

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following Management’s Discussion and Analysis of Financial Condition and Results of Operations (“MD&A”) should be read together with the unaudited interim consolidated financial statements and the accompanying notes (the “Consolidated Financial Statements”) of BlackBerry Limited for the three months ended May 31, 2020, included in Part I, Item 1 of this Form 10-Q, as well as the Company’s audited consolidated financial statements and accompanying notes and MD&A for the fiscal year ended February 29, 2020 (the “Annual MD&A”). The Consolidated Financial Statements are presented in U.S. dollars and have been prepared in accordance with U.S. GAAP. All financial information in this MD&A is presented in U.S. dollars, unless otherwise indicated.

Additional information about the Company, which is included in the Company’s Annual Report on Form 10-K for the fiscal year ended February 29, 2020 (the “Annual Report”), can be found on SEDAR at www.sedar.com and on the SEC’s website at www.sec.gov.

Cautionary Note Regarding Forward-Looking Statements

This MD&A contains forward-looking statements within the meaning of certain securities laws, including under the U.S. Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws, including statements relating to:

- the Company’s plans, strategies and objectives, including its intentions to achieve long-term profitable revenue growth and increase and enhance its product and service offerings;
- the Company’s expectations with respect to its revenue, profitability and free cash flow in fiscal 2021;
- the Company’s estimates of purchase obligations and other contractual commitments; and
- the Company’s expectations with respect to the sufficiency of its financial resources.

The words “expect”, “anticipate”, “estimate”, “may”, “will”, “should”, “could”, “intend”, “believe”, “target”, “plan” and similar expressions are intended to identify forward-looking statements in this MD&A, including in the sections entitled “Business Overview - Strategy”, “Business Overview - COVID-19”, “Non-GAAP Financial Measures - Key Metrics - Free Cash Flow”, “Results of Operations - Three months ended May 31, 2020 compared to the three months ended May 31, 2019 - Revenue - Revenue by Product and Service”, “Results of Operations - Three months ended May 31, 2020 compared to the three months ended May 31, 2019 - Net Loss” and “Financial Condition - Debenture Financing and Other Funding Sources”. Forward-looking statements are based on estimates and assumptions made by the Company in light of its experience and its perception of historical trends, current conditions and expected future developments, as well as other factors that the Company believes are appropriate in the circumstances, including but not limited to, the Company’s expectations regarding its business, strategy, opportunities and prospects, the launch of new products and services, general economic conditions, competition, and the Company’s expectations regarding its financial performance. Many factors could cause the Company’s actual results, performance or achievements to differ materially from those expressed or implied by the forward-looking statements, including, without limitation, the risk factors discussed in Part I, Item 1A “Risk Factors” in the Annual Report.

All of these factors should be considered carefully, and readers should not place undue reliance on the Company’s forward-looking statements. Any statements that are forward-looking statements are intended to enable the Company’s shareholders to view the anticipated performance and prospects of the Company from management’s perspective at the time such statements are made, and they are subject to the risks that are inherent in all forward-looking statements, as described above, as well as difficulties in forecasting the Company’s financial results and performance for future periods, particularly over longer periods, given changes in technology and the Company’s business strategy, evolving industry standards, intense competition and short product life cycles that characterize the industries in which the Company operates. See “Strategy” subsection in Part I, Item 1 “Business” of the Annual Report.

The Company has no intention and undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable law.

Business Overview

The Company provides intelligent security software and services to enterprises and governments around the world. The Company secures more than 500 million endpoints including more than 175 million cars on the road today. Based in Waterloo, Ontario, the Company leverages artificial intelligence and machine learning to deliver innovative solutions in the areas of cybersecurity, safety and data privacy, and is a leader in the areas of endpoint security management, encryption, and embedded systems.

Strategy

The Company is widely recognized for its intelligent security software and services, and believes that it delivers the broadest set of security capabilities and visibility in the market, covering users, devices, networks, apps and data. The Company leverages its extensive technology portfolio to offer best-in-class security, safety and reliability to enterprise customers in growing segments of the IoT, cybersecurity, connected transportation, healthcare, financial services and government markets.

The Company's goal is to remain a leader in regulated industries and other core verticals by continuing to extend the functionality of its secure BlackBerry Spark® software platform through organic investments and strategic acquisitions and partnerships. The Company intends to drive revenue growth and to achieve adjusted margins that are consistent with those of other enterprise software companies over the long term.

The Company's go-to-market strategy focuses principally on generating revenue from enterprise software, services and licensing. The Company continues to build its developer and channel partner programs to bolster its direct sales and marketing efforts and promote the growth of an IoT ecosystem.

Products and Services

The Company is organized and managed as one operating segment. The Company has multiple products and services from which it derives revenue, which are structured in two groups: Software and Services, and Licensing and Other.

Software and Services consists of the Company's BlackBerry Spark software platform business and BlackBerry IoT Solutions business. Licensing and Other consists primarily of the Company's patent licensing business and service access fees ("SAF").

Software and Services

BlackBerry Spark

The Company's core software and services offering is its secure BlackBerry Spark software platform that comprises continuous authentication, endpoint protection platform ("EPP"), endpoint detection and response ("EDR"), and mobile threat defense ("MTD") capabilities. BlackBerry Spark includes a unified endpoint security ("UES") layer which integrates with BlackBerry unified endpoint management ("UEM") to enable secure endpoint communications in a zero trust environment. The platform is informed by the Company's artificial intelligence ("AI") and machine learning capabilities, continuous innovations, professional cybersecurity services, industry partnerships and academic collaborations. The Company is currently executing on a robust schedule of product launches for BlackBerry Spark to deliver a comprehensive security approach operating on one agent across all endpoints, administered from one console, leveraging one crowd-sourced threat data repository and managed in one cloud environment.

The BlackBerry Spark platform includes a suite of security software products and services, including BlackBerry Cylance, BlackBerry® UEM, BlackBerry® Dynamics™ and BlackBerry® Workspaces. The Company also offers the BlackBerry® Spark SDK to promote the evolution of a platform ecosystem by enabling enterprise and independent software vendor ("ISV") developers to integrate the security features of BlackBerry Spark into their own mobile and web applications.

BlackBerry Cylance offers leading AI and machine learning-based cybersecurity solutions, including: BlackBerry® Protect, an EPP solution that uses machine learning to prevent suspicious behavior and the execution of malicious code on an endpoint; BlackBerry® Optics, an EDR solution that provides both visibility into and prevention of malicious activity on an endpoint; and BlackBerry® Guard, a managed detection and response solution that provides continuous threat hunting and monitoring. BlackBerry Cylance also offers incident response, compromised assessment and containment services to assist clients with forensic analysis, state of existing systems and remediation of attacks.

BlackBerry UEM is a central software component of the Company's secure communications platform, offering a "single pane of glass", or unified console view, for managing and securing devices, applications, identity, content and endpoints across all leading operating systems. BlackBerry Dynamics offers a best-in-class development platform and secure container for mobile applications, including the Company's own enterprise applications such as BlackBerry® Work and BlackBerry® Connect for secure collaboration.

BlackBerry IoT Solutions

The BlackBerry IoT Solutions business includes BlackBerry® QNX®, BlackBerry® AtHoc®, SecuSUITE, BlackBerry Certicom®, BlackBerry Radar®, and other IoT applications.

BlackBerry QNX is a global provider of real-time operating systems, middleware, development tools, and professional services for connected embedded systems in the automotive, medical, industrial automation and other markets. A recognized leader in automotive software, BlackBerry QNX offers a growing portfolio of safety-certified, secure and reliable platform solutions and is focused on achieving design wins with automotive original equipment manufacturers ("OEMs"), Tier 1 vendors and automotive semiconductor suppliers. These solutions include the Neutrino® operating system and the BlackBerry QNX® CAR

platform, the most advanced embedded software platform for the autonomous vehicle market, as well as other products designed to alleviate the challenges of compliance with ISO 26262, the automotive industry's functional safety standard. Additionally, the Company's secure automotive over-the-air software update management service allows OEMs to manage the life cycle of the software and security in their vehicles.

The Company is developing a concept system to integrate BlackBerry Spark capabilities, including AI and machine learning technologies, with BlackBerry QNX automotive solutions.

BlackBerry AtHoc is a secure, networked crisis communications software platform that enables people, devices and organizations to exchange critical information in real time during business continuity and life safety operations. The platform securely connects with a diverse set of endpoints to distribute emergency mass notifications, improve personnel accountability and facilitate the bidirectional collection and sharing of data within and between organizations. BlackBerry AtHoc earned Federal Risk and Authorization Management Program ("FedRAMP") authorization in fiscal 2018 and helps to protect more than 70% of U.S. government personnel.

SecuSUITE® for Government is a certified, multi-OS voice and text messaging solution with advanced encryption and anti-eavesdropping capabilities providing a maximum level of security on the individual device level for public authorities and businesses.

The Company's IoT Solutions offerings also include its BlackBerry Radar asset tracking solution, BlackBerry Certicom cryptography and key management products, BlackBerry Jarvis™ code security testing platform, and BlackBerry Messenger (BBM®) Enterprise service.

The BlackBerry Spark and BlackBerry IoT Solutions businesses are both complemented by the enterprise and cybersecurity consulting services offered by the Company's BlackBerry® Professional Services business. BlackBerry Professional Services provides platform-agnostic strategies to address mobility-based challenges, providing expert deployment support, end-to-end delivery (from system design to user training), application consulting, and experienced project management. The Company's cybersecurity consulting services and tools, combined with its other security solutions, help customers identify the latest cybersecurity threats, test for vulnerabilities, develop risk-appropriate mitigations, maintain IT security standards and techniques, and defend against the risk of future attacks.

Licensing and Other

The Company's Licensing business is responsible for the management and monetization of the Company's global patent portfolio. The patent portfolio continues to provide a competitive advantage in the Company's core product areas as well as providing leverage in the development of future technologies and licensing programs in both core and adjacent vertical markets. The Company owns rights to an array of patented and patent pending technologies which include, but are not limited to, operating systems, networking infrastructure, acoustics, messaging, enterprise software, automotive subsystems, cybersecurity, cryptography and wireless communications.

In addition, in recent years, the Company licensed its device security software and service suite and related brand assets to outsourcing partners who designed, manufactured, marketed and continue to provide customer support for BlackBerry-branded handsets featuring the Company's secure Android™ software. The Company also entered into licensing arrangements with manufacturers of other devices with embedded BlackBerry cybersecurity technology.

The Company's Other business generates revenue from SAF charged to subscribers using the Company's legacy BlackBerry 7 and prior BlackBerry operating systems, as well as revenue relating to unspecified future software upgrade rights for devices previously sold by the Company.

Recent Developments

The Company continued to execute on its strategy in fiscal 2021 and announced the following achievements:

Products and Innovation:

- Launched BlackBerry Spark Suites, offering enterprises a range of tailored cybersecurity and endpoint management options to help protect data, minimize risk, and reduce cost and complexity;
- Announced that an independent Frost & Sullivan study reported that the Company's solutions can secure all IoT endpoints against upwards of 96% of all cyberthreats;
- Announced that BlackBerry QNX software is embedded in more than 175 million cars on the road;
- Announced that BlackBerry® Unified Endpoint Security (UES) was validated by MITRE ATT&CK APT29, which examines the ability to detect sophisticated tactics and techniques used by APT29, a group that cybersecurity experts believe operates on behalf of the Russian government;

- Introduced AtHoc Managed Service to enable organizations of any size to maintain crisis communications capability;
- Announced a collaboration with Intel to deliver a new release of BlackBerry Optics to stop cryptojacking malware;
- Launched QNX Black Channel Communications Technology, a new software solution that OEMs and embedded software developers can use to ensure safe data communication exchanges within their safety-critical systems;
- Released new research that examines how five related Chinese Advanced Persistent Threat (APT) groups have compromised Linux servers, Windows systems and mobile Android devices for nearly a decade; and
- Announced feature updates to its SecuSUITE for Government and BlackBerry AtHoc solutions;

Customers and Partners:

- Partnered with Bell to become Bell's preferred mobile threat defense solution provider, delivering BlackBerry Protect to Canadian enterprise customers;
- Announced that the BlackBerry Enterprise Partner Program and the BlackBerry Cylance Partner Program both received a 5-Star rating from CRN for the fourth consecutive year;
- Announced that the BlackBerry® Government Mobility Suite has achieved Federal Risk and Authorization Management Program (FedRAMP) authorization;
- Expanded the leadership position of the BlackBerry AtHoc crisis communication system within the U.S. federal government;
- Announced that the German Development Agency chose BlackBerry AtHoc as its emergency mass notification system;
- Entered into a partnership with DEDrone, a market and technology leader in airspace security, to deliver advanced counter-drone technology to secure the world's most critical sites;
- Announced that BlackBerry Radar added more than 12 new channel partners in the past six months including two within Mexico, expanding the company's asset monitoring solutions outside of the U.S. and Canada for the first time;
- Entered into a partnership with ZTR to offer railcar owners, operators and suppliers a powerful new digital monitoring solution; and
- Entered into a partnership with University of Windsor to develop and deliver a cybersecurity curriculum for the University's Graduate Master's Program in Applied Computing;

Environmental, Sustainability and Corporate Governance:

- Expanded the Company's commitment to the United Nations Global Compact Sustainable Development Goals;
- Appointed Thomas Eacobacci as President; and
- Appointed Marjorie Dickman as Chief Government Affairs and Public Policy Officer.

COVID-19

In March 2020, the World Health Organization characterized the novel coronavirus ("COVID-19") as a global pandemic and extraordinary actions have been taken by international, federal, state, provincial and local governmental authorities to contain and combat the spread of COVID-19 in regions throughout the world. The COVID-19 outbreak and related public health measures, including orders to shelter-in-place, travel restrictions and mandated business closures, have adversely affected workforces, organizations, consumers, economies, and financial markets globally, leading to an economic downturn and increased market volatility. It has also disrupted the normal operations of the Company and the businesses of many of the Company's customers, suppliers and distribution partners.

To protect the health and safety of the Company's employees, contractors, customers and visitors, the Company responded rapidly to COVID-19 by proactively mandating remote working, utilizing virtual meetings and suspending employee travel. All of the Company's currently planned customer, industry and other stakeholder events have been shifted to virtual-only experiences, and the Company may deem it advisable to similarly alter, postpone, or cancel entirely, additional events in the future. As public health protocols begin to accommodate returning to work at the Company's facilities, the Company is implementing additional safety measures at all of its facilities, including increased frequency in cleaning and disinfecting as well as hygiene and social distancing practices. The Company has a limited history of having a remote workforce and the long-term impact on, and the resulting types of continuing investments for, the Company's employee base is uncertain.

In response to certain anticipated impacts from the COVID-19 pandemic, the Company has also implemented a series of temporary cost reduction measures to further preserve financial flexibility. These actions include the postponement of certain discretionary spending and capital expenditures, taking advantage of the broad-based employer relief provided by governments

in Canada, the United States and other jurisdictions, temporarily suspending certain company matching contributions to employee retirement savings plans and deferring increases in the base salaries of many employees and executives.

The economic downturn and uncertainty caused by the COVID-19 outbreak and the measures undertaken to contain its spread have already negatively affected the Company's QNX automotive software business and will likely cause volatility in demand for the Company's products and services, adversely affect the ability of the Company's sales and professional services teams to meet with customers and provide service, negatively impact expected spending from new customers and increase sales cycle times. The Company continues to evaluate the current and potential impact of the COVID-19 outbreak on its business, results of operations and consolidated financial statements, including the impairment of goodwill and indefinite-lived intangible assets and the collectability of receivables.

The ultimate impact of the COVID-19 pandemic will depend on, among other things, the duration and severity of the pandemic, the governmental restrictions that have been, and may continue to be, imposed in response to the pandemic, the effectiveness of actions taken to contain or mitigate the outbreak, and global economic conditions. In light of the changing nature of the COVID-19 pandemic and uncertainty regarding the duration, severity, and possible resurgence of the pandemic in future periods, the long-term impact on the Company's business is currently unclear.

Although the effects of the pandemic may not be fully reflected in the Company's business until future periods, the Company believes that the COVID-19 pandemic could have a material adverse impact on the Company's consolidated business, results of operations and financial condition in fiscal 2021. The Company does not expect the COVID-19 pandemic and its related economic impact to materially adversely affect its liquidity position.

As the COVID-19 pandemic evolves, the Company will continue to actively monitor developments and business conditions that may cause it to take further actions that alter business operations as may be required by applicable authorities or that the Company determines are in the best interests of its employees, customers, suppliers and stockholders.

First Quarter Fiscal 2021 Summary Results of Operations

The following table sets forth certain unaudited consolidated statements of operations data for the quarter ended May 31, 2020 compared to the quarter ended May 31, 2019 under U.S. GAAP:

	For the Three Months Ended		
	<i>(in millions, except for share and per share amounts)</i>		
	May 31, 2020	May 31, 2019	Change
Revenue	\$ 206	\$ 247	\$ (41)
Gross margin	143	177	(34)
Operating expenses	788	213	575
Investment income, net	—	3	(3)
Loss before income taxes	(645)	(33)	(612)
Provision for (recovery of) income taxes	(9)	2	(11)
Net loss	\$ (636)	\$ (35)	\$ (601)
Loss per share - reported			
Basic	\$ (1.14)	\$ (0.06)	
Diluted	\$ (1.14)	\$ (0.09)	
Weighted-average number of shares outstanding (000's)			
Basic	557,839	551,845	
Diluted ⁽¹⁾	557,839	612,345	

⁽¹⁾ Diluted loss per share on a U.S. GAAP basis for the first quarter of fiscal 2021 does not include the dilutive effect of the Debentures (defined below) as to do so would be anti-dilutive. Diluted loss per share on a U.S. GAAP basis for the first quarter of fiscal 2021 and 2020 does not include the dilutive effect of stock-based compensation as to do so would be anti-dilutive. See Note 8 to the Consolidated Financial Statements for the Company's calculation of the diluted weighted average number of shares outstanding.

Financial Highlights

The Company had approximately \$955 million in cash, cash equivalents and investments as of May 31, 2020.

In the first quarter of fiscal 2021, the Company recognized revenue of \$206 million and incurred a net loss of \$636 million, or \$1.14 basic and diluted loss per share on a U.S. GAAP basis.

The Company recognized adjusted revenue of \$214 million and adjusted net income of \$12 million, and adjusted earnings of \$0.02 per share, on a non-GAAP basis in the first quarter of fiscal 2021. See “Non-GAAP Financial Measures” below.

Debentures Fair Value Adjustment

As previously disclosed, the Company elected the fair value option to account for the 3.75% unsecured convertible debentures (the “Debentures”); therefore, periodic revaluation has been and continues to be required under U.S. GAAP. The fair value adjustment does not impact the terms of the Debentures such as the face value, the redemption features or the conversion price.

In the first quarter of fiscal 2021, the fair value of the Debentures decreased by approximately \$7 million. For the three months ended May 31, 2020, the Company recorded non-cash income relating to changes in fair value from instrument specific credit risk of \$8 million in Accumulated Other Comprehensive Loss and a non-cash charge relating to changes in fair value from non-credit components of \$1 million (pre-tax and after tax) (the “Q1 Fiscal 2021 Debentures Fair Value Adjustment”) in the Company’s consolidated statements of operations.

Non-GAAP Financial Measures

The Consolidated Financial Statements have been prepared in accordance with U.S. GAAP, and information contained in this MD&A is presented on that basis. On June 24, 2020, the Company announced financial results for the three months ended May 31, 2020, which included certain non-GAAP financial measures, including adjusted revenue, adjusted gross margin (before taxes), adjusted gross margin percentage (before taxes), adjusted operating expense, adjusted operating income, adjusted EBITDA, adjusted operating income margin percentage, adjusted EBITDA margin percentage, adjusted net income (loss), adjusted income (loss) per share, adjusted research and development expense, adjusted selling, marketing and administrative expense, adjusted amortization expense and free cash flow.

In the Company’s internal reports, management evaluates the performance of the Company’s business on a non-GAAP basis by excluding the impact of the items below from the Company’s financial results. The Company believes that excluding the below items provides readers of the Company’s financial statements with a more consistent basis for comparison across accounting periods and is more useful in helping readers understand the Company’s operating results and underlying operational trends.

- *Debentures fair value adjustment.* The Company has elected to measure its outstanding Debentures at fair value in accordance with the fair value option under U.S. GAAP. Each period, the fair value of the Debentures is recalculated and resulting non-cash gains and losses from the change in fair value from non-credit components of the Debentures are recognized in income. The amount can vary each period depending on changes to the Company’s share price. This is not indicative of the Company’s core operating performance, and may not be meaningful in comparison to the Company’s past operating performance.
- *Restructuring charges.* The Company believes that restructuring costs relating to employee termination benefits, facilities, and manufacturing network simplification efforts pursuant to the Resource Allocation Program (“RAP”) entered into in order to transition the Company from a legacy hardware manufacturer to a licensing driven software business do not reflect expected future operating expenses, are not indicative of the Company’s core operating performance, and may not be meaningful in comparison to the Company’s past operating performance.
- *Software deferred revenue acquired.* The Company has acquired businesses whose net assets include deferred revenue. In accordance with U.S. GAAP reporting requirements, the Company recorded write-downs of deferred revenue under arrangements pre-dating each acquisition to fair value, which resulted in lower recognized revenue than the original transaction price until the related service obligations under such arrangements are fulfilled. Therefore, U.S. GAAP revenues after the acquisitions will not reflect the full amount of revenue that would have been reported if the acquired deferred revenue was not written down to fair value, prior to the renewal of these arrangements. The Company believes that reversing the acquisition-related deferred revenue write-downs (so that the full amount of revenue booked by the acquired businesses is included) provides a more appropriate representation of revenue in a given period and, therefore, provides readers of the Company’s financial statements with a more consistent basis for comparison across accounting periods. The Company also believes that the adjustment is more useful in helping readers to understand the Company’s operating results and underlying operational trends, especially in future periods when the contracts underlying the acquired deferred revenue are renewed at amounts more consistent with their transaction price. As the impacted contracts renew over time, the associated reversal of the acquisition write-downs will trend to zero.
- *Software deferred commission expense acquired.* The Company has acquired businesses whose net assets include deferred commissions. In accordance with U.S. GAAP reporting requirements, the Company recorded write-downs of deferred commissions under arrangements pre-dating each acquisition to fair value, which in most cases is nil. Therefore, U.S. GAAP commission expense after the acquisitions will not reflect commission expense that would have

been reported if the acquired deferred commissions were not written down to fair value. The Company believes that reversing the acquisition-related deferred commission write-downs (so that the full amount of commission expense is included) provides a more appropriate representation of commission expense in a given period and, therefore, provides readers of the Company's financial statements with a more consistent basis for comparison across accounting periods. The Company also believes that the adjustment is more useful in helping readers to understand the Company's operating results and underlying operational trends, especially in future periods when the Company recognizes commissions on the renewals of the contracts underlying the acquired deferred commissions. As the impacted contracts renew over time, the associated reversal of the acquisition write-downs will trend to zero.

- *Stock compensation expenses.* Equity compensation is a non-cash expense and does not impact the ongoing operating decisions taken by the Company's management.
- *Amortization of acquired intangible assets.* When the Company acquires intangible assets through business combinations, the assets are recorded as part of purchase accounting and contribute to revenue generation. Such acquired intangible assets depreciate over time and the related amortization will recur in future periods until the assets have been fully amortized. This is not indicative of the Company's core operating performance, and may not be meaningful in comparison to the Company's past operating performance.
- *Business acquisition and integration costs.* The Company incurs costs associated with business acquisitions, including legal costs, audit and accounting fees, and other acquisition and integration expenses. These expenditures do not relate to the ongoing operation of the business and they tend to vary significantly based on the circumstances of each transaction. This is not indicative of the Company's core operating performance, and may not be meaningful in comparison to the Company's past operating performance.
- *Acquisition valuation allowance.* The Company records an income tax valuation allowance associated with business acquisitions. This is not indicative of the Company's core operating performance, and may not be meaningful in comparison to the Company's past operating performance.
- *Long-lived asset impairment charge.* The Company believes that long-lived asset impairment charges do not reflect expected future operating expenses, are not indicative of the Company's core operating performance, and may not be meaningful in comparison to the Company's past operating performance.
- *Goodwill impairment charge.* The Company believes that goodwill impairment charge does not reflect expected future operating expenses, is not indicative of the Company's core operating performance, and may not be meaningful in comparison to the Company's past operating performance.

On a U.S. GAAP basis, the impact of these items is reflected in the Company's income statement. However, the Company believes that the provision of supplemental non-GAAP measures allow investors to evaluate the financial performance of the Company's business using the same evaluation measures that management uses, and is therefore a useful indication of the Company's performance or expected performance of future operations and facilitates period-to-period comparison of operating performance. As a result, the Company considers it appropriate and reasonable to provide, in addition to U.S. GAAP measures, supplementary non-GAAP financial measures that exclude certain items from the presentation of its financial results.

Reconciliation of non-GAAP based measures with most directly comparable GAAP based measures for the three months ended May 31, 2020 and May 31, 2019

Readers are cautioned that adjusted revenue, adjusted gross margin (before taxes), adjusted gross margin percentage (before taxes), adjusted operating expense, adjusted operating income, adjusted EBITDA, adjusted operating income margin percentage, adjusted EBITDA margin percentage, adjusted net income (loss), adjusted income (loss) per share, adjusted research and development expense, adjusted selling, marketing and administrative expense, adjusted amortization expense and free cash flow and similar measures do not have any standardized meaning prescribed by U.S. GAAP and are therefore unlikely to be comparable to similarly titled measures reported by other companies. These non-GAAP financial measures should be considered in the context of the U.S. GAAP results, which are described in this MD&A and presented in the Consolidated Financial Statements.

A reconciliation of the most directly comparable U.S. GAAP financial measures for the three months ended May 31, 2020 and May 31, 2019 to adjusted financial measures is reflected in the tables below:

For the Three Months Ended (in millions)	May 31, 2020	May 31, 2019
Revenue	\$ 206	\$ 247
Software deferred revenue acquired ⁽¹⁾	8	20
Adjusted revenue	\$ 214	\$ 267
Gross margin	\$ 143	\$ 177
Software deferred revenue acquired ⁽¹⁾	8	20
Restructuring charges	—	1
Stock compensation expense	2	1
Adjusted gross margin	\$ 153	\$ 199
Gross margin %	69.4 %	71.7 %
Software deferred revenue acquired ⁽¹⁾	1.2 %	2.1 %
Restructuring charges	— %	0.4 %
Stock compensation expense	0.9 %	0.3 %
Adjusted gross margin %	71.5 %	74.5 %

⁽¹⁾ See Reconciliation of U.S. GAAP Software and Services revenue to adjusted Software and Services revenue

Reconciliation of operating expense for the three months ended May 31, 2020, February 29, 2020 and May 31, 2019 to adjusted operating expense is reflected in the tables below:

For the Three Months Ended (in millions)	May 31, 2020	February 29, 2020	May 31, 2019
Operating expense	\$ 788	\$ 253	\$ 213
Restructuring charges	1	1	—
Stock compensation expense	12	15	16
Debenture fair value adjustment ⁽¹⁾	1	5	(28)
Software deferred commission expense acquired	(3)	(3)	(5)
Acquired intangibles amortization	33	35	35
Business acquisition and integration costs	—	1	1
Goodwill impairment charge	594	22	—
LLA impairment charge	—	5	—
Adjusted operating expense	\$ 150	\$ 172	\$ 194

⁽¹⁾ See “First Quarter Fiscal 2021 Summary Results of Operations - Financial Highlights - Debentures Fair Value Adjustment”

Reconciliation of GAAP net loss and GAAP basic loss per share for the three months ended May 31, 2020 and May 31, 2019 to adjusted net income and adjusted basic earnings per share is reflected in the tables below:

For the Three Months Ended (in millions, except per share amounts)	May 31, 2020		May 31, 2019	
		Basic earnings per share		Basic earnings per share
Net loss	\$ (636)	\$(1.14)	\$ (35)	\$(0.06)
Software deferred revenue acquired	8		20	
Restructuring charges	1		1	
Stock compensation expense	14		17	
Debenture fair value adjustment	1		(28)	
Software deferred commission expense acquired	(3)		(5)	
Acquired intangibles amortization	33		35	
Business acquisition and integration costs	—		1	
Goodwill impairment charge	594		—	
Acquisition valuation allowance	—		(1)	
Adjusted net income	<u>\$ 12</u>	<u>\$0.02</u>	<u>\$ 5</u>	<u>\$0.01</u>

Reconciliation of U.S GAAP Software and Services revenue for the three months ended May 31, 2020 and May 31, 2019 to adjusted Software and Services revenue is reflected in the tables below:

For the Three Months Ended (in millions)	May 31, 2020		May 31, 2019	
Software and Services Revenue	\$ 148		\$ 168	
Software deferred revenue acquired	8		20	
Adjusted Software and Services revenue	<u>\$ 156</u>		<u>\$ 188</u>	

Reconciliation of U.S GAAP research and development, selling, marketing and administration, and amortization expense for the three months ended May 31, 2020 and May 31, 2019 to adjusted research and development, selling, marketing and administration, and amortization expense is reflected in the tables below:

For the Three Months Ended (in millions)	May 31, 2020		May 31, 2019	
Research and development	\$ 57		\$ 71	
Stock compensation expense	3		3	
Adjusted research and development	<u>\$ 54</u>		<u>\$ 68</u>	
Selling, marketing and administration	\$ 90		\$ 121	
Restructuring charges	1		—	
Software deferred commission expense acquired	(3)		(5)	
Stock compensation expense	9		13	
Business acquisition and integration costs	—		1	
Adjusted selling, marketing and administration	<u>\$ 83</u>		<u>\$ 112</u>	
Amortization	\$ 46		\$ 49	
Acquired intangibles amortization	33		35	
Adjusted amortization	<u>\$ 13</u>		<u>\$ 14</u>	

Adjusted operating income, adjusted EBITDA, adjusted operating income margin percentage and adjusted EBITDA margin percentage for the three months ended May 31, 2020 and May 31, 2019 are reflected in the table below.

For the Three Months Ended (in millions)	May 31, 2020	May 31, 2019
Operating loss	\$ (645)	\$ (36)
Non-GAAP adjustments to operating loss		
Software deferred revenue acquired	8	20
Restructuring charges	1	1
Stock compensation expense	14	17
Debenture fair value adjustment	1	(28)
Software deferred commission expense acquired	(3)	(5)
Acquired intangibles amortization	33	35
Business acquisition and integration costs	—	1
Goodwill impairment charge	594	—
Total non-GAAP adjustments to operating loss	648	41
Adjusted operating income	3	5
Amortization	50	53
Acquired intangibles amortization	(33)	(35)
Adjusted EBITDA	<u>\$ 20</u>	<u>\$ 23</u>
Adjusted revenue (per above)	<u>\$ 214</u>	<u>\$ 267</u>
Adjusted operating income margin % ⁽¹⁾	<u>1%</u>	<u>2%</u>
Adjusted EBITDA margin % ⁽²⁾	<u>9%</u>	<u>9%</u>

⁽¹⁾ Adjusted operating income margin % is calculated by dividing adjusted operating income by adjusted revenue

⁽²⁾ Adjusted EBITDA margin % is calculated by dividing adjusted EBITDA by adjusted revenue

Key Metrics

The Company regularly monitors a number of financial and operating metrics, including the following key metrics, in order to measure the Company's current performance and estimate future performance. Readers are cautioned that billings, recurring revenue percentage, annual recurring revenue ("ARR"), dollar-based net retention rate ("DBNRR"), QNX royalty revenue backlog, net customer churn rate and free cash flow do not have any standardized meaning prescribed by U.S. GAAP and are therefore unlikely to be comparable to similarly titled measures reported by other companies.

Billings

The Company defines billings as amounts invoiced less credits issued. The Company considers billings to be a useful metric because billings drive deferred revenue, which is an important indicator of the health and visibility of the business, and represents a significant percentage of future revenue.

Total company billings declined in the first quarter of fiscal 2021 compared to the first quarter of fiscal 2020 due to the impact of the COVID-19 pandemic. The rate of decline in billings was lower than the rate of decline in revenue in the first quarter of fiscal 2021 compared to the first quarter of fiscal 2020.

Recurring Software Product Revenue

The Company defines recurring software product revenue percentage as recurring software product revenue divided by total software and services revenue. Recurring software product revenue is comprised of subscription and term licenses, maintenance arrangements, royalty arrangements and perpetual licenses recognized ratably under ASC 606. Total software and services revenue is comprised of recurring product revenue, non-recurring product revenue and professional services. The Company uses recurring software product revenue percentage to provide visibility into the revenue expected to be recognized in the current and future periods.

Total adjusted software and services revenue, excluding IP licensing and professional services, was greater than 90% recurring in the first quarter of fiscal 2021 and the first quarter of fiscal 2020.

Annual Recurring Revenue

The Company defines ARR as the annualized value of all subscription, term, maintenance, services, and royalty contracts that generate recurring revenue as of the end of the reporting period. The Company uses ARR as an indicator of business momentum for software and services.

Software and Services ARR was approximately \$500 million in the first quarter of fiscal 2021.

Dollar-Based Net Retention Rate

The Company calculates the DBNRR as of period end by first calculating the ARR from the customer base as at 12 months prior to the current period end ("Prior Period ARR"). The Company then calculates the ARR for the same cohort of customers as at the current period end ("Current Period ARR"). The Company then divides the Current Period ARR by the Prior Period ARR to calculate the DBNRR.

Software and Services DBNRR was 93% in the first quarter of fiscal 2021.

QNX Royalty Revenue Backlog

The Company defines the royalty revenue backlog of its QNX business as estimated future revenue from variable forecasted royalties related to the QNX business. The estimation of forecasted royalties is based on QNX's royalty rates and on customer projections of anticipated volumes over the lifetime of a design, in each case as of when the design win was awarded. The QNX royalty revenue backlog is not based on current projections of volumes and may not be indicative of actual future revenue. The revenue that the Company will recognize is subject to several factors, including actual volumes and potential terminations or modifications to customer contracts.

The Company's QNX royalty revenue backlog was approximately \$450 million at the beginning of the first quarter of fiscal 2021.

Net Customer Churn Rate

The Company defines net customer churn rate as the difference between the gross customer churn rate and the new customer acquisition rate, divided by the number of active customers in the prior quarter, expressed as a percentage. The Company uses net customer churn rate to evaluate the rate the Company is obtaining new customers to offset customers lost due to account cancellations or non-renewal of subscriptions.

Net customer churn rate was approximately zero percent in the first quarter of fiscal 2021, consistent with the first quarter of fiscal 2020.

Free Cash Flow

Free cash flow is a measure of liquidity calculated as net operating cash flow minus capital expenditures. Free cash flow does not have any standardized meaning as prescribed by U.S. GAAP and therefore may not be comparable to similar measures presented by other companies. The Company uses free cash flow when assessing its sources of liquidity, capital resources, and quality of earnings. Free cash flow is helpful in understanding the Company's capital requirements and provides an additional means to reflect the cash flow trends in the Company's business. For the three months ended May 31, 2020, the Company's net cash flow used in operating activities was \$31 million and capital expenditures were \$1 million, resulting in the Company reporting negative free cash flow of \$32 million.

The Company expects to generate positive free cash flow in fiscal 2021.

Results of Operations - Three months ended May 31, 2020 compared to the three months ended May 31, 2019

The following section sets forth certain unaudited consolidated statements of operations data, which is expressed in millions of dollars, except for share and per share amounts and as a percentage of revenue, for the three months ended May 31, 2020 and May 31, 2019:

	For the Three Months Ended (in millions, except for share and per share amounts)		
	May 31, 2020	May 31, 2019	Change
Revenue	\$ 206	\$ 247	\$ (41)
Gross margin	143	177	(34)
Operating expenses	788	213	575
Investment income, net	—	3	(3)
Loss before income taxes	(645)	(33)	(612)
Provision for (recovery of) income taxes	(9)	2	(11)
Net loss	<u>\$ (636)</u>	<u>\$ (35)</u>	<u>\$ (601)</u>
Loss per share - reported			
Basic	<u>\$ (1.14)</u>	<u>\$ (0.06)</u>	<u>\$ (1.08)</u>
Diluted ⁽¹⁾	<u>\$ (1.14)</u>	<u>\$ (0.09)</u>	<u>\$ (1.05)</u>
Weighted-average number of shares outstanding (000's)			
Basic	557,839	551,845	
Diluted ⁽¹⁾	557,839	612,345	

⁽¹⁾ Diluted loss per share on a U.S. GAAP basis in the first quarter of fiscal 2021 does not include the dilutive effect of the Debentures as to do so would be anti-dilutive. Diluted loss per share on a U.S. GAAP basis in the first quarter of fiscal 2021 and fiscal 2020 do not include the dilutive effect of stock-based compensation as to do so would be anti-dilutive.

Revenue

Revenue by Product and Service

Comparative breakdowns of revenue by product and service on a U.S. GAAP basis are set forth below.

	For the Three Months Ended (in millions)		
	May 31, 2020	May 31, 2019	Change
Revenue by Product and Service			
Software and Services	\$ 148	\$ 168	\$ (20)
Licensing and Other	58	79	(21)
	<u>\$ 206</u>	<u>\$ 247</u>	<u>\$ (41)</u>
% Revenue by Product and Service			
Software and Services	71.8 %	68.0 %	
Licensing and Other	28.2 %	32.0 %	
	<u>100.0 %</u>	<u>100.0 %</u>	

Software and Services

Software and Services revenue was \$148 million, or 71.8% of revenue, in the first quarter of fiscal 2021, a decrease of \$20 million compared to \$168 million, or 68.0% of revenue, in the first quarter of fiscal 2020. The decrease in Software and Services revenue of \$20 million was primarily due to a decrease of \$20 million in recurring royalties in BlackBerry QNX, due to the slowdown in the automotive market related to the COVID-19 pandemic and the conversion in the prior fiscal year of certain existing royalty-bearing licenses to fixed pricing from volume-based pricing, and to a decrease of \$4 million in professional services, partially offset by an increase of \$2 million in hardware sales in Secusmart.

Adjusted Software and Services revenue was \$156 million in the first quarter of fiscal 2021, a decrease of \$32 million compared to \$188 million in the first quarter of fiscal 2020. Adjusted Software and Services revenue decreased due to the reasons described above on a U.S. GAAP basis and due to a decrease of \$12 million in the non-GAAP adjustment of deferred software revenue acquired to \$8 million in the first quarter of fiscal 2021 from \$20 million in the first quarter of fiscal 2020.

Licensing and Other

Licensing and Other revenue was \$58 million, or 28.2% of revenue, in the first quarter of fiscal 2021, a decrease of \$21 million compared to \$79 million, or 32.0% of revenue, in the first quarter of fiscal 2020. The decrease in Licensing and Other revenue of \$21 million was primarily due to a decrease of \$23 million in revenue from the BBM Consumer licensing arrangement and a decrease of \$8 million from mobility licensing arrangements, partially offset by an increase of \$14 million in revenue from the Company's patent licensing agreement with Telety. SAF revenue, which is generated from users of BlackBerry 7 and prior BlackBerry operating systems, also decreased by \$4 million, primarily due to a lower number of BlackBerry 7 users and lower revenue from those users compared to the first quarter of fiscal 2020.

The Company expects total Company adjusted revenue to be higher in the second quarter of fiscal 2021 than in the first quarter of fiscal 2021. The Company expects the rate of sequential adjusted revenue growth to be higher for the Licensing and Other group than for the Software and Services group. The Company expects to generate total Company adjusted revenue of approximately \$950 to \$965 million in fiscal 2021, assuming a gradual re-opening of the global economy as the measures undertaken to contain the COVID-19 pandemic are reduced.

U.S. GAAP Revenue by Geography

Comparative breakdowns of the geographic regions are set forth in the following table:

	For the Three Months Ended (in millions)		
	May 31, 2020	May 31, 2019	Change
Revenue by Geography			
North America	\$ 150	\$ 160	\$ (10)
Europe, Middle East and Africa	41	61	(20)
Other regions	15	26	(11)
	<u>\$ 206</u>	<u>\$ 247</u>	<u>\$ (41)</u>
% Revenue by Geography			
North America	72.8 %	64.8 %	
Europe, Middle East and Africa	19.9 %	24.7 %	
Other regions	7.3 %	10.5 %	
	<u>100.0 %</u>	<u>100.0 %</u>	

North America Revenue

Revenue in North America was \$150 million, or 72.8% of revenue, in the first quarter of fiscal 2021, reflecting a decrease of \$10 million compared to \$160 million, or 64.8% of revenue, in the first quarter of fiscal 2020. Revenue in North America decreased compared to the first quarter of fiscal 2020 primarily due to a decrease of \$10 million in Licensing and Other revenue and a decrease of \$7 million in BlackBerry QNX revenue due to the reasons discussed above in “Revenue by Product and Service”, partially offset by an increase of \$6 million in BlackBerry Spark revenue primarily due to a write-down of deferred revenue related the Cylance acquisition in the fourth quarter of fiscal 2019, which resulted in lower recognized revenue in the first quarter of fiscal 2020.

Europe, Middle East and Africa Revenue

Revenue in Europe, Middle East and Africa was \$41 million or 19.9% of revenue in the first quarter of fiscal 2021, reflecting a decrease of \$20 million compared to \$61 million or 24.7% of revenue in the first quarter of fiscal 2020. The decrease in revenue is primarily due to a decrease of \$14 million in BlackBerry QNX revenue due to the reasons discussed above in “Revenue by Product and Service”, a decrease of \$4 million in BlackBerry Spark revenue due to a decrease in subscription licenses sold and a decrease of \$3 million in SAF revenue due to the reasons discussed above in “Revenue by Product and Service”, partially offset by an increase of \$2 million in hardware sales in Secusmart.

Other Regions Revenue

Revenue in other regions was \$15 million or 7.3% of revenue in the first quarter of fiscal 2021, reflecting a decrease of \$11 million compared to \$26 million or 10.5% of revenue in the first quarter of fiscal 2020. The decrease in revenue is primarily due to a \$8 million decrease in Licensing and Other revenue due to a decrease in revenue from mobility licensing arrangements and a \$4 million decrease in BlackBerry QNX revenue due to the reasons discussed above in “Revenue by Product and Service”.

Gross Margin

Consolidated Gross Margin

Consolidated gross margin decreased by \$34 million to approximately \$143 million in the first quarter of fiscal 2021 from \$177 million in the first quarter of fiscal 2020. The decrease was primarily due to decreases in gross margin in BlackBerry QNX and Licensing due to the decreases in revenue discussed above in “Revenue by Product and Service”.

Consolidated Gross Margin Percentage

Consolidated gross margin percentage decreased by 2.3%, to approximately 69.4% of consolidated revenue in the first quarter of fiscal 2021 from 71.7% of consolidated revenue in the first quarter of fiscal 2020. The decrease was primarily due to lower gross margin percentage associated with BlackBerry QNX due to the decreases in revenue discussed above in “Revenue by Product and Service”.

Operating Expenses

The table below presents a comparison of research and development, selling, marketing and administration, and amortization expenses for the quarter ended May 31, 2020, compared to the quarter ended February 29, 2020 and the quarter ended May 31, 2019. The Company believes it is meaningful to provide a sequential comparison between the first quarter of fiscal 2021 and the fourth quarter of fiscal 2020.

	For the Three Months Ended (in millions)		
	May 31, 2020	February 29, 2020	May 31, 2019
Revenue	\$ 206	\$ 282	\$ 247
Operating expenses			
Research and development	57	60	71
Selling, marketing and administration	90	113	121
Amortization	46	48	49
Impairment of long-lived assets	—	5	—
Impairment of goodwill	594	22	—
Debentures fair value adjustment	1	5	(28)
Total	\$ 788	\$ 253	\$ 213

Operating Expenses as % of Revenue

Research and development	27.7 %	21.3 %	28.7 %
Selling, marketing and administration	43.7 %	40.1 %	49.0 %
Amortization	22.3 %	17.0 %	19.8 %
Impairment of long-lived assets	— %	1.8 %	— %
Impairment of goodwill	288.3 %	7.8 %	— %
Debentures fair value adjustment	0.5 %	1.7 %	(11.3)%
Total	382.5 %	89.7 %	86.2 %

See “Non-GAAP Financial Measures” for a reconciliation of selected GAAP-based measures to adjusted measures for the three months ended May 31, 2020, February 29, 2020 and May 31, 2019.

U.S. GAAP Operating Expenses

Operating expenses increased by \$535 million, or 211.5%, to \$788 million, or 382.5% of revenue, in the first quarter of fiscal 2021, compared to \$253 million, or 89.7% of revenue, in the fourth quarter of fiscal 2020. The increase was primarily attributable to an increase of \$572 million in goodwill impairment, partially offset by \$9 million in government subsidies resulting from claims filed for the Canada Emergency Wage Subsidy (“CEWS”) program to support the business through the COVID-19 pandemic in the first quarter of fiscal 2021, a decrease of \$4 million in legal expenses, a difference between the Q1 Fiscal 2021 Debentures Fair Value Adjustment and Q4 fiscal 2020 debentures fair value adjustment of \$4 million, a decrease of \$4 million in long-lived asset impairment, and a decrease of \$4 million in travel expenses.

Operating expenses increased by \$575 million, or 270.0%, to \$788 million, or 382.5% of revenue, in the first quarter of fiscal 2021, compared to \$213 million, or 86.2% of revenue, in the first quarter of fiscal 2020. The increase was primarily attributable to a \$594 million goodwill impairment and a difference between the Q1 Fiscal 2021 Debentures Fair Value Adjustment and Q1 Fiscal 2020 Debentures Fair Value Adjustment of \$29 million, partially offset by a decrease of \$13 million in salaries and benefits expenses, \$9 million in CEWS funding, a decrease of \$7 million in variable incentive plan costs, a decrease of \$6 million in travel expenses, and a decrease of \$4 million in consulting fees.

Adjusted Operating Expenses

Adjusted operating expenses decreased by \$22 million, or 12.8%, to \$150 million in the first quarter of fiscal 2021 compared to \$172 million in the fourth quarter of fiscal 2020. The decrease was primarily attributable to \$9 million in CEWS funding, a decrease of \$4 million in legal expenses, a decrease of \$4 million in travel expenses, a decrease of \$3 million in marketing and advertising expense and a decrease of \$3 million in sales incentive plan costs.

Adjusted operating expenses decreased by \$44 million, or 22.7%, to \$150 million in the first quarter of fiscal 2021, compared to \$194 million in the first quarter of fiscal 2020. The decrease was primarily attributable to a decrease of \$11 million in salaries

and benefits expenses, \$9 million in CEWS funding, a decrease of \$9 million in variable incentive plan costs, a decrease of \$6 million in travel expenses, and a decrease of \$4 million in consulting costs.

Research and Development Expenses

Research and development expenses consist primarily of salaries and benefits costs for technical personnel, new product development costs, travel expenses, office and building costs, infrastructure costs and other employee costs.

Research and development expenses decreased by \$14 million, or 19.7%, to \$57 million in the first quarter of fiscal 2021 compared to \$71 million in the first quarter of fiscal 2020. The decrease was primarily attributable to a decrease of \$8 million in salaries and benefits expenses, a decrease of \$3 million in variable incentive plan costs, and a decrease of \$2 million in consulting fees.

Adjusted research and development expenses decreased by \$14 million, or 20.6%, to \$54 million in the first quarter of fiscal 2021 compared to \$68 million in the first quarter of fiscal 2020. The decrease was due to the reasons described above on a U.S. GAAP basis.

Selling, Marketing and Administration Expenses

Selling, marketing and administration expenses consist primarily of marketing, advertising and promotion, salaries and benefits, external advisory fees, information technology costs, office and related staffing infrastructure costs and travel expenses.

Selling, marketing and administration expenses decreased by \$31 million, or 25.6%, to \$90 million in the first quarter of fiscal 2021 compared to \$121 million in the first quarter of fiscal 2020. This decrease was primarily attributable to the benefit of \$9 million in CEWS funding, a decrease of \$5 million in salaries and benefits expenses, a decrease of \$5 million in travel expenses, a decrease of \$4 million in variable incentive plan costs, and a decrease of \$4 million in marketing and advertising expenses.

Adjusted selling, marketing and administration expenses decreased by \$29 million, or 25.9%, to \$83 million in the first quarter of fiscal 2021 compared to \$112 million in the first quarter of fiscal 2020. This decrease was primarily attributable \$9 million in CEWS funding, a decrease of \$5 million in variable incentive plan expenses, a decrease of \$5 million in travel expenses, a decrease of \$4 million in salaries and benefits expenses, and a decrease of \$4 million in marketing and advertising expenses.

Amortization Expense

The table below presents a comparison of amortization expense relating to property, plant and equipment and intangible assets recorded as amortization or cost of sales for the quarter ended May 31, 2020 compared to the quarter ended May 31, 2019. Intangible assets are comprised of patents, licenses and acquired technology.

	For the Three Months Ended (in millions)		
	Included in Operating Expense		
	May 31, 2020	May 31, 2019	Change
Property, plant and equipment	\$ 4	\$ 5	\$ (1)
Intangible assets	42	44	(2)
Total	\$ 46	\$ 49	\$ (3)
	Included in Cost of Sales		
	May 31, 2020	May 31, 2019	Change
Property, plant and equipment	\$ 1	\$ 1	\$ —
Intangible assets	3	3	—
Total	\$ 4	\$ 4	\$ —

Amortization included in Operating Expense

Amortization expense relating to property, plant and equipment and certain intangible assets decreased by \$3 million to \$46 million for the first quarter of fiscal 2021 compared to \$49 million for the first quarter of fiscal 2020. The decrease in amortization expense was due to the lower cost base of assets.

Adjusted amortization decreased by \$1 million to \$13 million in the first quarter of fiscal 2021 compared to \$14 million in the first quarter of fiscal 2020.

Amortization included in Cost of Sales

Amortization expense relating to certain property, plant and equipment and certain intangible assets employed in the Company's service operations was \$4 million in the first quarter of fiscal 2021, consistent with \$4 million for the first quarter of fiscal 2020.

Investment Income, Net

Investment income, net, which includes the interest expense from the Debentures, decreased by \$3 million to nil in the first quarter of fiscal 2021, compared to income of \$3 million in the first quarter of fiscal 2020. The decrease in investment income was due to a lower yield on cash and investments in the first quarter of fiscal 2021 compared to the first quarter of fiscal 2020.

Income Taxes

For the first quarter of fiscal 2021, the Company's net effective income tax recovery rate was approximately 1%, compared to an effective income tax expense rate of approximately 6% for the same period in the prior fiscal year. The Company's net effective income tax rate reflects the change in unrecognized income tax benefits and the fact that the Company has a significant valuation allowance against its deferred tax assets, and in particular, the change in fair value of the Debentures, amongst other items, was offset by a corresponding adjustment of the valuation allowance. The Company's net effective income tax rate also reflects the geographic mix of earnings in jurisdictions with different income tax rates.

The Company's adjusted net effective income tax recovery rate was approximately 300%, compared to a net effective income tax expense rate of approximately 38% for the same period in the prior fiscal year. The change was due to current year recoveries that do not have a corresponding tax carry forward offset.

Net Loss

The Company's net loss for the first quarter of fiscal 2021 was \$636 million, or \$1.14 basic and diluted loss per share on a U.S. GAAP basis, reflecting an increase in net loss of \$601 million compared to a net loss of \$35 million, or \$0.06 basic loss per share and \$0.09 diluted loss per share, in the first quarter of fiscal 2020. The increase in net loss of \$601 million was primarily due to an increase in operating expenses due to the goodwill impairment, as described above in "Operating Expenses", a decrease in revenue, as described above in "Revenue by Product and Service" and a decrease in gross margin percentage, as described above in "Consolidated Gross Margin Percentage".

Adjusted net income was \$12 million in the first quarter of fiscal 2021 compared to \$5 million in the first quarter of fiscal 2020, reflecting an increase in adjusted net income of \$7 million primarily due to a decrease in operating expenses as described above in "Operating Expenses", partially offset by a decrease in revenue as described above in "Revenue by Product and Service" and a decrease in gross margin percentage, as described above in "Consolidated Gross Margin Percentage".

The Company expects to be profitable on a non-GAAP basis in fiscal 2021.

The Company previously stated that it expected its financial performance in the first quarter of fiscal 2021 to be below that of the fourth quarter of fiscal 2020 due to the COVID-19 pandemic. The Company's financial performance in the first quarter of fiscal 2021 was below that of the fourth quarter of fiscal 2020.

The weighted average number of shares outstanding was 558 million common shares for basic and diluted loss per share for the first quarter of fiscal 2021. The weighted average number of shares outstanding was 552 million common shares for basic loss per share and 612 million common shares for diluted loss per share for the first quarter of fiscal 2020.

Selected Quarterly Financial Data

The following table sets forth the Company's unaudited quarterly consolidated results of operations data for each of the eight most recent quarters, including the quarter ended May 31, 2020. The information in the table below has been derived from the Company's unaudited interim consolidated financial statements that, in management's opinion, have been prepared on a basis consistent with the audited consolidated financial statements of the Company and include all adjustments necessary for a fair presentation of information when read in conjunction with the audited consolidated financial statements of the Company. The Company's quarterly operating results have varied substantially in the past and may vary substantially in the future. Accordingly, the information below is not necessarily indicative of results for any future quarter.

(in millions, except per share data)

	Fiscal Year 2021		Fiscal Year 2020		Fiscal Year 2019			
	First Quarter	Fourth Quarter	Third Quarter	Second Quarter	First Quarter	Fourth Quarter	Third Quarter	Second Quarter
Revenue	\$ 206	\$ 282	\$ 267	\$ 244	\$ 247	\$ 255	\$ 226	\$ 210
Gross margin	143	212	198	176	177	206	170	161
Operating expenses	788	253	227	219	213	178	112	122
Income (loss) before income taxes	(645)	(42)	(30)	(43)	(33)	32	60	44
Provision for (recovery of) income taxes	(9)	(1)	2	1	2	(19)	1	1
Net income (loss)	<u>\$ (636)</u>	<u>\$ (41)</u>	<u>\$ (32)</u>	<u>\$ (44)</u>	<u>\$ (35)</u>	<u>\$ 51</u>	<u>\$ 59</u>	<u>\$ 43</u>
Earnings (loss) per share								
Basic earnings (loss) per share	<u>\$ (1.14)</u>	<u>\$ (0.07)</u>	<u>\$ (0.06)</u>	<u>\$ (0.08)</u>	<u>\$ (0.06)</u>	<u>\$ 0.09</u>	<u>\$ 0.11</u>	<u>\$ 0.08</u>
Diluted earnings (loss) per share	<u>\$ (1.14)</u>	<u>\$ (0.07)</u>	<u>\$ (0.07)</u>	<u>\$ (0.10)</u>	<u>\$ (0.09)</u>	<u>\$ 0.08</u>	<u>\$ (0.01)</u>	<u>\$ (0.04)</u>

Financial Condition

Liquidity and Capital Resources

Cash, cash equivalents, and investments decreased by \$35 million to \$955 million as at May 31, 2020 from \$990 million as at February 29, 2020, primarily as a result of changes in working capital. The majority of the Company's cash, cash equivalents, and investments were denominated in U.S. dollars as at May 31, 2020.

A comparative summary of cash, cash equivalents, and investments is set out below:

	As at <i>(in millions)</i>		
	May 31, 2020	February 29, 2020	Change
Cash and cash equivalents	\$ 312	\$ 377	\$ (65)
Restricted cash	48	49	(1)
Short-term investments	562	532	30
Long-term investments	33	32	1
Cash, cash equivalents, and investments	<u>\$ 955</u>	<u>\$ 990</u>	<u>\$ (35)</u>

The table below summarizes the current assets, current liabilities, and working capital of the Company:

	As at (in millions)		
	May 31, 2020	February 29, 2020	Change
Current assets	\$ 1,172	\$ 1,196	\$ (24)
Current liabilities	1,091	1,121	(30)
Working capital	<u>\$ 81</u>	<u>\$ 75</u>	<u>\$ 6</u>

Current Assets

The decrease in current assets of \$24 million at the end of the first quarter of 2021 from the end of fourth quarter of fiscal 2020 was primarily due to a decrease in cash and cash equivalents of \$65 million and accounts receivable, net of \$5 million, partially offset by an increase in short term investments of \$30 million, other current assets of \$8 million, other receivables of \$6 million and income taxes receivable of \$2 million.

At May 31, 2020, accounts receivable was \$210 million, a decrease of \$5 million from February 29, 2020. The decrease was primarily due lower revenue recognized over the three months ended May 31, 2020 and an increase in the allowance for credit losses from the adoption of ASC 326, partially offset by an increase in days sales outstanding to 95 days at the end of the first quarter of fiscal 2021 from 70 days at the end of the fourth quarter of fiscal 2020 due to an increase in Licensing receivables which have longer net payment terms than Software and Services receivables and due to an increase in overdue balances as a result of COVID-19.

At May 31, 2020, other current assets was \$60 million, an increase of \$8 million from February 29, 2020. The increase was primarily due to an increase in prepaid maintenance of \$5 million and an increase in prepaid insurance of \$2 million.

At May 31, 2020, other receivables increased by \$6 million to \$20 million compared to \$14 million as at February 29, 2020. The increase was primarily due to an increase of \$4 million relating to the CEWS program and \$1 million relating to the Strategic Innovation Fund program.

At May 31, 2020, income taxes receivable was \$8 million, an increase of \$2 million from February 29, 2020. The increase was primarily due to the U.S. CARES Act resulting in an increase in taxes receivable from tax loss carry backs.

Current Liabilities

The decrease in current liabilities of \$30 million at the end of the first quarter of 2021 from the end of the fourth quarter of 2020 was primarily due to a decrease in accrued liabilities of \$17 million and a decrease in deferred revenue of \$15 million, partially offset by an increase in accounts payable of \$15 million.

Accrued liabilities were \$185 million, reflecting a decrease of \$17 million compared to February 29, 2020, which was primarily attributable to a \$8 million decrease in payroll accruals and a \$8 million decrease in vendor liabilities.

Deferred revenue, current was \$249 million, which reflects a decrease of \$15 million compared to February 29, 2020 that was attributable to a \$10 million decrease in deferred revenue, current related to BlackBerry Spark and \$3 million related to AtHoc.

As at May 31, 2020, accounts payable were \$46 million, reflecting an increase of \$15 million from February 29, 2020, which was primarily attributable to invoices related to maintenance and telecom expenses and computer supplies.

Cash flows for the three months ended May 31, 2020 compared to the three months ended May 31, 2019 were as follows:

	For the three months ended		
	May 31, 2020	May 31, 2019	Change
Net cash flows provided by (used in):			
Operating activities	\$ (31)	\$ (64)	\$ 33
Investing activities	(39)	(129)	90
Financing activities	4	3	1
Effect of foreign exchange loss on cash and cash equivalents	—	(1)	1
Net decrease in cash and cash equivalents	<u>\$ (66)</u>	<u>\$ (191)</u>	<u>\$ 125</u>

Operating Activities

The decrease in net cash flows used in operating activities of \$33 million primarily reflects the net changes in working capital.

Investing Activities

During the three months ended May 31, 2020, cash flows used in investing activities were \$39 million and included cash used in transactions involving the acquisitions of short-term and long-term investments, net of the proceeds on sale or maturity in the amount of \$30 million, intangible asset additions of \$8 million, and acquisitions of property, plant and equipment of \$1 million. For the same period in the prior fiscal year, cash flows used in investing activities were \$129 million and included cash used in transactions involving the acquisitions of short-term and long-term investments, net of the proceeds on sale or maturity in the amount of \$122 million, intangible asset additions of \$7 million, and acquisitions of property, plant and equipment of \$2 million, offset by proceeds expected from the decrease in consideration paid for the Cylance acquisition.

Financing Activities

The increase in cash flows provided by financing activities was \$1 million for the first three months of fiscal 2021 due to an increase in common shares issued.

Aggregate Contractual Obligations

The following table sets out aggregate information about the Company's contractual obligations and the periods in which payments are due as at May 31, 2020:

	<i>(in millions)</i>				
	Total	Less than One Year	One to Three Years	Four to Five Years	Greater than Five Years
Operating lease obligations	\$ 158	\$ 34	\$ 61	\$ 37	\$ 26
Purchase obligations and commitments	196	110	64	22	—
Debt interest and principal payments	615	615	—	—	—
Total	<u>\$ 969</u>	<u>\$ 759</u>	<u>\$ 125</u>	<u>\$ 59</u>	<u>\$ 26</u>

Purchase obligations and commitments amounted to approximately \$969 million as at May 31, 2020, including future principal and interest payments of \$615 million on the Debentures and operating lease obligations of \$158 million. The remaining balance consists of purchase orders for goods and services utilized in the operations of the Company. Total aggregate contractual obligations as at May 31, 2020 decreased by approximately \$44 million as compared to the February 29, 2020 balance of approximately \$1,013 million, which was attributable to a decrease in purchase obligations and commitments, a decrease in operating lease obligations and a decrease in interest payments on the Debentures.

Debenture Financing and Other Funding Sources

See Note 6 to the Consolidated Financial Statements for a description of the Debentures.

The Company has \$48 million in collateralized outstanding letters of credit in support of certain leasing arrangements entered into in the ordinary course of business. See Note 3 to the Consolidated Financial Statements for further information concerning the Company's restricted cash.

Cash, cash equivalents, and investments were approximately \$955 million as at May 31, 2020. The Company's management remains focused on maintaining appropriate cash balances, efficiently managing working capital balances and managing the liquidity needs of the business. Based on its current financial projections, the Company believes its financial resources, together with expected future operating cash generating and operating expense reduction activities and access to other potential financing arrangements, should be sufficient to meet funding requirements for current financial commitments and future operating expenditures not yet committed, and should provide the necessary financial capacity for the foreseeable future. The Company expects to repay all of its obligations under the Debentures at maturity.

The Company does not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K under the Exchange Act, or under applicable Canadian securities laws.

Accounting Policies and Critical Accounting Estimates

There have been no changes to the Company's accounting policies or critical accounting estimates from those described under "Accounting Policies and Critical Accounting Estimates" in the Annual MD&A, with the exception of those noted below.

The following policies have been updated to reflect the adoption of the new standard in accounting for credit losses on financial instruments and goodwill.

Goodwill

Goodwill represents the excess of the acquisition price in a business combination over the fair value of identifiable net assets acquired. Goodwill is allocated at the date of the business combination. Goodwill is not amortized but is tested for impairment annually on December 31 or more frequently if events or changes in circumstances indicate the asset may be impaired. These events and circumstances may include a significant change in legal factors or in the business climate, a significant decline in the Company's share price, an adverse action or assessment by a regulator, unanticipated competition, a loss of key personnel, significant disposal activity and the testing of recoverability for a significant asset group.

The Company's impairment test is carried out in one step. The carrying amount of the reporting unit, including goodwill, was compared with its fair value. The estimated fair value was determined utilizing multiple approaches based on the nature of the reporting units being valued. In its analysis, the Company utilized multiple valuation techniques, including the income approach, discounted future cash flows, the market-based approach, and the asset value approach. The analysis requires significant judgment, including estimation of future cash flows, which is dependent on internal forecasts, estimation of the long-term rate of revenue growth for our reporting units, estimation of the useful life over which cash flows will occur, terminal growth rate, profitability measures, and determination of the discount rates for the reporting units. The carrying amount of the Company's assets was assigned to reporting units using reasonable methodologies based on the asset type. When the carrying amount of a reporting unit exceeds its fair value, goodwill of the reporting unit is considered to be impaired and written down to its fair value. Different judgments could yield different results.

Accounts receivable, net

The accounts receivable balance reflects invoiced and accrued revenue and is presented net of an allowance for credit losses. The Company expects the majority of its accounts receivable balances to continue to come from large customers as it sells the majority of its software products and services through resellers and network carriers rather than directly. The Company establishes current expected credit losses ("CECL") for pools of assets with similar risk characteristics by evaluating historical levels of credit losses, current economic conditions that may affect a customer's ability to pay, and creditworthiness of significant customers. When specific customers are identified as no longer sharing the same risk profile as their current pool, they are removed from the pool and evaluated separately. The Company, in the normal course of business, monitors the financial condition of its customers and reviews the credit history of each new customer. When the Company becomes aware of a specific customer's inability to meet its financial obligations to the Company (such as in the case of bankruptcy filings or material deterioration in the customer's operating results or financial position, and payment experiences), the Company records a specific credit loss provision to reduce the customer's related accounts receivable to its estimated net realizable value. If circumstances related to specific customers change, the Company's estimates of the recoverability of accounts receivable balances could be further adjusted.

Investments

The Company's cash equivalents and investments, other than publicly issued equity securities and private equity investments without readily determinable fair value, consist of money market and other debt securities, which are classified as available-for-sale for accounting purposes and are carried at fair value. Unrealized gains and losses, net of related income taxes, are recorded in Accumulated Other Comprehensive Loss ("AOCL") until such investments mature or are sold. The Company uses the specific identification method of determining the cost basis in computing realized gains or losses on available-for-sale investments, which are recorded in investment income. The Company does not exercise significant influence with respect to any of these investments. Publicly issued equity securities are recorded at fair value and revalued at each reporting period with changes in fair value recorded through investment income. The Company elects to record private equity investments without readily determinable fair value at cost minus impairment, as adjusted for any changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. The Company reassesses each reporting period that its private equity investments without readily determinable fair value continue to qualify for this treatment.

Investments with maturities at the time of purchase of three months or less are classified as cash equivalents. Investments with maturities of one year or less (but which are not cash equivalents), public equity investments and any investments that the Company intends to hold for less than one year are classified as short-term investments. Investments with maturities in excess of one year or investments that the Company does not intend to sell are classified as long-term investments.

Allowance for Credit Losses on Available-for-sales Debt Securities

The Company accounts for credit losses on available-for-sale debt securities in accordance with ASC 326. The Company adopted ASC 326 on March 1, 2020, on a modified retrospective basis. Under ASC 326, at each reporting period, the Company evaluates its available-for-sale debt securities at the individual security level to determine whether there is a decline in the fair value below its amortized cost basis (an impairment). In circumstances where the Company intends to sell, or is more likely than not required to sell, the security before it recovers its amortized cost basis, the difference between fair value and amortized cost is recognized as a loss in the consolidated statement of operations, with a corresponding write-down of the security's amortized cost. In circumstances where neither condition exists, the Company then evaluates whether a decline is due to credit-related factors. The factors considered in determining whether a credit loss exists can include the extent to which fair value is less than the amortized cost basis, changes in the credit quality of the underlying issuer, credit ratings actions, as well as other factors. To determine the portion of a decline in fair value that is credit-related, the Company compares the present value of the expected cash flows of the security discounted at the security's effective interest rate to the amortized cost basis of the security. A credit-related impairment is limited to the difference between fair value and amortized cost, and recognized as an allowance for credit loss on the consolidated balance sheet with a corresponding adjustment to net income. Any remaining decline in fair value that is non-credit related is recognized in other comprehensive income (loss), net of tax. Improvements in expected cash flows due to improvements in credit are recognized through reversal of the credit loss and corresponding reduction in the allowance for credit loss.

Government Subsidies

The Company recognizes government subsidies as a reduction to operating expenses in the consolidated statement of operations when there is reasonable assurance the Company will receive the amount and has complied with the conditions, if any, attached to the government subsidies.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

The Company is engaged in operating and financing activities that generate risk in three primary areas:

Foreign Exchange

The Company is exposed to foreign exchange risk as a result of transactions in currencies other than its functional currency, the U.S. dollar. The majority of the Company's revenue in the first quarter of fiscal 2021 was transacted in U.S. dollars. Portions of the revenue were denominated in Canadian dollars, euros and British pounds. Expenses, consisting mainly of salaries and certain other operating costs, were incurred primarily in Canadian dollars, but were also incurred in U.S. dollars, euros and British pounds. At May 31, 2020, approximately 12% of cash and cash equivalents, 11% of accounts receivables and 32% of accounts payable were denominated in foreign currencies (February 29, 2020 – 12%, 17% and 17%, respectively). These foreign currencies primarily include the Canadian dollar, euro and British pound. As part of its risk management strategy, the Company maintains net monetary asset and/or liability balances in foreign currencies and engages in foreign currency hedging activities using derivative financial instruments, including currency forward contracts and currency options. The Company does not use derivative instruments for speculative purposes. If overall foreign currency exchanges rates to the U.S. dollar uniformly weakened or strengthened by 10% related to the Company's net monetary asset or liability balances in foreign currencies at May 31, 2020 (after hedging activities), the impact to the Company would be immaterial.