as of June 12, 2018 (incorporated by reference to Exhibit 10.3 of the Registrant’s Quarterly Report on Form 10-Q filed on August 30, 2018)
10.3*	Registrant’s 1998 Employee Qualified Stock Purchase Plan Forms of Subscription Agreement, as amended and restated (incorporated by reference to Exhibit 10.5 filed with the Registrant’s Quarterly Report on Form 10-Q filed on August 30, 2016)
10.4*	Registrant's 2012 Employee Stock Plan, as amended and restated effective as of June 12, 2018 (incorporated by reference to Exhibit 10.2 filed with the Registrant's Quarterly Report on Form 10-Q filed on August 30, 2018)
10.5*	Registrant's 2012 Employee Stock Plan Form of Restricted Stock Unit Agreement, as amended and restated (incorporated by reference to Exhibit 10.2 filed with the Registrant's Quarterly Report on Form 10-Q filed on August 30, 2016)
10.6*	Registrant's 2012 Employee Stock Plan Form of Severance Restricted Stock Unit Agreement, as amended and restated (incorporated by reference to Exhibit 10.3 filed with the Registrant's Quarterly Report on Form 10-Q filed on August 30, 2016)
10.7*	Registrant's 2012 Employee Stock Plan Form of Stock Option Agreement (incorporated by reference to Exhibit 10.2 filed with the Registrant's Current Report on Form 8-K filed on March 13, 2012)
10.8*	Registrant's 2012 Employee Stock Plan Form of Stock Option Agreement (non-U.S. Employees) (incorporated by reference to Exhibit 10.4 filed with the Registrant's Current Report on Form 8-K filed on March 13, 2012)

Exhibit No.	Description
10.9*	PlanGrid, Inc. 2012 Equity Incentive Plan (incorporated by reference to Exhibit 99.1 filed with the Registrant's Registration Statement on Form S-8 filed on December 21, 2018)
10.10*	Amended and Restated BuildingConnected, Inc. 2013 Stock Plan (incorporated by reference to Exhibit 99.1 filed with the Registrant's Registration Statement on Form S-8 filed on January 24, 2019)
10.11*	Registrant's 2012 Outside Directors' Stock Plan, as amended and restated (incorporated by reference to Exhibit 10.18 filed with the Registrant's Annual Report on Form 10-K filed on March 21, 2017)
10.12*	Registrant's 2012 Outside Directors' Stock Plan Form of Restricted Stock Unit Agreement (incorporated by reference to Exhibit 10.5 filed with the Registrant's Current Report on Form 8-K filed on March 13, 2012)
10.13*	Registrant's Executive Incentive Plan, as amended and restated (incorporated by reference to Exhibit 10.23 filed with the Registrant's Annual Report on Form 10-K filed on March 23, 2016)
10.14*	Registrant's 2005 Non-Qualified Deferred Compensation Plan, as amended and restated, effective as of January 1, 2010 (incorporated by reference to Exhibit 10.1 filed with the Registrant's Quarterly Report on Form 10-Q filed on December 8, 2009)
10.15*	Participants, target awards and payout formulas for fiscal year 2019 under the Registrant's Executive Incentive Plan (incorporated by reference to Item 5.02 of the Registrant's Current Report on Form 8-K filed on March 26, 2018)
10.16*	Executive Change in Control Program, as amended and restated (incorporated by reference to Exhibit 10.1 filed with the Registrant's Current Report on Form 8-K filed on December 21, 2016)
10.17*	Sub-Plan of the Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan, as amended and restated (filed herewith)
10.18*	Form of Indemnification Agreement executed by the Registrant and each of its officers and directors (incorporated by reference to Exhibit 10.8 filed with the Registrant's Annual Report on Form 10-K filed on March 31, 2005)
10.19*	Employment Agreement, dated as of June 19, 2017, by and between the Registrant and Andrew Anagnost (incorporated by reference to Exhibit 10.1 filed with the Registrant's Current Report on Form 8-K filed on June 19, 2017)
10.20*	Registrant's Severance Plan dated August 27, 2018 (incorporated by reference to Exhibit 99.1 filed with the Registrant's Current Report on Form 8-K filed on August 30, 2018)
10.21*	Registrant's 2012 Employee Stock Plan Form of Retirement Restricted Stock Unit Agreement, as amended and restated (filed herewith)
10.22	Office Lease between Registrant and the J.H.S. Trust for 111 McInnis Parkway, San Rafael, CA, as amended (incorporated by reference to Exhibit 10.1 filed with the Registrant's Quarterly Report on Form 10-Q for the fiscal quarter ended October 31, 2004)
10.23	Fourth Amendment to Lease between Registrant and the J.H.S. Holdings L.P. for 111 McInnis Parkway, San Rafael, CA (incorporated by reference to Exhibit 10.30 filed with the Registrant's Annual Report on Form 10-K filed on March 19, 2010)
10.24	Amended and Restated Credit Agreement, dated December 17, 2018, by and among the Registrant, the lenders from time to time party thereto and Citibank, N.A. as agent (incorporated by reference to Exhibit 10.1 filed with the Registrant's Current Report on Form 8-K filed on December 20, 2018)
10.25	Term Loan Agreement, dated December 17, 2018, by and among the Registrant, the lenders from time to time party thereto and Citibank, N.A. as agent (incorporated by reference to Exhibit 10.2 filed with the Registrant's Current Report on Form 8-K filed on December 20, 2018)
10.26	Agreement and Plan of Merger, dated as of November 20, 2018, by and among the Registrant, Araujo Acquisition Corp., PlanGrid, Inc. and Shareholder Representative Services LLC (incorporated by reference to Exhibit 2.1 filed with the Registrant's Current Report on Form 8-K filed on November 20, 2018)

Exhibit No.	Description
21.1	List of Subsidiaries (filed herewith)
23.1	Consent of Independent Registered Public Accounting Firm (Ernst & Young LLP) (filed herewith)
24.1	Power of Attorney (contained in the signature page to this Annual Report)
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (filed herewith)
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934 (filed herewith)
32.1†	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (filed herewith)
101.INS ††	XBRL Instance Document
101.SCH ††	XBRL Taxonomy Extension Schema
101.CAL ††	XBRL Taxonomy Extension Calculation Linkbase
101.DEF ††	XBRL Taxonomy Extension Definition Linkbase
101.LAB ††	XBRL Taxonomy Extension Label Linkbase
101.PRE ††	XBRL Taxonomy Extension Presentation Linkbase

* Denotes a management contract or compensatory plan or arrangement.

† The certifications attached as Exhibit 32.1 that accompany this Annual Report on Form 10-K are not deemed filed with the Securities and Exchange Commission and are not to be incorporated by reference into any filing of Autodesk, Inc. under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-K, irrespective of any general incorporation language contained in such filing.

†† The financial information contained in these XBRL documents is unaudited.

AUTODESK, INC.

INTERNATIONAL EMPLOYEE STOCK PURCHASE PLAN

(as amended and restated effective June 14, 2017)
(Sub-Plan of the Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan, as amended and restated)

The following constitute the provisions of the International Employee Stock Purchase Plan, as amended and restated (herein called the “Sub-Plan”) of Autodesk, Inc. (herein called the “Company”), a sub-plan of the Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan, as amended and restated (herein called the “US Plan”).

1. Purpose. The Sub-Plan is intended to provide eligible Employees of the Company’s Affiliates the opportunity to acquire a proprietary interest in the Company through the purchase of shares of the Company’s common stock at periodic intervals with their accumulated payroll deductions or other approved contributions. The Sub-Plan is not intended to qualify as an employee stock purchase plan under Section 423 (b) of the U.S. Internal Revenue Code of 1986, as amended.

All provisions of this Sub-Plan shall be governed by the U.S. Plan, except as otherwise provided herein.

2. Definitions.

All definitions in the Sub-Plan shall be interpreted in accordance with the U.S. Plan except as otherwise provided herein.

(a) “Affiliate” shall mean a corporation, partnership, joint venture or other business entity, or branch of such business entity, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or an Affiliate.

(b) “Employee” shall mean any person employed by an Affiliate.

(c) “Participant” means any Employee who meets the eligibility and participation requirements set forth in Sections 3 and 4, below.

3. Eligibility. Each individual who is (a) an Employee as of the date specified by the Committee for the applicable Offering Period, and (b) employed by an Affiliate (or legal extension of an Affiliate, such as a branch office) operating in one of the countries listed on the attached Schedule A (which Schedule A may be amended form time to time by the Board or a committee thereof), shall be eligible to participate in the Sub-Plan for that Offering Period.

4. Participation.

(a) An eligible Employee may become a Participant in the Plan by completing a subscription agreement authorizing payroll deductions or other approved contributions on the form provided by the Company and filing it online via the employee portal or with the Company's payroll office within the period specified by the Committee for the applicable Offering Period, unless a later or earlier time for filing the subscription agreement is set by the Board for all eligible Employees with respect to a given offering.

(b) Payroll deductions for a Participant shall continue at the rate specified in the subscription agreement throughout the Offering Period with automatic re-enrollment for the Offering Period which commences the day after the Exercise Date at the same rate specified in the original subscription agreement, subject to any change in subscription rate made pursuant to Section 6(c) of the U.S. Plan, unless sooner terminated by the participant as provided in Section 11 of the U.S. Plan.

5. Payroll Deductions and Other Approved Contributions.

(a) Except to the extent otherwise determined by the Board, payroll deductions shall be made in accordance with Section 6 of the U.S. Plan. The Board may, at its discretion, approve other methods of contributions including, without limitation, check, cash or standing order of the Participant's individual bank account.

(b) The amounts so collected shall be credited to the participant's individual book account under the Sub-Plan, initially in the currency in which paid by the Affiliate until converted into U.S. Dollars. Accordingly, all purchases of Common Stock under the Sub-Plan are to be made with the U.S. Dollars into which the payroll deductions for the Offering Period or other approved contributions have been converted. The amounts collected from a participant may be commingled with the general assets of the Company or the Affiliate and may be used for general corporate purposes, except as otherwise required by local law.

(c) For purposes of determining the number of shares purchasable by a participant, the payroll deductions or other approved contributions credited to each participant's book account during each Exercise Period shall be converted into U.S. Dollars on the Exercise Date for that Exercise Period on the basis of the exchange rate in effect on such date. The Board shall have the absolute discretion to determine the applicable exchange rate to be in effect for each Exercise Date by any reasonable method (including, without limitation, the exchange rate actually used by the Company for its intra-Company financial transactions for the month of such transfer). Any changes or fluctuations in the exchange rate at which the payroll deductions or other approved contributions collected on the participant's behalf are converted into U.S. Dollars on each Exercise Date shall be borne solely by the participant.

6. Grant of Option. The grant of the option and the purchase price of the option shall be in accordance with Section 7 of the U.S. Plan.

7. Exercise of Option. The exercise of the option shall be in accordance with Section 8 of the U.S. Plan.

8. Withdrawal; Termination of Employment.

(a) A Participant may withdraw all but not less than all the payroll deductions or other approved contributions credited to his or her account under the Sub-Plan at any time prior to the Exercise Date of the Offering Period by giving written notice to the Company. All of the Participant's payroll deductions or other approved contributions credited to his or her account will be paid to him or her at the next pay date after receipt of his or her notice of withdrawal and his or her option for the current period will be automatically terminated, and no further payroll deductions for the purchase of shares will be made during the Offering Period.

(b) Upon termination of the participant's Continuous Status as an Employee prior to the Exercise Date for any reason, including retirement or death, the payroll deductions or other approved contributions credited to his or her account will be returned to the participant's or, in the case the of Participant's death, to the person or persons entitled thereto under Section 15 of the U.S. Plan, and his or her option will be automatically terminated.

(c) A Participant's withdrawal from an offering will not have any effect upon his or her eligibility to participate in a succeeding offering or in any similar plan which may hereafter be adopted by the Company.

9. Transfer of Employment.

(a) In the event that a Participant who is an Employee of an Affiliate is transferred and becomes an employee of the Company during an Offering Period under the Sub-Plan, such individual may, subject to the terms and eligibility of the U.S. Plan, become a participant under the U.S. Plan for the duration of the Offering Period in effect at that time. Unless otherwise required under local law, any payroll deductions or other approved contributions may continue to be held by the Affiliate former employer of the Participant for the remainder of the Offering Period. At the next Exercise date, all payroll deductions and other approved contributions made by or to the Company or the Affiliate shall be aggregated for the purchase of shares subject to the terms and limitations of the U.S. Plan.

(b) In the event that an employee of the Company who is a participant in the U.S. Plan is transferred and becomes an Employee of an Affiliate during an Offering Period in effect under the U.S. Plan, such individual may become a participant under the Sub-Plan for the duration of the Offering Period in effect at that time. Unless otherwise required under local law, any payroll deductions may continue to be held by the Company for the remainder of the Offering Period. At the next Exercise date, all payroll deductions and other approved contributions made by or to the Company or Affiliate may be aggregated for the purchase of shares subject to the terms and limitations of the Sub-Plan.

10. Interest. No interest shall accrue on the payroll deductions or other approved contributions of a Participant in the Sub-Plan, unless required by Applicable Law, as determined by the Company.

11. Stock.

(a) The shares of the Company's Common Stock purchasable by Participants under the Sub-Plan shall be made available from shares reserved under the U.S. Plan and any shares issued under the Sub-Plan will reduce, on a share-for-share basis, the number of shares of Stock available for subsequent issuance under the U.S. Plan.

(b) The Participant will have no interest or voting right in shares covered by his or her option until such option has been exercised.

(c) Shares to be delivered to a Participant under the Sub-Plan will be registered in the name of the Participant or in the name of the Participant and his or her spouse.

12. Administration. The Sub-Plan shall be administered in accordance with Section 14 of the U.S. Plan. The Board may adopt rules or procedures relating to the operation and administration of the Sub-Plan to accommodate the specific requirements of the law and procedures of applicable jurisdictions. Without limiting the generality of the foregoing, the Board is specifically authorized to adopt rules and procedures regarding handling of payroll deductions or other approved contributions, payment of interest, conversion of local currency, payroll tax, withholding procedures and handling of stock certificates that vary with local requirements. The Board may also adopt rules, procedures or sub-plans applicable to particular Affiliates or jurisdictions. The rules of such sub-plans may take precedence over other provisions of this Sub-Plan, with the exception of Section 11 of the Sub-Plan, but unless otherwise superseded by the terms of such sub-plan, the provisions of the Sub-Plan shall govern the operation of such sub-plan.

13. Transferability. Neither payroll deductions nor other funds credited to a Participant's account nor any rights with regard to the exercise of an option or to receive shares under the Sub-Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution or as provided in Section 15 of the U.S. Plan) by the Participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with Section 11 of the U.S. Plan. In order to comply with local law (including, without limitation, local securities and applicable exchange laws), the Company may require a Participant to retain the shares purchased on his or her behalf in a Company account or an account of a designated broker until the sale of such shares.

14. Use of Funds. All payroll deductions or other approved contributions received or held by the Company under the Sub-Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such payroll deductions or other approved contributions unless required by local law.

15. Reports. Individual accounts will be maintained for each Participant in the Sub-Plan. Statements of account will be given to participating Employees annually promptly following the Exercise Date, which statements will set forth the amounts of payroll deductions or other approved contributions, the per share purchase price, the number of shares purchased and the remaining cash balance refunded or to be refunded, if any.

16. Amendment or Termination. The Board of Directors of the Company or its Committee appointed pursuant to the U.S. Plan may at any time terminate or amend the Sub-Plan. No such termination can affect options previously granted, nor may an amendment make any change in any option theretofore granted which adversely affects the rights of any participant.

Notwithstanding any provision of the U.S. Plan or this Sub-Plan to the contrary, in order to comply with the laws in other countries in which the Company and its Subsidiaries operate or have participants, the Company, by action of its duly authorized officers, in their sole discretion, shall have the power and authority at any time to establish "offering document" and similar addendums to this Sub-Plan to modify administrative procedures and other terms and procedures, to the extent such actions may be necessary or advisable and take any action that it deems advisable to obtain approval or comply with any necessary local governmental regulatory exemptions or approvals. Notwithstanding the foregoing, no action may be taken hereunder that would violate the Exchange Act, the Code, any securities law or governing statute or any other applicable law or cause the U.S. Plan not to comply with Section 423 of the Code.

17. Notices. All notices or other communications by a participant to the Company under or in connection with the Sub-Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

18. Governing Law. Except to the extent that provisions of this Plan are governed by applicable provisions of the Code or any other substantive provision of United States federal law, this Plan shall be construed in accordance with the laws of the State of California, without giving effect to the conflict of laws principles thereof. Should any provision of this Sub-Plan be determined by a court of competent jurisdiction to be unlawful or unenforceable for a country, such determination shall in no way affect the application of that provision in any other country, or any of the remaining provisions of the Sub-Plan.

19. Severability. If any provision of this Sub-Plan is or becomes or is deemed to be invalid, illegal, or unenforceable for any reason in any jurisdiction or as to any Employee, such invalidity, illegality or unenforceability will not affect the remaining parts of the Sub-Plan, and the Sub-Plan will be construed and enforced as to such jurisdiction or Employee as if the invalid, illegal or unenforceable provision had not been included.

Schedule A

Countries with Eligible Employees of Affiliates Participating in the International Employee Stock Purchase Plan (as of December 13, 2018)

Argentina
Australia
Austria
Belgium
Brazil
Canada
China
Colombia
Czech Republic
Denmark
Finland
France
Germany
Greece
Hong Kong
Hungary
India
Indonesia
Ireland
Israel
Italy
Japan
Jordan
Malaysia
Mexico
Netherlands
New Zealand
Norway
Philippines
Poland
Portugal
Qatar
Romania
Singapore
South Korea
Spain
Sweden
Switzerland
Taiwan
Thailand
Turkey
United Arab Emirates
United Kingdom

<u>EXHIBIT A</u>

AUTODESK, INC.

2012 EMPLOYEE STOCK PLAN

TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS

(Settled in Shares)

1. <u>Grant</u>. The Company hereby grants to the Employee ("Participant") named in the Notice of Grant of Restricted Stock Units (the "Notice of Grant") under the Autodesk, Inc. 2012 Employee Stock Plan (the "Plan") the number of Restricted Stock Units indicated on the Notice of Grant, subject to all of the terms and conditions in this Agreement (as defined in the Notice of Grant and Plan) and the Plan, which is incorporated herein by reference. When shares of the Company's Common Stock ("Shares") are issued to Participant in settlement of the Restricted Stock Units, par value shall be deemed paid by Participant for each Restricted Stock Unit by past services rendered by Participant, and shall be subject to the appropriate tax withholdings. Unless otherwise defined herein, capitalized terms used herein shall have the meanings ascribed to them in the Plan.

2. <u>Company's Obligation to Settle</u>. Unless and until the Restricted Stock Units shall have vested in the manner set forth in Sections 3, 4 or 8 of this Agreement or Section 13 of the Plan, Participant shall have no right to settlement of any such Restricted Stock Units. Prior to actual settlement of any vested Restricted Stock Units, such Restricted Stock Units shall represent an unsecured obligation of the Company. Settlement of any vested Restricted Stock Units will be made in whole Shares only.

3. <u>Vesting Schedule</u>. Except as provided in Section 4 of this Agreement and Section 13 of the Plan, and subject to Sections 5 and 8 of this Agreement, the Restricted Stock Units awarded by this Agreement shall vest in accordance with the vesting provisions set forth in the Notice of Grant. Except as set forth in Section 8 of this Agreement, Restricted Stock Units scheduled to vest on a certain date or upon the occurrence of a certain condition shall vest in accordance with the provisions of this Agreement only if Participant is an Employee from the Date of Grant until the date such vesting occurs.

4. <u>Administrator Discretion</u>. Except to the extent doing so would result in the imposition of additional taxes under Section 409A of the Code, the Administrator, in its discretion, may accelerate the vesting of the balance, or some lesser portion of the balance, of the unvested Restricted Stock Units at any time, subject to the terms of the Plan. If so accelerated, the balance, or such lesser portion of the balance as applicable, of the Restricted Stock Units shall be considered as having vested as of the date specified by the Administrator. Notwithstanding anything in the Plan or this Agreement to the contrary, if the vesting of any portion of the balance of the Restricted Stock Units is accelerated in connection with Participant's "separation from service" within the meaning of Section 409A of the Code (as determined by the Company), other than due to death, and if (x) Participant is a "specified employee" within the meaning of Section 409A of the Code at the time of such termination and (y) the settlement of such accelerated Restricted Stock Units shall result in the imposition of additional tax under Section 409A of the Code if issued to Participant on or within the six (6) month period following Participant's termination as an Employee, then the settlement of such accelerated Restricted Stock Units shall not be made until the earlier of (A) six (6) months and one (1) day following the date of Participant's termination as an Employee or (B) Participant's death. It is the intent of this Agreement to comply with or be exempt from the requirements of Section 409A of the Code so that none of the Restricted Stock Units provided under this Agreement or Shares issuable thereunder shall be subject to the additional tax imposed under Section 409A of the Code, and any ambiguities herein shall be interpreted to so comply.

5. <u>Forfeiture upon Termination of Status as an Employee</u>.

(a) Subject to Section 7, Section 8 and Section 5(b), the balance of the Restricted Stock Units that have not vested as of the time of Participant's termination as an Employee for any or no reason shall be forfeited and automatically transferred to and reacquired by the Company at no cost to the Company, and Participant's right to acquire any Shares hereunder shall immediately terminate.

(b) Notwithstanding Section 5(a), if Participant is subject to the Company's Executive Change in Control Program on his or her Termination Date (defined below), upon any termination without Cause (defined below) or for Good Reason (defined below) following a Change of Control (defined below), unvested Restricted Stock Units with vesting schedules subject only to Participant's continuous service as an Employee ("Time-Based RSUs") shall vest in full as of such termination, and unvested Restricted Stock Units which are not Time-Based RSUs ("Performance-Based RSUs") shall vest at the "target" level set forth in the Notice of Grant as of such termination. For purposes of this Section 5(b), "Cause", "Change of Control", "Good Reason" and "Termination Date" shall have the meaning set forth in the version of the Company's Executive Change in Control Program, as in effect on the Termination Date.

6. <u>Distribution after Vesting</u>. Unless otherwise specified in the country-specific provisions in Exhibit B, any Restricted Stock Units that vest in accordance with the terms of this Agreement and the Plan will be distributed to Participant (or in the event of Participant's death, to his or her estate) in whole Shares as soon as administratively practicable after vesting, subject to Section 9 and the other provisions of this Agreement, but, subject to Applicable Law, in no event later than the 15th day of the third month following the end of (i) the Company's fiscal year in which the Restricted Stock Units vest or (ii) the calendar year in which the Restricted Stock Units vest, whichever is later. Any Restricted Stock Units that vest in accordance with Section 4 will be settled at the time(s) provided in Section 4, subject to Section 9 and the other provisions of this Agreement.

7. <u>Disability or Death of Participant</u>.

(a) Subject to Section 7(c), if Participant ceases to be an Employee by reason of his or her Disability during the term of this Award, all unvested Time-Based RSUs shall vest in full as of the date of such cessation of employment due to such Disability.

(b) Subject to Section 7(c), in the event of the death of Participant during the term of this Award and while an Employee, all unvested Restricted Stock Units that are Time-Based RSUs shall vest in full as of the date of death. Upon such death, any distribution or delivery to be made to Participant under this Agreement shall be made to Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator or, if no such beneficiary has been designated or survives Participant, the administrator or executor of Participant's estate. Any such transferee must furnish the Company with (a) written notice of his or her status as transferee, and (b) evidence satisfactory to the Company to establish the validity of the transfer and compliance with any laws or regulations pertaining to said transfer.

(c) Notwithstanding anything in Sections 7(a) or 7(b), if Participant ceases to be an Employee by reason of his or her Disability or death during the term of this Award, unvested Performance-Based RSUs, shall vest at the "target" level set forth in the Notice of Grant on the date of cessation as an Employee or death.

8. Retirement of Participant

(a) In the event of Participant's Qualified Retirement (as defined below), shares subject to time-based RSUs that would otherwise vest within twelve (12) months following his or her Qualified Retirement shall fully accelerate and become vested with respect to one hundred percent (100%) of the shares of Company common stock subject thereto as of the date of Participant's Qualified Retirement. Any Company time-based RSUs that remain unvested after application of this Section 8 shall immediately be forfeited and cancelled for no additional consideration upon the Participant's Qualified Retirement.

(b) In the event of a Participant's Qualified Retirement, shares subject to performance-based RSUs that would otherwise vest within twelve (12) months following his or her Qualified Retirement shall continue to vest as if Participant had remained continuously employed by the Company through the vest date (as defined in the Notice of Grant) next following the Participant's Qualified Retirement, based on the extent, if any, that the underlying performance criteria with respect to such awards are satisfied for the applicable performance period (and the remainder of such performance-based RSUs that do not become vested pursuant to this Section 8(b), if any, shall be forfeited and cancelled for no additional consideration).

(c) For the purposes of this Plan, "Qualified Retirement," shall be defined as a voluntary termination of employment by Participant, which meets either of the following requirements: (i) Participant's combined total age plus years of continuous employment with the Company is equal to or greater than 75 or (ii) Participant is at least 55 years of age and completes at least 10 years of continuous employment with the Company. Unless waived by the Administrator, in order for such voluntary termination to be deemed a Qualified Retirement, Participant shall properly deliver written notice of his or her intent to resign employment with the Company in a Qualified Retirement at least 3 months prior to the effective date of such Qualified Retirement.

9. Responsibility for Taxes. Participant acknowledges that, regardless of any action taken by the Company or, if different, Participant's employer (the "Employer") the ultimate liability for all income tax, social insurance, payroll tax, fringe benefits tax, payment on account or other tax-related items related to Participant's participation in the Plan and legally applicable to Participant ("Tax-Related Items"), is and remains Participant's responsibility and may exceed the amount, if any, actually withheld by the Company or the Employer. Participant further acknowledges that the Company and/or the Employer (1) make no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the Restricted Stock Units, including, but not limited to, the grant, vesting or settlement of the Restricted Stock Unit, the subsequent sale of Shares acquired pursuant to such settlement and the receipt of any dividends; and (2) do not commit to and are under no obligation to structure the terms of the grant or any aspect of the Restricted Stock Units to reduce or eliminate Participant's liability for Tax-Related Items or achieve any particular tax result. Further, if Participant is subject to Tax-Related Items in more than one jurisdiction, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for Tax-Related Items in more than one jurisdiction.

In this regard, Participant authorizes the Company and/or the Employer, or their respective agents, at their discretion, to satisfy any obligations with regard to withholding of Tax-Related Items by one or a combination of the following:

(i) withholding from Participant's wages or other cash compensation paid to Participant by the Company and/or the Employer, including withholding from cash from Participant's brokerage account designated by the Company; or

(ii) withholding from proceeds of the sale of Shares acquired upon vesting/settlement of the Restricted Stock Units either through a voluntary sale or through a mandatory sale arranged by the Company (on Participant's behalf pursuant to this authorization); or

(iii) withholding in Shares to be issued upon settlement of the Restricted Stock Units.

The Company may withhold or account for Tax-Related Items by using rates up to, but not exceeding, the maximum tax rates in Participant's jurisdiction on the date the amount of Tax-Related Items to be withheld is to be determined. Participant may receive a refund in cash of any amount withheld that exceeds the amount remitted to the applicable tax authorities and will have no entitlement to the Common Stock equivalent or to any interest on such over-withheld amount. If the obligation for Tax-Related Items is satisfied by withholding in Shares, for tax purposes, Participant is deemed to have been issued the full number of Shares subject to the vested Restricted Stock Units, notwithstanding that a number of the Shares are held back solely for the purpose of paying the Tax-Related Items.

Notwithstanding (i) through (iii) above, if Participant is subject to Section 17 of the Exchange Act, any obligation to withhold Tax-Related Items will be satisfied under (iii), unless otherwise determined by the Board or Compensation Committee.

Finally, Participant agrees to pay to the Company or the Employer, any amount of Tax-Related Items that the Company or the Employer may be required to withhold or account for as a result of Participants participation in the Plan that cannot be satisfied by the means previously described. The Company may refuse to issue or deliver the Shares or the proceeds of the sale of Shares, if Participant fails to comply with Participants obligations in connection with the Tax-Related Items.

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

11. No Guarantee of Continued Employment. PARTICIPANT ACKNOWLEDGES AND AGREES THAT THE VESTING OF THE RESTRICTED STOCK UNITS PURSUANT TO THE VESTING SCHEDULE HEREOF IS EARNED ONLY BY CONTINUING AS AN EMPLOYEE AT THE WILL OF THE COMPANY (OR THE EMPLOYER) AND NOT THROUGH THE ACT OF BEING HIRED, BEING GRANTED THIS AWARD OF RESTRICTED STOCK UNITS OR, AS APPLICABLE, ACQUIRING SHARES HEREUNDER. PARTICIPANT FURTHER ACKNOWLEDGES AND AGREES THAT THIS AGREEMENT, THE TRANSACTIONS CONTEMPLATED HEREUNDER AND THE VESTING SCHEDULE SET FORTH HEREIN DO NOT CONSTITUTE AN EXPRESS OR IMPLIED PROMISE OF CONTINUED ENGAGEMENT AS AN EMPLOYEE FOR THE VESTING PERIOD, FOR ANY PERIOD, OR AT ALL, AND SHALL NOT INTERFERE IN ANY WAY WITH PARTICIPANT'S RIGHT OR THE RIGHT OF THE COMPANY (OR SUBSIDIARY EMPLOYING PARTICIPANT) TO TERMINATE PARTICIPANT'S RELATIONSHIP AS AN EMPLOYEE AT ANY TIME, WITH OR WITHOUT CAUSE.

12. Address for Notices. Unless otherwise specified in Exhibit B, any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at Autodesk, Inc., c/o Stock Administrator, **111 McInnis Parkway, San Rafael, CA 94903 U.S.A.**, or at such other address as the Company may hereafter designate in writing.

13. Grant is Not Transferable. Except to the limited extent provided in Section 7, this Award and the rights and privileges conferred hereby shall not be transferred, assigned, pledged or hypothecated in any way (whether by operation of law or otherwise) and shall not be subject to sale under execution, attachment or similar process. Upon any attempt to transfer, assign, pledge, hypothecate or otherwise dispose of this Award, or any right or privilege conferred hereby, or upon any attempted sale under any execution, attachment or similar process, this Award and the rights and privileges conferred hereby immediately shall become null and void.

14. Binding Agreement. Subject to the limitation on the transferability of this grant contained herein, this Agreement shall be binding upon and inure to the benefit of the heirs, legatees, legal representatives, successors and assigns of the parties hereto.

15. Additional Conditions to Issuance of Stock. The Company shall not be required to issue any certificate or certificates for Shares (in book entry form or otherwise) hereunder prior to fulfillment of all the following conditions: (a) the admission of such Shares to listing on all stock exchanges on which such class of stock is then listed; (b) the completion of any registration or other qualification of such Shares under any Applicable Law or under the rulings or regulations of the U.S. Securities and Exchange Commission or any other governmental regulatory body, which the Administrator shall, in its absolute discretion, deem necessary or advisable; (c) the obtaining of any approval or other clearance from any governmental agency, which the Administrator shall, in its absolute discretion, determine to be necessary or advisable; and (d) the lapse of such reasonable period of time following the date of vesting of the Restricted Stock Units as the Administrator may establish from time to time for reasons of administrative convenience.

If at any time the Company shall determine, in its discretion, that the listing, registration or qualification of the Shares upon any securities exchange or under any state or federal law, or the consent or approval of any governmental regulatory authority is necessary or desirable as a condition to the issuance of Shares to Participant (or his or her estate), such issuance shall not occur unless and until such listing, registration, qualification, consent or approval shall have been effected or obtained free of any conditions not acceptable to the Company. Participant's sale of Shares may be subject to any market blackout period that may be imposed by the Company and must comply with the Company's insider trading policies and any other applicable securities laws.

16. Plan Governs. This Agreement is subject to all terms and provisions of the Plan. Subject to the express exception in Section 4 of this Agreement, in the event of a conflict between one or more provisions of this Agreement and one or more provisions of the Plan, the provisions of the Plan shall govern.

17. Administrator Authority. The Administrator shall have the power to interpret the Plan and this Agreement and to adopt such rules for the administration, interpretation and application of the Plan as are consistent therewith and to interpret or revoke any such rules (including, but not limited to, the determination of whether or not any Restricted Stock Units have vested). All actions taken and all interpretations and determinations made by the Administrator in good faith shall be final and binding upon Participant, the Company and all other interested persons. The Administrator shall not be personally liable for any action, determination or interpretation made in good faith with respect to the Plan or this Agreement. The Administrator shall, in its absolute discretion, determine when such conditions have been fulfilled.

18. Electronic Delivery. The Company may, in its sole discretion, decide to deliver any documents related to Restricted Stock Units awarded under the Plan or future Restricted Stock Units that may be awarded under the Plan by electronic means or request Participant's consent to participate in the Plan by electronic means. Participant hereby consents to receive such documents by electronic delivery and agrees to participate in the Plan through any on-line or electronic system established and maintained by the Company or another third party designated by the Company.

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

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

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

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

23. Governing Law. This Award and the provisions of this Agreement shall be governed by, and subject to, the laws of the State of California, without giving effect to the conflict of law principles thereof. For purposes of litigating any dispute that arises under this Award of Restricted Stock Units or this Agreement, the parties hereby submit to and consent to the sole and exclusive jurisdiction of the State of California, and agree that such litigation shall be conducted in the courts of **Marin County, California**, or the federal courts for the United States for the Northern District of California, and no other courts, where this Award of Restricted Stock Units is made and/or to be performed.

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

25. Nature of Grant. In accepting this Restricted Stock Unit Award, Participant acknowledges that:

(a) Any notice period mandated under Applicable Laws shall not be treated as continuous service for the purpose of determining the vesting of the Restricted Stock Unit Award; and Participant's right to receive Shares in settlement of the Restricted Stock Unit Award after termination of service, if any, will be measured by the date of termination of Participant's service and will not be extended by any notice period mandated under Applicable Laws. Subject to the foregoing and the provisions of the Plan, the Company, in its sole discretion, shall determine whether Participant's service has terminated and the effective date of such termination.

(b) The Plan is established voluntarily by the Company. It is discretionary in nature and it may be modified, amended, suspended or terminated by the Company at any time, unless otherwise provided in the Plan and this Agreement.

(c) The grant of this Restricted Stock Unit Award is an exceptional, voluntary and occasional one-time benefit which does not create any contractual or other right to receive future grants of Restricted Stock Units, or benefits in lieu of Restricted Stock Units. All decisions with respect to future Restricted Stock Unit grants, if any, will be at the sole discretion of the Company.

(d) Participant's participation in the Plan shall not create a right to continued service with the Company (or any Subsidiary).

(e) Participant is voluntarily participating in the Plan.

(f) The Restricted Stock Unit Award is an extraordinary item that does not constitute compensation of any kind for service of any kind rendered to the Company (or any Subsidiary), and which is outside the scope of Participant's employment contract, if any. Additionally, unless otherwise agreed with the Company, the Restricted Stock Units and the Shares subject to the Restricted Stock Units, and the income and value of same, are not granted as consideration for, or in connection with, the service Participant may provide as an officer or a director of a subsidiary of the Company.

(g) The Restricted Stock Unit Award is not part of normal or expected compensation or salary for any purpose, including, but not limited to, calculating any severance payments, resignation, termination, redundancy, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or similar payments. This applies to any payment even in those jurisdictions requiring such payments upon termination of employment.

(h) The Restricted Stock Unit Award will not be interpreted to form an employment contract or relationship with the Company; and furthermore the Restricted Stock Unit Award will not be interpreted to form an employment contract with any Subsidiary.

(i) The future value of the underlying Shares is unknown and cannot be predicted with certainty. If Participant obtains Shares upon settlement of the Restricted Stock Unit Award, the value of those Shares may increase or decrease.

(j) This Restricted Stock Unit Award has been granted to Participant in Participant's status as an Employee of the Company or its Subsidiaries.

(k) There shall be no additional obligations for any Subsidiary employing Participant as a result of this Restricted Stock Unit Award.

(l) All decisions with respect to future Restricted Stock Units or other grants, if any, will be at the sole discretion of the Company.

(m) The Restricted Stock Unit and the Shares subject to the Restricted Stock Units, and the income and value of same, are not intended to replace any pension rights or compensation.

(n) The following provisions apply only if Participant is providing services outside the United States:

(i) the Restricted Stock Units and the Shares subject to the Restricted Stock Units are not part of normal or expected compensation or salary for any purpose;

(ii) neither the Company, the Employer nor any other Subsidiary of the Company shall be liable for any foreign exchange rate fluctuation between Participant's local currency and the United States Dollar that may affect the value of the Restricted Stock Units or of any amounts due to Participant pursuant to the settlement of the Restricted Stock Units or the subsequent sale of any Shares acquired upon settlement; and

(iii) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from the termination of Participant's employment or other service relationship (for any reason whatsoever, whether or not later found to be invalid or in breach of employment laws in the jurisdiction where Participant is employed or the terms of Participant's employment agreement, if any), and in consideration of the grant of the Restricted Stock Units, Participant agrees not to institute any claim against the Company, the Employer or any of the other Subsidiaries or affiliates of the Company.

26. **Data Privacy Information and Consent**.

The Company is located at 111 McInnis Parkway, San Rafael, CA 94903 U.S.A. and grants Restricted Stock Units to Employees of the Company and its Subsidiaries and affiliates, at its sole discretion. If Participant would like to participate in the Plan, he or she should review the following information about the Company's data processing practices and declare his or her consent.

(a) *Data Collection and Usage*. ***The Company collects, processes and uses personal data of Employees, including name, home address, email address and telephone number, date of birth, social insurance, passport or other identification number, salary, citizenship, job title, any Shares or directorships held in the Company, and details of all Restricted Stock Units canceled, vested, or outstanding in Participant's favor, which the Company receives from Participant or the Employer. If the Company offers Participant a grant of Restricted Stock Units under the Plan, then the Company will collect his or her personal data for purposes of allocating shares and implementing, administering and managing the Plan. The Company's legal basis for the processing of Participant's personal data will be his or her consent.***

(b) *Stock Plan Administration Service Providers*. ***The Company transfers Employee data to E*TRADE Financial Corporate Services, Inc. ("E*TRADE") an independent service provider based in the United States which assists the Company with the implementation, administration and management of the Plan. In the future, the Company may select a different service provider and share Participant's data with another company that serves in a similar manner. The Company's service provider will open an account for Participant to receive and trade Shares. Participant will be asked to agree on separate terms and data processing practices with the service provider, which is a condition of Participant's ability to participate in the Plan.***

(c) *International Data Transfers*. ***The Company and its service providers are based in the United States. If Participant is outside the United States, he or she should note that his or her country has enacted data privacy laws that are different from the United States. For example, the European Commission has issued a limited adequacy finding with respect to the United States that applies only to the extent companies register for the EU-U.S. Privacy Shield program, which is open to companies subject to Federal Trade Commission jurisdiction. The Company is Privacy Shield certified, and any transfer of your data from the EU to the U.S. is covered under this regime.***

(d) *Data Retention*. ***The Company will use Participant's personal data only as long as is necessary to implement, administer and manage his or her participation in the Plan or as required to comply with legal or regulatory obligations, including under tax and security laws. When the Company no longer needs Participant's personal data, the Company will remove it from its systems. The Company may keep data longer to satisfy legal or regulatory obligations, and the Company's legal basis would be compliance with the relevant laws or regulations.***

(e) *Voluntariness and Consequences of Consent Denial or Withdrawal*. ***Participant's participation in the Plan and his or her grant of consent is purely voluntary. Participant may deny or withdraw his or her consent at any time. If Participant does not consent, or if he or she withdraws his or her consent, Participant cannot participate in the Plan. This would not affect Participant's salary as an Employee or his or her career; Participant would merely forfeit the opportunities associated with the Plan.***

(f) *Data Subject Rights*. ***Participant has a number of rights under data privacy laws in his or her country. Depending on where Participant is based, his or her rights may include the right to (a) to request access or copies of personal data the Company's processes, (b) rectification of incorrect data, (c) deletion of data, (d) restrictions on processing, (e) portability of data, (f) to lodge complaints with competent authorities in his or her country, and/or (g) a list with the names and addresses of any potential recipients of his or her personal data. To receive clarification regarding Participant's rights or to exercise his or her rights please contact privacy.questions@autodesk.com.***

If Participant agrees with the data processing practices as described in this notice, he or she should declare his or her consent by clicking "Accept" on the E*TRADE award acceptance page.

27. Currency Exchange Risk. Participant agrees and acknowledges that Participant shall bear any and all risk associated with the exchange or fluctuation of currency associated with the Award, including without limitation the settlement of the Award or sale of the Shares (the "Currency Exchange Risk"). Participant waives and releases the Company and its Subsidiaries from any potential claims arising out of the Currency Exchange Risk.

28. Exhibit B. Notwithstanding any provisions in this Agreement, the Restricted Stock Units shall be subject to any applicable country-specific provisions set forth in Exhibit B to this Agreement for Participant's country. Moreover, if Participant relocates to one of the countries included in Exhibit B, the provisions for such country will apply to Participant, to the extent the Company determines that the application of such provisions is necessary or advisable for legal or administrative reasons. Exhibit B constitutes part of this Agreement.

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

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

31. Waiver. Participant acknowledge that a waiver by the Company of breach of any provision of this Agreement shall not operate or be construed as a waiver of any other provision of this Agreement, or of any subsequent breach by Participant or any other Participant.

32. Insider-Trading/Market-Abuse Laws. Participant may be subject to insider trading restrictions and/or market abuse laws based on the exchange on which the Shares are listed and in applicable jurisdictions including the United States and Participant's country or his or her broker's country, if different, which may affect Participant's ability to accept, acquire, sell or otherwise dispose of Shares, rights to Shares (e.g., Restricted Stock Units) or rights linked to the value of Shares during such times as Participant is considered to have "inside information" regarding the Company (as defined by the laws in applicable jurisdictions). Local insider trading laws and regulations may prohibit the cancellation or amendment of orders Participant placed before he or she possessed inside information. Furthermore, Participant could be prohibited from (i) disclosing the inside information to any third party, which may include fellow Employees and (ii) "tipping" third parties or causing them otherwise to buy or sell securities. Any restrictions under these laws or regulations are separate from and in addition to any restrictions that may be imposed under the Autodesk, Inc. Insider Trading Policy. Participant is responsible for complying with any applicable restrictions, and should speak to Participant's personal legal advisor and/or the Company's Legal Department for further details regarding any applicable insider-trading and/or market-abuse laws in Participant's country.

33. Foreign Asset/Account Reporting Requirements and Exchange Controls. Participant acknowledges that Participant's country may have certain foreign asset and/or foreign account reporting requirements and exchange controls which may affect Participant's ability to acquire or hold Shares purchased under the Plan or cash received from participating in the Plan (including from any dividends paid on shares acquired under the Plan) in a brokerage or bank account outside Participant's country. Participant may be required to report such accounts, assets or transactions to the tax or other authorities in Participant's country. Participant also may be required to repatriate sale proceeds or other funds received as a result of Participant's participation in the Plan to Participant's country through a designated bank or broker within a certain time after receipt. Participant acknowledges that it is Participant's responsibility to be compliant with such regulations, and Participant is advised to consult Participant's personal legal advisor for any details.

EXHIBIT B

COUNTRY-SPECIFIC PROVISIONS TO THE

TERMS AND CONDITIONS OF RESTRICTED STOCK UNITS UNDER THE AUTODESK, INC. 2012 EMPLOYEE STOCK PLAN

Terms and Conditions

This Appendix includes additional terms and conditions that govern the Restricted Stock Units granted to Participant under the Autodesk, Inc. (the "Company") 2012 Equity Incentive Plan (the "Plan") if Participant works and/or resides in one of the countries listed below. Capitalized terms used but not defined in this Exhibit B have the meanings set forth in the Plan, the Notice of Restricted Stock Unit Grant (the "Notice") and/or the Terms and Conditions of Restricted Stock Unit Agreement (the "Agreement").

If Participant is a citizen or resident of a country other than the one in which Participant is currently working and/or residing, is considered a resident of another country for local law purposes or transfers employer and/or residency between countries after the Date of Grant, the Company shall, in its sole discretion, determine to what extent the terms and conditions contained herein shall apply to Participant under these circumstances.

Notifications

This Exhibit B also includes information regarding securities laws, exchange controls and certain other issues of which Participant should be aware with respect to his or her participation in the Plan. The information is based on the securities laws, exchange controls and other laws in effect in the respective countries as of January 2018. Such laws are often complex and change frequently. As a result, the Company strongly recommends Participant not rely on the information in this Exhibit B as the only source of information relating to the consequences of Participant's participation in the Plan because the information may be out of date at the time the Restricted Stock Units vest, or Participant sells the Shares acquired upon vesting of the Restricted Stock Units under the Plan.

In addition, the information contained herein is general in nature and may not apply to Participant's particular situation, and the Company is not in a position to assure Participant of a particular result. Accordingly, Participant is advised to seek appropriate professional advice as to how the relevant laws in Participant's country(ies) may apply to his or her situation.

Finally, if Participant is a citizen or resident of a country other than the one in which he or she is currently working and/or residing, transfers after the Date of Grant or is considered a resident of another country for local law purposes, the information contained herein may not apply in the same manner.

ARGENTINA

Terms and Conditions

Labor Law Acknowledgement. This provision supplements Section 25 of the Agreement.

In accepting the Award, Participant acknowledges and agrees that the grant of Restricted Stock Units is made by the Company (not the Employer) in its sole discretion and the value of the Restricted Stock Units or any Shares acquired under the Plan shall not constitute salary or wages for any purpose under Argentine labor law, including, but not limited to, the calculation of (i) any labor benefits including, without limitation, vacation pay, compensation in lieu of notice, annual bonus, disability, and leave of absence payments, etc., or (ii) any termination or severance indemnities or similar payments.

If, notwithstanding the foregoing, any benefits under the Plan are considered as salary or wages for any purpose under Argentine labor law, Participant acknowledges and agrees that such benefits shall not accrue more frequently than on each Restricted Stock Units vesting date. Participant further acknowledges and agrees the Restricted Stock Units are an extraordinary benefit, which for labor law purposes (e.g. thirteenth month salary, Christmas bonuses, or similar payments) are valued at the fair market value of the Shares on the date of vesting, when the Shares are delivered to the Participant. A portion of such value may be deducted, to be taken into account for thirteenth month salary purposes as of the month in which the vesting occurs if required under local law.

Notifications

Securities Law Information. Neither the Restricted Stock Units nor the underlying Shares are publicly offered or listed on any stock exchange in Argentina. The offer is private and not subject to the supervision of any Argentine governmental authority.

Exchange Control Information. If Participant is an Argentine resident, Participant must comply with any and all Argentine currency exchange restrictions, approvals and reporting requirements in connection with this Award. Argentine residents should consult with their personal advisor to confirm what will be required (if anything) as the exchange control rules and regulations are subject to change without notice.

AUSTRALIA

Terms and Conditions

Form of Settlement. Notwithstanding Section 2 or any other provision of this Agreement, (a) the Restricted Stock Units may not be settled in cash; and (b) the vesting of Restricted Stock Units may be accelerated by the Administrator only upon the death or total permanent disablement of Participant, and to the extent permitted by Applicable Law.

A Participant will cease to be an employee for the purposes of the Plan (incorporating this Agreement) if he or she is no longer an “Employee” as defined in the Plan, or Participant is no longer employed by any of the following: (a) Participant’s employer in the employment in respect of which Participant acquired the Restricted Stock Units; (b) a holding company (within the meaning of the *Corporations Act 2001* (Cth)) of Participant’s employer in the employment in respect of which Participant acquired the Restricted Stock Units; (c) a subsidiary (within the meaning of the *Income Tax Assessment Act 1997* (Cth)) of Participant’s employer in the employment in respect of which Participant acquired the Restricted Stock Units; or (d) a subsidiary (within the meaning of the *Income Tax Assessment Act 1997* (Cth) of a holding company (within the meaning of the *Corporations Act 2001* (Cth)) of Participant’s employer in the employment in respect of which Participant acquired the Restricted Stock Units.

Tax Information: The Plan is a plan to which Subdivision 83A-C of the Income Tax Assessment Act 1997 (Cth) (the “Act”) applies (subject to the conditions in that Act).

Australia Class Order Exemption. The offering of the Plan in Australia is intended to qualify for exemption from the prospectus requirements under a Class Order issued by the Australian Securities and Investments Commission. Participant’s right to purchase Shares is subject to the terms and conditions set forth in the Australia Offer Document, the Plan and the Agreement, including this Exhibit B.

Notifications

Exchange Control Information. If Participant is an Australian resident, exchange control reporting is required for cash transactions exceeding A$10,000 and for international fund transfers. If an Australian bank is assisting with the transaction, the bank will file the report on Participant’s behalf. If there is no Australian bank involved in the transfer, Participant will be required to file the report.

AUSTRIA

Notifications

Exchange Control Information. If Participant holds Shares obtained through the Plan outside Austria, Participant may be required to submit reports to the Austrian National Bank as follows: (i) on a quarterly basis if the value of the Shares as of any given quarter meets or exceeds €30,000,000; and (ii) on an annual basis if the value of the Shares as of December 31 meets or exceeds €5,000,000. The quarterly reporting date is as of the last day of the respective quarter; the deadline for filing the quarterly report is the fifteenth day of the month following the end of the respective quarter. The deadline for filing the annual report is January 31 of the following year.

In addition, when the Shares are sold or a dividend is received, Participant may be required to comply with certain exchange control obligations if the cash proceeds from the sale are held outside Austria. If the transaction volume of all accounts abroad meets or exceeds €10,000,000, the movements and balances of all accounts must be reported monthly, as of the last day of the month, on or before the fifteenth day of the following month on the prescribed form (*Meldungen SI-Forderungen und/oder SI-Verpflichtungen*).

BELGIUM

There are no country-specific provisions.

BRAZIL

Terms and Conditions

Compliance with Law. In accepting the Award, Participant agrees to comply with all applicable Brazilian laws and to report and pay any and all applicable Tax-Related Items associated with the vesting of the Restricted Stock Units and issuance or sale of Shares acquired under the Plan or the receipt of dividends.

Labor Law Acknowledgement. In accepting the Award, Participant agrees that he or she is (i) making an investment decision, (ii) the Shares will be issued to Participant only if the vesting conditions are met, and (iii) the value of the underlying Shares is not fixed and may increase or decrease in value over the vesting period without compensation to Participant.

Notifications

Exchange Control Information. If Participant is a resident or domiciled in Brazil, he or she will be required to submit annually a declaration of assets and rights (including Shares issued upon settlement of the Restricted Stock Units) held outside Brazil to the Central Bank of Brazil if the aggregate value of such assets and rights held abroad is equal to or exceeds a threshold that is established annually by the Central Bank. Further, if Participant is a resident or domiciled in Brazil, and transfers funds into Brazil (e.g., proceeds from the sale of Shares), he or she is required to transfer such funds through a duly authorized bank and provide any requested supporting documents to the bank. By accepting the Award, Participant acknowledges that it is his or her responsibility to comply with the Brazilian exchange control laws, and neither the Company nor the Employer will be liable for any fines or penalties resulting from his or her failure to comply with applicable exchange control laws. Participant should consult with his or her personal legal advisor to ensure compliance with applicable Brazilian regulations.

CANADA

Terms and Conditions

Form of Settlement. As detailed in Section 2 of the Agreement and notwithstanding any discretion in the Plan, the Restricted Stock Units will be settled only in Shares. The Restricted Stock Units do not provide any right for Participant to receive a cash payment.

Distribution after Vesting. Section 6 of the Agreement shall be deleted in its entirety and replaced with the following language:

Any Restricted Stock Units that vest in accordance with the terms of this Agreement and the Plan will be distributed to Participant (or in the event of Participant's death, to his or her estate) in whole Shares as soon as administratively practicable after vesting, subject to Section 9 and the other provisions of the Agreement. Any Restricted Stock Units that vest in accordance with Section 4 will be settled at the time(s) provided in Section 4, subject to Section 9 and the other provisions of the Agreement.

Vesting/Termination. The following provision supplements Section 5 and replaces 24(a) of the Agreement:

For purposes of the Agreement, in the event Participant ceases his or her employment or service relationship with the Company or Employer (for any reason whatsoever and whether or not later found to be invalid or in breach of local labor laws), Participant's right to vest in the Restricted Stock Units will terminate as of the date that is the earlier of: (a) the date Participant's employment is terminated; (b) the date Participant receives notice of termination of employment from the Company or Employer, or (c) the date Participant is no longer actively employed or actively providing services to the Company or Employer, regardless of any notice period or period of pay in lieu of such notice required under local law (including, but not limited to statutory law, regulatory law and/or common law). The Administrator shall have the exclusive discretion to determine when Participant is no longer actively providing services (including whether Participant may still be considered actively employed or actively providing services while on a leave of absence).

The following terms and conditions will apply if Participant is a resident of Quebec:

Data Privacy. The following provision supplements section 26 of the Agreement:

Participant hereby authorizes the Company and the Company's representatives to discuss with and obtain all relevant information from all personnel, professional or not, involved in the administration and operation of the Plan. Participant further authorizes the Company, any Parent or Subsidiary and any stock plan service provider that may be selected by the Company to assist with the Plan to disclose and discuss the Plan with their respective advisors. Participant further authorizes the Company and any Parent or Subsidiary to record such information and to keep such information in Participant's employee file.

Notifications

Securities Law Information. Participant is permitted to sell Shares acquired through the Plan through the designated broker appointed under the Plan, if any, provided the resale of Shares acquired under the Plan takes place outside Canada through the facilities of a stock exchange on which the Shares are listed on the Nasdaq Global Select Market.

CHINA

The following terms and conditions apply if Participant is subject to exchange control restrictions and regulations in China, including the requirements imposed by the State Administration of Foreign Exchange ("SAFE") as determined by the Company in its sole discretion.

Terms and Conditions

Sale Requirement. Notwithstanding any provisions concerning the conversion of Restricted Stock Units and issuance of Shares set forth in this Agreement and the Plan, due to exchange control laws in China, Participant agrees that the Company reserves the right to require the immediate sale of any Shares issued upon settlement of the Restricted Stock Units. Participant understands and agrees that any such immediate sale of Shares will occur as soon as is practical following settlement of the Restricted Stock Units. Alternatively, if the Shares are not immediately sold upon settlement of the Restricted Stock Units, the Company will require the sale of any Shares Participant may then hold within six (6) months (or such other period as may be required under applicable legal or exchange control requirements) following the termination of Participant's employment with the Company including its Subsidiaries.

Participant agrees that the Company is authorized to instruct such designated broker as may be selected by the Company to assist with the sale of the Shares on Participant's behalf pursuant to this authorization, and Participant expressly authorizes such broker to complete the sale of such Shares. Participant also agrees to sign any agreements, forms and/or consents that may be reasonably requested by the Company (or the Company's designated broker) to effectuate the sale of the Shares (including, without limitation, as to the transfers of the proceeds and other exchange control matters noted below) and to otherwise cooperate with the Company with respect to such matters, provided that he or she shall not be permitted to exercise any influence over how, when or whether the sales occur. Upon the sale of the Shares, Participant will receive the cash proceeds from the sale, less any applicable Tax-Related Items, brokerage fees or commissions, in accordance with applicable exchange control laws and regulations.

Participant acknowledges that such designated broker as may be selected by the Company is under no obligation to arrange for the sale of the Shares at any particular price. Due to fluctuations in the Share price and/or applicable exchange rates between the settlement date and (if later) the date on which the Shares are sold, the amount of proceeds ultimately distributed to Participant may be more or less than the market value of the Shares on the settlement date (which is the amount relevant to determining his or her liability for Tax-Related Items). Participant understands and agrees that the Company is not responsible for the amount of any loss that he or she may incur and that the Company assumes no liability for any fluctuations in the Share price and/or any applicable exchange rate.

Designated Broker Account. If Shares issued upon the settlement of the Restricted Stock Units are not immediately sold, Participant acknowledges that he or she is required to maintain the Shares in an account as may be selected by the Company until the Shares are sold through such Company-designated broker (as further detailed below).

Exchange Control Requirements. Participant understands and agrees that, pursuant to local exchange control requirements, he or she will be required to immediately repatriate the cash proceeds from the sale of Shares and any cash dividends paid on such Shares to China. Participant further understands that, under local law, such repatriation of his or her cash proceeds may need to be effectuated through a special exchange control account established by the Company, the Employer or any other parent or Subsidiary, and Participant hereby consents and agrees that any proceeds from the sale of Shares or any cash dividends paid on such Shares may be transferred to such special account prior to being delivered to him or her.

The proceeds may be paid to Participant in US dollars or local currency at the Company's discretion. In the event the proceeds are paid to Participant in US dollars, he or she understands that he or she will be required to set up a US dollar bank account in China and provide the bank account details to his or her Employer and/or the Company so that the proceeds may be deposited into this account. If the proceeds are paid to Participant in local currency, the Company is under no obligation to secure any particular exchange conversion rate and/or conversion date and the Company may face delays in converting the proceeds to local currency due to exchange control restrictions. Participant agrees to bear any currency fluctuation risk between the time the Shares are sold or dividends are received and the time the proceeds are distributed through any such special exchange account. Participant further agrees to comply with any other requirements that may be imposed by the Company in the future in order to facilitate compliance with exchange control requirements in China.

COLOMBIA

Terms and Conditions

Labor Law Acknowledgement. This provision supplements Section 25 of the Agreement:

Participant expressly acknowledges that, pursuant to Article 15 of Law 50/1990 (Article 128 of the Colombian Labor Code), the Restricted Stock Units and any payments Participant receives pursuant to the Restricted Stock Units are wholly discretionary and are a benefit of an extraordinary nature that do not exclusively depend on Participant's performance. Accordingly, the Plan, the Restricted Stock Units and related benefits do not constitute a component of Participant's "salary" for any legal purpose, including for purposes of calculating any and all labor benefits, such as fringe benefits, vacation pay, termination or other indemnities, payroll taxes, social insurance contributions, or any other outstanding employment-related amounts, subject to the limitations provided in Law 1393/2010.

Notifications

Exchange Control Information. Investments in assets located outside Colombia (including the Shares) are subject to registration with the Central Bank (*Banco de la República*) if the aggregate value of such investments is US$500,000 or more (as of December 31 of the applicable calendar year). Further, when Shares (or other investments) held abroad are sold, Participant may either choose to keep the resulting sums abroad, or to repatriate them to Colombia. If Participant chooses to repatriate funds to Colombia and has not registered the investment with *Banco de la República*, Participant will need to file with *Banco de la República* the appropriate form upon conversion of funds into local currency, which should be duly completed to reflect the nature of the transaction. If Participant has registered the investment with *Banco de la República*, then Participant will need to file with *Banco de la República* the appropriate form upon conversion of funds into local currency, which should be duly completed to reflect the nature of the transaction. Participant should obtain proper legal advice in order to ensure compliance with applicable Colombian regulations.

Securities Law Information. The Shares are not and will not be registered with the Colombian registry of publicly traded securities (*Registro Nacional de Valores y Emisores*) and therefore the Shares may not be offered to the public in Colombia. Nothing in this document should be construed as the making of a public offer of securities in Colombia.

CZECH REPUBLIC

Notifications

Exchange Control Information**.** Proceeds from the sale of Shares, any dividends paid on such Shares may be held in a cash account abroad and Participant is no longer required to report the opening and maintenance of a foreign account to the Czech National Bank (the "CNB"), unless the CNB notifies Participant specifically that such reporting is required. Upon request of the CNB, Participant may need to file a notification within fifteen (15) days of the end of the calendar quarter in which Participant acquires Shares. However, because exchange control regulations change frequently and without notice, Participant should consult his or her personal legal advisor prior to vesting to ensure compliance with current regulations.

DENMARK

Terms and Conditions

Danish Stock Option Act. By participating in the Plan, Participant acknowledges that he or she received an Employer Statement translated into Danish, which is being provided to comply with the Danish Stock Option Act. To the extent more favorable to Participant and required to comply with the Stock Option Act, the terms set forth in the Employer Statement will apply to the Participant's participation in the Plan.

Securities/Tax Reporting Information. Participant understands if he or she holds Shares issued upon settlement of the Restricted Stock Units in a brokerage account with a broker or bank outside Denmark, Participant is required to inform the Danish Customs and Tax Administration about the account. For this purpose, Participant must file a Form V (Erklaering V) with the Danish Tax Administration. A sample of Form V can be found at the following website: www.skat.dk. Prior to submitting the Form V to the Danish Customs and Tax Administration, the form must be signed by a representative of the bank or broker with which the securities are deposited (the "depositary"). By signing the Form V, the depositary is undertaking to submit the required information on an annual basis without further request by the Danish Customs and Tax Administration. However, if the depositary will not agree to sign the Form V, Participant may apply for an exemption from this requirement by completing Section 6 ("Possible exemption from requirement to give promise") of the Form V. If the application is accepted, Participant will be personally responsible for submitting the required information as an attachment to his or her annual tax return.

It is only necessary to submit a Form V the first time securities are deposited with a depositary outside of Denmark. However, if the securities are transferred to a different depositary or if he or she begins using a new depositary, a new Form V is required.

Generally, the Form V must be submitted by the depositary no later than February 1 of the year following the calendar year to which the information relates. However, if Participant is responsible for submitting this information (i.e., because he or she has applied for and received an exemption), Participant must submit the required information as an attachment to his or her annual tax return.

In addition, if Participant opens a brokerage account (or a deposit account with a U.S. bank) for the purpose of holding cash outside Denmark, Participant is also required to inform the Danish Customs and Tax Administration about this account. To do so, Participant must also file a Form K (Erklaering K) with the Danish Customs and Tax Administration. The Form K must be signed both by Participant and by the applicable broker or bank where the account is held. By signing the Form K, the broker/bank undertakes an obligation, without further request each year and not later than on February 1 of the year following the calendar year to which the information relates, to forward certain information to the Danish Tax Administration concerning the content of the account. In the event that the applicable financial institution (broker or bank) with which the account is held, does not wish to, or, pursuant to the laws of the country in question, is not allowed to assume such obligation to report, Participant acknowledges that he or she is solely responsible for providing certain details regarding the foreign brokerage or bank account to the Danish Customs and Tax Administration as part of his or her annual income tax return. By signing the Form K, Participant authorizes the Danish Customs and Tax Administration to examine the account. A sample of Form K can be found at the following website: www.skat.dk.

FINLAND

There are no country-specific provisions.

FRANCE

Terms and Conditions

Language Consent. By accepting the Award, Participant confirms having read and understood the Plan and Agreement which were provided in the English language. Participant accepts the terms of those documents accordingly.

Consentement Relatif à la Langue Utilisée. En acceptant l'Attribution, le Participant confirme avoir lu et compris le Plan et le Contrat, qui ont été communiqués en langue anglaise. Le Participant accepte les termes de ces documents en connaissance de cause.

Notifications

Exchange Control Information. Participant must declare to the customs and excise authorities any cash or securities he or she imports or exports without the use of a financial institution when the value of the cash or securities is equal to or exceeds €10,000.

GERMANY

Notifications

Exchange Control Information. Cross-border payments in excess of €12,500 must be reported monthly to the German Federal Bank. If Participant makes or receives a cross-border payment in excess of €12,500 (*e.g.*, proceeds from the sale of Shares acquired under the Plan), he or she must report the payment to the German Federal Bank electronically using the "General Statistics Reporting Portal" available via the Bank's website (www.bundesbank.de).

HONG KONG

Terms and Conditions

Form of Settlement. As detailed in Section 2 of the Agreement and notwithstanding any discretion in the Plan, the Restricted Stock Units will be settled only in Shares. The Restricted Stock Units do not provide any right for Participant to receive a cash payment.

Nature of Scheme. Participant acknowledges that the Company specifically intends that the Plan will not be an occupational retirement scheme for purposes of the Occupational Retirement Schemes Ordinance ("ORSO"). Notwithstanding the foregoing, if the Plan is deemed to constitute an occupational retirement scheme for purposes of ORSO, the Restricted Stock Units granted shall be void.

Securities Law Compliance. Participant acknowledges and agrees that any and all Shares allotted or issued pursuant to the terms and conditions of the Plan are issued to Participant for his/her own account and not with a view to all or any of those Shares being offered for sale to the public. Participant may not sell or offer to sell any Shares issued to him or her within six months following the Date of Grant. By accepting the Restricted Stock Units, Participant acknowledges and agrees that he or she is bound by the provisions of the certificate of incorporation or bylaws of the Company, as amended (including any provisions restricting the sale or transfer of such Shares) and the Plan and that any subsequent sale or transfer of the Shares must be undertaken in accordance with all Applicable Laws and regulations and that no documentation issued by the Company to Participant in respect of the Restricted Stock Units or the Shares may be disseminated or disclosed to any person at any time.

Notification

Securities Law Notification. *WARNING: The contents of this Agreement, the Plan and any other incidental communication materials distributed in connection with the Restricted Stock Units have not been reviewed by any regulatory authority in Hong Kong. Participant is advised to exercise caution in relation to the Award. If Participant is in any doubt about any of the contents of this Agreement, the Plan any other incidental communication materials distributed in connection with the Restricted Stock Units, Participant should obtain independent professional advice.*

The Restricted Stock Units and Shares that may be issued in respect of the Restricted Stock Units have not been offered or sold and will not be offered or sold in Hong Kong by means of any document other than in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Chapter 32 of the Laws of Hong Kong) or which do not constitute an offer to the public within the meaning of that ordinance.

This Agreement and the information contained herein may not be used other than by Participant and may not be reproduced in any form or transferred to any person in Hong Kong. This Award is not an offer for sale to the public in Hong Kong and it is not the intention of the Company that the Restricted Stock Units or the Shares be offered for sale to the public in Hong Kong.

HUNGARY

There are no country-specific provisions.

INDIA

Notifications

Exchange Control Information. Participant must repatriate any proceeds from the sale of Shares acquired under the Plan and any cash dividends to India and convert the proceeds into local currency within such time as prescribed under applicable Indian exchange control laws as may be amended from time to time. Participant will receive a foreign inward remittance certificate ("FIRC") from the bank where Participant deposits the foreign currency. Participant should retain the FIRC as evidence of the repatriation of funds in the event the Reserve Bank of India or the Employer requests proof of repatriation. It is Participant's responsibility to comply with applicable exchange control laws in India.

INDONESIA

Terms and Conditions

Language Consent and Information. A translation of the documents relating to this grant (i.e., the Plan and the Agreement) into Bahasa Indonesia can be provided to Participant upon request to the Company at Stock.Administrator@autodesk.com. By accepting the grant of Restricted Stock Units, Participant (i) confirms having read and understood the documents relating to this grant (i.e., the Notice of Grant, the Agreement (including Exhibit A and B thereof) and the Plan) which were provided in the English language, (ii) accepts the terms of those documents accordingly, and (iii) agrees not to challenge the validity of this document based on Law No. 24 of 2009 on National Flag, Language, Coat of Arms and National Anthem or the implementing Presidential Regulation (when issued).

Notifications

Exchange Control Information. If Indonesian residents remit proceeds from the sale of Shares into Indonesia, the Indonesian Bank through which the transaction is made will submit a report on the transaction to the Bank of Indonesia for statistical reporting purposes. For transactions of US$10,000 or more, a description of the transaction must be included in the report. Although the bank through which the transaction is made is required to make the report, Indonesian residents must complete a "Transfer Report Form." The Transfer Report Form will be provided to the Indonesian residents by the bank through which the transaction is made.

IRELAND

There are no country-specific provisions.

ISRAEL

Terms and Conditions

The following provisions apply to Participants who are in Israel on the Date of Grant.

Grant. Section 1 of the Agreement shall be supplemented to add the following language at the end thereof:

References to the Plan will be deemed to include the Sub-Plan for Israeli Participants (the "Sub-Plan"). The Restricted Stock Units are granted as a 102 Capital Gains Track Grant, subject to the terms and conditions of Section 102(b)(2) and 102(b)(3) of the Income Tax Ordinance (New Version) – 1961 (the "ITO"), the Plan and the Trust Agreement ("Trust Agreement"), entered into between the Company and ESOP Management and Trust Services Ltd. (the "Trustee"). References to the issuance of Shares to Participant shall be deemed to include the words "or the Trustee". References to "Applicable Law" shall be deemed to include Section 102 of the ITO.

Section 102 Compliance. By accepting this Restricted Stock Unit Award, Participant acknowledges and agrees that: (a) the Award is granted under and governed by the Plan, Sections 102(b)(2) and 102(b)(3) of the ITO and the Rules promulgated in connection therewith, and the Trust Agreement; (b) the Shares issued upon vesting of the Restricted Stock Units will be issued to the Trustee to hold on behalf of Participant, pursuant to the terms of Section 102 of the ITO and the Trust Agreement, and (c) Participant is familiar with the terms and provisions of the ITO, particularly the "Capital Gains Track" described in Sections 102(b)(2) and 102(b)(3) thereof, and will not require the Trustee to release or sell the Restricted Stock Units or Shares during the Required Holding Period (defined in the Sub-Plan), unless permitted to do so by Applicable Law.

Distribution after Vesting. Section 6 of the Agreement shall be deleted in its entirety and replaced by the following language:

The Shares will be issued in the name of the Trustee as required by Applicable Law to qualify under Section 102 of the ITO, for the benefit of Participant. Participant shall comply with the ITO, the Rules, and the terms and conditions of the Trust Agreement entered into between the Company and the Trustee. The Trustee will hold the Shares for the Required Holding Period, as set forth in the Sub-Plan. Participant hereby undertakes to release the Trustee from any liability in respect of any action or decision duly taken and bona fide executed in relation to the Plan and the Sub-Plan, or any Shares issued to the Trustee hereunder. Participant hereby confirms that s/he shall execute any and all documents that the Company or the Trustee may reasonably determine to be necessary in order to comply with the ITO and, in particular, the Rules.

Responsibility for Taxes. Section 9 of the Agreement shall be supplemented by the following language:

To the extent required by Applicable Law on any date Participant is required to recognize taxable income with respect to the Restricted Stock Units, Participant will be required to pay, and the Trustee and/or the Company will withhold any Tax-Related Items which will enable the Company and/or the Trustee to satisfy its obligation to withhold any Tax-Related Items arising on such date Participant is required to recognize taxable income with respect to the Restricted Stock Units. The Company, in its sole discretion, may, to the extent permitted by Applicable Law, require or otherwise allow the Trustee or the Company to withhold and/or Participant to pay such Tax-Related Items by (i) withholding cash from Participant's account at the broker designated by the Company for such purpose, (ii) selling of sufficient Shares on the date Participant is required to recognize taxable income with respect to the Restricted Stock Units, (iii) deductions from compensation payable to Participant or (iv) any other method permitted by Applicable Law.

In the event Participant disposes of any Shares issued upon vesting of the Restricted Stock Units prior to the expiration of the Required Holding Period, Participant acknowledges and agrees that such shares will not qualify for 102 Capital Gains Tax Treatment and will be subject to taxation in Israel in accordance with ordinary income tax principles. Further, Participant acknowledges and agrees that Participant will be liable for the Employer's component of payments to the National Insurance Institute (to the extent such payments by the Employer are required).

Participant further agrees that the Trustee may act on behalf of the Company or the Employer, as applicable, to satisfy any obligation to withhold Tax-Related Items applicable to Participant in connection with the Units granted under the Sub-Plan.

Address for Notices. Section 12 of the Agreement shall be deleted in its entirety and replaced by the following language:

Any notice to be given to the Company under the terms of this Agreement will be addressed to the Company at Autodesk, Inc., c/o Stock Administrator, **111 McInnis Parkway, San Rafael, CA 94903 U.S.A.**, or at such other address as the Company may hereafter designate in writing, unless otherwise expressly instructed by the Company or the Trustee with respect to a specific type of notice.

Data Privacy. Section 26 of the Agreement shall be supplemented by the following language:

Without derogating from the scope of Section 26 of the Agreement, Participant hereby explicitly consents to the transfer of Data between the Company, the Trustee, and/or a designated Plan broker, including any requisite transfer of such Data outside the Participant's country and further transfers thereafter as may be required to a broker or other third party.

The following provisions apply to Participants who permanently transfer to Israel after the Date of Grant.

Mandatory Sale Restriction. To facilitate compliance with local tax requirements, Participant agrees to the sale of any Shares to be issued to him or her upon settlement of the Restricted Stock Units. The sale may occur (i) immediately upon settlement, (ii) following Participant's termination of employment, or (iii) within any other time frame as the Company determines to be necessary to comply with local tax requirements. Participant further agrees the Company is authorized to instruct its designated broker to assist with the mandatory sale of such Shares (on his or her behalf pursuant to this authorization) and Participant expressly authorizes the Company's designated broker to complete the sale of such Shares. Participant acknowledges the Company's designated broker is under no obligation to arrange for the sale of the Shares at any particular price. Upon the sale of the Shares, the Company agrees to pay Participant the cash proceeds from the sale, less any brokerage fees or commissions and subject to any obligation to satisfy Tax-Related Items.

Participant further agrees any Shares to be issued to him or her shall be deposited directly into an account with the Company's designated broker. The deposited Shares shall not be transferable (either electronically or in certificate form) from the brokerage account. This limitation shall apply both to transfers to different accounts with the same broker and to transfers to other brokerage firms. The limitation shall apply to all Shares issued to Participant under the Plan, whether or not he or she continues to be employed by the Company or any parent or Subsidiary.

ITALY

Terms and Conditions

Plan Document Acknowledgement. By accepting the Award, Participant acknowledges he or she has received a copy of the Plan and the Agreement and has reviewed the Plan and the Agreement, including this Exhibit B, in their entirety and fully understands and accepts all provisions of the Plan and the Agreement, including this Exhibit B.

Participant further acknowledges having read and specifically approves the following sections of the Agreement: Section 3 (Vesting Schedule), Section 5 (Forfeiture upon Termination of Service as a an Employee), Section 7 (Disability or Death of Participant), Section 8 (Retirement of Participant), Section 9 (Responsibility for Taxes), Section 25 (Nature of Grant), Section 15 (Additional Conditions to Issuance of Stock), Section 18 (Electronic Delivery), Section 23 (Governing Law), Section 24 (Language), Section 32 (Insider Trading Restrictions/Market Abuse Laws), and Section 26 (Data Privacy).

JAPAN

There are no country-specific provisions.

KOREA

There are no country-specific provisions.

MALAYSIA

Terms and Conditions

Responsibility for Taxes. This provision replaces Section 9 of the Agreement in its entirety:

As a condition of grant, Participant hereby elects to pay any and all income tax due on the benefits derived from the Restricted Stock Units and/or the receipt of Shares upon vesting of the Restricted Stock Units ("Taxes on RSUs") directly to the Malaysian Inland Revenue Board and report such benefits on his or her annual tax return for the relevant year of the tax assessment. Participant further understands and agrees that by making this election, the Company and the Employer will not withhold any taxes pursuant to the Income Tax (Deduction of Remuneration) Rules 1994 in respect of the Taxes on RSUs, and Participant acknowledges and agrees that the ultimate liability for all Taxes on RSUs is and remains Participant's responsibility.

Further, if Participant becomes subject to taxation in more than one jurisdiction between the Date of Grant and the date of any relevant taxable event, Participant acknowledges that the Company and/or the Employer (or former employer, as applicable) may be required to withhold or account for the Taxes on RSUs in any relevant jurisdiction outside Malaysia and may do so in the manner set forth in the Agreement.

This election will remain in effect unless and until Participant actively cancels the election by notifying the Employer in writing and the Employer confirms receipt of such cancellation notice.

Data Privacy. This provision replaces Section 26 of the Agreement in its entirety:

Participant hereby explicitly, voluntarily and unambiguously consents to the collection, use and transfer, in electronic or other form, of his or her personal data as described in this Agreement and any other Plan participation materials by and among, as applicable, the Employer, the Company and any Parent or Subsidiary or any third parties authorized by same in assisting in the implementation, administration and management of Participant's participation in the Plan.

Participant may have previously provided the Company and the Employer with, and the Company and the Employer may hold, certain personal information about Participant, including, but not limited to, his or her name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any Shares or directorships held in the Company, the fact and conditions of Participant's participation in the Plan, details of all Restricted Stock Units or any other entitlement to Shares awarded, cancelled, exercised, vested, unvested or outstanding in Participant's favor ("Data"), for the exclusive purpose of implementing, administering and managing the Plan.

Participant also authorizes any transfer of Data, as may be required, to such stock plan service provider as may be selected by the Company from time to time, which is assisting the Company with the implementation, administration and management of the Plan and/or with whom any Shares acquired upon settlement of the Restricted Stock Units are deposited. Participant acknowledges that these recipients may be located in Participant's country or elsewhere, and that the recipient's country (e.g., the United States) may have different data privacy laws and protections to Participant's country, which may not give the same level of protection to Data. Participant understands that he or she may request a list with the names and addresses of any potential recipients of Data by contacting his or her local human resources representative. Participant authorizes the Company, the stock plan service provider and any other possible recipients which may assist the Company (presently or in the future) with implementing, administering and managing Participant's participation in the Plan to receive, possess, use, retain and transfer Data, in electronic or other form, for the sole purpose of implementing, administering and managing Participant's participation in the Plan. Participant understands that Data will be held only as long as is necessary to implement, administer and manage his or her participation in the Plan. Participant understands that he or she may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case, without cost, by contacting in writing his or her local human resources representative, HRGC APAC, whose contact details are hrgc.apac@autodesk.com. Further, Participant understands that he or she is providing the consents herein on a purely voluntary basis. If Participant does not consent, or if Participant later seeks to revoke the consent, his or her employment status or service and career with the Employer will not be adversely affected; the only adverse consequence of refusing or withdrawing the consent is that the Company would not be able to grant future Restricted Stock Units or other equity awards to Participant or administer or maintain such awards. Therefore, Participant understands that refusing or withdrawing his or her consent may affect his or her ability to participate in the Plan. For more information on the consequences of the refusal to consent or withdrawal of consent, Participant understands that he or she may contact his or her local human resources representative.

<u>Notifikasi Privasi Data</u>. Peruntukan ini menggantikan Seksyen 25 dalam Perjanjian Anugerah secara keseluruhan :

Pesertadengan ini secara eksplisit, secara sukarela dan tanpa sebarang keraguan mengizinkan pengumpulan, penggunaan dan pemindahan, dalam bentuk elektronik atau lain-lain, data peribadinya seperti yang dinyatakan dalam Perjanjian Penganugerahan ini dan apa-apa bahan Pelan penyertaan oleh dan di antara Majikan, Syarikat dan mana-mana Syarikat Induk atau Anak Syarikat atau mana-mana pihak ketiga yang diberi kuasa oleh yang sama untuk membantu dalam pelaksanaan, pentadbiran dan pengurusan penyertaan Peserta dalam Pelan tersebut.

Sebelum ini, Peserta mungkin telah membekalkan Syarikat dan Majikan dengan, dan Syarikat dan Majikan mungkin memegang, maklumat peribadi tertentu tentang Peserta, termasuk, tetapi tidak terhad kepada, namanya , alamat rumah dan nombor telefon, tarikh lahir, nombor insurans sosial atau nombor pengenalan lain, gaji, kewarganegaraan, jawatan, apa-apa saham atau jawatan pengarah yang dipegang dalam Syarikat, fakta dan syarat-syarat penyertaan Peserta dalam Pelan tersebut, butir-butir semua Unit-unit Saham Terbatas atau apa-apa hak lain untuk saham yang dianugerahkan, dibatalkan, dilaksanakan, terletak hak, tidak diletak hak ataupun bagi faedah Peserta ("Data"), untuk tujuan yang eksklusif bagi melaksanakan, mentadbir dan menguruskan Pelan tersebut.

Peserta juga memberi kuasa untuk membuat apa-apa pemindahan Data, sebagaimana yang diperlukan, kepada pembekal perkhidmatan pelan saham yang lain sebagaimana yang dipilih oleh Syarikat dari semasa ke semasa, yang membantu Syarikat dalam pelaksanaan, pentadbiran dan pengurusan Pelan dan/atau dengan sesiapa yang mendepositkan Saham-Saham yang diperolehi melalui penyelesaian Unit-unit Saham Terbatas. Peserta mengakui bahawa penerima-penerima ini mungkin berada di negara Peserta atau di tempat lain, dan bahawa negara penerima (contohnya, Amerika Syarikat) mungkin mempunyai undang-undang privasi data dan perlindungan yang berbeza daripada negara Peserta, yang mungkin tidak boleh memberi tahap perlindungan yang sama kepada Data. Pesertafaham bahawa dia boleh meminta senarai nama dan alamat mana-mana penerima Data dengan menghubungi wakil sumber manusia tempatannya . Peserta memberi kuasa kepada Syarikat, pembekal perkhidmatan pelan saham dan mana-mana penerima lain yang mungkin membantu Syarikat (masa sekarang atau pada masa depan) untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut untuk menerima, memiliki, menggunakan, mengekalkan dan memindahkan Data, dalam bentuk elektronik atau lain-lain, semata-mata dengan tujuan untuk melaksanakan, mentadbir dan menguruskan penyertaan Peserta dalam Pelan tersebut. Peserta faham bahawa Data akan dipegang hanya untuk tempoh yang diperlukan untuk melaksanakan, mentadbir dan menguruskan penyertaannya dalam Pelan tesebut. Peserta faham bahawa dia boleh, pada bila-bila masa, melihat data, meminta maklumat tambahan mengenai penyimpanan dan pemprosesan Data, meminta bahawa pindaan-pindaan dilaksanakan ke atas Data atau menolak atau menarik balik persetujuan dalam ini, dalam mana-mana kes, tanpa kos, dengan menghubungi secara bertulis wakil sumber manusia tempatannya , di mana butir-butir hubungannya adalah hrgc.apac@autodesk.com. Selanjutnya, Peserta memahami bahawa dia memberikan persetujuan di sini secara sukarela. Jika Peserta tidak bersetuju, atau jika Peserta kemudian membatalkan persetujuannya, status pekerjaan atau perkhidmatan dan kerjayanya dengan Majikan tidak akan terjejas; satunya akibat buruk jika dia tidak bersetuju atau menarik balik persetujuannya adalah bahawa Syarikat tidak akan dapat memberikan Unit-unit Saham Terbatas pada masa depan atau anugerah ekuiti lain kepada Peserta atau mentadbir atau mengekalkan anugerah-anugerah tersebut. Oleh itu, Peserta faham bahawa keengganan atau penarikan balik persetujuannya boleh menjejaskan keupayaannya untuk mengambil bahagian dalam Pelan tesebut. Untuk maklumat lanjut mengenai akibat keengganan untuk memberikan keizinan atau penarikan balik keizinan, Peserta fahami bahawa dia boleh menghubungi wakil sumber manusia tempatannya .

Notifications

<u>Director Notification Obligation</u>. If Participant is a director of a Malaysian Subsidiary, Participant is subject to certain notification requirements under the Malaysian Companies Act. Among these requirements is an obligation to notify the Malaysian Subsidiary in writing when Participant receives or disposes of an interest (e.g., Restricted Stock Units, Shares, etc.) in the Company or any related company. This notification must be made within fourteen (14) days of receiving or disposing of any interest in the Company or any related company.

MEXICO

Terms and Conditions

<u>Plan Document Acknowledgement</u>. This provision supplements Section 25 of the Agreement:

By accepting the Restricted Stock Units, Participant acknowledges that he or she has received a copy of the Plan and the Agreement, including this Exhibit B, which he or she has reviewed. Participant further acknowledges that he or she accepts all the provisions of the Plan and the

Agreement, including this Exhibit B. Participant also acknowledges that he or she has read and specifically and expressly approves the terms and conditions set forth in the "Nature of Grant" Section of the Agreement, which clearly provide as follows:

(1) Participant's participation in the Plan does not constitute an acquired right;

(2) The Plan and Participant's participation in it are offered by the Company on a wholly discretionary basis; and

(3) Participant's participation in the Plan is voluntary.

Labor Law Acknowledgement and Policy Statement. By accepting the Restricted Stock Units, Participant acknowledges that Autodesk, Inc., with registered offices at 111 McInnis Parkway, San Rafael, CA 94903 U.S.A., is solely responsible for the administration of the Plan. Participant further acknowledges that his or her participation in the Plan, the grant of the Restricted Stock Units and any acquisition of Shares under the Plan do not constitute an employment relationship or service contract between Participant and the Company because Participant is participating in the Plan on a wholly commercial basis. Based on the foregoing, Participant expressly acknowledges that the Plan and the benefits that he or she may derive from participation in the Plan do not establish any rights between Participant and the Employer, and do not form part of the employment conditions and/or benefits provided by the Company or any Subsidiary, and any modification of the Plan or its termination shall not constitute a change or impairment of the terms and conditions of Participant's employment.

Participant further understands that his or her participation in the Plan is the result of a unilateral and discretionary decision of the Company and, therefore, the Company reserves the absolute right to amend and/or discontinue Participant's participation in the Plan at any time, without any liability to Participant.

Finally, Participant hereby declares that he or she does not reserve to him or herself any action or right to bring any claim against the Company for any compensation or damages regarding any provision of the Plan or the benefits derived under the Plan, and that he or she therefore grants a full and broad release to the Company, its Subsidiaries, affiliates, branches, representation offices, shareholders, officers, agents and legal representatives, with respect to any claim that may arise.

Términos y Condiciones

Documento de Reconocimiento del Plan. Esta disposición suplementa la Sección 24 del Contrato:

Al aceptar las Unidades de Acción Restringida, el Participante reconoce que ha recibido una copia del Plan y del Contrato, incluyendo este Anexo B, que ha sido revisado por el Participante. El Participante reconoce, además, que acepta todas las disposiciones del Plan y del Contrato, incluyendo este Anexo B. El Participante también reconoce que ha leído y específica y expresamente aprueba los términos y condiciones establecidos en la Sección del Contrato intitulada "Naturaleza del Otorgamiento", que claramente establece lo siguiente:

(1) La participación del Participante en el Plan no constituye un derecho adquirido;

(2) El Plan y la participación del Participante en el Plan se ofrecen por la Compañía de manera totalmente discrecional; y

(3) La participación del Participante en el Plan es voluntaria.

Reconocimiento de Ley Laboral y Declaración de Política. Al aceptar las Unidades de Acción Restringida, el Participante reconoce que Autodesk, Inc., con oficinas registradas en 111 McInnis Parkway, San Rafael, CA 94903, EE.UU., es únicamente responsable por la administración del Plan. Además, el Participante reconoce que su participación en el Plan, el otorgamiento de las Unidades de Acción Restringida y cualquier adquisición de Acciones de conformidad con el Plan no constituyen una relación laboral o un contrato de servicio entre el Participante y la Compañía, ya que el Participante está participando en el Plan sobre una base exclusivamente comercial. Con base en lo anterior, el Participante expresamente reconoce que el Plan y los beneficios que le deriven de la participación en el Plan no establecen derecho alguno entre el Participante y el Patrón y no forman parte de las condiciones de trabajo y/o prestaciones otorgadas por la Compañía o cualquier Subsidiaria de la Compañía, y cualquier modificación del Plan o su terminación no constituirá un cambio o deterioro de los términos y condiciones de empleo del Participante.

Además, el Participante entiende que su participación en el Plan es resultado de una decisión unilateral y discrecional de la Compañía y, por lo tanto, la Compañía se reserva el derecho absoluto de modificar y/o discontinuar la participación del Participante en el Plan en cualquier momento, sin responsabilidad alguna para con el Participante.

Finalmente, el Participante en este acto manifiesta que no se reserva ninguna acción o derecho para interponer una demanda o reclamación en contra de la Compañía por cualquier compensación o daño o perjuicio en relación con cualquier disposición del Plan o los beneficios derivados del Plan y, en consecuencia, otorga un amplio y total finiquito a la Compañía, sus Subsidiarias, afiliadas, sucursales, oficinas de representación, accionistas, directores, funcionarios, agentes y representantes con respecto a cualquier demanda o reclamación que pudiera surgir.

NETHERLANDS

There are no country-specific provisions.

NEW ZEALAND

Notifications

Securities Law Information. Warning: This is an offer of rights to receive Shares upon vesting of the Restricted Stock Units subject to the terms of the Plan and this Agreement. Restricted Stock Units give the Participant a stake in the ownership of the Company. Participant may receive a return if dividends are paid on the Shares.

If the Company runs into financial difficulties and is wound up, Participant will be paid only after all creditors have been paid. Participant may lose some or all of his or her investment.

New Zealand law normally requires people who offer financial products to give information to investors before they invest. This information is designed to help investors to make an informed decision. The usual rules do not apply to this offer because it is made under an employee share purchase scheme. As a result, the Participant may not be given all the information usually required. Participant will also have fewer other legal protections for this investment.

Participant should ask questions, read all documents carefully, and seek independent financial advice before committing to participate in the Plan.

A copy of the Company's latest annual report and most recent published annual financial statements are available online at www.sec.gov/, as well as on the Company's website at http://investors.autodesk.com.

As noted above, Participant is advised to carefully read the materials provided before making a decision whether to participate in the Plan. Participant is also encouraged to contact his or her tax advisor for specific information concerning Participant's personal tax situation with regard to Plan participation.

NORWAY

There are no country-specific provisions.

PHILIPPINES

Notifications

Securities Law Information. This offering is subject to exemption from the requirements of securities registration with the Philippines Securities and Exchange Commission, under Section 10.1 (k) of the Philippine Securities Regulation Code. Section 10.1(k) of the Philippine Securities Regulation Code provides as follows:

> "Section 10.1 Exempt Transactions – The requirement of registration under Subsection 8.1 shall not apply to the sale of any security in any of the following section;
>
> [. . .]
>
> "(k) The sale of securities by an issuer to fewer than twenty (20) persons in the Philippines during any twelve-month period."

THE SECURITIES BEING OFFERED OR SOLD HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION UNDER THE SECURITIES REGULATION CODE. ANY FURTHER OFFER OR SALE THEREOF IS SUBJECT TO REGISTRATION REQUIREMENTS UNDER THE CODE UNLESS SUCH OFFER OR SALE QUALIFIES AS AN EXEMPT TRANSACTION.

For further information on risk factors impacting the Company's business that may affect the value of the Shares, Participant may refer to the risk factors discussion in the Company's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, which are filed with the U.S. Securities and Exchange Commission and are available online at www.sec.gov/, as well as on the Company's website at http://investors.autodesk.com. In addition, Participant may receive, free of charge, a copy of the Company's Annual Report, Quarterly Reports or any other reports, proxy statements or communications distributed to the Company's stockholders by contacting john.clancy@autodesk.com.

Participant acknowledges he or she is permitted to dispose or sell Shares acquired under the Plan provided the offer and resale of the Shares takes place outside the Philippines through the facilities of a stock exchange on which the Shares are listed. The Shares are currently listed on the Nasdaq Global Select Market in the United States of America.

POLAND

Notifications

Exchange Control Information. Polish residents are required to transfer funds (e.g., in connection with the sale of Shares) through a bank in Poland if the transferred amount in any single transaction exceeds a specified threshold (currently €15,000 unless the transfer of funds is considered to be connected with the business activity of an entrepreneur, in which case a lower threshold may apply). Polish residents are required to retain the documents connected with a foreign exchange transaction for a period of five (5) years, as measured from the end of the year in which such transaction occurred.

ROMANIA

Terms and Conditions

Vesting Schedule. Notwithstanding Section 3 of the Agreement and the vesting provisions set forth in the Notice of Grant, Participant's Restricted Stock Units will not vest prior to one year anniversary of the Date of Grant.

Notifications

Exchange Control Information. Romanian residents are required to deposit proceeds from the sale of Shares in a bank account in Romania and may be required to provide the Romanian bank with appropriate documentation explaining the source of the funds. Romanian residents should consult their personal advisor to determine whether they will be required to submit such documentation to the Romanian bank.

SINGAPORE

Terms and Conditions

Form of Settlement. As detailed in Section 2 of the Agreement and notwithstanding any discretion in the Plan, the Restricted Stock Units will be settled only in Shares. The Restricted Stock Units do not provide any right for Participant to receive a cash payment.

Securities Law Information. The Award is being granted pursuant to the "Qualifying Person" exemption under section 273(1)(f) of the Singapore Securities and Futures Act (Chapter 289, 2006 Ed.) ("SFA") and is not being granted to Participant with a view to the Shares acquired from the Award being subsequently offered for sale to any other party. The Plan has not been, and will not be, lodged or registered as a prospectus with the Monetary Authority of Singapore. Further, the grant of the Award is subject to section 257 of the SFA and Participant should not sell, or offer to sell, any Shares acquired pursuant to the award in Singapore, unless such sale or offer is made (i) after six months from the Date of Grant or (ii) pursuant to the exemptions under Part XIII Division (1) Subdivision (4) (other than section 280) of the SFA.

To the extent Participant sells, offers to sell or otherwise disposes of Shares acquired through the Plan within six months of the Date of Grant, Participant is permitted to dispose of such Shares through the designated broker appointed under the Plan, if any, provided the resale of Shares acquired under the Plan takes place outside Singapore through the facilities of a stock exchange on which the Shares are listed. The Shares are currently listed on the Nasdaq Global Select Market in the United States of America.

Notifications

Chief Executive Officer and Director Notification Obligation. If Participant is the Chief Executive Officer ("CEO") or a director, associate director or shadow director of a Singaporean Subsidiary, Participant is subject to certain notification requirements under the Singapore Companies Act. Among these requirements is an obligation to notify the Singaporean Subsidiary in writing when Participant receives an interest (e.g., Restricted Stock Units, Shares) in the Company or a Subsidiary or related entity. In addition, Participant must notify the Singaporean Subsidiary when he or she sells any Shares (including when Participant sells the Shares acquired under the Plan). These notifications must be made within two (2) business days of acquiring or disposing of any interest in the Company or any Subsidiary or related entity. In addition, a notification must be made of Participant's interests in the Company or any Subsidiary or related entity within two (2) business days of becoming the CEO or a director, associate director or shadow director of a parent, Subsidiary or affiliate in Singapore.

SPAIN

Terms and Conditions

Termination of Employment. For purposes of the Award, a termination of employment includes any termination that is deemed an "unfair dismissal" or a "constructive dismissal."

Labor Law Acknowledgement. As a condition of receipt of the Award, Participant acknowledges that he or she understands and agrees to participation in the Plan and that he or she has received a copy of the Plan.

Participant understands that the Company has unilaterally, gratuitously and discretionally decided to grant Restricted Stock Units under the Plan to individuals who may be Employees of the Company or its Subsidiaries throughout the world. The decision is a limited decision that is entered into upon the express assumption and condition that any grant will not economically or otherwise bind the Company or any of its Subsidiaries on an ongoing basis. Consequently, Participant understands that any grant is given on the assumption and condition that it shall not become a part of any employment contract (either with the Company or any of its Subsidiaries) and shall not be considered a mandatory benefit, salary for any purposes (including severance compensation) or any other right whatsoever. Furthermore, Participant understands and freely accepts that there is no guarantee that any benefit whatsoever shall arise from any gratuitous and discretionary grant since the future value of the Award and the underlying Shares is unknown and unpredictable. In addition, Participant understands that this grant would not be made but for the assumptions and conditions referred to above; thus, Participant understands, acknowledges and freely accepts that should any or all of the assumptions be mistaken or should any of the conditions not be met for any reason, then the Award shall be null and void.

Furthermore, Participant understands that the Award is a conditional right. Except as determined by the Committee or as provided in the Agreement, Participant shall forfeit any unvested Award upon termination of employment. The terms of this provision apply even if Participant is considered to be unfairly dismissed without good cause (i.e., subject to a "*despido improcedente*").

Notifications

Exchange Control Information. Participant must declare the acquisition and sale of Shares to the *Dirección General de Comercio e Inversiones* ("DGCI") for statistical purposes. Participant also must declare the ownership of any Shares with the DGCI each January while the Shares are owned, unless the amount of Shares acquired or sold exceeds the applicable threshold (currently €1,502,530), or Participant holds 10% or more of the share capital of the Company or other such amount that would entitle Participant to join the Board, in which case the filing is due within one month after the sale.

When receiving foreign currency payments derived from the ownership of Shares (i.e., dividends or sale proceeds) in excess of €50,000, Participant must inform the financial institution receiving the payment of the basis upon which such payment is made. Participant will need to provide the following information: (i) Participant's name, address, and fiscal identification number; (ii) the name and corporate domicile of the Company; (iii) the amount of the payment and the currency used; (iv) the country of origin; (v) the reasons for the payment; and (vi) further information that may be required.

Securities Law Information. No "offer of securities to the public," as defined under Spanish law, has taken place or will take place in the Spanish territory in connection with the Award. The Agreement has not been nor will it be registered with the *Comisión Nacional del Mercado de Valores*, and does not constitute a public offering prospectus.

SWEDEN

No country-specific provisions.

SWITZERLAND

Notifications

Securities Law Information. The grant of Restricted Stock Units and the issuance of any Shares is not intended to be publicly offered in or from Switzerland. Neither this Agreement nor any other materials relating to the Restricted Stock Units (1) constitute a prospectus as such term is understood pursuant to article 652a of the Swiss Code of Obligations, (2) may be publicly distributed nor otherwise made publicly available in Switzerland, or (3) have been or will be filed with, approved or supervised by any Swiss regulatory authority (in particular, the Swiss Financial Market Supervisory Authority ("FINMA")).

TAIWAN

Notifications

Securities Law Information. The offer of participation in the Plan is available only for Employees. The offer of participation in the Plan is not a public offer of securities by a Taiwanese company.

Exchange Control Information. Taiwanese residents may acquire and remit foreign currency (including funds to purchase or proceeds from the sale of Shares) into and out of Taiwan up to US$5 million per year without submission of supporting documentation. If the transaction amount is TWD$500,000 or more in a single transaction, Taiwanese residents are required to submit a foreign exchange transaction form and if the transaction amount is US$500,000 or more in a single transaction, such residents may be required to provide supporting documentation to the satisfaction of the remitting bank. Participant is personally responsible for complying with exchange control restrictions in Taiwan.

THAILAND

Notifications

Exchange Control Information. If Participant realizes US$50,000 or more in a single transaction from the sale of Shares or the payment of dividends, he or she is required to repatriate the funds to Thailand immediately following the receipt of the funds and to then either convert such repatriated funds into Thai Baht or deposit the funds into a foreign currency account opened with any commercial bank in Thailand within 360 days of repatriation. Further, for repatriated funds of US$50,000 or more, Participant must specifically report the inward remittance to the Bank of Thailand on a Foreign Exchange Transaction Form. Participant is personally responsible for complying with exchange control restrictions in Thailand.

TURKEY

Notifications

Securities Law Information. Under Turkish law, Participant is not permitted to sell any Shares acquired under the Plan in Turkey. The Shares are currently traded on the Nasdaq Global Select Market, which is located outside Turkey, under the ticker symbol "ADSK" and the Shares may be sold through this exchange.

Exchange Control Information. Participant will likely be required to engage a Turkish financial intermediary to assist with the sale of Shares acquired under the Plan and may also need to engage a Turkish financial intermediary with respect to the acquisition of such Shares, although this is less certain. As Participant is solely responsible for complying with the financial intermediary requirements and their application to participation in the Plan is uncertain, Participant should consult his or her personal legal advisor for further information regarding these requirements to ensure compliance.

UNITED ARAB EMIRATES

Notifications

Securities Law Information. This Restricted Stock Unit Award has not been approved or licensed by the United Arab Emirates ("UAE") Central Bank or any other relevant licensing authorities or governmental agencies in the UAE. This Restricted Stock Unit Award is strictly private and confidential and has not been reviewed by, deposited or registered with the UAE Central Bank or any other licensing authority or governmental agencies in the United Arab Emirates. This Award is being issued from outside the United Arab Emirates to a limited number of Employees of Autodesk Middle East (Representative Office) and must not be provided to any person other than the original recipient and may not be reproduced or used for any other purpose.

UNITED KINGDOM

Terms and Conditions

Form of Settlement. As detailed in Section 2 of the Agreement and notwithstanding any discretion contained in the Plan or anything to the contrary in the Agreement, the Restricted Stock Units are payable only in Shares.

Responsibility for Taxes. The following provisions supplement Section 9 of the Agreement:

Participant agrees to be liable for any Tax-Related Items and hereby covenants to pay any such Tax-Related Items, as and when requested by the Company or, if different, the Employer or by Her Majesty's Revenue & Customs ("HMRC") (or any other tax authority or any other relevant authority). Participant also agrees to indemnify and keep indemnified the Company and, if different, the Employer against any Tax-Related Items that they are required to pay or withhold or have paid or will pay to HMRC on his or her behalf (or any other tax authority or any other relevant authority).

Notwithstanding the foregoing, if Participant is a director or executive officer (within the meaning of Section 13(k) of the Exchange Act), the terms of the immediately foregoing provision may not apply. In the event Participant is a director or executive officer, Participant acknowledges that he or she may not be able to indemnify the Company for the amount of any income tax not collected from or paid by Participant, as it may be considered to be a loan and, therefore, it may constitute a benefit to him or her on which additional income tax and National Insurance contributions may be payable. Participant acknowledges that the Company or the Employer may recover any such additional income tax and national insurance contributions at any time thereafter by any of the means referred to in the Agreement. However, Participant is primarily responsible for reporting and paying any income tax due on this additional benefit directly to HMRC under the self-assessment regime.

Exhibit 21.1

SUBSIDIARIES OF AUTODESK, INC.

a Delaware Corporation

as of January 31, 2019

Subsidiary Name	Jurisdiction of Incorporation
Assemble Systems, LLC	U.S.
Autodesk Americas LLC	U.S.
ADSK Ireland Limited	Ireland
Autodesk (China) Software Research and Development Co., Ltd.	China
Autodesk (EMEA) Sàrl	Switzerland
Autodesk AB	Sweden
Autodesk ApS	Denmark
Autodesk Asia Pte. Ltd.	Singapore
Autodesk Australia Pty Ltd.	Australia
Autodesk B.V.	The Netherlands
Autodesk Canada Co.	Canada
Autodesk Colombia S.A.S.	Colombia
Autodesk DC Limited	United Kingdom
Autodesk de Argentina S.A.	Argentina
Autodesk de Mexico, S.A. de C.V.	Mexico
Autodesk de Venezuela, S.A.	Venezuela
Autodesk Development B.V.	The Netherlands
Autodesk Development S.à.r.l.	Switzerland
Autodesk Direct Limited	United Kingdom
Autodesk do Brasil Ltda	Brazil
Autodesk Far East Ltd.	Hong Kong
Autodesk France	France
Autodesk Ges.mbH	Austria
Autodesk Global, Inc.	U.S.
Autodesk GmbH	Germany
Autodesk Holdings LLP	United Kingdom
Autodesk Hungary Kft	Hungary
Autodesk India Private Limited	India
Autodesk International Holding Co.	U.S.
Autodesk Ireland Operations Limited	Ireland
Autodesk Israel Ltd.	Israel
Autodesk Korea Ltd.	South Korea
Autodesk Limited	United Kingdom
Autodesk Limited	Saudi Arabia
Autodesk Ltd. Japan	Japan
Autodesk Netherlands Holdings, B.V.	Netherlands
Autodesk S.r.l.	Italy
Autodesk S.R.L.	Romania
Autodesk SA	Switzerland
Autodesk Software (China) Co., Ltd.	China
Autodesk Sp. z.o.o.	Poland

Autodesk spol. s.r.o.	Czech Republic
Autodesk Taiwan Limited	Taiwan
Autodesk UK Holdings Limited	United Kingdom
Autodesk Yazilim Hizmetleri Ticaret Limited Sirketi (Autodesk Limited Sirketi)	Turkey
Autodesk, S.A.	Spain
Beijing Delcam Integrated System Co. Ltd.	China
BuildingConnected, Inc.	U.S.
CadSoft Computer GmbH	Germany
Crispin Systems Limited	United Kingdom
Delcam (Malaysia) Sdn. Bhd.	Malaysia
Delcam Australia Pty Limited	Australia
Delcam Consulting and Technology Services Limited	India
Delcam Indonesia	Indonesia
Delcam Limited	United Kingdom
Delcam Partmaker Limited	United Kingdom
Delcam Professional Services Limited	United Kingdom
Delcam Software (India) Private Limited	India
Delta Soft LLC	Russia
Graitec GmbH	Germany
Hankook Delcam Limited	South Korea
Limited Liability Company Autodesk (CIS)	Russia
Moldflow International Pty Ltd.	Australia
Moldflow Pty Ltd.	Australia
netfabb GmbH	Germany
netfabb, Inc.	U.S.
PlanGrid, Inc.	U.S.
PlanGrid Australia Pty Ltd.	Australia
PlanGrid Hong Kong Limited	Hong Kong
PlanGrid UK Limited	United Kingdom
PlanGrid Canada ULC	Canada
Shotgun Software Inc.	U.S.
Solid Angle, S.L.U.	Spain
TradeTabb, Inc.	U.S.
Within Technologies Limited	United Kingdom

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements:

Form S-8	333-229346	Amended and Restated BuildingConnected, Inc. 2013 Stock Plan
Form S-8	333-228934	PlanGrid 2012 Equity Incentive Plan
Form S-3ASR	333-226196	Autodesk, Inc. Common Stock
Form S-8	333-223861	Autodesk, Inc. 2012 Employee Stock Plan
Form S-8	333-08693	1996 Stock Plan, 1990 Directors' Option Plan, 1998 Employee Qualified Stock Purchase Plan and Teleos Research 1996 Stock Plan
Form S-8	333-62655	1996 Stock Plan and 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-81207	1996 Stock Plan, 1998 Employee Qualified Stock Purchase Plan and Nonstatutory Stock Option Plan
Form S-8	333-45928	1996 Stock Plan, 2000 Directors' Option Plan and 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-67974	1996 Stock Plan, 1998 Employee Qualified Stock Purchase Plan and Nonstatutory Stock Option Plan
Form S-8	333-88682	Revit Technology Corporation 1998 Stock Plan, 1996 Stock Plan and 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-106556	1996 Stock Plan and 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-116203	1996 Stock Plan and 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-134560	Autodesk, Inc. 2006 Employee Stock Plan, Autodesk, Inc. 2000 Directors' Option Plan, Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan, and Alias Systems Holdings Inc. 2004 Stock Option Plan
Form S-8	333-149964	Autodesk, Inc. 2008 Employee Stock Plan, Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-158131	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-165561	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan and Autodesk, Inc. 2010 Outside Directors' Stock Plan
Form S-8	333-172936	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-179514	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan, Autodesk, Inc. 2012 Employee Stock Plan and Autodesk, Inc. 2012 Outside Directors' Stock Plan
Form S-8	333-187338	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan
Form S-8	333-194463	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan and Autodesk, Inc. 2012 Employee Stock Plan
Form S-8	333-205038	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan and Autodesk, Inc. 2012 Employee Stock Plan
Form S-8	333-213701	Autodesk, Inc. 1998 Employee Qualified Stock Purchase Plan
Form S-3ASR	333-218070	Senior Debt Securities

of our reports dated March 25, 2019, with respect to the consolidated financial statements and schedule of Autodesk, Inc., and the effectiveness of internal control over financial reporting of Autodesk, Inc., included in this Annual Report (Form 10-K) of Autodesk, Inc. for the year ended January 31, 2019.

/s/ ERNST & YOUNG LLP

San Francisco, California
March 25, 2019

Exhibit 31.1

CERTIFICATIONS

I, Andrew Anagnost, certify that:

1. I have reviewed this report on Form 10-K of Autodesk, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ ANDREW ANAGNOST

Andrew Anagnost

President and Chief Executive Officer

(Principal Executive Officer)

Date: March 25, 2019

Exhibit 31.2

CERTIFICATIONS

I, R. Scott Herren, certify that:

1. I have reviewed this report on Form 10-K of Autodesk, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

   5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

      a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

      b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ R. SCOTT HERREN

R. Scott Herren

Senior Vice President and Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

Date: March 25, 2019

Exhibit 32.1

CERTIFICATION OF CHIEF EXECUTIVE OFFICER AND CHIEF FINANCIAL OFFICER
PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

Based on my knowledge, I, Andrew Anagnost, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Autodesk, Inc. on Form 10-K for the annual period ended January 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Autodesk, Inc.

/s/ ANDREW ANAGNOST

Andrew Anagnost

President and Chief Executive Officer
(Principal Executive Officer)

March 25, 2019

Based on my knowledge, I, R. Scott Herren, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report of Autodesk, Inc. on Form 10-K for the annual period ended January 31, 2019 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-K fairly presents in all material respects the financial condition and results of operations of Autodesk, Inc.

/s/ R. SCOTT HERREN

R. Scott Herren

Senior Vice President and Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

March 25, 2019