

## BLACKBERRY LIMITED

### MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS FOR THE THREE AND SIX MONTHS ENDED AUGUST 31, 2019

September 24, 2019

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 (the "Company" or "BlackBerry") for the three and six months ended August 31, 2019, as well as the Company's audited consolidated financial statements and accompanying notes, and MD&A for the fiscal year ended February 28, 2019 (the "Annual MD&A"). The Consolidated Financial Statements are presented in U.S. dollars and have been prepared in accordance with United States generally accepted accounting principles ("U.S. GAAP"). All financial information in this MD&A is presented in U.S. dollars, unless otherwise indicated.

The Company has prepared this MD&A with reference to *National Instrument 51-102* "Continuous Disclosure Obligations" of the Canadian Securities Administrators. Under the U.S./Canada Multijurisdictional Disclosure System, the Company is permitted to prepare this MD&A in accordance with the disclosure requirements of Canada, which are different from those of the United States. This MD&A provides information for the three and six months ended August 31, 2019 and up to and including September 24, 2019.

Additional information about the Company, including the Company's Annual Information Form for the fiscal year ended February 28, 2019 (the "AIF"), which is included in the Company's Annual Report on Form 40-F for the fiscal year ended February 28, 2019 (the "Annual Report"), can be found on SEDAR at [www.sedar.com](http://www.sedar.com) and on the U.S. Securities and Exchange Commission's website at [www.sec.gov](http://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 the anticipated benefits of its strategic initiatives and its intentions to increase, enhance and integrate its product and service offerings;
- the Company's expectations regarding revenue, billings and earnings for fiscal 2020;
- 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- Products and Services", "Key Metrics - Recurring Revenue Percentage", "Results of Operations – Three months ended August 31, 2019 compared to three months ended August 31, 2018 - Revenue - U.S. GAAP Revenue by Product and Service", "Results of Operations – Three months ended August 31, 2019 compared to three months ended August 31, 2018 - Non-GAAP Revenue by Product and Service", "Results of Operations - Six months ended August 31, 2019 compared to six months ended August 31, 2018 - Net Income (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, historical trends, current conditions and expected future developments, as well as other factors that the Company believes are appropriate in the circumstances. 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 factors discussed in the "Risk Factors" section of the AIF and the following:

- the Company's ability to enhance, develop, introduce or monetize products and services for the enterprise market in a timely manner with competitive pricing, features and performance;
- the Company's ability to maintain or expand its customer base for its software and services offerings to grow revenue or achieve sustained profitability;
- the intense competition faced by the Company;
- the occurrence or perception of a breach of the Company's network or product security measures, or an inappropriate disclosure of confidential or personal information could significantly harm its business;

- risks related to the Company's continuing ability to attract new personnel, retain existing key personnel and manage its staffing effectively;
- the Company's dependence on its relationships with resellers and channel partners; and
- risks related to acquisitions, divestitures, investments and other business initiatives, which may negatively affect the Company's results of operations.

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 "Business Overview - Strategy" in this MD&A, as well as the "Narrative Description of the Business - Strategy" section in the AIF.

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 is a trusted security software and services company that provides enterprises and governments with the technology they need to secure the Internet of Things (the "IoT"). Based in Waterloo, Ontario, the Company is unwavering in its commitment to safety, cybersecurity and data privacy, and leads in key areas such as artificial intelligence ("AI"), endpoint security and management, encryption and embedded systems. The Company's common shares trade under the ticker symbol "BB" on the New York Stock Exchange and the Toronto Stock Exchange.

### **Strategy**

The Company is widely recognized for productivity and security innovations, and the Company believes that it delivers the most secure endpoint management and communications solutions in the market. With these core strengths, the Company's broad portfolio of products and services is focused on serving enterprise customers, particularly in regulated industries.

The Company is focused on delivering an end-to-end software and services platform to secure the IoT. The Company leverages many elements of its extensive technology portfolio to extend best-in-class security and reliability to its solutions for the IoT, including unified endpoint management ("UEM"), cybersecurity solutions, embedded systems, crisis communications, enterprise applications, and related services, with hosting available on the Company's global, scalable, secure network, as well as in the cloud.

The Company intends to continue to increase and enhance its product and service offerings through both organic investments and strategic acquisitions. The Company's goal is to remain a leader in its target enterprise markets by continuing to extend the functionality of its secure platform and delivering innovative solutions focused on regulated industries and other strategic verticals.

### **Products and Services**

The Company's core software and services offering is its end-to-end platform that comprises endpoint management capabilities, enterprise communication and collaboration software and safety-certified embedded solutions. The Company is developing BlackBerry Spark, a next-generation secure communications platform that will create and leverage trusted connections between endpoints. The Company expects a robust schedule of product launches in fiscal 2020.

The Company groups its portfolio of product and services offerings as follows: IoT, BlackBerry Cylance, Licensing and Other.

The Company's IoT business is comprised of the Company's suite of security software products and services designed to secure endpoint communications for the IoT, including BlackBerry UEM, BlackBerry Dynamics, BlackBerry AtHoc, SecuSUITE and the technologies offered by BlackBerry QNX. The IoT business generates revenue predominantly through software licenses, commonly bundled with support, maintenance and professional services. In fiscal 2019, the IoT products and services were included in the Company's Enterprise Software & Services ("Enterprise") and BlackBerry Technology Solutions ("BTS") business groupings.

BlackBerry UEM offers a “single pane of glass”, or unified console view, for managing and securing devices, applications, identity, content, and IoT 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 AtHoc is a secure, networked crisis communications platform, and SecuSUITE is a secure voice and text messaging solution with advanced encryption and anti-eavesdropping capabilities.

The BlackBerry QNX unit 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 leader in software for automotive electronics, 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, Tier 1 vendors and automotive semiconductor suppliers. These solutions include the BlackBerry QNX CAR Platform and the Neutrino operating system, among other technologies.

The Company's IoT offerings also include its BlackBerry Radar asset tracking solution, BlackBerry Workspaces electronic file synchronization and sharing platform, BlackBerry Jarvis code security testing platform, Paratek antenna tuning technology, BlackBerry Certicom cryptography and key management products, BlackBerry Messenger (“BBM”) Enterprise service, BlackBerry Spark Communication Services and BlackBerry Cybersecurity Services.

The BlackBerry Cylance business offers a leading AI and machine learning-based platform consisting of CylancePROTECT, an endpoint threat prevention solution that uses machine learning to prevent suspicious behavior and the execution of malicious code on an endpoint, and CylanceOPTICS, an endpoint detection and response solution that provides both visibility into and prevention of malicious activity on an endpoint. BlackBerry Cylance also offers CylanceGUARD, a managed detection and response offering that provides continuous threat hunting and monitoring, as well as professional services. The Company intends to integrate the intelligent cybersecurity capabilities of BlackBerry Cylance with BlackBerry Spark and BlackBerry QNX technologies, with an initial release of a combined BlackBerry UEM and BlackBerry Cylance product in early 2020.

The Licensing business includes the Company's patent licensing programs and its mobility software licensing arrangements, including the development and licensing of the Company's secure device software and the outsourcing to partners of all design, manufacturing, sales and customer support for BlackBerry-branded, and white label handsets.

The Company's Other business generates revenue from service access fees (“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 continues to execute on its strategy in fiscal 2020 and announced the following achievements:

- Announced that Steve Capelli would transition to the role of Chief Revenue Officer and that Steve Rai would be promoted to the role of Chief Financial Officer;
- Announced that Matson Logistics has deployed the BlackBerry Radar-M solution across its entire fleet of domestic intermodal containers;
- Announced, along with DENSO Corporation, that the first integrated Human Machine Interface digital cockpit system with BlackBerry QNX technology has shipped in SUBARU vehicles;
- Launched the BlackBerry QNX Acoustics Management Platform 3.0, the latest version of its automotive acoustics software;
- Announced a deeper partnership with Jaguar Land Rover for the use of the Company's AI and machine learning technologies, BlackBerry QNX software and BlackBerry Cybersecurity Consulting services in the development of the automaker's next-generation vehicles;
- Appointed Lisa Disbrow to the Company's Board of Directors (the “Board”) and to the audit and risk management committee of the Board;
- Named as a Leader in Gartner's 2019 Magic Quadrant for Unified Endpoint Management Tools for the fourth consecutive year;
- Launched BlackBerry Intelligent Security, the first cloud-based solution that leverages the power of adaptive security, continuous authentication and artificial intelligence to enhance mobile endpoint security in zero trust environments;
- Entered into an agreement with SYNnex Corporation to distribute the BlackBerry Enterprise Mobility Suite in the United States and accelerate partner recruitment for the BlackBerry Enterprise Partner Program;
- Introduced CylanceGUARD, a managed detection and response solution that leverages BlackBerry Cylance security experts and its industry-leading native AI platform to provide continuous threat hunting and monitoring;

- Entered into a collaborative supply agreement expanding the Company's partnership with LG Electronics Inc. to accelerate the deployment of connected and autonomous vehicle technology for automotive OEMs and Tier 1 vendors;
- Announced that BlackBerry QNX Software is embedded in more than 150 million vehicles;
- Achieved Federal Risk and Authorization Management Program ("FedRAMP") Ready status for the BlackBerry Government Mobility Suite, a cloud-based endpoint management solution developed specifically for U.S. government agencies;
- Announced support of Canada's Digital Charter, aimed at protecting the privacy and data security of Canadians, and that the Company has been recognized by the Government of Canada as a benchmark for trusted technology;
- Announced that Forrester found that BlackBerry Cylance's AI-driven endpoint security products delivered a 99 percent return on investment;
- Announced that BlackBerry Cylance has completed an Australian Information Security Registered Assessors Program (IRAP) assessment to obtain certification as a security solutions provider to Australian federal government agencies;
- With WITTENSTEIN high integrity systems, announced a new embedded software platform that enables the development of safety-certified and mission-critical applications on heterogenous system-on-chip processors;
- Launched BlackBerry Radar H2, a new intelligent, data-driven asset monitoring device that can help automate operations, improve utilization of trailers, containers, chassis and other remote assets, as well as ensure assets are safe and secure;
- Established BlackBerry Government Solutions, to accelerate the company's FedRAMP initiatives and deepen ties with U.S. federal agencies;
- BlackBerry Limited announced that the NATO Communications and Information (NCI) Agency has awarded a contract for BlackBerry's SecuSUITE® for Government to encrypt the conversations of its technology and cyber leaders;
- Announced that Verizon added BlackBerry Cylance's AI-driven antivirus security solutions to its Managed Security Services portfolio; and
- Introduced CylancePERSONA, the first proactive endpoint behavioral analytics solution.

### ***Inducement Awards***

In the first quarter of fiscal 2020, the Board approved an agreement to grant performance-based equity awards ("Inducement Awards") to the co-founders of Cylance covering up to 4,182,189 common shares. Up to 25%, 35% and 40% of the Inducement Awards may be earned at the end of the Company's 2020, 2021 and 2022 fiscal years, respectively, if certain performance conditions are met, and any earned amounts will vest at the end of fiscal 2022. The Company also notes that 75% of the awards eligible to vest in a given year are based on achievement of a billings goal and 25% are based on achievement of a contribution margin goal.

### **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 unless otherwise noted. On September 24, 2019, the Company announced financial results for the three and six months ended August 31, 2019, which included certain non-GAAP financial measures, including adjusted revenue, adjusted gross margin, adjusted gross margin percentage, adjusted EBITDA, adjusted EBITDA margin, adjusted income (loss) before income taxes, adjusted net income (loss) and adjusted earnings (loss) per share. The Company believes the presentation of these non-GAAP measures provides management and shareholders with important information regarding the Company's financial performance.

For the three months ended August 31, 2019, these measures were adjusted for the following (collectively, the "Q2 Fiscal 2020 Non-GAAP Adjustments") (all items pre-tax and after-tax):

- the Q2 Fiscal 2020 Debentures Fair Value Adjustment (as defined below under "Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights – Debentures Fair Value Adjustment") of approximately \$23 million;
- restructuring charges from the Resource Allocation Program ("RAP") consisting of amounts associated with operating lease right-of-use ("ROU") assets, employee termination benefits, and certain other costs of approximately \$3 million;
- software deferred revenue acquired but not recognized due to business combination accounting rules of approximately \$17 million;
- software deferred commission expense acquired but not recognized due to business combination accounting rules of approximately \$4 million;

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- stock compensation expense of approximately \$14 million;
- amortization of intangible assets acquired through business combinations of approximately \$36 million; and
- business acquisition and integration costs incurred through or as a result of business combinations of approximately \$2 million.

The Company believes that presenting non-GAAP financial measures that exclude the impact of those items enables it and its shareholders to assess the Company's operating performance relative to its consolidated financial results in prior and future periods on a more comparable basis. Readers are cautioned that adjusted revenue, adjusted gross margin, adjusted gross margin percentage, adjusted EBITDA, adjusted EBITDA margin percentage, adjusted income (loss) before income taxes, adjusted net income (loss), adjusted earnings (loss) per share 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 presented in the Consolidated Financial Statements and are described in this MD&A. A reconciliation from the most directly comparable U.S. GAAP measures to these non-GAAP financial measures for the three months ended August 31, 2019 was included in the Company's press release dated September 24, 2019, and is reflected in the table below:

Q2 Fiscal 2020 Non-GAAP Adjustments		For the Three Months Ended August 31, 2019 (in millions, except for per share amounts)					
	Income statement location	Revenue	Gross margin (before taxes)	Gross margin % (before taxes)	Income (loss) before income taxes	Net income (loss)	Basic earnings (loss) per share
<b>As reported</b>		\$ 244	\$ 176	72.1%	\$ (43)	\$ (44)	\$ (0.08)
Debtentures fair value adjustment <sup>(1)</sup>	Debtentures fair value adjustment	—	—	—%	(23)	(23)	
Restructuring charges <sup>(2)</sup>	Cost of sales	—	1	0.4%	1	1	
Restructuring charges <sup>(2)</sup>	Selling, marketing and administration	—	—	—%	2	2	
Software deferred revenue acquired <sup>(3)</sup>	Revenue	17	17	1.8%	17	17	
Software deferred commission expense acquired	Selling, marketing and administration	—	—	—%	(4)	(4)	
Stock compensation expense	Cost of sales	—	1	0.4%	1	1	
Stock compensation expense	Research and development	—	—	—%	3	3	
Stock compensation expense	Selling, marketing and administration	—	—	—%	10	10	
Acquired intangibles amortization	Amortization	—	—	—%	36	36	
Business acquisition and integration costs	Selling, marketing and administration	—	—	—%	2	2	
<b>Adjusted</b>		<u>\$ 261</u>	<u>\$ 195</u>	<u>74.7%</u>	<u>\$ 2</u>	<u>\$ 1</u>	<u>\$ 0.00</u>

<sup>(1)</sup> See "Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights - Debtentures Fair Value Adjustment".

<sup>(2)</sup> See "Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights - Restructuring Charges".

<sup>(3)</sup> \$16 million was included in BlackBerry Cylance revenue and \$1 million was included in IoT revenue.

For the six months ended August 31, 2019, these non-GAAP measures were adjusted for the following (collectively, the "Fiscal 2020 Non-GAAP Adjustments") (all items pre-tax and after-tax):

- the Fiscal 2020 Debtentures Fair Value Adjustment (as defined below under "Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights – Debtentures Fair Value Adjustment") of approximately \$51 million;
- restructuring charges from RAP consisting of amounts associated with operating lease ROU assets, employee termination benefits, and certain other costs of approximately \$4 million;
- software deferred revenue acquired but not recognized due to business combination accounting rules of approximately \$37 million;
- software deferred commission expense acquired but not recognized due to business combination accounting rules of approximately \$9 million;

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- stock compensation expense of approximately \$31 million;
- amortization of intangible assets acquired through business combinations of approximately \$71 million;
- business acquisition and integration costs incurred through or as a result of business combinations of approximately \$3 million; and
- income tax valuation allowance related to the acquisition of Cylance of approximately \$1 million.

Fiscal 2020 Non-GAAP Adjustments

For the Six Months ended August 31, 2019  
(in millions, except for per share amounts)

	Income statement location	Revenue	Gross margin (before taxes)	Gross margin % (before taxes)	Income (loss) before income taxes	Net income (loss)	Basic earnings (loss) per share
<b>As reported</b>		\$ 491	\$ 353	71.9%	\$ (76)	\$ (79)	\$ (0.14)
Debtentures fair value adjustment <sup>(1)</sup>	Debtentures fair value adjustment	—	—	—%	(51)	(51)	
Restructuring charges <sup>(2)</sup>	Cost of sales	—	2	0.4%	2	2	
Restructuring charges <sup>(2)</sup>	Selling, marketing and administration	—	—	—%	2	2	
Software deferred revenue acquired <sup>(3)</sup>	Revenue	37	37	1.9%	37	37	
Software deferred commission expense acquired	Selling, marketing and administration	—	—	—%	(9)	(9)	
Stock compensation expense	Cost of sales	—	2	0.4%	2	2	
Stock compensation expense	Research and development	—	—	—%	6	6	
Stock compensation expense	Selling, marketing and administration	—	—	—%	23	23	
Acquired intangibles amortization	Amortization	—	—	—%	71	71	
Business acquisition and integration costs	Selling, marketing and administration	—	—	—%	3	3	
Acquisition valuation allowance	Income taxes	—	—	—%	—	(1)	
<b>Adjusted</b>		<u>\$ 528</u>	<u>\$ 394</u>	<u>74.6%</u>	<u>\$ 10</u>	<u>\$ 6</u>	<u>\$ 0.01</u>

<sup>(1)</sup> See “Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights - Debtentures Fair Value Adjustment”.

<sup>(2)</sup> See “Second Quarter Fiscal 2020 Summary Results of Operations – Financial Highlights - Restructuring Charges”.

<sup>(3)</sup> \$35 million was included in BlackBerry Cylance revenue and \$2 million was included in IoT revenue.

Similarly, on September 28, 2018, the Company announced financial results for the three and six months ended August 31, 2018, which included certain non-GAAP financial measures, including adjusted revenue, adjusted gross margin, adjusted gross margin percentage, adjusted EBITDA, adjusted EBITDA margin percentage, adjusted income (loss) before income taxes, adjusted net income (loss) and adjusted earnings (loss) per share.

For the three months ended August 31, 2018, these measures were adjusted for the following (collectively, the “Q2 Fiscal 2019 Non-GAAP Adjustments”) (all items pre-tax and after tax):

- a fair value adjustment associated with the Company’s 3.75% unsecured convertible debtentures (the “Debtentures”) of approximately \$70 million (the “Q2 Fiscal 2019 Debtentures Fair Value Adjustment”);
- restructuring charges from RAP and recoveries from the Cost Optimization and Resource Efficiency (“CORE”) program consisting of amounts associated with employee termination benefits, facilities, and certain other costs of approximately \$3 million on a net basis;
- software deferred revenue acquired but not recognized due to business combination accounting rules of approximately \$4 million;
- stock compensation expense of approximately \$21 million;
- amortization of intangible assets acquired through business combinations of approximately \$22 million; and
- business acquisition and integration costs incurred through business combinations of approximately \$2 million.

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For the six months ended August 31, 2018, these measures were adjusted for the following (collectively, the "Fiscal 2019 Non-GAAP Adjustments") (all items pre-tax and after tax):

- a fair value adjustment associated with the Debentures of approximately \$42 million (the "Fiscal 2019 Debentures Fair Value Adjustment");
- restructuring charges from RAP and recoveries from the CORE program consisting of amounts associated with employee termination benefits, facilities, and certain other costs of approximately \$7 million on a net basis;
- software deferred revenue acquired but not recognized due to business combination accounting rules of approximately \$8 million;
- stock compensation expense of approximately \$39 million;
- amortization of intangible assets acquired through business combinations of approximately \$44 million; and
- business acquisition and integration costs recovered incurred through business combinations of approximately \$1 million.

A reconciliation from the most directly comparable U.S. GAAP measures to these non-GAAP financial measures for the three and six months ended August 31, 2018 was included in the Company's press release, dated September 28, 2018, and is reflected in the table below.

	Income statement location	For the Three Months Ended August 31, 2018				For the Six Months Ended August 31, 2018			
		<i>(in millions)</i>				<i>(in millions)</i>			
		Revenue	Gross margin (before taxes)	Income (loss) before income taxes	Net income (loss)	Revenue	Gross margin (before taxes)	Income before income taxes	Net income
<b>As reported</b>		\$ 210	\$ 161	\$ 44	\$ 43	\$ 423	\$ 322	\$ (15)	\$ (17)
Debentures fair value adjustment	Debentures fair value adjustment	—	—	(70)	(70)	—	—	(42)	(42)
Restructuring charges	Cost of sales	—	1	1	1	—	1	1	1
Restructuring charges	Research and development	—	—	—	—	—	—	2	2
Restructuring charges	Selling, marketing and administration	—	—	2	2	—	—	4	4
Software deferred revenue acquired <sup>(1)</sup>	Revenue	4	4	4	4	8	8	8	8
Stock compensation expense	Cost of sales	—	1	1	1	—	2	2	2
Stock compensation expense	Research and development	—	—	3	3	—	—	6	6
Stock compensation expense	Selling, marketing and administration	—	—	17	17	—	—	31	31
Acquired intangibles amortization	Amortization	—	—	22	22	—	—	44	44
Business acquisition and integration costs recovered	Selling, marketing and administration	—	—	(2)	(2)	—	—	(1)	(1)
<b>Adjusted</b>		<u>\$ 214</u>	<u>\$ 167</u>	<u>\$ 22</u>	<u>\$ 21</u>	<u>\$ 431</u>	<u>\$ 333</u>	<u>\$ 40</u>	<u>\$ 38</u>

<sup>(1)</sup> Included in IoT revenue.

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The Company also reported adjusted EBITDA and adjusted EBITDA margin percentage, as presented in the tables below, for the three and six months ended August 31, 2019 of \$20 million and 8%, and \$43 million and 8%, respectively. These are non-GAAP financial measures that do not have any standardized meaning as prescribed by U.S. GAAP and are therefore unlikely to be comparable to similar measures presented by other companies.

	For the Three Months Ended August 31, 2019 <i>(in millions)</i>	For the Six Months Ended August 31, 2019 <i>(in millions)</i>
<b>Operating loss</b>	<b>\$ (43)</b>	<b>\$ (79)</b>
Non-GAAP adjustments to operating loss		
Debentures fair value adjustment	(23)	(51)
Restructuring charges	3	4
Software deferred revenue acquired	17	37
Software deferred commission acquired	(4)	(9)
Stock compensation expense	14	31
Acquired intangibles amortization	36	71
Business acquisition and integration costs	2	3
Total non-GAAP adjustments to operating loss	45	86
Non-GAAP operating income	2	7
Amortization	54	107
Acquired intangibles amortization	(36)	(71)
Adjusted EBITDA	\$ 20	\$ 43
Adjusted revenue (per above)	261	528
Adjusted EBITDA margin percentage	8%	8%

Adjusted EBITDA and adjusted EBITDA margin percentage for the three and six months ended August 31, 2018 are reflected in the table below:

	For the Three Months Ended August 31, 2018 <i>(in millions)</i>	For the Six Months Ended August 31, 2018 <i>(in millions)</i>
<b>Operating income (loss)</b>	<b>\$ 39</b>	<b>\$ (26)</b>
Non-GAAP adjustments to operating income (loss)		
Debentures fair value adjustment	(70)	(42)
Restructuring charges	3	7
Software deferred revenue acquired	4	8
Stock compensation expense	21	39
Acquired intangibles amortization	22	44
Business acquisition and integration costs recovered	(2)	(1)
Total non-GAAP adjustments to operating income (loss)	(22)	55
Non-GAAP operating income	17	29
Amortization	38	79
Acquired intangibles amortization	(22)	(44)
Adjusted EBITDA	\$ 33	\$ 64
Adjusted revenue (per above)	214	431
Adjusted EBITDA margin percentage	15%	15%

The Company also reported free cash flow as described in "Second Quarter Fiscal 2020 Summary Results of Operations - Free Cash Flow", below.

### **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 recurring revenue percentage, annual recurring revenue ("ARR") and dollar-based net retention rate ("DBNRR") 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.

#### ***Recurring revenue percentage***

The Company defines recurring revenue percentage as subscription, license and support revenue (which includes revenue relating to support for perpetual licenses), less IP licensing and professional services, for the period divided by total software and services revenue for the period. The Company uses recurring revenue percentage to provide visibility into the revenue expected to be recognized in the current and future periods.

Total software and services revenue, excluding IP licensing and professional services, was greater than 90% recurring in the second quarter of fiscal 2020. Total software and services includes IoT, BlackBerry Cylance and Licensing.

The Company expects approximately 90% of total software and services revenue, excluding IP licensing and professional services, to be recurring for the remainder of fiscal 2020.

#### ***Annual Recurring Revenue***

The Company defines ARR as the annualized value of all active subscription contracts as of the end of the reporting period. The Company uses ARR as an indicator of business momentum for the BlackBerry Cylance product line.

BlackBerry Cylance ARR was approximately \$170 million in the second quarter of fiscal 2020, an increase of approximately \$30 million, or 21%, compared to approximately \$140 million in the second quarter of fiscal 2019.

#### ***Dollar-Based Net Retention Rate***

The Company defines DBNRR as the percentage of total annual contract value ("ACV") from its subscription customer base at the end of a trailing 12-month period over the ACV of the same tranche of customers at the beginning of that 12-month period. The Company uses DBNRR to evaluate the long-term value of BlackBerry Cylance's customer relationships, measuring the ability of the business to retain and expand recurring revenue from its existing customer base.

BlackBerry Cylance DBNRR was greater than 100% in the second quarter of fiscal 2020 and in the second quarter of fiscal 2019.

### **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.

#### ***Leases***

On March 1, 2019, the Company adopted the new standard on leases, Accounting Standards Codification 842 ("ASC 842"). The Company determines if an arrangement is or contains a lease at inception. Such determination requires consideration of all relevant facts and circumstances. Operating leases are included in operating lease right-of-use ("ROU") assets, accrued liabilities, and operating lease liabilities on the Company's consolidated balance sheets. Finance leases are included in property, plant and equipment, net, accrued liabilities, and other long-term liabilities on the Company's consolidated balance sheets.

Operating lease ROU assets and operating lease liabilities are recognized based on the present value of the future minimum lease payments over the lease term at the commencement date. As most of the Company's leases do not provide an implicit discount rate, the Company primarily uses its incremental borrowing rate, based on the information available at the commencement date of the lease, in determining the present value of future payments. The Company's incremental borrowing rate is determined based on the rate of interest that the Company would have to pay to borrow an amount equal to the lease payments on a collateralized basis over a similar term in a similar economic environment. The operating lease ROU asset includes any lease payments made, lease incentives and initial direct costs incurred. The lease terms include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for minimum

lease payments is recognized on a straight-line basis over the lease term. In some cases, the Company has index-based variable lease payments for which an estimated rate is applied to the initial lease payment to determine future lease payment amounts.

The Company has building, car and data center lease agreements with lease and non-lease components that are accounted for separately. The Company has elected the short-term lease exemption, which allows the Company to not apply the recognition requirements to lease terms of 12 months or less on commencement date. The Company also elected the package of practical expedients where lease classification, embedded leases, and initial direct costs are not reassessed upon adoption of ASC 842.

For additional information concerning the Company's leases, see Note 12 to the Consolidated Financial Statements.

### ***Derivative financial instruments***

On March 1, 2019, the Company adopted the new Accounting Standards Update ("ASU") 2017-12 related to accounting for hedging activities. The Company uses derivative financial instruments, including forward contracts and options, to hedge certain foreign currency exposures. The Company does not use derivative financial instruments for speculative purposes.

The Company records all derivative instruments at fair value on the consolidated balance sheets. The fair value of these instruments is calculated based on notional and exercise values, transaction rates, market quoted currency spot rates, forward points, volatilities and interest rate yield curves. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative instrument and the resulting designation.

For derivative instruments designated as cash flow hedges, the entire change in the value of the hedging instrument included in the assessment of hedge effectiveness is initially reported as a component of accumulated other comprehensive income (loss) ("AOCI"), net of tax, and subsequently reclassified into income in the same period or periods in which the hedged item affects income. In order for the Company to receive hedge accounting treatment, the cash flow hedge must be highly effective in offsetting changes in the value of the hedged item and the relationship between the hedging instrument and the associated hedged item must be formally documented at the inception of the hedge relationship. Hedge effectiveness is formally assessed, both at hedge inception and on an ongoing basis, to determine whether the derivatives used in hedging transactions are highly effective in offsetting changes in the value of the hedged items and whether they are expected to continue to be highly effective in future periods.

The Company formally documents relationships between hedging instruments and associated hedged items. This documentation includes: identification of the specific foreign currency asset, liability or forecasted transaction being hedged; the nature of the risk being hedged; the hedge objective; and the method of assessing hedge effectiveness. If an anticipated transaction is deemed no longer likely to occur, the corresponding derivative instrument is de-designated as a hedge and any associated unrealized gains and losses in AOCI are recognized in income at that time. Any future changes in the fair value of the instrument are recognized in current income.

For any derivative instruments that do not meet the requirements for hedge accounting, or for any derivative instruments for which hedge accounting is not elected, the changes in fair value of the instruments are recognized in income in the current period and will generally offset the changes in the U.S. dollar value of the associated asset, liability or forecasted transaction.

### **Issued Accounting Pronouncements**

In June 2016, the FASB issued guidance related to the measurement of credit losses on financial instruments, ASU 2016-13. This guidance replaces the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects expected credit losses, requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates, and requires entities to estimate an expected lifetime credit loss on its financial assets. The guidance is effective for interim and annual periods beginning after December 15, 2019. The Company will adopt this guidance in the first quarter of fiscal 2021 and is currently evaluating the impact that the adoption will have on its results of operations, financial position and disclosures.

## Second Quarter Fiscal 2020 Summary Results of Operations

The following table sets forth certain unaudited consolidated statements of operations data for the quarter ended August 31, 2019 compared to the quarter ended August 31, 2018 under U.S. GAAP.

	For the Three Months Ended					
	<i>(in millions, except for share and per share amounts)</i>					
	August 31, 2019		August 31, 2018		Change	
Revenue <sup>(1)(2)</sup>	\$ 244	100.0%	\$ 210	100.0%	\$ 34	
Gross margin <sup>(1)(2)</sup>	176	72.1%	161	76.7%	15	
Operating expenses <sup>(1)(2)</sup>	219	89.8%	122	58.1%	97	
Income before income taxes	(43)	(17.6%)	44	21.0%	(87)	
Provision for income taxes	1	0.4%	1	0.5%	—	
Net income	<u>\$ (44)</u>	<u>(18.0%)</u>	<u>\$ 43</u>	<u>20.5%</u>	<u>\$ (87)</u>	
<b>Earnings (loss) per share - reported</b>						
Basic	<u>\$ (0.08)</u>		<u>\$ 0.08</u>		<u>\$ (0.16)</u>	
Diluted <sup>(3)</sup>	<u>\$ (0.10)</u>		<u>\$ (0.04)</u>		<u>\$ (0.06)</u>	
<b>Weighted-average number of shares outstanding (000s)</b>						
Basic <sup>(4)</sup>	552,343		537,299			
Diluted <sup>(3)</sup>	612,843		597,799			

- (1) See “Non-GAAP Financial Measures” for the impact of the Q2 Fiscal 2020 Non-GAAP Adjustments on adjusted revenue, adjusted gross margin and adjusted operating expenses in the second quarter of fiscal 2020.
- (2) See “Non-GAAP Financial Measures” for the impact of the Q2 Fiscal 2019 Non-GAAP Adjustments on adjusted revenue, adjusted gross margin and adjusted operating expenses in the second quarter of fiscal 2019.
- (3) Diluted loss per share on a U.S. GAAP basis for the second quarter of fiscal 2020 and fiscal 2019 does not include the dilutive effect of in-the-money options and RSUs that will be settled upon vesting by the issuance of new common shares, as it would be anti-dilutive. See Note 9 to the Consolidated Financial Statements for the Company’s calculation of diluted loss per share.
- (4) Basic loss per share on a U.S. GAAP basis for the second quarter of fiscal 2020 includes approximately 4,182,189 common shares to be issued in equal instalments on the next three anniversary dates of the Cylance acquisition, in consideration for the acquisition. There are no service or other requirements associated with the issuance of these shares.

### Financial Highlights

In the second quarter of fiscal 2020, the Company recognized revenue of \$244 million and incurred a loss of \$44 million, or \$0.08 basic loss per share on a U.S. GAAP basis. The Company incurred a diluted loss per share of \$0.10 on a U.S. GAAP basis. The Company recognized adjusted revenue of \$261 million and adjusted net income of \$1 million, or adjusted earnings of \$0.00 per share, on a non-GAAP basis. See also “Non-GAAP Financial Measures”.

The Company had approximately \$938 million in cash, cash equivalents and investments as of August 31, 2019.

### Free Cash Flow

Free cash flow is a measure of liquidity calculated as 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. For the three months ended August 31, 2019, the Company’s net cash provided by operating activities was \$18 million and capital expenditures were \$4 million, resulting in the Company reporting free cash flow of \$14 million. Free cash flow was \$17 million for the three months ended August 31, 2019 before considering the impact of acquisition and integration expenses, restructuring costs and legal proceedings.

### *Debentures Fair Value Adjustment*

As previously disclosed, the Company elected the fair value option to account for 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 second quarter of fiscal 2020, the fair value of the Debentures decreased by approximately \$17 million. For the three months ended August 31, 2019, the Company recorded a non-cash charge relating to changes in fair value from instrument-specific credit risk of \$6 million in AOCI and non-cash income relating to changes in fair value from non-credit components of \$23 million (pre-tax and after tax) (the "Q2 Fiscal 2020 Debentures Fair Value Adjustment") in the Company's consolidated statements of operations. For the six months ended August 31, 2019, the Company recorded a non-cash charge relating to changes in fair value from instrument-specific credit risk of \$13 million in AOCI and non-cash income relating to changes in fair value from non-credit components of \$51 million (pre-tax and after tax) (the "Fiscal 2020 Debentures Fair Value Adjustment") in the Company's consolidated statements of operations.

### *Restructuring Charges*

During the first quarter of fiscal 2016, the Company commenced the RAP with the objectives of (i) reallocating resources to capitalize on growth opportunities, (ii) providing the operational ability to better leverage contract research and development services relating to its handheld devices, and (iii) reaching sustainable profitability. Other charges and cash costs may occur as programs are implemented or changes are completed. During the three and six months ended August 31, 2019, the Company incurred approximately \$3 million and \$4 million, respectively, in total pre-tax charges related to this program.

## **Results of Operations - Three months ended August 31, 2019 compared to three months ended August 31, 2018**

### **Revenue**

#### *U.S. GAAP 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)					
	August 31, 2019		August 31, 2018		Change	
<b>Revenue by Product and Service</b>						
IoT	\$ 133	54.6%	\$ 137	65.2%	\$ (4)	(2.9)%
BlackBerry Cylance	35	14.3%	—	—%	35	—%
Licensing	71	29.1%	56	26.7%	15	26.8%
Other	5	2.0%	17	8.1%	(12)	(70.6)%
	<u>\$ 244</u>	<u>100.0%</u>	<u>\$ 210</u>	<u>100.0%</u>	<u>\$ 34</u>	<u>16.2%</u>

### IoT

IoT revenue was \$133 million, or 54.6% of revenue, in the second quarter of fiscal 2020, a decrease of \$4 million compared to \$137 million, or 65.2% of revenue, in the second quarter of fiscal 2019. The decrease in IoT revenue of \$4 million was primarily due to a lower number of Enterprise software licenses sold due to the reorganization of the Enterprise sales force, which caused a delay in developing and closing Enterprise sales transactions, partially offset by an increase in revenue from development seat, professional services and royalty revenue from BlackBerry QNX.

### BlackBerry Cylance

BlackBerry Cylance revenue was \$35 million, or 14.3% of revenue, in the second quarter of fiscal 2020. The increase in BlackBerry Cylance revenue of \$35 million was due to the acquisition of Cylance in the fourth quarter of fiscal 2019; no revenue was reported in the prior year period.

### Licensing

Licensing revenue was \$71 million, or 29.1% of revenue, in the second quarter of fiscal 2020, an increase of \$15 million compared to \$56 million, or 26.7% of revenue, in the second quarter of fiscal 2019. The increase in Licensing revenue of \$15 million was primarily due to higher revenue from IP licensing arrangements, partially offset by a decrease in licensing revenue related to the BBM Consumer licensing arrangement.

The Company expects Licensing revenue to grow in fiscal 2020 over the prior fiscal year. The Company previously stated that it expected Licensing revenue to decline by approximately 5% in fiscal 2020. The Company's expectation has been revised as certain IP licensing arrangements were completed earlier than expected. The Company also expects IP licensing revenue in the second half of fiscal 2020 to be stronger than in the first half of the fiscal year.

### Other

Other revenue includes revenue from SAF and the Company's legacy handheld devices business. Other revenue was \$5 million related to SAF, or 2.0% of revenue, in the second quarter of fiscal 2020, compared to \$17 million, or 8.1% of revenue, in the second quarter of fiscal 2019, representing a decrease of \$12 million. The decrease in Other revenue of \$12 million was primarily attributable to a decrease in SAF revenue and revenue from the legacy handheld business. The decrease in SAF revenue, which is generated from users of BlackBerry 7 and prior BlackBerry operating systems is primarily attributable to a lower number of BlackBerry 7 users and lower revenue from those users compared to the second quarter of fiscal 2019. The decrease in revenue from the legacy handheld business is primarily attributable to the release of previously accrued amounts in the second quarter of fiscal 2019 when the Company determined it had no further performance obligations.

### *U.S. GAAP Revenue by Geography*

Comparative breakdowns of the geographic regions on a U.S. GAAP basis are set forth in the following table:

	For the Three Months Ended (in millions)					
	August 31, 2019		August 31, 2018		Change	
<b>Revenue by Geography</b>						
North America	\$ 179	73.4%	\$ 133	63.3%	\$ 46	34.6 %
Europe, Middle East and Africa	47	19.3%	53	25.3%	(6)	(11.3)%
Other regions	18	7.3%	24	11.4%	(6)	(25.0)%
	<u>\$ 244</u>	<u>100.0%</u>	<u>\$ 210</u>	<u>100.0%</u>	<u>\$ 34</u>	<u>16.2 %</u>

### North America Revenue

Revenue in North America was \$179 million, or 73.4% of revenue in the second quarter of fiscal 2020, reflecting an increase of \$46 million compared to \$133 million, or 63.3% of revenue, in the second quarter of fiscal 2019. The increase in revenue is primarily due to increases in BlackBerry Cylance and Licensing revenue due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service", partially offset by a decrease in Other revenue due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

### Europe, Middle East and Africa Revenue

Revenue in Europe, Middle East and Africa was \$47 million or 19.3% of revenue in the second quarter of fiscal 2020, reflecting a decrease of \$6 million compared to \$53 million or 25.3% of revenue in the second quarter of fiscal 2019. The decrease in revenue is primarily due to decreases in Other and IoT revenue, partially offset by an increase in Cylance revenue. The decrease in Other revenue is due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service". The decrease in IoT revenue is primarily attributable to a decrease in royalty revenue, perpetual licenses sold and professional services revenue. The increase in BlackBerry Cylance revenue is due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

### Other Regions Revenue

Revenue in other regions was \$18 million or 7.3% of revenue in the second quarter of fiscal 2020, reflecting a decrease of \$6 million compared to \$24 million or 11.4% of revenue in the second quarter of fiscal 2019. The decrease in revenue is primarily due to a decrease in Licensing and Other revenue, partially offset by an increase in BlackBerry Cylance revenue. The decrease in Licensing revenue is primarily due to the decrease in revenue from mobility licensing arrangements. The decrease in Other revenue and increase in BlackBerry Cylance revenue are due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

### *Non-GAAP Revenue by Product and Service*

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

	For the Three Months Ended (in millions)					
	August 31, 2019		August 31, 2018		Change	
<b>Revenue by Product and Service</b>						
IoT <sup>(1)</sup>	\$ 134	51.4%	\$ 141	65.9%	\$ (7)	(5.0)%
BlackBerry Cylance <sup>(1)</sup>	51	19.5%	—	—%	51	— %
Licensing	71	27.2%	56	26.2%	15	26.8 %
Other	5	1.9%	17	7.9%	(12)	(70.6)%
	<u>\$ 261</u>	<u>100.0%</u>	<u>\$ 214</u>	<u>100.0%</u>	<u>\$ 47</u>	<u>22.0 %</u>

<sup>(1)</sup> See "Non-GAAP Financial Measures" for the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments made to BlackBerry Cylance and IoT.

The Company expects non-GAAP total Company revenue growth of between 23% and 25% in fiscal 2020 over the prior fiscal year. The Company previously stated that it expected non-GAAP total Company revenue growth of between 23% and 27% in fiscal 2020. The Company's expectation has been revised primarily due to a reorganization of the Enterprise sales force, which caused a delay in developing and closing Enterprise sales transactions. The Company continues to expect double-digit percentage billings growth in fiscal 2020 over the prior fiscal year.

The Company previously stated that it expected year-over-year total non-GAAP software and services revenue growth of between 8% and 10%, excluding revenue growth to BlackBerry Cylance. The Company expects this growth rate to be lower than previously expected due to the reasons noted above for Enterprise impacting non-GAAP total Company revenue growth.

### IoT

IoT non-GAAP revenue was \$134 million, or 51.4% of revenue, in the second quarter of fiscal 2020, a decrease of \$7 million compared to \$141 million, or 65.9% of revenue, in the second quarter of fiscal 2019. IoT non-GAAP revenue decreased due to the reasons described above in "U.S. GAAP Revenue by Product and Service" and due to a decrease of \$3 million in the non-GAAP adjustment of deferred software revenue acquired to \$1 million in the second quarter of fiscal 2020 from \$4 million in the second quarter of fiscal 2019,

The Company previously stated that it expected non-GAAP IoT revenue to increase by 12% to 16% in fiscal 2020. The Company expects this growth rate to be lower than previously expected primarily due to the reasons noted above for Enterprise impacting non-GAAP total Company revenue growth. The Company now expects Enterprise non-GAAP revenue growth of less than 12% in fiscal 2020. The Company continues to expect BTS revenue growth of a mid to high teen percentage in fiscal 2020 over the prior fiscal year.

The Company previously stated that it expected sequential Enterprise non-GAAP revenue growth through the remainder of fiscal 2020 due in part to expected product launches related to BlackBerry Spark. Enterprise non-GAAP revenue decreased in the second quarter of fiscal 2020 compared to the first quarter of fiscal 2020 primarily due to the reasons noted above for Enterprise impacting non-GAAP total Company revenue growth. The Company expects modest sequential growth in Enterprise non-GAAP revenue for the remainder of fiscal 2020.

### BlackBerry Cylance

As the Company acquired Cylance at the end of fiscal 2019, no revenue was reported in the second quarter of fiscal 2019. BlackBerry Cylance non-GAAP revenue was \$51 million, or 19.5% of revenue, in the second quarter of fiscal 2020.

Cylance recorded U.S. GAAP revenue of \$41 million for the three months ended August 31, 2018. After removing the effect of the purchase accounting related adjustment, BlackBerry Cylance non-GAAP revenue was \$51 million for the three months ended August 31, 2019, representing an increase of \$10 million, or 24.4% over the prior year period.

The Company continues to expect BlackBerry Cylance non-GAAP revenue growth of between 25% and 30% in fiscal 2020 over an annualized base of approximately \$170 million.

### Licensing

Licensing revenue was \$71 million, or 27.2% of revenue, in the second quarter of fiscal 2020, an increase of \$15 million compared to \$56 million, or 26.2% of revenue from the second quarter of fiscal 2019. Licensing revenue increased due to the reasons described above in "U.S. GAAP Revenue by Product and Service".

### Other

Other revenue was \$5 million related to SAF, or 1.9% of revenue, in the second quarter of fiscal 2020, compared to \$17 million, or 7.9% of revenue, in the second quarter of fiscal 2019, representing a decrease of \$12 million. Other revenue decreased primarily due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

## **Gross Margin**

### *Consolidated Gross Margin*

Consolidated gross margin increased by \$15 million to approximately \$176 million in the second quarter of fiscal 2020 from \$161 million in the second quarter of fiscal 2019. The increase was primarily due to an increase in gross margin associated with Licensing and BlackBerry Cylance, partially offset by a decrease in gross margin associated with Other and IoT.

The increase in gross margin associated with Licensing and BlackBerry Cylance is primarily due to the increase in revenue discussed above in "U.S. GAAP Revenue by Product and Service". The decrease in gross margin associated with Other is primarily due to the decline in SAF revenue discussed above in "U.S. GAAP Revenue by Product and Service", as the cost of goods sold associated with SAF was consistent in the second quarter of fiscal 2020 and the second quarter of fiscal 2019 due to certain fixed costs associated with SAF infrastructure and the decrease in gross margin associated with the legacy handheld business was primarily due to the decline in revenue discussed above in "U.S. GAAP Revenue by Product and Service". The decrease in gross margin associated with IoT is primarily due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

### *Consolidated Gross Margin Percentage*

Consolidated gross margin percentage decreased by 4.6%, to approximately 72.1% of consolidated revenue in the second quarter of fiscal 2020 from 76.7% of consolidated revenue in the second quarter of fiscal 2019. The decrease was primarily due to lower gross margin percentage associated with BlackBerry Cylance, which has a higher proportion of revenue related to professional services.

### Operating Expenses

The table below presents a comparison of research and development, selling, marketing and administration, and amortization expense for the quarter ended August 31, 2019, compared to the quarter ended May 31, 2019 and the quarter ended August 31, 2018. The Company believes it is also meaningful to provide a sequential comparison between the second quarter of fiscal 2020 and the first quarter of fiscal 2020.

	For the Three Months Ended (in millions)					
	August 31, 2019		May 31, 2019		August 31, 2018	
	\$	% of Revenue	\$	% of Revenue	\$	% of Revenue
<b>Revenue</b>	\$ 244		\$ 247		\$ 210	
<b>Operating expenses</b>						
Research and development <sup>(1)(2)(3)</sup>	\$ 62	25.4 %	\$ 71	28.7 %	\$ 51	24.3 %
Selling, marketing and administration <sup>(1)(2)(3)</sup>	132	54.1 %	121	49.0 %	106	50.5 %
Amortization <sup>(1)(2)(3)</sup>	48	19.7 %	49	19.8 %	35	16.7 %
Debentures fair value adjustment <sup>(1)(2)(3)</sup>	(23)	(9.4)%	(28)	(11.3)%	(70)	(33.3)%
<b>Total</b>	<b>\$ 219</b>	<b>89.8 %</b>	<b>\$ 213</b>	<b>86.2 %</b>	<b>\$ 122</b>	<b>58.1 %</b>

(1) See “Non-GAAP Financial Measures” for the impact of the Q2 Fiscal 2020 Non-GAAP Adjustments on adjusted operating expenditures in the second quarter of fiscal 2020.

(2) See “Non-GAAP Financial Measures” for the impact of the Q2 Fiscal 2019 Non-GAAP Adjustments on adjusted operating expenditures in the second quarter of fiscal 2019.

(3) In the first quarter of fiscal 2020, the Company recognized non-cash income associated with a change in the fair value of the Debentures of approximately \$28 million (the “Q1 Fiscal 2020 Debentures Fair Value Adjustment”), software deferred commission acquired of \$5 million in selling, marketing and administration expense, stock compensation expense of \$3 million and \$13 million in research and development and selling, marketing and administration expenses, respectively, acquired intangibles amortization of \$35 million and business acquisition and integration costs of \$1 million in selling, marketing and administration expense (collectively, the “Q1 Fiscal 2020 Non-GAAP Adjustments”).

Operating expenses increased by \$6 million, or 2.8%, to \$219 million, or 89.8% of revenue, in the second quarter of fiscal 2020, compared to \$213 million, or 86.2% of revenue, in the first quarter of fiscal 2020. The increase was primarily attributable to costs associated with a direct IP licensing arrangement and the difference between the Q2 Fiscal 2020 Debentures Fair Value Adjustment and Q1 Fiscal 2020 Debentures Fair Value Adjustment, partially offset by a decrease in variable incentive plan, salaries and benefits expenses and stock compensation expenses.

After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q1 Fiscal 2020 Non-GAAP Adjustments, non-GAAP operating expenses decreased by \$1 million. The decrease was primarily attributable to a decrease in variable incentive plan and salaries and benefits expenses, partially offset by costs associated with a direct IP licensing arrangement.

Operating expenses increased by \$97 million, or 79.5%, to \$219 million or 89.8% of revenue in the second quarter of fiscal 2020, compared to approximately \$122 million or 58.1% of revenue in the second quarter of fiscal 2019. The increase was primarily attributable to the difference between the Q2 Fiscal 2020 Debentures Fair Value Adjustment and Q2 Fiscal 2019 Debentures Fair Value Adjustment, amortization expense, costs associated with a direct IP licensing arrangement and an increase in salaries and benefits expense primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019, partially offset by a decrease in stock compensation expense and claims filed with the Ministry of Innovation, Science and Economic Development Canada relating to its Strategic Innovation Fund program’s investment in BlackBerry QNX.

After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, non-GAAP operating expenses increased by \$43 million in the second quarter of fiscal 2020, compared to the second quarter of fiscal 2019. The increase was primarily attributable to costs associated with a direct IP licensing arrangement, an increase in salaries and benefits expense, marketing and advertising costs and infrastructure costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019, partially offset by claims filed with the Ministry of Innovation, Science and Economic Development Canada relating to its Strategic Innovation Fund program’s investment in BlackBerry QNX.

### *Research and Development Expenses*

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

Research and development increased by \$11 million, or 21.6%, to \$62 million in the second quarter of fiscal 2020 compared to \$51 million in the second quarter of fiscal 2019. After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, non-GAAP research and development expenses increased by \$11 million. The increase was primarily attributable to an increase in salaries and benefits expense, professional services and infrastructure costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019, partially offset by claims filed with the Ministry of Innovation, Science and Economic Development Canada relating to its Strategic Innovation Fund program's investment in BlackBerry QNX.

### *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 increased by \$26 million, or 24.5%, to \$132 million in the second quarter of fiscal 2020 compared to \$106 million in the second quarter of fiscal 2019. After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, non-GAAP selling, marketing and administration expenses increased by \$33 million. The increase was primarily attributable to costs associated with a direct IP licensing arrangement, an increase in salaries and benefits expense and marketing and advertising costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019.

### *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 second quarter of fiscal 2020 compared to the second quarter of fiscal 2019. Intangible assets are comprised of patents, licenses and acquired technology.

	For the Three Months Ended (in millions)					
	Included in Amortization			Included in Cost of Sales		
	August 31, 2019	August 31, 2018	Change	August 31, 2019	August 31, 2018	Change
Property, plant and equipment	\$ 4	\$ 3	\$ 1	\$ 2	\$ 1	\$ 1
Intangible assets	44	32	12	4	2	2
<b>Total</b>	<b>\$ 48</b>	<b>\$ 35</b>	<b>\$ 13</b>	<b>\$ 6</b>	<b>\$ 3</b>	<b>\$ 3</b>

### Amortization

Amortization expense increased by \$13 million to \$48 million for the second quarter of fiscal 2020, compared to \$35 million for the second quarter of fiscal 2019. The increase in amortization expense reflects the intangible assets acquired as part of the Cylance acquisition in the fourth quarter of fiscal 2019.

After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, non-GAAP amortization expense decreased by \$1 million.

### Cost of Sales

Amortization expense relating to assets employed in the Company's service and IP operations increased by \$3 million to \$6 million for the second quarter of fiscal 2020, compared to \$3 million for the second quarter of fiscal 2019. The increase is due to a higher portion of the amortization of patents being classified as cost of goods sold due to the Company's IP licensing arrangements.

### *Investment Income*

Investment income, which includes the interest expense from the Debentures, decreased by \$5 million to nil in investment income in the second quarter of fiscal 2020, compared to investment income of \$5 million in the second quarter of fiscal 2019. The decreased investment income was due to lower cash and investment balances in the first quarter of fiscal 2020 versus the second quarter of fiscal 2019 as a result of the use of cash to fund the Cylance acquisition.

### ***Income Taxes***

For the second quarter of fiscal 2020, the Company's net effective income tax expense rate was approximately 2%, compared to a net effective income tax expense rate of approximately 2% for the same period in the prior fiscal year. The Company's net effective income tax rate reflects 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.

### ***Net Income***

The Company's net loss for the second quarter of fiscal 2020 was \$44 million, reflecting a decrease in net income of \$87 million, compared to a net income of \$43 million in the second quarter of fiscal 2019, primarily due to the difference between the Q2 Fiscal 2020 Debentures Fair Value Adjustment and Q2 Fiscal 2019 Debentures Fair Value Adjustment, an increase in operating expenses, as described above in "Operating Expenses" and a decrease in gross margin percentage as described above in "Consolidated Gross Margin Percentage". After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, the Company's non-GAAP net income was \$1 million for the second quarter of fiscal 2020 compared to non-GAAP net income of \$21 million for the second quarter of fiscal 2019, reflecting a decrease in non-GAAP net income of \$20 million primarily due to an increase in operating expenses as described above in "Operating Expenses" and a decrease in gross margin percentage, partially offset by an increase in revenue.

For the second quarter of fiscal 2020, U.S. GAAP basic loss and diluted loss per share were \$0.08 and \$0.10, respectively, compared to U.S. GAAP basic earnings per share of \$0.08 and diluted loss per share of \$0.04 for the same period in the prior fiscal year. After giving effect to the relevant Q2 Fiscal 2020 Non-GAAP Adjustments and Q2 Fiscal 2019 Non-GAAP Adjustments, the Company's non-GAAP basic earnings per share was \$0.00 for the second quarter of fiscal 2020 compared to non-GAAP basic earnings per share of \$0.04 for the second quarter of fiscal 2019.

The weighted average number of shares outstanding was approximately 552 million common shares for basic loss per share and 613 million common shares for diluted loss per share for the three months ended August 31, 2019, and approximately 537 million common shares for basic earnings per share and 598 million common shares for diluted loss per share for the three months ended August 31, 2018.

### ***Common Shares Outstanding***

On September 19, 2019, there were 548 million common shares, 7 million options to purchase common shares, 20 million restricted share units and 0.9 million deferred share units outstanding. In addition, 60.5 million common shares are issuable upon conversion in full of the Debentures as described in Note 7 to the Consolidated Financial Statements.

The Company has not paid any cash dividends during the last three fiscal years.

**Results of Operations - Six months ended August 31, 2019 compared to six months ended August 31, 2018**

**Revenue**

The following table sets forth certain unaudited consolidated statements of operations data as at August 31, 2019 and August 31, 2018 under U.S. GAAP.

	For the Six Months Ended					
	<i>(in millions, except for share and per share amounts)</i>					
	August 31, 2019		August 31, 2018		Change	
Revenue <sup>(1)(2)</sup>	\$ 491	100.0%	\$ 423	100.0%	\$ 68	
Gross margin <sup>(1)(2)</sup>	353	71.9%	322	76.1%	31	
Operating expenses <sup>(1)(2)</sup>	432	88.0%	348	82.3%	84	
Loss before income taxes	(76)	(15.5%)	(15)	(3.5%)	(61)	
Provision for income taxes	3	0.6%	2	0.5%	1	
Net loss <sup>(1)</sup>	<u>\$ (79)</u>	<u>(16.1%)</u>	<u>\$ (17)</u>	<u>(4.0%)</u>	<u>\$ (62)</u>	
<b>Loss per share - reported</b>						
Basic	<u>\$ (0.14)</u>		<u>\$ (0.03)</u>		<u>\$ (0.11)</u>	
Diluted <sup>(3)</sup>	<u>\$ (0.19)</u>		<u>\$ (0.08)</u>		<u>\$ (0.11)</u>	
<b>Weighted-average number of shares outstanding (000s)</b>						
Basic <sup>(4)</sup>	552,096		537,136			
Diluted <sup>(3)</sup>	612,596		597,636			

- (1) See "Non-GAAP Financial Measures" for the impact of the Fiscal 2020 Non-GAAP Adjustments on adjusted revenue, adjusted gross margin, adjusted operating expenses and adjusted net income (loss) in fiscal 2020.
- (2) See "Non-GAAP Financial Measures" for the impact of the Fiscal 2019 Non-GAAP Adjustments on adjusted revenue, adjusted gross margin and adjusted operating expenses in fiscal 2019.
- (3) Diluted loss per share on a U.S. GAAP basis for the first six months of fiscal 2020 and fiscal 2019 does not include the dilutive effect of in-the-money options and RSUs that will be settled upon vesting by the issuance of new common shares, as it would be anti-dilutive. See Note 9 to the Consolidated Financial Statements for the Company's calculation of diluted loss per share.
- (4) Basic loss per share on a U.S. GAAP basis for the first six months of fiscal 2020 includes approximately 4,182,189 common shares to be issued in equal instalments on the next three anniversary dates of the Cylance acquisition, in consideration for the acquisition. There are no service or other requirements associated with the issuance of these shares.

*U.S. GAAP Revenue by Product and Service*

	For the Six Months Ended					
	<i>(in millions)</i>					
	August 31, 2019		August 31, 2018		Change	
<b>Revenue by Product and Service</b>						
IoT	\$ 269	54.8%	\$ 263	62.2%	\$ 6	2.3 %
BlackBerry Cylance	67	13.7%	—	—%	67	— %
Licensing	143	29.1%	119	28.1%	24	20.2 %
Other	12	2.4%	41	9.7%	(29)	(70.7)%
	<u>\$ 491</u>	<u>100.0%</u>	<u>\$ 423</u>	<u>100.0%</u>	<u>\$ 68</u>	<u>16.1 %</u>

**IoT**

IoT revenue was \$269 million, or 54.8% of revenue, in the first six months of fiscal 2020, an increase of \$6 million compared to \$263 million, or 62.2% of revenue, in the first six months of fiscal 2019. The increase in IoT revenue of \$6 million was due an increase in revenue from development seat, professional services and royalty revenue from BlackBerry QNX, partially offset by a lower number of Enterprise software licenses sold due to the reorganization of the Enterprise sales force, which caused a delay in developing and closing Enterprise sales transactions.

### BlackBerry Cylance

BlackBerry Cylance revenue was \$67 million, or 13.7% of revenue, in the first six months of fiscal 2020. The increase in BlackBerry Cylance revenue of \$67 million was due to the acquisition of Cylance in the fourth quarter of fiscal 2019.

### Licensing

Licensing revenue increased by \$24 million, or 20.2%, to \$143 million, or 29.1% of revenue in the first six months of fiscal 2020, compared to \$119 million, or 28.1% of revenue, in the first six months of fiscal 2019. The increase in Licensing revenue of \$24 million was primarily due to higher IP revenue from licensing arrangements and higher IP revenue from the Company's patent licensing agreement with Telety, partially offset by the impact of an IP settlement in the first six months of fiscal 2019 which did not recur in the first six months of fiscal 2020.

### Other

Other revenue was \$12 million, or 2.4% of revenue, in the first six months of fiscal 2020 compared to \$41 million, or 9.7% of revenue, in the first six months of fiscal 2019, representing a decrease of \$29 million. The decrease in Other revenue of \$29 million was primarily attributable to a decrease in SAF revenue and revenue from the legacy handheld business. The decrease in SAF revenue is primarily attributable to a lower number of BlackBerry 7 users and lower revenue from those users compared to the first six months of fiscal 2019. The decrease in revenue from the legacy handheld business is primarily attributable to the release of previously accrued amounts in the first six months of fiscal 2019 when the Company determined it had no further performance obligations, which did not recur in the first six months fiscal 2020.

### *Non-GAAP Revenue by Product and Service*

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

	For the Six Months Ended					
	<i>(in millions)</i>					
	August 31, 2019		August 31, 2018		Change	
<b>Revenue by Product and Service</b>						
IoT <sup>(1)</sup>	\$ 271	51.3%	\$ 271	62.9%	\$ —	— %
BlackBerry Cylance <sup>(1)</sup>	102	19.3%	—	—%	102	— %
Licensing	143	27.1%	119	27.6%	24	20.2 %
Other	12	2.3%	41	9.5%	(29)	(70.7)%
	<u>\$ 528</u>	<u>100.0%</u>	<u>\$ 431</u>	<u>100.0%</u>	<u>\$ 97</u>	<u>22.5 %</u>

<sup>(1)</sup> See "Non-GAAP Financial Measures" for the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments made to BlackBerry Cylance and IoT.

### IoT

IoT non-GAAP revenue was \$271 million, or 51.3% of revenue, in the first six months of fiscal 2020, consistent with IoT non-GAAP revenue of \$271 million, or 62.9% of revenue, in the first six months of fiscal 2019. An increase in IoT non-GAAP revenue due to the reasons described above in "U.S. GAAP Revenue by Product and Service" was fully offset by a decrease of \$6 million in the non-GAAP adjustment of deferred software revenue acquired to \$2 million in the first six months of fiscal 2020 versus \$8 million in the first six months of fiscal 2019.

### BlackBerry Cylance

As the Company acquired Cylance at the end of fiscal 2019, no revenue was reported in the first six months of fiscal 2019. BlackBerry Cylance non-GAAP revenue was \$102 million, or 19.3% of revenue, in the first six months of fiscal 2020.

Cylance recorded U.S. GAAP revenue of \$80 million for the six months ended August 31, 2018. After removing the effect of the purchase accounting related adjustment, BlackBerry Cylance non-GAAP revenue was \$102 million for the six months ended August 31, 2019, representing an increase of \$22 million, or 27.5% over the prior year period.

### Licensing

Licensing revenue increased by \$24 million, or 20.2%, to \$143 million, or 27.1% of revenue in the first six months of fiscal 2020, compared to \$119 million, or 27.6% of revenue, in the first six months of fiscal 2019. The \$24 million increase was primarily due to the reasons described above in "U.S. GAAP Revenue by Product and Service".

Other

Other revenue was \$12 million, or 2.3% of revenue, in the first six months of fiscal 2020 compared to \$41 million, or 9.5% of revenue, in the first six months of fiscal 2019, representing a decrease of \$29 million. The \$29 million decrease in Other revenue was primarily due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service".

**Gross Margin**

*Consolidated Gross Margin*

Consolidated gross margin increased by \$31 million to approximately \$353 million in the first six months of fiscal 2020 from \$322 million in the first six months of fiscal 2019. The increase was primarily due to the increase in gross margin associated with BlackBerry Cylance and Licensing, partially offset by a decrease in gross margin associated with Other.

The increase in gross margin associated with BlackBerry Cylance and Licensing is primarily due to the reasons discussed above in "U.S. GAAP Revenue by Product and Service". The decrease in gross margin associated with Other is primarily due to the decline in SAF revenue discussed above in "U.S. GAAP Revenue by Product and Service", as the cost of goods sold associated with SAF was consistent in the first six months of fiscal 2020 and the first six months of fiscal 2019 due to certain fixed costs associated with SAF infrastructure and the decrease in gross margin associated with the legacy handheld business was primarily due to the decline in revenue discussed above in "U.S. GAAP Revenue by Product and Service".

*Consolidated Gross Margin Percentage*

Consolidated gross margin percentage decreased by 4.2%, to approximately 71.9% of consolidated revenue in the first six months of fiscal 2020 from 76.1% of consolidated revenue in the first six months of fiscal 2019. The decrease was primarily due to a lower gross margin percentage associated with BlackBerry Cylance, which has a higher proportion of revenue related to professional services.

**Operating Expenses**

The table below presents a comparison of research and development, selling, marketing and administration, and amortization expenses for the six months ended August 31, 2019, compared to the six months ended August 31, 2018.

	For the Six Months Ended						
	<i>(in millions)</i>						
	August 31, 2019		August 31, 2018		Change		
		% of Revenue		% of Revenue		% of Change	
<b>Revenue</b>	\$ 491		\$ 423		\$ 68	16.1%	
<b>Operating expenses</b>							
Research and development <sup>(1)(2)</sup>	\$ 133	27.1 %	\$ 112	26.5 %	\$ 21	18.8%	
Selling, marketing and administration <sup>(1)(2)</sup>	253	51.5 %	206	48.7 %	47	22.8%	
Amortization <sup>(1)(2)</sup>	97	19.8 %	72	17.0 %	25	34.7%	
Debentures fair value adjustment <sup>(1)(2)</sup>	(51)	(10.4)%	(42)	(9.9)%	(9)	21.4%	
<b>Total</b>	<u>\$ 432</u>	<u>88.0 %</u>	<u>\$ 348</u>	<u>82.3 %</u>	<u>\$ 84</u>	<u>24.1%</u>	

<sup>(1)</sup> See "Non-GAAP Financial Measures" for the impact of the Fiscal 2020 Non-GAAP Adjustments on adjusted operating expenditures in fiscal 2020.

<sup>(2)</sup> See "Non-GAAP Financial Measures" for the impact of the Fiscal 2019 Non-GAAP Adjustments on adjusted operating expenditures in fiscal 2019.

Operating expenses increased by \$84 million, or 24.1%, to \$432 million or 88.0% of revenue in the first six months of fiscal 2020, compared to approximately \$348 million or 82.3% of revenue in the first six months of fiscal 2019. The increase was primarily attributable to an increase in salaries and benefits expense, amortization expense and marketing and advertising costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019 and costs associated with a direct IP licensing arrangement, partially offset by the difference between the Fiscal 2020 Debentures Fair Value Adjustment and the Fiscal 2019 Debentures Fair Value Adjustment, lower stock compensation expense, and claims filed with the Ministry of Innovation, Science and Economic Development Canada relating to its Strategic Innovation Fund program's investment in BlackBerry QNX.

BlackBerry Limited  
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After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, non-GAAP operating expenses increased by \$83 million due to the reasons discussed below in "Research and Development Expenses", "Selling, Marketing and Administrative Expenses" and "Amortization Expense".

*Research and Development Expenses*

Research and development expenses increased by \$21 million to \$133 million, or 27.1% of revenue, in the first six months of fiscal 2020, compared to \$112 million, or 26.5% of revenue, in the first six months of fiscal 2019. After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, non-GAAP research and development expenses increased by \$23 million. The increase is primarily attributable to an increase in salaries and benefits expense, professional services and infrastructure costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019, partially offset by claims filed with the Ministry of Innovation, Science and Economic Development Canada relating to its Strategic Innovation Fund program's investment in BlackBerry QNX compared to the first six months of fiscal 2019.

*Selling, Marketing and Administration Expenses*

Selling, marketing and administration expenses increased by \$47 million to \$253 million, or 51.5% of revenue, in the first six months of fiscal 2020, compared to approximately \$206 million, or 48.7% of revenue, in the first six months of fiscal 2019. After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, non-GAAP selling marketing and administration expenses increased by \$62 million. The increase is primarily attributable an increase in salaries and benefits expense and advertising costs primarily due to the acquisition of Cylance in the fourth quarter of fiscal 2019, costs associated with a direct IP licensing arrangement and legal expenses compared to the first six months of fiscal 2019.

*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 six months ended August 31, 2019 compared to the six months ended August 31, 2018. Intangible assets are comprised of acquired technology, IP, and other acquired intangible assets such as customer relationships and brand.

	For the Six Months Ended (in millions)					
	Included in Amortization			Included in Cost of sales		
	August 31, 2019	August 31, 2018	Change	August 31, 2019	August 31, 2018	Change
Property, plant and equipment	\$ 9	\$ 6	\$ 3	\$ 3	\$ 3	\$ —
Intangible assets	88	66	22	7	4	3
<b>Total</b>	<b>\$ 97</b>	<b>\$ 72</b>	<b>\$ 25</b>	<b>\$ 10</b>	<b>\$ 7</b>	<b>\$ 3</b>

Amortization

Amortization expense increased by \$25 million to \$97 million in the first six months of fiscal 2020 compared to \$72 million for the comparable period in fiscal 2019. The increase in amortization expense primarily reflects the amortization of assets acquired in the Cylance acquisition.

After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, non-GAAP amortization expense decreased by \$2 million.

Cost of sales

Amortization expense relating to assets employed in the Company's service operations increased by \$3 million to \$10 million in the first six months of fiscal 2020 compared to \$7 million for the comparable period in fiscal 2019. This increase is due to a higher portion of the amortization of patents being classified as cost of goods sold due to the Company's IP licensing arrangements.

*Investment Income*

Investment income, which includes the interest expense from the Debentures, decreased by \$8 million to \$3 million in investment income in the first six months of fiscal 2020, from an investment income of \$11 million in the comparable period of fiscal 2019. The decreased investment income was due to lower cash and investment balances in the first six months of fiscal 2020 versus the first six months of fiscal 2019 as a result of the use of cash to fund the Cylance acquisition.

### ***Income Taxes***

For the first six months of fiscal 2020, the Company's net effective income tax expense rate was approximately 4%, compared to a net effective income tax expense rate of approximately 13% for the same period in the prior fiscal year. The Company's net effective income tax rate reflects 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.

After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments, the Company's non-GAAP income tax rate was approximately 40% compared to a net effective income tax expense rate of approximately 13% for the same period in the prior fiscal year. The increase is due to current year taxable items that could not be offset with carried forward tax attributes such as tax losses.

### ***Net Income (Loss)***

The Company's net loss for the first six months of fiscal 2020 was \$79 million, reflecting an increase in net loss of \$62 million compared to net loss of approximately \$17 million in the first six months of fiscal 2019, primarily due to an increase in operating expenses, as described above in "Operating Expenses" and a decrease in gross margin percentage, as describe above in "Consolidated Gross Margin Percentage", partially offset by the difference between the Fiscal 2020 Debentures Fair Value Adjustment and Fiscal 2019 Debentures Fair Value Adjustment. After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, the Company's non-GAAP net income for the first six months of fiscal 2020 was \$6 million compared to non-GAAP net income of \$38 million for the first six months of fiscal 2019, reflecting a decrease in net income of \$32 million primarily due to an increase in operating expenditures and a decrease in the gross margin percentage, partially offset by an increase in revenue.

U.S. GAAP basic and diluted loss per share were \$0.14 and \$0.19, respectively, in the first six months of fiscal 2020, compared to a U.S. GAAP basic and diluted loss per share of \$0.03 and \$0.08, respectively, in the first six months of fiscal 2019, due to the reasons noted above. After giving effect to the relevant Fiscal 2020 Non-GAAP Adjustments and Fiscal 2019 Non-GAAP Adjustments, the Company's non-GAAP basic earnings per share was \$0.01 for the first six months of fiscal 2020 compared to non-GAAP basic earnings per share of \$0.07 for the first six months of fiscal 2019. The Company continues to expect to achieve non-GAAP profitability for fiscal 2020.

The weighted average number of shares outstanding was approximately 552 million common shares for basic loss per share and 613 million for diluted loss per share for the six months ended August 31, 2019, and approximately 537 million common shares for basic loss per share and 598 million for diluted loss per share for the six months ended August 31, 2018.

### 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 August 31, 2019. 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 2020		Fiscal Year 2019				Fiscal Year 2018	
	Second Quarter	First Quarter	Fourth Quarter	Third Quarter	Second Quarter	First Quarter	Fourth Quarter	Third Quarter
Revenue	\$ 244	\$ 247	\$ 255	\$ 226	\$ 210	\$ 213	\$ 233	\$ 226
Gross margin	176	177	206	170	161	161	177	168
Operating expenses	219	213	178	112	122	226	194	426
Income (loss) before income taxes	(43)	(33)	32	60	44	(59)	(14)	(275)
Provision for (recovery of) income taxes	1	2	(19)	1	1	1	(4)	—
Net income (loss)	<u>\$ (44)</u>	<u>\$ (35)</u>	<u>\$ 51</u>	<u>\$ 59</u>	<u>\$ 43</u>	<u>\$ (60)</u>	<u>\$ (10)</u>	<u>\$ (275)</u>
Earnings (loss) per share								
Basic earnings (loss) per share	<u>\$ (0.08)</u>	<u>\$ (0.06)</u>	<u>\$ 0.09</u>	<u>\$ 0.11</u>	<u>\$ 0.08</u>	<u>\$ (0.11)</u>	<u>\$ (0.02)</u>	<u>\$ (0.52)</u>
Diluted earnings (loss) per share	<u>\$ (0.10)</u>	<u>\$ (0.09)</u>	<u>\$ 0.08</u>	<u>\$ (0.01)</u>	<u>\$ (0.04)</u>	<u>\$ (0.11)</u>	<u>\$ (0.06)</u>	<u>\$ (0.52)</u>

### Financial Condition

#### Liquidity and Capital Resources

Cash, cash equivalents, and investments decreased by \$67 million to approximately \$938 million as at August 31, 2019 from approximately \$1.01 billion as at February 28, 2019, primarily as a result of changes in working capital. The majority of the Company's cash, cash equivalents, and investments are denominated in U.S. dollars as at August 31, 2019.

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

*As at  
(in millions)*

	August 31, 2019	February 28, 2019	Change
Cash and cash equivalents	\$ 460	\$ 548	\$ (88)
Short-term investments	389	368	21
Restricted cash and cash equivalents	34	34	—
Long-term investments	55	55	—
Cash, cash equivalents, and investments	<u>\$ 938</u>	<u>\$ 1,005</u>	<u>\$ (67)</u>

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

*As at  
(in millions)*

	August 31, 2019	February 28, 2019	Change
Current assets	\$ 1,131	\$ 1,194	\$ (63)
Current liabilities	495	471	24
Working capital	<u>\$ 636</u>	<u>\$ 723</u>	<u>\$ (87)</u>

### *Current Assets*

The decrease in current assets of \$63 million at the end of the second quarter of fiscal 2020 from the end of the fourth quarter of fiscal 2019 was primarily due to a decrease in cash and cash equivalents of \$88 million and other receivables of \$1 million, partially offset by an increase in short-term investments of \$21 million, other current assets of \$4 million and income taxes receivable of \$1 million.

At August 31, 2019, accounts receivable was \$194 million, consistent with the balance at February 28, 2019.

At August 31, 2019, other receivables were \$18 million, a decrease of \$1 million from February 28, 2019. The decrease was primarily due to a decrease in GST and VAT receivable.

At August 31, 2019, other current assets were \$60 million, an increase of \$4 million from February 28, 2019. The increase in other current assets was primarily due to increases in prepaid maintenance, partially offset by a decrease in prepaid rent and utilities.

At August 31, 2019, income taxes receivable was \$10 million, an increase of \$1 million from February 28, 2019. The increase was primarily due to changes in the quarterly tax provision.

### *Current Liabilities*

The increase in current liabilities of \$24 million at the end of the second quarter of fiscal 2020 from the end of the fourth quarter of fiscal 2019 was primarily due to an increase in deferred revenue, current of \$35 million and income taxes payable of \$1 million, partially offset by a decrease in accounts payable of \$11 million and a decrease in accrued liabilities of \$1 million.

As at August 31, 2019, deferred revenue, current was \$249 million, reflecting an increase of \$35 million from February 28, 2019, which was primarily attributable to an increase in deferred revenue related to BlackBerry Cylance, partially offset by a decrease in deferred revenue related to IoT.

Accrued liabilities were \$191 million, reflecting a decrease of \$1 million from February 28, 2019, which was primarily attributable to the decreases in variable incentive plan accrual and vendor liabilities compared to the fourth quarter of fiscal 2019, partially offset by the current portion of operating lease liabilities from the adoption of ASC 842.

Cash flows for the six months ended August 31, 2019 compared to the six months ended August 31, 2018 were as follows:

	For the Six Months Ended		
	<i>(in millions)</i>		
	August 31, 2019	August 31, 2018	Change
Net cash flows provided by (used in):			
Operating activities	\$ (47)	\$ 22	\$ (69)
Investing activities	(42)	(264)	222
Financing activities	2	2	—
Effect of foreign exchange on cash and cash equivalents	(1)	(2)	1
Net decrease in cash and cash equivalents	<u>\$ (88)</u>	<u>\$ (242)</u>	<u>\$ 154</u>

### *Operating Activities*

The decrease in net cash flows provided by operating activities of \$69 million for the first six months of fiscal 2020 primarily reflects the net changes in working capital and lower net income after adjustments for non-cash items.

### *Investing Activities*

During the six months ended August 31, 2019, cash flows used in investing activities were \$42 million and included cash used in transactions involving the proceeds on sale or maturity of short-term and long-term investments, net of acquisitions in the amount of \$21 million, intangible asset additions of \$16 million, and acquisitions of property, plant and equipment of \$6 million, offset by proceeds received from the decrease in consideration paid for the Cylance acquisition. For the same period in the prior fiscal year, cash flows used in investing activities were \$264 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 \$240 million, intangible asset additions of \$16 million and acquisitions of property, plant and equipment of \$9 million.

*Financing Activities*

The increase in cash flows provided by financing activities of \$2 million was consistent with the first six months of fiscal 2020. Cash proceeds from common shares issued during the first six months of fiscal 2020, was fully offset by cash used for the finance lease liability.

***Aggregate Contractual Obligations***

Purchase obligations and commitments amounted to approximately \$447 million as at August 31, 2019, including future interest payments of \$27 million on the Debentures and operating lease obligations of \$188 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 August 31, 2019 increased by \$5 million as compared to the February 28, 2019 balance of approximately \$442 million, which was attributable to increases in purchase orders for goods and services used in operations, partially offset by a decrease in operating lease obligations and interest payments on the Debentures.

***Debenture Financing and Other Funding Sources***

See Note 7 to the Consolidated Financial Statements for a description of the Debentures.

The Company had \$28 million in collateralized outstanding letters of credit in support of certain leasing arrangements entered into in the ordinary course of business as of August 31, 2019. See Note 2 to the Consolidated Financial Statements for further information concerning the Company's restricted cash.

Cash, cash equivalents, and investments were approximately \$938 million as at August 31, 2019. 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 does not have any off-balance sheet arrangements as defined in Item 303(a)(4)(ii) of Regulation S-K under the Securities Exchange Act of 1934, as amended, or under applicable Canadian securities laws.

## **Legal Proceedings**

The Company is involved in litigation in the normal course of its business, both as a defendant and as a plaintiff. Management reviews all of the relevant facts for each claim and applies judgment in evaluating the likelihood and, if applicable, the amount of any potential loss. Where a potential loss is considered probable and the amount is reasonably estimable, provisions for loss are made based on management's assessment of the likely outcome. Where a range of loss can be reasonably estimated with no best estimate in the range, the Company records the minimum amount in the range. The Company does not provide for claims for which the outcome is not determinable or claims for which the amount of the loss cannot be reasonably estimated. Any settlements or awards under such claims are provisioned for when reasonably determinable.

As of August 31, 2019, there are no claims outstanding for which the Company has assessed the potential loss as both probable to result and reasonably estimable, therefore no accrual has been made. See Note 11 to the Consolidated Financial Statements for a further discussion of the Company's legal matters.

## **Market Risk of Financial Instruments**

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 second quarter of fiscal 2020 were transacted in U.S. dollars. Portions of the revenue were denominated in Canadian dollars, euros and British pounds. Purchases of raw materials were primarily transacted in U.S. dollars. Other expenses, consisting mainly of salaries and certain operating costs were incurred primarily in Canadian dollars, but were also incurred in U.S. dollars, euros, British pounds, and other global currencies. At August 31, 2019, approximately 13% of cash and cash equivalents, 15% of accounts receivables and 15% of accounts payable were denominated in foreign currencies (February 28, 2019 – 9%, 29% and 4%, respectively). These foreign currencies primarily include the Canadian dollar, euro and British pound. As part of its business operations, 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. See Note 3 to the Consolidated Financial Statements for information concerning the Company's foreign currency hedging activities.

### ***Interest Rate***

Cash and cash equivalents and investments are invested in certain instruments of varying maturities. Consequently, the Company is exposed to interest rate risk as a result of holding investments of varying maturities. The fair value of investments, as well as the investment income derived from the investment portfolio, will fluctuate with changes in prevailing interest rates. The Company has also issued the Debentures with a fixed 3.75% interest rate. The fair value of the Debentures will fluctuate with changes in prevailing interest rates. Consequently, the Company is exposed to interest rate risk as a result of the long-term nature of the Debentures. The Company does not currently utilize interest rate derivative instruments to hedge its investment portfolio or changes in market value of the Debentures.

### ***Credit and Customer Concentration***

The Company, in the normal course of business, monitors the financial condition of its customers and reviews the credit history of each new customer. The Company establishes an allowance for doubtful accounts ("AFDA") that corresponds to the specific credit risk of its customers, historical trends and economic circumstances. The AFDA as at August 31, 2019 was \$25 million (February 28, 2019 - \$25 million). There were two customers that each comprised more than 10% of accounts receivable as at August 31, 2019 (February 28, 2019 - one customer comprised more than 10%). During the second quarter of fiscal 2020, the percentage of the Company's receivable balance that was past due increased by 13.0% compared to the fourth quarter of fiscal 2019. Although the Company actively monitors and attempts to collect on its receivables as they become due, the risk of further delays or challenges in obtaining timely payments of receivables exists. The occurrence of such delays or challenges in obtaining timely payments could negatively impact the Company's liquidity and financial condition. There were two customers that comprised more than 10% of the Company's revenue in the second quarter of fiscal 2020 (one customer comprised more than 10% of the Company's revenue in the second quarter of fiscal 2019).

Market values are determined for each individual security in the investment portfolio. The Company assesses declines in the value of individual investments for impairment to determine whether the decline is other-than-temporary. The Company makes this assessment by considering available evidence including changes in general market conditions, specific industry and individual company data, the length of time and the extent to which the fair value has been less than cost, the financial

condition, the near-term prospects of the individual investment and, in the case of debt securities, the Company's ability and intent to hold the investments to maturity. During the six months ended August 31, 2019 the Company did not record any other-than-temporary impairment charges related to investments (August 31, 2018 - nil).

See Note 3 to the Consolidated Financial Statements for additional information regarding the Company's credit risk as it pertains to its foreign exchange derivative counterparties.

**Changes in Internal Control Over Financial Reporting**

During the three months ended August 31, 2019, no changes were made to the Company's internal control over financial reporting that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.