ANNUAL REPORT 2018

Guiding principles

Purpose

(why we exist)

Empower people to make confident planning decisions that maximize business performance.

Mission

(what we do)

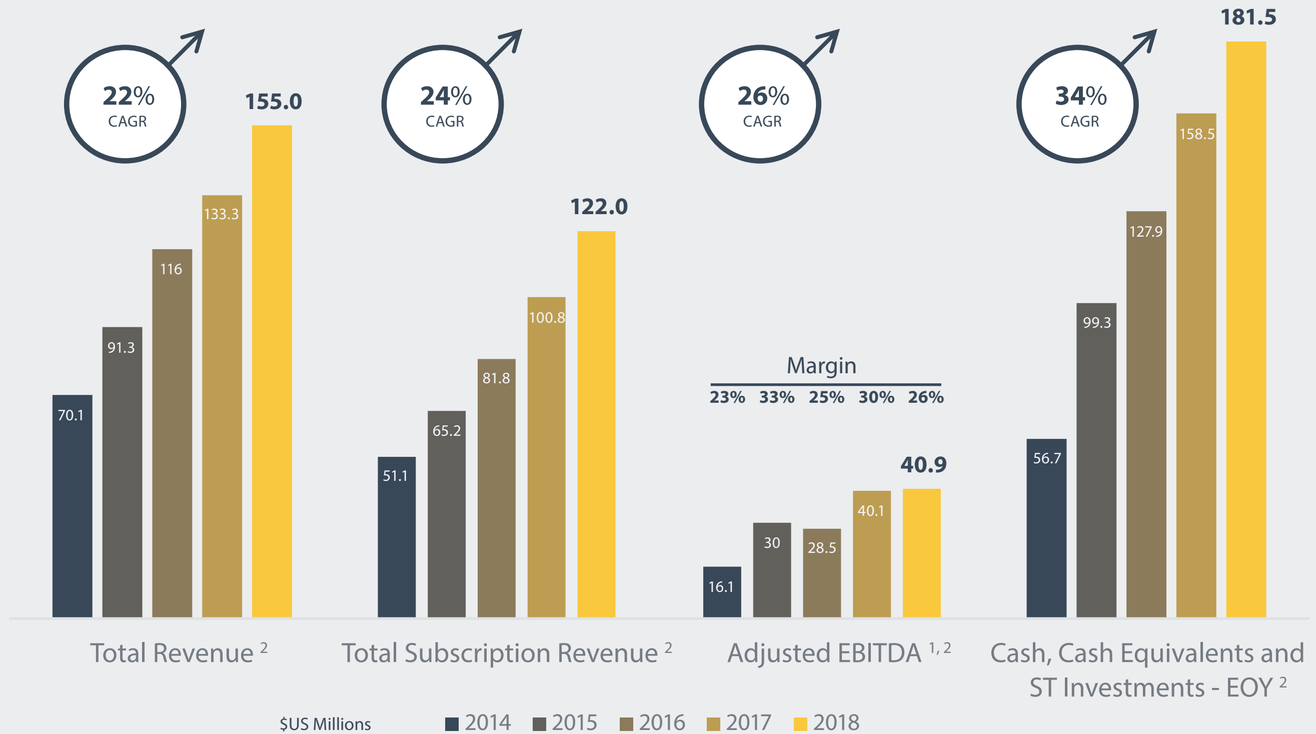
Solve complex planning problems in easy-to-understand ways by combining human and machine intelligence.

Vision

(where we're going)

Revolutionize planning.

Financial highlights



[1] Adjusted EBITDA" is a non-IFRS measure and is not a recognized, defined or a standardized measure under IFRS. This measure as well as other non-IFRS financial measures reported by Kinaxis are defined in the "Non-IFRS Measures" section of Kinaxis' Management's Discussion and Analysis for the year ended December 31, 2018 dated February 28, 2019.

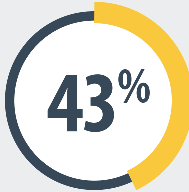
[2] Based on IFRS standards applicable at the time. 2018 amounts are pre-IFRS 15/16 for comparability purposes.

The many benefits of Kinaxis

Happier customers

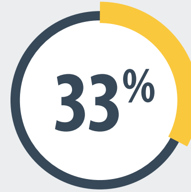
Cut manufacturing lead times by

Improve on-time delivery by

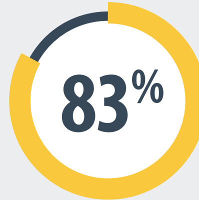


Better efficiency

Trim finished goods inventory by

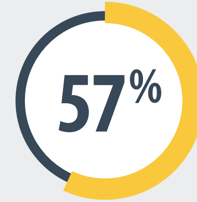


Shrink expedites by

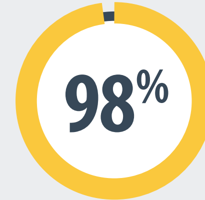


Faster decision-making

Shorten planning cycles by



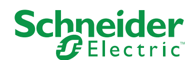
Speed up build plan change analyzation by

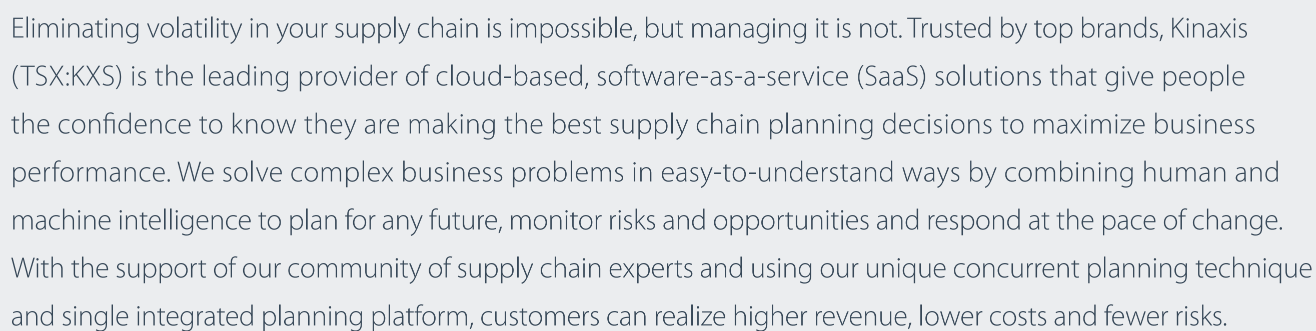


Kinaxis customers

Kinaxis has over 100 customers globally across six vertical markets. Here is a small sample of some of the marquee names that trust their supply chain planning to Kinaxis.

HermanMiller





Eliminating volatility in your supply chain is impossible, but managing it is not. Trusted by top brands, Kinaxis (TSX:KXS) is the leading provider of cloud-based, software-as-a-service (SaaS) solutions that give people the confidence to know they are making the best supply chain planning decisions to maximize business performance. We solve complex business problems in easy-to-understand ways by combining human and machine intelligence to plan for any future, monitor risks and opportunities and respond at the pace of change. With the support of our community of supply chain experts and using our unique concurrent planning technique and single integrated planning platform, customers can realize higher revenue, lower costs and fewer risks.

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JOHN SICARD

President and Chief Executive Officer

To our shareholders

I am pleased to report that 2018 was another very successful year for Kinaxis. We achieved significant progress on our key strategies, made significant investments for our future, grew our already diverse talent pool, and reported another year of very strong financial results. Our significant investments in sales and marketing early in the year were instrumental in building the strongest and most diversified pipeline in our history, spanning each of our six targeted verticals throughout North America, Europe, and Asia Pacific. We strengthened and broadened our senior leadership team to enable Kinaxis to continue to execute upon its global growth objectives. RapidResponse continues to lead our industry as the most innovative supply chain system of record solution. I remain confident that our continued investment in research and development will keep us in the pole position.

2018 financial results

Fiscal 2018 was a transition year for our financial reporting, as we were required to adopt new accounting standards for certain revenue and expense items. The most notable change impacted how we recognize revenue from the minority of our customers that have deployed our RapidResponse platform on-premise. There was no corresponding change to the underlying contracts or our cash flow from these customers – just to the revenue recognition. As a result, throughout 2018 we reported our results under both the old standards (for ease of comparison to 2017 results) and the new. All adjustments are noted in our financial statement notes. We will only be reporting under the new standards going forward.

On a comparative basis in 2018, prior to the adoption of the new standards, we grew subscription revenue by 21% to $122 million and

total revenue by 16% to $155 million. We also reported adjusted EBITDA[1] that was 26% of revenue. Under the new standards (for which there are no comparative 2017 results) our total revenue was $150.7 million, total subscription revenue was $117.8 million and adjusted EBITDA[1] was 28% of revenue. Our cash and cash equivalents balance grew to almost $182 million – up $23 million from the end of 2017. Regardless of the accounting standard, I am very pleased with these results.

Strategic developments and the year ahead

When developing and measuring strategy, our management team focuses on five major themes:

- Dominate market segments
- Accelerate product innovation
- Leverage global partner network
- Continuous customer value
- Scale culture globally

We made notable progress on each of these themes throughout 2018 and will continue with our investments through 2019 to ensure continuous improvement and strengthening of our business.

Dominate market segments

Life sciences and pharmaceuticals, and high-tech and electronics remain our two largest vertical markets, each representing approximately 30% of our total revenue. The automotive and consumer packaged goods markets have developed into our fastest growing markets and we expect to continue to have a very strong presence amongst industrial and aerospace and defense companies.

During 2018 we welcomed several major new customers including Unilever, Novartis, Lenovo, and Dyson. Our significant investments in a European sales force supported this success as we saw revenue from the region grow to 22% of the total, compared to 13% in 2017. We also launched data centres in Japan to support our growing customer base in Asia. We expect to continue to recruit key sales and support personnel in our core industry and geographic segments.

Accelerate product investment

With a significantly stronger sales organization already in the field, in 2019 we plan to focus on enhancing our market innovation through significant investment in our product team. We believe that these investments will be key to remaining ahead of our competition.

Kinaxis wins against much larger competitors because our product better addresses the fundamental business challenges facing the extremely dynamic world of supply chain planners. In 2018, we were proud to continue to be identified as leaders by industry analysts like Gartner, Nucleus Research and Ventana Research. We are investing in 2019 to continue to extend our leadership.

Throughout 2019 and beyond we will be building new functionality to enhance our supply chain planning, production planning, and sales and operations planning capabilities, which will be leveraged in both existing and new market verticals. We will also expand the use of our machine learning and artificial intelligence capabilities to help our customers more accurately and automatically sense changes in demand for their offerings, and to self-heal supply chain design flaws that are detected when operating

in the real world. We will continue to enhance the market-leading performance of our one-of-a-kind in-memory versioning database. This key piece of Kinaxis intellectual property lies at the heart of our abilities to enable our unique end-to-end concurrent planning approach and the limitless what-if scenario analysis that empowers planners to manage the non-stop volatility in modern supply chains.

Finally, and perhaps our most strategic product investment, we will complete the evolution of RapidResponse into a formal development platform allowing third parties (e.g. our strategic partners and customers) to build industry-specific or customer-specific extensions to RapidResponse. I believe that providing this level of flexibility will drive a significant increase in business for our partners and provide Kinaxis an accelerated path into new market verticals and new and exciting adjacent solutions.

We are focused on long-term success at Kinaxis and we fully expect these key product investments to provide strong returns over time, as we launch the related capabilities and introduce them to existing customers and prospects throughout the typical 18-month sales cycle.

Leverage global partner network

It is hard to imagine a better group of strategic partners in the supply chain space than Accenture, Deloitte, and Genpact (acquisition of Barkawi). However, during 2018 we continued to build this partner network by adding EY and several other industry- and geographic-focused partners. In 2018, the majority of our new customer wins were influenced by our partners and as a result they are collectively delivering the majority of related deployment services. This high level of partner engagement will be critical to help us scale the organization to continue to effectively deliver our platform to customers and to accelerate subscription revenue over time. Throughout 2019, we will continue to enhance our partners' skills for deploying and selling RapidResponse and will continue to examine co-innovation opportunities to give our partners even greater incentive to develop their Kinaxis practices.

Continuous customer value

Delivering continuous customer value is the key to sustained success for any SaaS company. Customers consistently tell us that they realize significant returns on their investment in RapidResponse – often in under a year. Key savings are achieved in many ways, including: improved inventory management; higher order fulfillment; improved data quality; instant end-to-end visibility; problem solving through high speed, comprehensive simulations; and generally improved business insight and decision making. We continue to hone our focus on supporting our customers throughout their full supply chain transformation journey, ensuring that they are fully trained and leveraging RapidResponse's potential. In 2018, we continued our investments in customer care and our centre of excellence capabilities, to better measure and monitor overall customer health and product adoption. Our goal is to help customers maximize their return on investment in Kinaxis through full adoption of product capabilities and timely expansion into our new solution areas. We will continue to invest globally in these areas as our customer base grows.

Scale culture globally

Kinaxis has become a truly global organization. In 2018, we grew our European and Asian operations to stimulate and support growth in our customer base in those regions. As a result, we hired more people in Europe and Asia than within North America. With our growing global operations, we focus our attention and energy to ensure that all employees understand our unique company culture and values. We significantly strengthened our management team in 2018 (and to date in 2019) to enable this rapid global expansion. Most recently we welcomed Andrew McDonald as Chief Product Officer and Anne Robinson as Chief Strategy Officer. One key factor in all our recruitment is an assessment of fit with the very special culture within Kinaxis. Over time we have been recognized as a Top Employer in Canada by a variety of organizations and strive to continue with our successful formula. I am also committed to diversity in the workplace, as I firmly believe that diversity in thought drives acceleration in innovation. Kinaxis has long had strong diversity across the employee base, and is also proud to support neuro diversity with our Autism at Work program. As we enter into 2019, we have successfully hired and retained 1% of our staff on the autism spectrum, and will continue to support this key initiative moving forward.

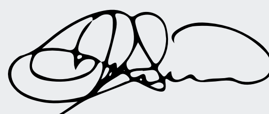
In closing

Kinaxis is committed to a subscription growth strategy while taking great care to ensure predictable profitability and business sustainability. We have a strong and mature leadership team in place dedicated to maximizing our full potential and driving towards accelerated organic growth. Every investment, and every initiative is measured against this goal, and we will maintain this razor sharp focus to deliver continued value to our shareholders.

I would like to take this opportunity to thank our global employees for their unrelenting efforts, their contribution to customer value, and their loyalty to our culture. Their commitment to our cause has been vital to our success and will continue to be as we progress. I would also like to thank our distinguished Board of Directors, led by Chair Ian Giffen, who collaborate with our leadership team to shape and support our mission for growth.

It is an honor and privilege to lead this exceptional company and to work with inspiring and gifted people each and every day. We are proud of what Kinaxis has already become but remain fiercely committed to driving even greater heights of success. Thank you for your trust, and continued support of Kinaxis.

Sincerely,



John Sicard

President and Chief Executive Officer
Kinaxis Inc.

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ANOTHER GREAT YEAR #KINAXISLIFE

@Kinaxis

@Kinaxis is proud to conclude our first "Kin-Hack-This" #security training event to raise awareness on common app vulnerabilities! Special thanks to the Kinaxis R&D team for making it a success and congratulations to the winning team. #JustWorkHere #KinaxisLife

@Kinaxis

Inspiring women make an impact at Kinaxis each and every day. Today, on #internationalwomensday2018, our male colleagues show their support to honor and celebrate them. #IWD2018 #PressforProgress #KinaxisLife

@KinaxisCEO

Kinaxis has been named one of Canada's Best Employers for Young People 2018! We look foward to welcoming the best new talent to our great team. Check out our website for a full listing of available positions today! #KinaxisLife #JustWorkHere

@Kinaxis

What better way to celebrate than throwing axes? Meet some of the team behind the success of the Kinaxis Knowledge Network launch @badaxethrowing ! #KinaxisLife #JustWorkHere

@JayMuelhoefer

The power of supply chain = the success of the Kinaxis users and customers! #Kinaxis #supplychain #digitaltransformation #kinexions

@Kinaxis

Fun company outing at the Ottawa @Senators hockey game! #kinaxislife #justworkhere

@LisaCarter12

Happy Mother's Day from the folks here at Kinaxis #flowerarrangements #mothersdaygift #kinaxislife

@Kinaxis

Know sooner, act faster. When your corporate tagline also applies to your team building event! #KinaxisLife #JustWorkHere @ArcheryGamesOtt

@Kinaxis

Music. Yoga. Food! All the essential elements to power innovation on day two of the @Kinaxis #hackathon #justworkhere #kinaxislife

@Kinaxis

A view from the top via @Kinaxis Chief Revenue Officer Paul Carreiro, who took #RapidResponse to new heights. Well done! #montblanc #beadventurous #kinaxislife

@LisaCarter12

Autism on the hill! Kinaxis #kinaxislife #autismawareness #showyoursupport

KINAXIS

CAREER FAIR

MAY 10 | 4PM – 7PM

LEARN MORE

@Kinaxis

Meet our awesome team at our annual #careerfair tonight at the Kanata Holiday Inn & Suites to learn more about what we have to offer! It's time to love where you work! #kinaxislife #ottjob #justworkhere

@Alexa_Cheater

The impossible is a call to action. @Kinaxis responded to it 20 years ago with #RapidResponse and we're continuing to answer that call by challenging trends. So proud to work for this company! #kinaxislife #kinexions

@Kinaxis

Congratulations to Kinaxis founder Duncan Klett for becoming the first Kinaxis Certified RapidResponse Master! Learn how to get certified today #kinaxislife #kinaxiscert

Consolidated Financial Statements of

Kinaxis Inc.

Years ended December 31, 2018 and 2017

KPMG LLP
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Ottawa ON K2P 2P8
Canada
Telephone (613) 212-5764
Fax (613) 212-2896

INDEPENDENT AUDITORS' REPORT

To the Shareholders of Kinaxis Inc.

Opinion

We have audited the consolidated financial statements of Kinaxis Inc. (the Entity), which comprise:

- the consolidated statements of financial position as at December 31, 2018 and December 31, 2017
- the consolidated statements of comprehensive income for the years then ended
- the consolidated statements of changes in shareholders' equity for the years then ended
- the consolidated statements of cash flows for the years then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at December 31, 2018 and December 31, 2017, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "***Auditors' Responsibilities for the Audit of the Financial Statements***" section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KPMG LLP is a Canadian limited liability partnership and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity.
KPMG Canada provides services to KPMG LLP.

Other Information

Management is responsible for the other information. Other information comprises:

- the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions.
- the information, other than the financial statements and the auditors' report thereon, included in a document likely to be entitled "Annual Report".

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion and Analysis filed with the relevant Canadian Securities Commissions as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

The information, other than the financial statements and the auditors' report thereon, included in a document likely to be entitled "Annual Report" is expected to be made available to us after the date of this auditors' report. If, based on the work we will perform on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact to those charged with governance.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards (IFRS), and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian general accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

The engagement partner on the audit resulting in this auditors' report is Mahesh Mani.

Ottawa, Canada
February 28, 2019

3. Significant accounting policies (continued):

(b) Revenue recognition (continued):

Professional services are provided for implementation and configuration of software licenses and SaaS, as well as ongoing technical services and training. Professional services are typically billed on a time and material basis and revenue is recognized over time as the services are performed. For professional services contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of services performed.

Maintenance and support services provided to customers on legacy perpetual software licenses is recognized ratably over the term of the maintenance and support services.

The Company recognizes an asset for the incremental costs of obtaining a contract with a customer if it expect the costs to be recoverable, and has determined that certain sales incentive programs meet the requirements to be capitalized. Capitalized contract acquisition costs are amortized consistent with the pattern of transfer to the customer for the goods and services to which the asset relates. The amortization period includes specifically identifiable contract renewals where there is no substantive renewal commission. The expected customer renewal period is estimated based on the historical life of our customers, which the Company has determined to be six years. The Company applies the practical expedient available under IFRS 15 and does not capitalize incremental costs of obtaining contracts if the amortization period is one year or less.

The timing of revenue recognition often differs from contract payment schedules, resulting in revenue that has been earned but not billed. These amounts are included in unbilled receivables. Amounts billed in accordance with customer contracts, but not yet earned, are recorded and presented as part of deferred revenue.

The Company has elected to apply the practical expedient to not adjust the total consideration over the contract term for the effect of a financing component if the period between the transfer of services to the customer and the customer's payment for these services is expected to be one year or less.

(c) Financial instruments:

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument.

Trade receivables without a significant financing component are initially measured at the transaction price. All other financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

Financial assets

All financial assets are recognized and de-recognized on trade date.

The Company determines the classification of its financial assets on the basis of both the business model for managing the financial assets and the contractual cash flow characteristics of the financial asset. Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets.

A financial asset is measured at amortized cost if it is held within a business model whose objective is to hold assets to collect contractual cash flows, and its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

The Company's financial assets are classified as follows:

Financial asset	Classification under IFRS 9
Cash and cash equivalents	Amortized cost
Short-term investments	Amortized cost
Trade and other receivables	Amortized cost
Unbilled receivables	Amortized cost

Amortized cost

Subsequent to initial recognition, financial assets at amortized cost are measured using the effective interest method, less any impairment. Interest income is recognized by applying the effective interest rate except for short-term receivables where the interest revenue would be immaterial. Interest income, foreign exchange gains and losses, impairment, and any gain or loss on de-recognition are recognized in profit or loss.

Impairment of financial assets

The Company measures a loss allowance based on the lifetime expected credit losses. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, the number of delayed payments in the portfolio past the average credit period, observable changes in national or local economic conditions that correlate with default on receivables, financial difficulty of the borrower, and it becoming probable that the borrower will enter bankruptcy or financial re-organization.

Financial assets are written off when there is no reasonable expectation of recovery.

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

Financial liabilities

The Company determines the classification of its financial liabilities at initial recognition. The Company's financial liabilities are classified as follows:

Financial liability	Classification under IFRS 9
Trade payables and accrued liabilities	Amortized cost

Amortized cost

Financial liabilities at amortized cost are measured using the effective interest rate method.

De-recognition of financial liabilities

The Company de-recognizes financial liabilities when the Company's obligations are discharged, cancelled or they expire.

(d) Cash and cash equivalents:

Cash and cash equivalents include cash investments in interest-bearing accounts and term deposits which can readily be redeemed for cash without penalty or are issued for terms of three months or less from the date of acquisition. At December 31, 2017, $55,138 of term deposits and guaranteed investment certificates previously reported within cash and cash equivalents have been classified as short-term investments as the terms to maturity exceeded ninety days.

(e) Short-term investments:

Short-term investments consist of term deposits and guaranteed income certificates held with Schedule 1 Canadian banks for maturity terms of three to six months from the date of acquisition. Investments are measured at amortized cost. The carrying amount of investments approximates fair market value due to the short-term maturity of these instruments.

(f) Property and equipment:

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. Property and equipment under finance leases are stated at the present value of minimum future lease payments. Cost includes expenditures that are directly attributable to the acquisition of the asset. The assets are depreciated over their estimated useful lives using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits.

Property and equipment	Rate
Computer equipment	5 years
Computer software	3 to 5 years
Office furniture and equipment	3 to 5 years
Leasehold improvements	Shorter of useful life or remaining term of lease

3. Significant accounting policies (continued):

(f) Property and equipment (continued):

Depreciation methods, useful lives and residual values are reviewed at each financial year end and adjusted prospectively if appropriate.

At the end of each reporting period, the Company reviews the carrying amounts of its property and equipment to determine whether there is any indication of impairment. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). The recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the "cash-generating unit, or CGU"). If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

(g) Leases:

At inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Company has elected to apply the practical expedient to account for each lease component and any non-lease components as a single lease component.

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The assets are depreciated to the earlier of the end of the useful life of the right-of-use asset or the lease term using the straight-line method as this most closely reflects the expected pattern of consumption of the future economic benefits. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. Lease terms range from 2 to 6 years for offices and data centres. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

3. Significant accounting policies (continued):

(g) Leases (continued):

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. Generally, the Company uses its incremental borrowing rate as the discount rate. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

The Company has elected to apply the practical expedient not to recognize right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with these leases are recognized as an expense on a straight-line basis over the lease term.

(h) Employee benefits:

The Company offers a defined contribution plan to its employees which is a post-employment benefit plan under which an entity pays fixed contributions into a separate entity and will have no legal or constructive obligation to pay further amounts. Obligations for contributions to defined contribution pension plans are recognized as an employee benefit expense in profit or loss in the periods during which services are rendered by employees.

(i) Provisions:

A provision is recognized if, as a result of a past event, the Company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are determined by discounting the expected future cash flows at a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The unwinding of the discount is recognized as finance cost.

A provision for onerous contracts is recognized when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Company recognizes any impairment loss on the assets associated with that contract.

3. Significant accounting policies (continued):

(j) Research and development expense:

Research and development costs are expensed as incurred unless the criteria for capitalization are met. No research or development costs have been capitalized to date.

(k) Income taxes:

Current and deferred income taxes are recognized as an expense or recovery in profit or loss, except when they relate to items that are recognized outside profit or loss (whether in other comprehensive income or directly in equity), in which case the tax is also recognized outside of profit or loss.

Current income tax

Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from, or paid to, the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, by the reporting date, in the countries where the Company operates and generates taxable income.

Deferred income tax

Deferred income tax assets and liabilities are recorded for the temporary differences between transactions that have been included in the consolidated financial statements or income tax returns. Deferred income taxes are provided for using the liability method. Under the liability method, deferred income taxes are recognized for all significant temporary differences between the tax and financial statement bases of assets and liabilities and for certain carry-forward items. Deferred income tax assets are recognized only to the extent that, in the opinion of management, it is probable that the deferred income tax assets will be realized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date. Deferred income tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of the enactment or substantive enactment. Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Company intends to settle its current tax assets and liabilities on a net basis.

Investment tax credits

Investment tax credits relating to scientific research and experimental development expenditures are recorded in the fiscal period the qualifying expenditures are incurred based on management's interpretation of applicable legislation in the Income Tax Act of Canada. Credits are recorded provided there is reasonable assurance that the tax credit will be realized. Credits claimed are subject to review by the Canada Revenue Agency.

3. Significant accounting policies (continued):

(k) Income taxes (continued):

Credits claimed in connection with research and development activities are accounted for using the cost reduction method. Under this method, assistance and credits relating to the acquisition of equipment is deducted from the cost of the related assets, and those relating to current expenditures, which are primarily salaries and related benefits, are included in the determination of profit or loss as a reduction of the research and development expenses.

(l) Share-based payments:

The Company uses the fair value based method to measure share-based compensation for all share-based awards made to employees and directors. The grant date fair value of equity-settled share-based payment awards granted to employees is generally recognized as an expense, with a corresponding increase in equity, over the vesting period of the awards. The grant date fair value is determined using the Black-Scholes model for option grants. The market value of the Company's shares on the date of the grant is used to determine the fair value of share units issued. Each tranche of an award is considered a separate award with its own vesting period and grant date fair value. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting (i.e. performance) conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

Where the terms of an equity-settled transaction award are modified, the minimum expense recognized is the expense as if the terms had not been modified and if the original terms of the award are met. An additional expense is recognized for any modification that increases the total fair value of the share-based payment transaction, or is otherwise beneficial to the employee as measured at the date of modification.

(m) Earnings per share:

Basic earnings per share are calculated by dividing profit or loss by the weighted average number of common shares outstanding during the reporting period. Diluted earnings per share are calculated similar to basic earnings per share except the weighted average number of common shares outstanding is adjusted for the effects of all dilutive potential common shares, which are comprised of additional shares from the assumed exercise or conversion of share options. Options that have a dilutive impact are assumed to have been exercised or converted on the later of the beginning of the period or the date granted.

4. Changes in significant accounting policies:

(a) IFRS 15: Revenue from Contracts with Customers ("IFRS 15"):

IFRS 15 provides a single, principles-based five-step model for revenue recognition to be applied to all customer contracts, and requires enhanced disclosures. The standard also provides guidance relating to recognition of customer contract acquisition and fulfilment costs.

Effective January 1, 2018, the Company adopted IFRS 15 using the cumulative effect method, with the effect of adopting this standard recognized on January 1, 2018, the date of initial application. Accordingly, the information presented for 2017 has not been restated. It remains as previously reported under IAS 18, IAS 11 and related interpretations.

Adoption of IFRS 15 has not impacted the accounting for the Company's SaaS, professional services or maintenance and support arrangements for the Company's legacy perpetual software licenses. However, adoption has impacted the accounting for the Company's on-premise and hybrid subscription license arrangements, its accounting for contract acquisition costs as well as requiring expanded disclosure on revenue, performance obligations and contract balances.

Prior to adopting IFRS 15, subscription fees for licenses and coterminous maintenance and support and hosting services were combined and recognized ratably over the term of the subscription contract. Under IFRS 15, the fees for on-premise and hybrid subscriptions are separately allocated to each distinct performance obligation. Revenue attributable to the distinct software license component is recognized upfront upon term commencement and revenue allocated to maintenance and support and hosting components is recognized ratably over the term. This results in earlier recognition of revenue for these subscription arrangements.

Prior to adopting IFRS 15, contract acquisition costs, including commissions paid to employees and referral fees to third parties, were expensed upon commencement of the related contract revenue.

Effective January 1, 2018, revenue from SaaS arrangements is reported as SaaS and subscription revenue. Revenue for maintenance and support from on-premise and hybrid arrangements and hosting services from hybrid arrangements is separately reported as subscription term license support revenue. Revenue for the software license component from on-premise arrangements is separately reported as subscription term license revenue. Professional services revenue and revenue from maintenance and support on legacy perpetual license arrangements continue to be reported separately.

In its adoption of IFRS 15, the Company has elected to apply the requirements of the new standard only to contracts that are incomplete at the date of initial application. The Company has also elected to apply the contract modification practical expedient and reflect the aggregate effect of all contract modifications prior to the transition date.

4. Changes in significant accounting policies (continued):

(a) IFRS 15: Revenue from Contracts with Customers ("IFRS 15") (continued):

The following table summarizes the impact of transition to IFRS 15 on the Company's retained earnings as at January 1, 2018:

	Impact of adopting IFRS 15 at January 1, 2018
Accelerated recognition of on-premise software component	$ 20,919
Capitalization of previously expensed contract acquisition costs	11,514
Related income tax impact	(8,600)
Impact at January 1, 2018	$ 23,833

The following table summarizes the impact of transition to IFRS 15 on the Company's statement of financial position as at January 1, 2018:

	Balance at December 31, 2017	Impact of adopting IFRS 15	Adjusted balance at January 1, 2018
Assets			
Cash and cash equivalents	$ 103,392	$ –	$ 103,392
Short-term investments	55,138	–	55,138
Trade and other receivables	31,651	9,773	41,424
Investment tax credits recoverable	911	–	911
Prepaid expenses	4,196	–	4,196
Property and equipment	17,350	–	17,350
Contract acquisition costs	–	11,514	11,514
Deferred tax assets	55	–	55
	$ 212,693	$ 21,287	$ 233,980
Liabilities and Shareholders' Equity			
Trade payables and accrued liabilities	$ 11,176	$ 5,601	$ 16,777
Current deferred revenue	67,040	(11,146)	55,894
Non-current deferred revenue	7,745	–	7,745
Deferred tax liabilities	1,944	2,999	4,943
Share capital	108,253	–	108,253
Contributed surplus	19,294	–	19,294
Accumulated other comprehensive loss	(284)	–	(284)
Retained earnings (deficit)	(2,475)	23,833	21,358
	$ 212,693	$ 21,287	$ 233,980

4. Changes in significant accounting policies (continued):

(b) IFRS 16: Leases ("IFRS 16"):

IFRS 16 specifies how to recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all major leases.

Effective January 1, 2018, the Company early adopted IFRS 16 using the modified retrospective approach and accordingly the information presented for 2017 has not been restated. It remains as previously reported under IAS 17 and related interpretations.

On initial application, the Company has elected to record right-of-use assets based on the corresponding lease liability. Right-of-use assets and lease obligations of $7,234 were recorded as of January 1, 2018, with no net impact on retained earnings. When measuring lease liabilities, the Company discounted lease payments using its incremental borrowing rate at January 1, 2018. The weighted-average rate applied is 5.5%.

The Company has elected to apply the practical expedient to account for leases for which the lease term ends within 12 months of the date of initial application as short-term leases.

The Company has elected to apply the practical expedient to grandfather the assessment of which transactions are leases on the date of initial application, as previously assessed under IAS 17 and IFRIC 4. The Company applied the definition of a lease under IFRS 16 to contracts entered into or changed on or after January 1, 2018.

The following table reconciles the Company's operating lease obligations at December 31, 2017, as previously disclosed in the Company's consolidated financial statements, to the lease obligations recognized on initial application of IFRS 16 at January 1, 2018:

Operating lease commitments at December 31, 2017	$ 11,847
Discounted using the incremental borrowing rate at January 1, 2018	10,515
Variable lease payments that do not depend on an index or rate	(3,588)
Recognition exemption for short-term leases	(23)
Extension options reasonably certain to be exercised	330
Lease obligations recognized at January 1, 2018	$ 7,234

(c) IFRS 9: Financial Instruments ("IFRS 9"):

Effective January 1, 2018, the Company adopted IFRS 9, which sets out requirements for recognition and measurement, impairment, derecognition and general hedge accounting. This standard simplifies the classification of a financial asset as either at amortized cost or at fair value as opposed to the multiple classifications which were permitted under IAS 39. This standard also requires the use of a single impairment method as opposed to the multiple methods in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets. The standard also adds guidance on the classification and measurement of financial liabilities.

Kinaxis Inc.

Consolidated Statements of Financial Position

As at December 31
(Expressed in thousands of USD)

	2018	2017*
Assets		
Current assets:		
Cash and cash equivalents	$ 126,144	$ 103,392
Short-term investments	55,404	55,138
Trade and other receivables (note 5)	64,330	31,651
Investment tax credits recoverable	–	911
Prepaid expenses	5,815	4,196
	251,693	195,288
Non-current assets:		
Property and equipment (note 6)	22,785	17,350
Right-of-use assets (note 7)	8,873	–
Contract acquisition costs (note 8)	13,902	–
Unbilled receivables	457	–
Deferred tax assets (note 17)	49	55
	$ 297,759	$ 212,693
Liabilities and Shareholders' Equity		
Current liabilities:		
Trade payables and accrued liabilities (note 9)	$ 21,623	$ 11,176
Deferred revenue (note 10)	78,496	67,040
Lease obligations (note 11)	2,572	–
	102,691	78,216
Non-current liabilities:		
Deferred revenue	–	7,745
Lease obligations (note11)	6,311	–
Deferred tax liabilities (note 17)	4,075	1,944
	10,386	9,689
Shareholders' equity:		
Share capital (note 12)	124,951	108,253
Contributed surplus	24,284	19,294
Accumulated other comprehensive loss	(319)	(284)
Retained earnings (deficit)	35,766	(2,475)
	184,682	124,788
Contingencies (note 24)		
	$ 297,759	$ 212,693

See accompanying notes to consolidated financial statements.

* The Company adopted IFRS 15 and 16 as described in Note 4. Under this adoption, the comparative information is not restated.

On behalf of the Board of Directors:

(signed) John (Ian) Giffen Director   *(signed) John Sicard* Director

4. Changes in significant accounting policies (continued):

(c) IFRS 9: Financial Instruments ("IFRS 9") (continued):

Trade and other receivables that were classified as loans and receivables under IAS 39 are classified as financial assets measured at amortized cost. There is no change to the initial measurement of the Company's financial assets. Impairment of financial assets is based on an expected credit loss ("ECL") model under IFRS 9, rather than the incurred loss model under IAS 39. ECLs are a probability-weighted estimate of credit losses. The Company calculated ECLs based on consideration of customer-specific factors and actual credit loss experience over the past five years. As a percentage of revenue, the Company's actual credit loss experience has not been material.

The adoption of IFRS 9 has not had an effect on the Company's accounting policies related to financial liabilities.

There was no material impact of transition to IFRS 9 on the Company's statement of financial position at January 1, 2018 .

(d) Impact of adopting IFRS 15 and 16:

The following tables summarize the impact of adopting IFRS 15 and IFRS 16 on the Company's consolidated statements of financial position as at December 31, 2018 and its consolidated statements of comprehensive income for the year ended December 31, 2018. There was no material impact on the Company's consolidated statements of cash flows for the year ended December 31, 2018 with the exception of lease payments being classified under financing cash flows instead of operating.

4. Changes in significant accounting policies (continued):

(d) Impact of adopting IFRS 15 and 16 (continued):

Impact on the consolidated statements of financial position as at December 31, 2018:

	As reported	IFRS 15 Adjustment	IFRS 16 Adjustment	Amount prior to IFRS 15 and 16
Assets				
Current assets:				
Cash and cash equivalents	$ 126,144	$ –	$ –	$ 126,144
Short-term investments	55,404	–	–	55,404
Trade and other receivables	64,330	(4,847)	(63)	59,420
Prepaid expenses	5,815	–	–	5,815
	251,693	(4,847)	(63)	246,783
Non-current assets:				
Property and equipment	22,785	–	–	22,785
Right-of-use assets	8,873	–	(8,873)	–
Contract acquisition costs	13,902	(13,902)	–	–
Unbilled receivables	457	(457)	–	–
Deferred tax assets	49	104	7	160
	$ 297,759	$ (19,102)	$ (8,929)	$ 269,728
Liabilities and Shareholders' Equity				
Current liabilities:				
Trade payables and accrued liabilities	$ 21,623	$ (5,193)	$ (190)	$ 16,240
Deferred revenue	78,496	11,435	–	89,931
Lease obligations	2,572	–	(2,572)	–
	102,691	6,242	(2,762)	106,171
Non-current liabilities:				
Lease obligations	6,311	–	(6,311)	–
Deferred tax liabilities	4,075	(2,691)	(41)	1,343
	10,386	(2,691)	(6,352)	1,343
Shareholders' equity:				
Share capital	124,951	–	–	124,951
Contributed surplus	24,284	–	–	24,284
Accumulated other comprehensive loss	(319)	(73)	–	(392)
Retained earnings	35,766	(22,580)	185	13,371
	184,682	(22,653)	185	162,214
	$ 297,759	$ (19,102)	$ (8,929)	$ 269,728

4. Changes in significant accounting policies (continued):

(d) Impact of adopting IFRS 15 and 16 (continued):

Impact on the consolidated statements of comprehensive income for the year ended December 31, 2018:

	As reported	IFRS 15 Adjustment	IFRS 16 Adjustment	Amount prior to IFRS 15 and 16
Revenue:				
Subscription services:				
SaaS and subscription	$ 97,157	$ 24,889	$ –	$ 122,046
Subscription term license support	10,730	(10,730)	–	–
	107,887	14,159	–	122,046
Professional services	31,854	–	–	31,854
Subscription term license	9,935	(9,935)	–	–
Maintenance and support	1,051	–	–	1,051
	150,727	4,224	–	154,951
Cost of revenue	47,032	–	136	47,168
Gross profit	103,695	4,224	(136)	107,783
Operating expenses:				
Selling and marketing	35,055	2,418	12	37,485
Research and development	27,626	–	48	27,674
General and administrative	20,167	(70)	(31)	20,066
	82,848	2,348	29	85,225
	20,847	1,876	(165)	22,558
Other income (expense):				
Foreign exchange loss	(181)	–	(326)	(507)
Net finance income	1,810	272	501	2,583
	1,629	272	175	2,076
Profit before income taxes	22,476	2,148	10	24,634
Income tax expense	8,068	895	(175)	8,788
Profit	14,408	1,253	185	15,846
Other comprehensive loss:				
Items that are or may be reclassified subsequently to profit or loss:				
Foreign currency translation differences – foreign operations	(35)	(73)	–	(108)
Total comprehensive income	$ 14,287	$ 1,180	$ 185	$ 15,738
Basic earnings per share	$ 0.56	$ 0.05	$ 0.01	$ 0.61
Diluted earnings per share	$ 0.54	$ 0.05	$ 0.01	$ 0.59

5. Trade and other receivables:

The following table presents the trade and other receivables for the Company:

	2018	2017
Trade accounts receivable	$ 56,618	$ 28,136
Unbilled receivables	6,408	1,507
Taxes receivable	566	665
Other	738	1,834
	64,330	32,142
Loss allowance	–	(491)
	$ 64,330	$ 31,651

Trade accounts receivable of $561 were written off in 2018 (2017 – none). The Company has determined that lifetime expected credit losses are not material as at December 31, 2018. Trade and other receivables as at December 31, 2018 and 2017 include the $2,532 referenced under Contingencies in Note 24(a).

6. Property and equipment:

The following table presents the property and equipment for the Company:

Cost	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
Balance, December 31, 2016	$ 14,505	$ 803	$ 129	$ 2,949	$ 18,386
Additions	9,207	116	206	620	10,149
Dispositions	(84)	–	–	–	(84)
Effects of movement in exchange rates	199	–	–	–	199
Balance, December 31, 2017	$ 23,827	$ 919	$ 335	$ 3,569	$ 28,650
Additions	9,713	1,179	158	1,260	12,310
Effects of movement in exchange rates	(172)	–	–	(10)	(182)
Balance, December 31, 2018	$ 33,368	$ 2,098	$ 493	$ 4,819	$ 40,778

Accumulated depreciation	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
Balance, December 31, 2016	$ 4,893	$ 503	$ 97	$ 2,241	$ 7,734
Depreciation	3,267	161	26	164	3,618
Dispositions	(84)	–	–	–	(84)
Effects of movement in exchange rates	32	–	–	–	32
Balance, December 31, 2017	$ 8,108	$ 664	$ 123	$ 2,405	$ 11,300
Depreciation	5,694	395	101	538	6,728
Effects of movement in exchange rates	(35)	–	–	–	(35)
Balance, December 31, 2018	$ 13,767	$ 1,059	$ 224	$ 2,943	$ 17,993

Carrying value	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
December 31, 2017	$ 15,719	$ 255	$ 212	$ 1,164	$ 17,350
December 31, 2018	$ 19,601	$ 1,039	$ 269	$ 1,876	$ 22,785

There were no asset dispositions in 2018 (2017 – no proceeds associated with asset dispositions).

7. Right-of-use assets:

The following table presents the right-of-use assets for the Company:

	Offices	Data centres	Total right-of-use assets
Balance, January 1, 2018 (note 4(b))	$ 3,927	$ 3,307	$ 7,234
Additions	–	4,245	4,245
Depreciation	(959)	(1,585)	(2,544)
Effects of movement in exchange rates	(14)	(48)	(62)
Balance, December 31, 2018	$ 2,954	$ 5,919	$ 8,873

8. Contract acquisition costs:

The following table presents changes in the contract acquisition costs balance:

Balance, January 1, 2018 (note 4(a))	$ 11,514
Additions	6,088
Amortization	(3,700)
Balance, December 31, 2018	$ 13,902

Amortization of contract acquisition costs is recorded in selling and marketing expense.

9. Trade payables and accrued liabilities:

The following table presents the trade payables and accrued liabilities for the Company:

	2018	2017
Trade accounts payable	$ 1,406	$ 3,307
Accrued liabilities	9,141	5,516
Taxes payable	11,076	2,353
	$ 21,623	$ 11,176

10. Deferred revenue:

The following table presents changes in the deferred revenue balance:

Balance, December 31, 2017	$	74,785
Adjustment on initial application of IFRS 15 (note 4(a))		(11,146)
Adjusted balance, January 1, 2018		63,639
Amounts invoiced and revenue deferred as at December 31, 2018		73,192
Recognition of deferred revenue included in the adjusted balance at the beginning of the period		(58,335)
Balance, December 31, 2018	$	78,496

11. Lease obligations:

The Company's leases are for office space and data centers. These leases contain no renewal option or a renewal option for one or two years. The Company has included renewal options in the measurement of lease obligations when it is reasonably certain to exercise the renewal option.

The following table presents lease obligations for the Company:

		2018
Current	$	2,572
Non-current		6,311
Total lease obligations	$	8,883

The following table presents the contractual undiscounted cash flows for lease obligations as at December 31, 2018:

Less than one year	$	2,942
One to five years		6,912
More than five years		119
Total undiscounted lease obligations	$	9,973

Interest expense on lease obligations for the year ended December 31, 2018 was $501. The expense relating to variable lease payments not included in the measurement of lease obligations was $739. This consists of variable lease payments for operating costs, property taxes, and insurance. Expenses relating to short-term leases were $256 and expenses relating to leases of low value assets were not material. Total cash outflow for leases was $3,656, including $2,160 of principal payments on lease obligations.

12. Share capital:

Authorized

The Company is authorized to issue an unlimited number of Common Shares.

Issued

	Common shares	
	Shares	Amount
Shares outstanding at December 31, 2016	24,940,114	$ 97,164
Shares issued from exercised options	512,874	9,437
Shares issued from vested restricted share units	54,934	1,652
Shares outstanding at December 31, 2017	25,507,922	$ 108,253
Shares issued from exercised options	511,862	14,012
Shares issued from vested restricted share units	37,565	1,834
Shares issued from exercised deferred share units	20,832	852
Shares outstanding at December 31, 2018	26,078,181	$ 124,951

Stock options plans

The following table presents the status of the stock option plans:

	2018		2017	
	Shares	Weighted average exercise price	Shares	Weighted average exercise price
Options outstanding, beginning of period	2,232,735	$ 31.92	2,459,872	$ 21.42
Granted	522,000	63.65	493,300	56.25
Exercised	(511,862)	19.77	(512,874)	13.07
Forfeited	(153,000)	53.96	(207,563)	29.74
Options outstanding, end of period	2,089,873	$ 38.32	2,232,735	$ 31.92
Options exercisable, end of period	851,622	$ 22.16	774,685	$ 14.58

12. Share capital (continued):

The following table presents information about stock options outstanding at December 31, 2018:

	Options outstanding			Options exercisable	
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
$ 1.50 to 3.50	250,159	2.67	$ 1.76	250,159	$ 1.76
8.50 to 13.50	185,100	5.27	10.50	182,600	10.46
18.50 to 21.00	41,250	6.23	19.55	7,500	18.72
27.50 to 34.00	531,425	6.96	32.59	235,925	32.43
44.00 to 50.50	339,337	6.34	47.19	87,237	45.46
50.50 to 56.00	390,602	5.44	54.02	88,201	53.99
59.50 to 63.50	279,000	4.23	62.25	–	–
69.50 to 70.50	73,000	4.61	69.64	–	–
	2,089,873	5.45	$ 38.32	851,622	$ 22.16

The Company has outstanding stock options issued under its 2010 and 2012 stock option plans. No further options may be granted under the 2010 and 2012 stock option plans. In June 2017, the Company adopted a new Canadian Resident Plan and a new Non-Canadian Resident Plan. Stock options granted under the new plans will have an exercise price equal to or greater than the stock's TSX price at the date of grant as determined by the Board of Directors and the maximum term of these options will be five years. Options are granted periodically and typically vest over four years.

At December 31, 2018, there were 1,549,200 stock options available for grant under the Plans. In 2018, the Company granted 522,000 (2017 – 493,300) options and recorded share-based compensation expense of $8,232 (2017 – $6,930) related to the vesting of options granted in 2018 and previous years. The per share weighted-average fair value of stock options granted in 2018 was $17.34 (2017 – $17.15) on the date of grant using the Black Scholes option-pricing model with the following weighted-average assumptions: exercise price is equal to the price of the underlying share, expected dividend yield of 0%, risk-free interest rate of 2.65% (2017 – 1.81%), an expected life of 2 to 5 years (2017 – 2 to 6 years), estimated volatility of 38% (2017 – 42%). The forfeiture rate was estimated at 10% (2017 – 10%). The forfeiture rate is estimated based upon an analysis of actual forfeitures.

Share Unit Plan

At December 31, 2018, there were 354,133 share units available for grant under the Plan. In 2018, the Company granted 58,200 (2017 – 45,500) restricted share units ("RSU") and 13,098 were forfeited (2017 – nil). There were 52,634 (2017 – 45,097) RSUs outstanding at December 31, 2018. Each RSU entitles the participant to receive one Common Share. The RSUs vest over time in three equal annual tranches. The weighted-average grant date fair value of the RSUs granted in 2018 was $66.16 (2017 – $55.71) per unit using the fair value of a Common Share at time of grant. The

12. Share capital (continued):

Company recorded share-based compensation expense of $2,436 (2017 – $1,916) related to the RSUs.

In 2018, the Company granted 13,800 (2017 – 16,194) deferred share units ("DSU"). There were 30,830 (2017 – 37,862) DSUs outstanding at December 31, 2018. Each DSU entitles the participant to receive one Common Share. The DSUs vest immediately as the participants are entitled to the shares upon termination of their service. The fair value of the DSUs granted in 2018 was $65.23 (2017 – $55.71) per unit using the fair value of a Common Share at time of grant. The Company recorded share-based compensation of $900 (2017 – $900) related to the DSUs.

The following table presents the share-based payments expense by function:

	2018	2017
Cost of revenue	$ 844	$ 1,183
Selling and marketing	4,644	2,813
Research and development	1,053	1,110
General and administrative	5,027	4,640
	$ 11,568	$ 9,746

13. Earnings per share:

The following table summarizes the calculation of the weighted average number of basic and diluted common shares:

	2018	2017
Issued Common Shares at beginning of period	25,507,922	24,940,114
Effect of shares issued from exercise of options	300,799	370,967
Effect of shares issued from vesting of restricted share units	2,161	3,010
Effect of shares issued from vesting of deferred share units	9,636	–
Weighted average number of basic Common Shares at end of period	25,820,518	25,314,091
Effect of share options on issue	890,135	1,043,105
Effect of share units on issue	113,782	122,425
Weighted average number of diluted Common Shares at end of period	26,824,435	26,479,621

For the year ended December 31, 2018, 352,000 (2017 – 736,106) options were excluded from the weighted average number of diluted common shares as their effect would have been anti-dilutive.

Kinaxis Inc.

Consolidated Statements of Comprehensive Income

For the years ended December 31
(Expressed in thousands of USD, except share and per share data)

		2018		2017*
Revenue (note 14)	$	150,727	$	133,317
Cost of revenue		47,032		39,780
Gross profit		103,695		93,537
Operating expenses:				
Selling and marketing		35,055		29,280
Research and development		27,626		23,691
General and administrative		20,167		13,855
		82,848		66,826
		20,847		26,711
Other income (expense):				
Foreign exchange loss		(181)		(84)
Net finance income		1,810		1,131
		1,629		1,047
Profit before income taxes		22,476		27,758
Income tax expense (recovery) (note 17):				
Current		8,930		6,659
Deferred		(862)		716
		8,068		7,375
Profit		14,408		20,383
Other comprehensive income (loss):				
Items that are or may be reclassified subsequently to profit or loss:				
Foreign currency translation differences - foreign operations		(35)		235
Total comprehensive income	$	14,373	$	20,618
Basic earnings per share	$	0.56	$	0.81
Weighted average number of basic Common Shares (note 13)		25,820,518		25,314,091
Diluted earnings per share	$	0.54	$	0.77
Weighted average number of diluted Common Shares (note 13)		26,824,435		26,479,621

See accompanying notes to consolidated financial statements.

* The Company adopted IFRS 15 and 16 as described in Note 4. Under this adoption, the comparative information is not restated.

14. Revenue:

The following table presents the revenue of the Company:

	2018	2017*
Subscription services:		
SaaS and subscription	$ 97,157	$ 100,813
Subscription term license support	10,730	–
	107,887	100,813
Professional services	31,854	31,469
Subscription term license	9,935	–
Maintenance and support	1,051	1,035
	$ 150,727	$ 133,317

* The Company adopted IFRS 15 as described in Note 4. Under this adoption, the comparative information is not restated.

The following table presents revenue expected to be recognized in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at December 31, 2018:

	2019	2020	2021 and thereafter	Total
SaaS	$ 100,462	$ 62,066	$ 59,768	$ 222,296
Subscription term license support	8,382	3,207	2,174	13,763
Subscription term license	176	–	–	176
Maintenance and support	908	167	167	1,242
	$ 109,928	$ 65,440	$ 62,109	$ 237,477

15. Personnel expenses:

The following table presents the personnel expenses of the Company:

	2018	2017
Salaries including bonuses	$ 59,538	$ 49,106
Benefits	9,355	7,627
Commissions	5,329	5,293
Share-based payments	11,568	9,746
	$ 85,790	$ 71,772

16. Depreciation:

The following table presents the total depreciation expense by function:

	2018	2017
Cost of revenue	$ 6,299	$ 2,745
Selling and marketing	4	4
Research and development	1,282	593
General and administrative	1,687	276
	$ 9,272	$ 3,618

17. Income tax expense:

The income tax amounts recognized in profit and loss are as follows:

	2018	2017
Current tax expense		
Current income tax	$ 8,930	$ 6,659
Deferred tax (recovery) expense		
Origination and reversal of temporary differences	(862)	716
	$ 8,068	$ 7,375

A reconciliation of the income tax expense to the expected amount using the Company's Canadian tax rate is as follows:

	2018	2017
Canadian tax rate	26.50%	26.50%
Expected Canadian income tax expense	$ 5,956	$ 7,356
Increase (reduction) in income taxes resulting from:		
Difference between current and future tax rates and other	13	(776)
Foreign tax rate differences	60	400
Permanent difference of share-based payments	2,045	2,004
Foreign exchange differences	(6)	(1,609)
	$ 8,068	$ 7,375

Foreign exchange differences during 2017 arose upon conversion of the financial statements of Kinaxis Inc. from USD, its functional currency, to Canadian dollars, the currency used for tax filing purposes. For 2018 and subsequent years, the Company filed an election to report in USD for Canadian tax purposes.

17. Income tax expense (continued):

The following table summarizes the impact of transition to IFRS 15 on the Company's deferred tax balances as at January 1, 2018:

	Impact of adopting IFRS 15 at January 1, 2018
Balance, December 31, 2017	$ (1,889)
Contract acquisition costs	(3,051)
Other	52
Adjusted balance, January 1, 2018	$ (4,888)

The following tables present the tax effects of temporary differences and carry-forwards, as well as movements in the deferred tax balances:

	Balance at January 1, 2018	Recognized in profit and loss	Balance at December 31, 2018
Deferred tax assets (liabilities):			
Tax effect of investment tax credits	$ (1,202)	$ 807	$ (395)
Share issuance costs	336	(240)	96
Property and equipment	(1,448)	(749)	(2,197)
Contract acquisition costs	(3,051)	(309)	(3,360)
Stock based compensation	–	1,070	1,070
Net operating loss carryforwards	–	658	658
Other	477	(375)	102
	$ (4,888)	$ 862	$ (4,026)

	Balance at January 1, 2017	Recognized in profit and loss	Balance at December 31, 2017
Deferred tax assets (liabilities):			
Tax effect of investment tax credits	$ (937)	$ (265)	$ (1,202)
Share issuance costs	540	(204)	336
Property and equipment	(1,056)	(392)	(1,448)
Other	280	145	425
	$ (1,173)	$ (716)	$ (1,889)

The Company does not have investment tax credits available to reduce federal income taxes payable in Canada as at December 31, 2018 (2017 – $911).

The company has foreign net operating loss carryforwards of $2,520 as at December 31, 2018 (2017 – $nil). These carryforwards are not currently subject to expiration dates and primarily relate to operations in the United States, United Kingdom and Hong Kong.

17. Income tax expense (continued):

Deferred tax liabilities have not been recognized for temporary differences associated with investments in subsidiaries as the Company is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future. The aggregate amount of these temporary differences at December 31, 2018 was $10,714 (2017 – $8,491).

18. Statement of cash flow:

The following table presents the changes in operating assets and liabilities:

	2018	2017
Trade and other receivables	$ (23,302)	$ (6,835)
Investment tax credit receivable	–	1,583
Prepaid expenses	(1,633)	(838)
Contract acquisition costs	(2,429)	–
Trade payables and accrued liabilities	(1,118)	(2,296)
Deferred revenue	15,267	5,757
	$ (13,215)	$ (2,629)

19. Credit facility:

The Company has a CAD$20.0 million revolving demand credit facility which bears interest at bank prime plus 0.50% per annum and has not been drawn as at December 31, 2018.

In addition to providing a general security agreement representing a first charge over the Company's assets, the Company must meet certain financial covenants as specified in the facility agreement. The Company was in compliance with these financial covenants as at December 31, 2018 and continues to be at the time of approval of these consolidated financial statements. In the event that the Company's aggregate borrowings under the revolving facility exceed CAD$2.5 million, a borrowing limit applies that is based principally on the Company's accounts receivable.

20. Financial instruments:

The carrying amounts of investments, trade and other receivables, unbilled receivables, and trade payables and accrued liabilities approximate fair market value due to the short-term maturity of these instruments.

Financial risk management:

(a) Credit risk:

Credit risk is the risk of an unexpected loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its trade and other receivables.

20. Financial instruments (continued):

(a) Credit risk (continued):

The maximum exposure to credit risk for trade receivables by geographic region was as follows:

	2018	2017
United States	$ 36,684	$ 23,790
Europe	16,397	1,335
Asia	2,827	2,520
Canada	710	–
	$ 56,618	$ 27,645

The aging of the net trade receivables at December 31 was as follows:

	2018	2017
Current	$ 40,321	$ 23,158
Past due:		
0 – 30 days	13,269	2,609
31 – 60 days	746	13
Greater than 60 days	2,282	1,865
	$ 56,618	$ 27,645

The nature of the Company's subscription based business results in payments being received in advance of the majority of the services being delivered; as a result, the Company's credit risk exposure is low. At December 31, 2018, no customers individually accounted for greater than 10% of total trade receivables (December 31, 2017 – three customers). For the year ended December 31, 2018, no customers individually accounted for more than 10% of revenue (2017 – no customers).

The Company measures a loss allowance based on the lifetime expected credit losses. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, the number of delayed payments in the portfolio past the average credit period, observable changes in national or local economic conditions that correlate with default on receivables, financial difficulty of the borrower, and it becoming probable that the borrower will enter bankruptcy or financial re-organization. Financial assets are written off when there is no reasonable expectation of recovery. During the year ended December 31, 2018, the Company wrote off $561 of trade receivables that were deemed not collectible (2017 – no balances written off). As at December 31, 2018, the Company has not recorded a loss allowance (2017 – allowance of $491).

20. Financial instruments (continued):

(a) Credit risk (continued):

The Company invests its excess cash in short-term investments with the objective of maintaining safety of principal and providing adequate liquidity to meet all current payment obligations and future planned capital expenditures with the secondary objective of maximizing the overall yield of the investment. The Company manages its credit risk on investments by dealing only with major Canadian banks and investing only in instruments that management believes have high credit ratings. Given these high credit ratings, the Company does not expect any counterparties to these investments to fail to meet their obligations.

The Company's exposure to credit risk is limited to the carrying amount of financial assets.

(b) Liquidity risk:

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due.

The Company's approach to managing liquidity risk is to ensure, as far as possible, that it will always have sufficient liquidity to meet liabilities when due. The Company also manages liquidity risk by continuously monitoring actual and budgeted expenses. Furthermore, the Board of Directors reviews and approves the Company's operating and capital budgets, as well as any material transactions out of the ordinary course of business, including acquisitions or other major investments or divestitures.

At December 31, 2018, the Company had cash and cash equivalents and short-term investments totaling $181,548 (2017 – $158,530). Further, the Company has a credit facility as disclosed in Note 19. The Company's trade payables and accrued liabilities are due within 3 months or less.

(c) Market risk:

Market risk is the risk that changes in market prices, such as foreign exchange rates and interest rates, will affect the Company's income or the value of its holdings of financial instruments.

Currency risk

A portion of the Company's revenues and operating costs are realized in currencies other than its functional currency, such as the Canadian dollar, Japanese Yen, Euro, Great British Pound, and Korean Won. As a result, the Company is exposed to currency risk on these transactions. Additional earnings volatility arises from the translation of monetary assets and liabilities denominated in foreign currencies at the rate of exchange on each date of the Consolidated Statements of Financial Position; the impact of which is reported as a foreign exchange gain or loss. The Company is also subject to currency risk on its income tax expense due to foreign exchange impacts resulting from translating financial results to local currency for Canadian tax reporting purposes.

20. Financial instruments (continued):

(c) Market risk (continued):

The Company's objective in managing its currency risk is to minimize its exposure to currencies other than its functional currency. The Company does so by matching foreign denominated assets with foreign denominated liabilities.

The Company is mainly exposed to fluctuations between the U.S. dollar and the Canadian dollar. For the year ending December 31, 2018, if the Canadian dollar had strengthened 5% against the U.S. dollar, with all other variables held constant, pre-tax income for the year would have been $2,953 lower (2017 – $1,764 lower). Conversely, if the Canadian dollar had weakened 5% against the U.S. dollar with all other variables held constant, there would be an equal, and opposite impact, on pre-tax income.

The summary quantitative data about the Company's exposure to currency risk is as follows:

December 31, 2018 In thousands of local currency	USD	CAD	JPY	EUR	GBP	KRW
Trade receivables	51,590	57	68,887	3,556	–	331,472
Unbilled receivables	3,798	113	328,685	–	–	–
Other receivables	317	214	24,796	20	12	–
Trade payables	(173)	(1,083)	(36,125)	(41)	(4)	(53,684)
Accrued liabilities	(4,046)	(5,080)	(37,127)	(198)	(600)	(9,479)
	51,486	(5,779)	349,116	3,337	(592)	268,309

December 31, 2017 In thousands of local currency	USD	CAD	JPY	EUR	HKD	KRW
Trade receivables	26,547	–	49,250	551	–	–
Other receivables	2,350	747	44,104	107	2	5,181
Trade payables	(1,774)	(713)	(96,992)	(34)	(27)	(24,742)
Accrued liabilities	(2,934)	(2,701)	(9,159)	(261)	–	(18,913)
	24,189	(2,667)	(12,797)	363	(25)	(38,474)

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company believes that interest rate risk is low as the majority of investments are made in fixed rate instruments. As of December 31, 2018, the Company has not drawn on the revolving demand facility.

21. Segmented information:

The Company's Chief Executive Officer ("CEO") has been identified as the chief operating decision maker. The CEO evaluates the performance of the Company and allocates resources based on the information provided by the Company's internal management system at a consolidated level. The Company has determined that it has only one operating segment.

Geographic information

To better represent the source of the underlying business, the following table presents revenue for 2018 and 2017 attributed to geographic areas based on the primary business location of the customer, rather than the location of the customer's contracting entity as reported in prior periods.

	2018	2017*
United States	$ 103,060	$ 103,392
Europe	33,226	17,230
Asia	12,373	10,419
Canada	2,068	2,276
	$ 150,727	$ 133,317

* The Company adopted IFRS 15 as described in Note 4. Under this adoption, the comparative information is not restated.

The following table presents total property and equipment on a geographic basis:

	2018	2017
Canada	$ 12,547	$ 10,895
Asia	4,616	1,374
United States	3,422	2,876
Europe	2,200	2,205
	$ 22,785	$ 17,350

The following table presents total right-of-use assets on a geographic basis:

	2018
Canada	$ 4,214
Asia	2,966
Europe	1,085
United States	608
	$ 8,873

22. Related party transactions:

Details of the Company's subsidiaries at December 31, 2018 and 2017 are as follows:

Name of subsidiary	Principal activity	Place of incorporation and operation	Proportion of ownership interest and voting power held	
			2018	2017
Kinaxis Asia Limited	Sales	Hong Kong	100%	100%
Kinaxis Corp.	Sales	State of Delaware, USA	100%	100%
Kinaxis Europe B.V.	Sales	The Netherlands	100%	100%
Kinaxis Japan K.K.	Sales	Japan	100%	100%
Kinaxis Korea Limited	Sales	South Korea	100%	100%
Kinaxis UK Limited	Sales	United Kingdom	100%	–

Balances and transactions between the Company and its subsidiaries, which are related parties of the Company, have been eliminated on consolidation and are not disclosed in this note.

During the year, the Company did not enter into any transactions with related parties other than key management personnel, as described below.

Compensation of key management personnel

The Company defines key management personnel as being the Board of Directors, the CEO and his direct reports. The remuneration of key management personnel during the year were as follows:

	2018	2017
Salary and other short-term benefits	$ 4,063	$ 3,225
Share-based payments	8,002	5,949
	$ 12,065	$ 9,174

23. Capital management:

The Company's capital is composed of its shareholders' equity. The Company's objective in managing its capital is to ensure financial stability and sufficient liquidity to increase shareholder value through organic growth and investment in sales, marketing and product development. The Company's senior management is responsible for managing the capital through regular review of financial information to ensure sufficient resources are available to meet operating requirements and investments to support its growth strategy. The Board of Directors is responsible for overseeing this process. In order to maintain or adjust its capital structure, the Company could issue new shares, repurchase shares, approve special dividends or issue debt.

The Company has access to a revolving demand facility bears interest at bank prime plus 0.50% per annum which has not been drawn as at December 31, 2018. The terms of the facility require the Company to meet certain financial covenants which are monitored by senior management to ensure compliance.

24. Contingencies:

a) During the second quarter of 2017, an Asian-based customer did not make certain scheduled payments under its contract. During the third quarter of 2017, the Company terminated the contract, the Company ceased providing services to this customer, and, as per the dispute resolution procedures in its contract with the customer, the Company has initiated confidential, binding arbitration proceedings for payment of all amounts due under the contract and damages. The customer has denied the Company's claims, alleges breach by the Company, and has asserted its own counterclaims. The Company has not recorded any liability for the customer's counterclaims as it believes the customer's positions and assertions are without merit. While the Company did not recognize revenue for this customer effective with the second quarter of 2017, as at December 31, 2018, trade and other receivables from this customer totaled $2,532. The Company believes the receivables recorded are collectible and it will be successful in asserting its claims.

b) In the normal course of business, the Company and its subsidiaries enter into lease agreements for facilities or equipment. It is common in such commercial lease transactions for the Company or its subsidiaries as the lessee to agree to indemnify the lessor and other related third parties for liabilities that may arise from the use of the leased assets. The maximum amount potentially payable under the foregoing indemnities cannot be reasonably estimated. The Company has liability insurance that relates to the indemnifications described above.

c) The Company includes standard intellectual property indemnification clauses in its software license and service agreements. Pursuant to these clauses, and subject to certain limitations, the Company holds harmless and agrees to defend the indemnified party, generally the Company's business partners and customers, in connection with certain patent, copyright or trade secret infringement claims by third parties with respect to the Company's products. The term of the indemnification clauses is generally for the subscription term and applicable statutory period after execution of the software license and service agreement. In the event an infringement claim against the Company or an indemnified party is successful, the Company, at its sole option, agrees to do one of the following: (i) procure for the indemnified party the right to continue use of the software; (ii) provide a modification to the software so that its use becomes non-infringing; (iii) replace the software with software which is substantially similar in functionality and performance; or (iv) refund the residual value of the software license fees paid by the indemnified party for the infringing software. The Company believes the estimated fair value of these intellectual property indemnification clauses is minimal.

   Historically, the Company has not made any significant payments related to the above-noted guarantees and indemnities and accordingly, no liabilities have been accrued in the consolidated financial statements.

Kinaxis Inc.

Consolidated Statements of Changes in Shareholders' Equity

For the years ended December 31
(Expressed in thousands of USD)

	Share capital	Contributed surplus	Accumulated other comprehensive income (loss)	Retained earnings (deficit)	Total equity*
Balance, December 31, 2016	$ 97,164	$ 13,924	$ (519)	$ (22,858)	$ 87,711
Profit	–	–	–	20,383	20,383
Other comprehensive income	–	–	235	–	235
Total comprehensive income	–	–	235	20,383	20,618
Share options exercised	9,437	(2,724)	–	–	6,713
Restricted share units vested	1,652	(1,652)	–	–	–
Share based payments (note 12)	–	9,746	–	–	9,746
Total shareholder transactions	11,089	5,370	–	–	16,459
Balance, December 31, 2017	$ 108,253	$ 19,294	$ (284)	$ (2,475)	$ 124,788
Adjustment on initial application of IFRS 15 (note 4)	–	–	–	23,833	23,833
Balance, January 1, 2018	108,253	19,294	(284)	21,358	148,621
Profit	–	–	–	14,408	14,408
Other comprehensive loss	–	–	(35)	–	(35)
Total comprehensive income (loss)	–	–	(35)	14,408	14,373
Share options exercised	14,012	(3,892)	–	–	10,120
Restricted share units vested	1,834	(1,834)	–	–	–
Deferred share units exercised	852	(852)	–	–	–
Share based payments (note 12)	–	11,568	–	–	11,568
Total shareholder transactions	16,698	4,990	–	–	21,688
Balance, December 31, 2018	$ 124,951	$ 24,284	$ (319)	$ 35,766	$ 184,682

See accompanying notes to consolidated financial statements.

* The Company adopted IFRS 15 and 16 as described in Note 4. Under this adoption, the comparative information is not restated.

Kinaxis Inc.

Consolidated Statements of Cash Flows

For the years ended December 31
(Expressed in thousands of USD)

	2018	2017*
Cash flows from operating activities:		
Profit	$ 14,408	$ 20,383
Items not affecting cash:		
Depreciation of property and equipment (note 16)	9,272	3,618
Share-based payments (note 12)	11,568	9,746
Amortization of lease inducement	–	(18)
Investment tax credits recoverable	911	(156)
Net finance income	(1,810)	(1,131)
Income tax expense (note 17)	8,068	7,375
Change in operating assets and liabilities (note 18)	(13,215)	(2,629)
Interest received	2,413	999
Interest paid	(773)	–
Income taxes paid	(2,927)	(4,624)
	27,915	33,563
Cash flows used in investing activities:		
Purchase of property and equipment (note 6)	(12,310)	(10,149)
Purchase of short-term investments	(112,684)	(80,006)
Redemption of short-term investments	112,588	25,000
	(12,406)	(65,155)
Cash flows from financing activities:		
Payment of lease obligations (note 11)	(2,160)	–
Common shares issued on exercise of stock options	10,120	6,713
	7,960	6,713
Increase in cash and cash equivalents	23,469	(24,879)
Cash and cash equivalents, beginning of year	103,392	127,910
Effects of exchange rates on cash and cash equivalents	(717)	361
Cash and cash equivalents, end of year	$ 126,144	$ 103,392

See accompanying notes to consolidated financial statements.

* The Company adopted IFRS 15 and 16 as described in Note 4. Under this adoption, the comparative information is not restated.

1. Corporate information:

Kinaxis Inc. ("Kinaxis" or the "Company") is incorporated under the Canada Business Corporations Act and domiciled in Ontario, Canada. The address of the Company's registered office is 700 Silver Seven Road, Ottawa, Ontario. The consolidated financial statements of the Company as at and for the years ended December 31, 2018 and 2017 comprise the Company and its subsidiaries.

Kinaxis is a leading provider of cloud-based subscription software that enables its customers to improve and accelerate analysis and decision-making across their supply chain operations. Kinaxis is a global enterprise with offices in Chicago, United States; Hong Kong, China; Tokyo, Japan; Seoul, South Korea; Eindhoven, The Netherlands; London, United Kingdom; and Ottawa, Canada.

2. Basis of preparation:

(a) Statement of compliance:

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"), and include the accounts of Kinaxis Inc. and its six wholly-owned subsidiaries, Kinaxis Corp., Kinaxis Asia Limited, Kinaxis Japan K.K., Kinaxis Korea Limited, Kinaxis Europe B.V., and Kinaxis UK Limited.

The consolidated financial statements were authorized for issue by the Board of Directors on February 28, 2019.

(b) Measurement basis:

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments measured at fair value. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

(c) Presentation currency:

These consolidated financial statements are presented in United States dollars ("USD") which is the functional currency of the Company and its subsidiaries unless otherwise stated. Tabular amounts are presented in thousands of USD.

(d) Foreign currency:

Foreign currency transactions

The financial statements of the Company and its wholly-owned subsidiaries (excluding Kinaxis Japan K.K., Kinaxis Korea Limited, Kinaxis Europe B.V., and Kinaxis UK Limited), are measured using USD as the functional currency. Transactions in currencies other than USD are translated at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated to the functional currency at the rates prevailing at that date. Exchange differences on monetary items are recognized in profit or loss in the period in which they arise. Non-monetary items carried at fair

2. Basis of preparation (continued):

(d) Foreign currency (continued):

value that are denominated in foreign currencies are translated to the functional currency at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the rates at the date of the transaction.

Foreign operations

The consolidated financial statements also include the accounts of its wholly-owned subsidiaries Kinaxis Japan K.K., Kinaxis Korea Limited, Kinaxis Europe B.V., and Kinaxis UK Limited translated into U.S. dollars. The financial statements of Kinaxis Japan K.K. are measured using the Japanese Yen as its functional currency; the financial statements of Kinaxis Korea Limited are measured using the Korean Won as its functional currency; the financial statements of Kinaxis Europe B.V. are measured using the European Euro as its functional currency; and the financial statements of Kinaxis UK Limited are measured using the British Pound as its functional currency. Assets and liabilities have been translated into USD using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuate significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in shareholders' equity.

(e) Use of estimates and judgments:

The preparation of the consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenue, expenses and disclosure of contingent assets and liabilities. Actual results may differ from these estimates.

Estimates and judgments included, but are not limited to, the allocation of consideration for a multiple element revenue arrangement, recognition of deferred tax assets, valuation of trade and other receivables, valuation of investment tax credits recoverable and valuation of share-based payments. Estimates and assumptions are reviewed periodically and the effects of revisions are recorded in the consolidated financial statements in the period in which the estimates are revised and in any future periods affected.

Allocation of consideration to multiple elements of a revenue arrangement

Contracts with customers often include promises to deliver multiple products and services. Determining whether such bundled products and services are considered i) distinct performance obligations that should be separately recognized, or ii) non-distinct and therefore should be combined with another good or service and recognized as a combined unit of accounting may require significant judgment. In general, the Company's professional services are capable of being distinct as they could be performed by third party service providers and do not involve significant customization of the licensed software.

2. Basis of preparation (continued):

(e) Use of estimates and judgments (continued):

The determination of the standalone selling prices ("SSP") for distinct performance obligations can also require judgment and estimates. The Company uses a single amount to estimate SSP for bundled items such as subscription licenses and maintenance and support in subscription arrangements that are not sold separately. The Company uses a range of amounts to estimate SSP when it sells each of the products and services separately and needs to determine whether there is a discount that needs to be allocated based on the relative SSP of the various products and services. In general, SSP for maintenance and support bundled in on-premise and hybrid subscription arrangements is established as a percentage of the subscription license fee as supported by third party evidence and internal analysis of similar vendor contracts. SSP for hosting and professional services is established based on observable prices for the same or similar services when sold separately, or estimated using a cost plus margin approach.

Income taxes

The recognition of deferred tax assets requires the Company to assess future taxable income available to utilize deferred tax assets related to deductible or taxable temporary differences. The Company considers the nature and carry-forward period of deferred tax assets, the Company's recent earnings history and forecast of future earnings in performing this assessment. The actual deferred tax assets realized may differ from the amount recorded due to factors having a negative impact on operating results of the Company and lower future taxable income.

Trade and other receivables

The recognition of trade and other receivables and loss allowances requires the Company to assess credit risk and collectability. The Company considers historical trends and any available information indicating a customer could be experiencing liquidity or going concern problems and the status of any contractual or legal disputes with customers in performing this assessment.

Investment tax credits recoverable

The recognition of investment tax credits recoverable requires the Company to assess future tax payable available to utilize the investment tax credits. The Company considers the carry-forward period of the investment tax credits, the Company's recent earnings history and forecast of future earnings in performing this assessment.

The Company determines the value of effort expended towards research and development projects that qualify for investment tax credits and calculates the estimated recoverable to be recognized. The allocation of direct salaries to qualifying projects is derived from time records and assessment by management. The actual investment tax credits claimed and realized may differ from the estimate based on the final tax returns and review by tax authorities.

2. Basis of preparation (continued):

(e) Use of estimates and judgments (continued):

Fair value of share-based payments

The Company uses the Black-Scholes valuation model to determine the fair value of equity settled stock options. Estimates are required for inputs to this model including the fair value of the underlying shares, the expected life of the option, volatility, expected dividend yield and the risk-free interest rate. Variation in actual results for any of these inputs will result in a different value of the stock option realized from the original estimate. The assumptions and estimates used are further outlined in Note 12.

3. Significant accounting policies:

(a) Basis of consolidation:

Subsidiaries are entities controlled by the Company. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. The accounting policies of subsidiaries have been changed when necessary to align them with the policies adopted by the Company. All intercompany transactions, balances, revenues and expenses between the Company and its subsidiaries have been eliminated.

(b) Revenue recognition:

Revenue is recognized upon transfer of control of products or services to customers at an amount that reflects the consideration the Company expects to receive in exchange for the products or services. The Company's contracts often include multiple products and services, which are generally capable of being distinct and accounted for as separate performance obligations.

The Company's hosted software-as-a-service ("SaaS") application, which allows customers to use hosted software over the contract period without taking possession of the software, is provided on a subscription basis, and recognized ratably over the contract period, commencing on the date an executed contract exists and the customer has the right-to-use and access to the platform.

On-premise, fixed term subscription licenses and hybrid software subscriptions (where the customer has the option to take the hosted software on-premise) provide the customer with a right-to-use the software as it exists when made available to the customer. Revenue from distinct on-premise subscription licenses is recognized upfront at the point in time when the software is made available to the customer and the right to use the software has commenced. On-premise subscription licenses and hybrid subscriptions are bundled with software maintenance and support services and/or hosting for a term. The license component and maintenance and support/hosting components are each allocated revenue using their relative estimated SSP. Revenue allocated to the bundled maintenance and support and hosting is recognized ratably over the term of the maintenance and support services.

KINAXIS INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE YEAR ENDED DECEMBER 31, 2018

DATED: February 28, 2019

	As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2017	Pre-IFRS 15/16 As at December 31, 2016
	(In thousands of USD)			
Total assets	$ 297,759	$ 269,728	$ 212,693	$ 168,292
Total non-current liabilities	10,386	1,343	9,689	14,628

Reconciliation of Non-IFRS Measures

Adjusted profit and Adjusted diluted earnings per share

Adjusted profit represents profit adjusted to exclude our equity compensation plans. Adjusted diluted earnings per share represents diluted earnings per share using Adjusted profit. We use Adjusted profit and Adjusted diluted earnings per share to measure our performance as these measures better align with our results and improve comparability against our peers.

Adjusted EBITDA

Adjusted EBITDA represents profit adjusted to exclude our equity compensation plans, income tax expense, depreciation, foreign exchange loss (gain) and net financing (income) expense. We use Adjusted EBITDA to provide readers with a supplemental measure of our operating performance and thus highlight trends in our core business that may not otherwise be apparent when relying solely on IFRS financial measures.

We believe that securities analysts, investors and other interested parties frequently use non-IFRS measures in the evaluation of performance. Management also uses non-IFRS measures in order to facilitate operating performance comparisons from period to period, prepare annual operating budgets and assess our ability to meet our capital expenditure and working capital requirements.

We have reconciled Adjusted profit and Adjusted EBITDA to the most comparable IFRS financial measure as follows:

	Three months ended December 31,			Year ended December 31,			
		Pre-IFRS 15/16			Pre-IFRS 15/16		
	2018	2018	2017	2018	2018	2017	2016
	(In thousands of USD)						
Profit	$ 2,925	$ 2,978	$ 5,485	$ 14,408	$ 15,846	$ 20,383	$ 10,745
Share-based compensation	2,924	2,924	2,334	11,568	11,568	9,746	8,140
Adjusted profit	$ 5,849	$ 5,902	$ 7,819	$ 25,976	$ 27,414	$ 30,129	$ 18,885
Income tax expense	1,796	2,028	2,584	8,068	8,788	7,375	7,258
Depreciation	2,571	1,894	1,101	9,272	6,728	3,618	2,494
Foreign exchange loss (gain)	(22)	117	31	181	507	84	198
Net finance income	(1,208)	(1,270)	(378)	(1,810)	(2,583)	(1,131)	(307)
	3,137	2,769	3,338	15,711	13,440	9,946	9,643
Adjusted EBITDA	$ 8,986	$ 8,671	$ 11,157	$ 41,687	$ 40,854	$ 40,075	$ 28,528
Adjusted EBITDA as a percentage of revenue	23%	22%	32%	28%	26%	30%	25%

Revenue

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		2017 to 2018
	2018	**2017**	**%**	**2018**	**2017**	**%**
			(In thousands of USD)			
Subscription services:						
SaaS and subscription	$ 25,492	$ 26,961	(5%)	$ 31,750	$ 26,961	18%
Subscription term license support	2,707	–	–	–	–	–
	28,199	26,961	5%	31,750	26,961	18%
Professional services	7,447	7,202	3%	7,447	7,202	3%
Subscription term license	2,390	–	–	–	–	–
Maintenance and support	263	260	1%	263	260	1%
	38,299	34,423	11%	39,460	34,423	15%

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		2017 to 2018
	2018	**2017**	**%**	**2018**	**2017**	**%**
			(In thousands of USD)			
Subscription services:						
SaaS and subscription	$ 97,157	$ 100,813	(4%)	$ 122,046	$ 100,813	21%
Subscription term license support	10,730	–	–	–	–	–
	107,887	100,813	7%	122,046	100,813	21%
Professional services	31,854	31,469	1%	31,854	31,469	1%
Subscription term license	9,935	–	–	–	–	–
Maintenance and support	1,051	1,035	2%	1,051	1,035	2%
	150,727	133,317	13%	154,951	133,317	16%

Prior to applying IFRS 15, total revenue for the three months ended December 31, 2018 was $39.5 million, an increase of $5.0 million compared to the same period in 2017. This increase was due to an 18% increase in SaaS and subscription revenue. Prior to applying IFRS 15, total revenue for the year ended December 31, 2018 was $155.0 million, an increase of $21.6 million compared to the same period in 2017. This increase was due to a 21% increase in SaaS and subscription revenue.

Under IFRS 15, total revenue for the three months ended December 31, 2018 was $38.3 million, $1.2 million lower than total revenue prior to applying IFRS 15. Under IFRS 15, total revenue for the year ended December 31, 2018 was $150.7 million, $4.2 million lower than total revenue prior to applying IFRS 15. These differences were due to earlier recognition of subscription revenue in the current and prior periods for the software license component of on-premise and hybrid subscriptions under IFRS 15.

SaaS and subscription revenue

Prior to applying IFRS 15, SaaS and subscription revenue for the three months ended December 31, 2018 was $31.8 million, an increase of $4.8 million compared to the same period in 2017. Prior to applying IFRS 15, SaaS and subscription revenue for the year ended December 31, 2018 was $122.0 million, an increase of $21.2 million compared to the same period in 2017. These increases were due to contracts secured with new customers, as well as expansion of existing customer subscriptions.

Under IFRS 15, SaaS and subscription revenue for the three months ended December 31, 2018 was $25.5 million, $6.3 million lower than SaaS and subscription revenue prior to applying IFRS 15. Under IFRS 15, SaaS and

subscription revenue for the year ended December 31, 2018 was $97.2 million, $24.9 million lower than SaaS and subscription revenue prior to applying IFRS 15. SaaS and subscription revenue is lower under IFRS 15 due to separate recognition of revenue for the support component of on-premise subscription arrangements, in addition to earlier and separate recognition of revenue for the software license component of on-premise subscriptions.

Subscription term license support revenue

Under IFRS 15, subscription term license support revenue for the three months and year ended December 31, 2018 was $2.7 million and $10.7 million respectively. This represents the support component of on-premise and hybrid subscription arrangements being recognized separately from the subscription term license revenue.

Professional services revenue

Professional services revenue varies quarter to quarter due to the size, timing and scheduling of customer engagements and the level of partner led engagements. Professional services revenue for the three months ended December 31, 2018 was $7.4 million, an increase of $0.2 million compared to the same period in 2017. Professional services revenue for the year ended December 31, 2018 was $31.9 million, an increase of $0.4 million compared to the same period in 2017. The increases were due to deployments for new name accounts.

Subscription term license revenue

Under IFRS 15, subscription term license revenue for the three months and year ended December 31, 2018 was $2.4 million and $9.9 million respectively. We expect subscription term license revenue to vary quarter to quarter based upon timing of new engagements, expansions and renewals for on-premise and hybrid subscription arrangements.

Maintenance and support revenue

Maintenance and support revenue was consistent at $0.3 million for the three months ended December 31, 2018 and 2017. Maintenance and support revenue was $1.1 million for the year ended December 31, 2018, comparable to the same period in 2017. We expect maintenance and support revenue to continue to account for less than 1% of total revenue.

Cost of Revenue

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Cost of revenue	$ 12,390	$ 9,737	27%	$ 12,450	$ 9,737	28%
Gross profit	25,909	24,686	5%	27,010	24,686	9%
Gross profit percentage	68%	72%		68%	72%	

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Cost of revenue	$ 47,032	$ 39,780	18%	$ 47,168	$ 39,780	19%
Gross profit	103,695	93,537	11%	107,783	93,537	15%
Gross profit percentage	69%	70%		70%	70%	

Cost of revenue for the three months ended December 31, 2018 was $12.4 million, an increase of $2.7 million compared to the same period in 2017. Cost of revenue for the year ended December 31, 2018 was $47.0 million, an increase of $7.3 million compared to the same period in 2017. Cost of revenue increased due to an increase in headcount and related compensation costs as well as higher depreciation costs associated with the expansion of data center capacity. We expanded existing data centers and launched new data centers in Japan to support new and ongoing customer engagements as well as global expansion. The adoption of IFRS 16 had a nominal impact on cost of revenue.

Prior to applying IFRS 15 and 16, gross profit for the three months and year ended December 31, 2018 was $27.0 million and $107.8 million respectively, compared to $24.7 million and $93.5 million for the same periods in 2017. Gross profit increased for the three months and year ended December 31, 2018 due to an increase in SaaS and subscription revenue, partly offset by the increase in cost of revenue. As a percentage of revenue, gross profit was 68% and 70% for the three months and year ended December 31, 2018, compared to 72% and 70% for the same periods in 2017.

Under IFRS 15 and 16, gross profit for the three months ended December 31, 2018 was $26.0 million, compared to $27.0 million prior to applying IFRS 15 and 16. Gross profit for the year ended December 31, 2018 was $103.7 million, compared to $107.8 million prior to applying IFRS 15 and 16. The lower gross profit under IFRS 15 and 16 was due to lower SaaS and subscription revenue recorded under IFRS 15. The adoption of IFRS 16 had a nominal impact on gross profit.

Selling and Marketing Expenses

	Three months ended December 31, 2018	Three months ended December 31, 2017	2017 to 2018 %	Pre-IFRS 15/16 Three months ended December 31, 2018	Pre-IFRS 15/16 Three months ended December 31, 2017	Pre-IFRS 15/16 2017 to 2018 %
	(In thousands of USD)					
Selling and marketing	$ 10,285	$ 7,882	30%	$ 11,119	$ 7,882	41%
As a percentage of revenue	27%	23%		28%	23%	

	Year ended December 31, 2018	Year ended December 31, 2017	2017 to 2018 %	Pre-IFRS 15/16 Year ended December 31, 2018	Pre-IFRS 15/16 Year ended December 31, 2017	Pre-IFRS 15/16 2017 to 2018 %
	(In thousands of USD)					
Selling and marketing	$ 35,055	$ 29,280	20%	$ 37,485	$ 29,280	28%
As a percentage of revenue	23%	22%		24%	22%	

Prior to applying IFRS 15 and 16, selling and marketing expenses for the three months ended December 31, 2018 were $11.1 million, an increase of $3.2 million compared to the same period in 2017. Selling and marketing expenses for the year ended December 31, 2018 were $37.5 million, an increase of $8.2 million compared to the same period in 2017. Selling and marketing expenses increased due to an increase in headcount and related compensation costs, travel costs, and marketing programs to support global expansion.

Under IFRS 15 and 16, selling and marketing expenses for the three months ended December 31, 2018 were $10.3 million, $0.8 million lower than selling and marketing expenses prior to application of IFRS 15 and 16. For the year ended December 31, 2018, selling and marketing expenses were $35.1 million, $2.4 million lower than selling and marketing expenses prior to application of IFRS 15 and 16. Selling and marketing expenses were lower under IFRS 15 due to capitalization of customer acquisition costs incurred in the period net of the amortization of customer acquisition costs. The adoption of IFRS 16 had a nominal impact on selling and marketing expenses.

As a percentage of revenue, selling and marketing expenses were 27% and 23% for the three months and year ended December 31, 2018 respectively, compared to 23% and 22% for the same periods in 2017. Selling and marketing expenses are traditionally higher in the fourth quarter due to the timing of significant marketing events, including our annual user conference.

Research and Development Expenses

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		2017 to 2018
	2018	2017	%	2018	2017	%
	(In thousands of USD)					
Research and development	$ 7,105	$ 5,608	27%	$ 7,078	$ 5,608	26%
As a percentage of revenue	19%	16%		18%	16%	

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		2017 to 2018
	2018	2017	%	2018	2017	%
	(In thousands of USD)					
Research and development	$ 27,626	$ 23,691	17%	$ 27,674	$ 23,691	17%
As a percentage of revenue	18%	18%		18%	18%	

Research and development expenses for the three months ended December 31, 2018 were $7.1 million, an increase of $1.5 million compared to the same period in 2017. Research and development expenses for the year ended December 31, 2018 were $27.6 million, an increase of $3.9 million compared to the same period in 2017. The increase in research and development expenses was due to an increase in headcount and related compensation costs. The investment in headcount supports ongoing programs to develop the RapidResponse product and solution offering and our knowledge solutions for new and existing customers. As a percentage of revenue, research and development expenses were 19% and 18% for the three months and year ended December 31, 2018, compared to 16% and 18% for the same periods in 2017.

The adoption of IFRS 15 did not have an impact on research and development expenses. The adoption of IFRS 16 had a nominal impact on research and development expenses.

General and Administrative Expenses

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
General and administrative	$ 5,028	$ 3,474	45%	$ 4,960	$ 3,474	43%
As a percentage of revenue	13%	10%		13%	10%	

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
General and administrative	$ 20,167	$ 13,855	46%	$ 20,066	$ 13,855	45%
As a percentage of revenue	13%	10%		13%	10%	

General and administrative expenses for the three months ended December 31, 2018 were $5.0 million, an increase of $1.6 million compared to the same period in 2017. General and administrative expenses for the year ended December 31, 2018 were $20.2 million, an increase of $6.3 million compared to the same period in 2017. The increase in general and administrative expenses was due to an increase in headcount and related compensation costs, legal fees, office and depreciation costs, and IT expenditures. The increase in headcount reflects investments in corporate infrastructure and capability to support our global expansion and growth strategy. As a percentage of revenue, general and administrative expenses were 13% for the three months and year ended December 31, 2018, compared to 10% for the same periods in 2017.

The adoption of IFRS 15 and 16 had a nominal impact on general and administrative expenses.

Other Income and Expense

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Other income (expense):						
Foreign exchange gain (loss)	$ 22	$ (31)	–[1]	$ (117)	$ (31)	277%
Net finance income	1,208	378	220%	1,270	378	236%
Total other income	1,230	347	254%	1,153	347	232%

Note:
(1) The percentage change has been excluded as it is not meaningful.

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Other income (expense):						
Foreign exchange loss	$ (181)	$ (84)	115%	$ (507)	$ (84)	504%
Net finance income	1,810	1,131	60%	2,583	1,131	128%
Total other income	1,629	1,047	56%	2,076	1,047	98%

Prior to applying IFRS 15 and 16, total other income for the three months ended December 31, 2018 was $1.2 million, compared to $0.3 million for the same period in 2017. For the year ended December 31, 2018, total other income was $2.1 million compared to $1.0 million for the same period in 2017. The increase for the three months and year was due to an increase in interest earned on higher balances of cash and cash equivalents and short-term investments, partly offset by higher foreign exchange losses caused by USD exchange rate changes during the year, which had an impact on foreign-denominated cash and working capital balances.

Under IFRS 15 and 16, total other income for the three months ended December 31, 2018 was $1.2 million, comparable to total other income prior to the application of IFRS 15 and 16. For the year ended December 31, 2018, total other income was $1.6 million, $0.4 million lower than total other income prior to the application of IFRS 15 and 16. The lower total other income was due to finance expenses associated with operating lease obligations under IFRS 16 and advance payment on certain arrangements under IFRS 15.

Income Taxes

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Income tax expense	$ 1,796	$ 2,584	(30%)	$ 2,028	$ 2,584	(22%)
As a percentage of profit before income taxes	38%	32%		41%	32%	

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		Pre-IFRS 15/16 2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Income tax expense	$ 8,068	$ 7,375	9%	$ 8,788	$ 7,375	19%
As a percentage of profit before income taxes	36%	27%		36%	27%	

Prior to applying IFRS 15 and 16, income tax expense for the three months ended December 31, 2018 was $2.0 million, compared to $2.6 million for the same period in 2017. Income tax expense for the year ended December 31, 2018 was $8.8 million, compared to $7.4 million for the same period in 2017. For the three months and year ended December 31 2018, income tax expense as a percentage of profit before income taxes increased from 32% to 41% and from 27% to 36%. The increase in income tax expense as a percentage was due to one-time credit adjustments recorded for changes in estimates included in the 2017 tax provisions as well as foreign exchange losses incurred in 2017 upon converting results to Canadian dollars for Canadian tax purposes.

Under IFRS 15 and 16, income tax expense for the three months ended December 31, 2018 was $1.8 million, $0.2 million lower than income tax expense prior to applying IFRS 15 and 16. Income tax expense for the year ended December 31, 2018 was $8.1 million, $0.7 million lower than income tax expense prior to applying IFRS 15 and 16. The change in income tax expense was due to the impact on profit before incomes taxes and the income tax effect of the IFRS 15 and 16 adjustments for the three months and year ended December 31, 2018.

The percentage of profit before income taxes is generally higher than statutory income tax rates in Canada due primarily to share-based payments expense incurred not considered deductible for income tax purposes in Canada.

Profit

	Three months ended December 31,		2017 to 2018	Pre-IFRS 15/16 Three months ended December 31,		2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Profit	$ 2,925	$ 5,485	(47%)	$ 2,978	$ 5,485	(46%)
Adjusted profit[(1)]	5,849	7,819	(25%)	5,902	7,819	(25%)
Adjusted EBITDA[(1)]	8,986	11,157	(19%)	8,671	11,157	(22%)
Basic earnings per share	$ 0.11	$ 0.22		$ 0.11	$ 0.22	
Diluted earnings per share	$ 0.11	$ 0.21		$ 0.11	$ 0.21	
Adjusted diluted earnings per share[(1)]	$ 0.22	$ 0.30		$ 0.22	$ 0.30	

	Year ended December 31,		2017 to 2018	Pre-IFRS 15/16 Year ended December 31,		2017 to 2018
	2018	2017	%	2018	2017	%
			(In thousands of USD)			
Profit	$ 14,408	$ 20,383	(29%)	$ 15,846	$ 20,383	(22%)
Adjusted profit[(1)]	25,976	30,129	(14%)	27,414	30,129	(9%)
Adjusted EBITDA[(1)]	41,687	40,075	4%	40,854	40,075	2%
Basic earnings per share	$ 0.56	$ 0.81		$ 0.61	$ 0.81	
Diluted earnings per share	$ 0.54	$ 0.77		$ 0.59	$ 0.77	
Adjusted diluted earnings per share[(1)]	$ 0.97	$ 1.14		$ 1.02	$ 1.14	

Note:

(1) Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share are non-IFRS measures. See "*Non-IFRS Measures*". For a reconciliation of these measures to the closest IFRS measure, where a comparable IFRS measure exists, see "*Reconciliation of Non-IFRS Measures*" above.

Prior to applying IFRS 15 and 16, profit for the three months ended December 31, 2018 was $3.0 million or $0.11 per basic and diluted share, compared to $5.5 million or $0.22 per basic share and $0.21 per diluted share for the same period in 2017. Profit for the year ended December 31, 2018 was $15.8 million or $0.61 per basic share and $0.59 per diluted share, compared to $20.4 million or $0.81 per basic share and $0.77 per diluted share for the same period in 2017. The decrease in profit for the three months and year was due to an increase in operating expenses net of an increase in revenue and gross profit.

Prior to applying IFRS 15, Adjusted EBITDA for the three months ended December 31, 2018 was $8.7 million, compared to $11.2 million for the same period in 2017. The decrease in Adjusted EBITDA was due to an increase in operating expenses net of an increase in revenue and gross profit. Adjusted EBITDA for the year ended December 31, 2018 was $40.9 million, compared to $40.1 million for the same period in 2017. The increase in Adjusted EBITDA was due to an increase in revenue and gross profit.

Under IFRS 15 and 16, profit for the three months ended December 31, 2018 was $2.9 million or $0.11 per basic and diluted share. This was comparable to profit prior to applying IFRS 15 and 16. Profit for the year ended December 31, 2018 was $14.4 million or $0.56 per basic share and $0.54 per diluted share. This was $1.4 million lower than profit prior to applying IFRS 15 and 16. The lower profit for the year was due to lower subscription revenue, partly offset by lower selling and marketing expenses under IFRS 15.

*Unless the context requires otherwise, all references in this management's discussion and analysis (the "**MD&A**") to "Kinaxis", "we", "us", "our" and the "Company" refer to Kinaxis Inc. and its subsidiaries as constituted on December 31, 2018. This MD&A has been prepared with an effective date of February 28, 2019.*

*This MD&A for the year ended December 31, 2018 should be read in conjunction with our annual consolidated financial statements and the related notes thereto as at and for the year ended December 31, 2018. The financial information presented in this MD&A is derived from our annual consolidated financial statements prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board ("**IASB**"). This MD&A contains forward-looking statements that involve risks, uncertainties and assumptions, including statements regarding anticipated developments in future financial periods and our future plans and objectives. There can be no assurance that such information will prove to be accurate, and readers are cautioned not to place undue reliance on such forward-looking statements. See "Forward-Looking Statements".*

This MD&A includes trade-marks, such as "Kinaxis", and "RapidResponse", which are protected under applicable intellectual property laws and are the property of Kinaxis. Solely for convenience, our trade-marks and trade names referred to in this MD&A may appear without the ® or ™ symbol, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights to these trade-marks and trade names. All other trade-marks used in this MD&A are the property of their respective owners.

All references to $ or dollar amounts in this MD&A are to U.S. currency unless otherwise indicated.

Additional information relating to Kinaxis Inc., including the Company's most recently completed Annual Information Form, can be found on SEDAR at www.sedar.com.

Non-IFRS Measures

This MD&A makes reference to certain non-IFRS measures such as "Adjusted profit", "Adjusted EBITDA" and "Adjusted diluted earnings per share". These non-IFRS measures are not recognized, defined or standardized measures under IFRS. Our definition of Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share will likely differ from that used by other companies and therefore comparability may be limited.

Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share should not be considered a substitute for or in isolation from measures prepared in accordance with IFRS. These non-IFRS measures should be read in conjunction with our annual consolidated financial statements and the related notes thereto as at and for the year ended December 31, 2018. Readers should not place undue reliance on non-IFRS measures and should instead view them in conjunction with the most comparable IFRS financial measures. See the reconciliations to these IFRS measures in the "Reconciliation of Non-IFRS Measures" section of this MD&A.

Forward-Looking Statements

This MD&A contains forward-looking statements that relate to our current expectations and views of future events. In some cases, these forward-looking statements can be identified by words or phrases such as "may", "will", "expect", "anticipate", "aim", "estimate", "intend", "plan", "seek", "believe", "potential", "continue", "is/are likely to" or the negative of these terms, or other similar expressions intended to identify forward-looking statements. Forward-looking statements are intended to assist readers in understanding management's expectations as of the date of this MD&A and may not be suitable for other purposes. We have based these forward-looking statements on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include, among other things, statements relating to:

- our expectations regarding our revenue, expenses and operations;
- our anticipated cash needs;
- our ability to protect, maintain and enforce our intellectual property rights;
- third party claims of infringement or violation of, or other conflicts with, intellectual property rights by us;

Under IFRS 15 and 16, Adjusted EBITDA for the three months ended December 31, 2018 was $9.0 million, $0.3 million higher than Adjusted EBITDA prior to applying IFRS 15 and 16. Adjusted EBITDA for the year ended December 31, 2018 was $41.7 million, $0.8 million higher than Adjusted EBITDA prior to applying IFRS 15 and 16. The higher Adjusted EBITDA for the three months and year was due to lower selling and marketing expenses under IFRS 15 and lower operating expenses excluding depreciation under IFRS 16.

Key Balance Sheet Items

		Pre-IFRS 15/16	
	As at December 31, 2018	**As at December 31, 2018**	**As at December 31, 2017**
		(In thousands of USD)	
Total assets	$ 297,759	$ 269,728	$ 212,693
Total liabilities	113,077	107,514	87,905

An analysis of the key balance sheet items driving the change in total assets and liabilities is as follows:

Trade and other receivables

		Pre-IFRS 15/16	
	As at December 31, 2018	**As at December 31, 2018**	**As at December 31, 2017**
		(In thousands of USD)	
Trade accounts receivable	$ 56,618	$ 56,618	$ 27,645
Unbilled receivables	6,408	1,844	1,507
Other receivables	1,304	958	2,631
Total trade and other receivables	64,330	59,420	31,783

Prior to applying IFRS 15, trade and other receivables were $59.4 million, an increase of $27.8 million compared to December 31, 2017. The change in trade and other receivables was due to variances in the timing of billings and collections on receivables, which can have a significant impact on the balance at any point in time due to the timing of the annual subscription billing cycle for each customer and when new customer contracts are secured. The aging of trade receivables is generally current and overdue amounts do not reflect any credit issues. There was no allowance for doubtful accounts as at December 31, 2018.

Under IFRS 15, trade and other receivables were $64.3 million at December 31, 2018, an increase of $4.9 million compared to the balance at December 31, 2018 prior to applying IFRS 15. The adoption of IFRS 15 as of January 1, 2018 increased the unbilled receivables balance due to the acceleration of revenue recognized for the implied software component of on-premise and hybrid subscription arrangements in advance of payments received under the contracts.

During the second quarter of 2017, an Asian-based customer did not make certain scheduled payments under its contract. We have since terminated the contract with this customer, ceased providing services to this customer, and, as per the dispute resolution procedures in our contract, we have initiated confidential, binding arbitration proceedings for payment of all amounts due under the contract and damages. The customer has denied our claims, alleges breach by Kinaxis, and has asserted its own counterclaims. We believe the customer's positions and assertions are without merit. We did not recognize subscription revenue in the second quarter of 2017 or subsequent quarters beyond payments received from this customer. As at December 31, 2018, trade and other receivables from this customer totaled $2.5 million. We believe that the receivables are collectible and that we will be successful in asserting our claims.

Right-of-use assets & Lease obligations

	As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2017
		(In thousands of USD)	
Right-of-use assets	$ 8,873	$ –	$ –
Lease obligations:			
Current	2,572	–	–
Non-current	6,311	–	–
	8,883	–	–

Upon adoption of IFRS 16 as of January 1, 2018, operating leases require recognition as a liability and a right-of-use asset. Payments for operating leases with a term of less than one year and leases considered low value are expensed as incurred. At December 31, 2018, the balance of right-of-use assets was $8.9 million, net of accumulated depreciation and the balance of the related lease obligations was $8.9 million, net of deemed finance costs. The assets and liabilities increased due to additional data center leases entered into during the year to date.

Contract acquisition costs

	As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2017
		(In thousands of USD)	
Contract acquisition costs	$ 13,902	$ –	$ –

Upon adoption of IFRS 15 as of January 1, 2018, contract acquisition costs are capitalized and amortized over the expected life of the customer upon commencement of the related revenue. Contract acquisition costs primarily include sales commissions paid to employees and third party referral fees. Contract acquisition costs were $13.9 million at December 31, 2018, net of accumulated amortization. The balance increased due to additional contract acquisition costs incurred during the year to date.

Deferred revenue

	As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2018	Pre-IFRS 15/16 As at December 31, 2017
		(In thousands of USD)	
Current	$ 78,496	$ 89,931	$ 67,040
Non-current	–	–	7,745
	78,496	89,931	74,785

Prior to applying IFRS 15, deferred revenue at December 31, 2018 was $89.9 million, an increase of $15.1 million compared to deferred revenue at December 31, 2017. We generally bill our customers annually in advance for subscriptions resulting in initially recording the amount billed as deferred revenue which is subsequently drawn down to revenue over the term. The change in deferred revenue was due to variances in the timing of billings for new and existing customer contracts. There was no deferred revenue relating to subscription term periods beyond one year at December 31, 2018 compared to $7.7 million at December 31, 2017.

Under IFRS 15, deferred revenue was $78.5 million at December 31, 2018, $11.4 million lower than the balance at December 31, 2018 prior to applying IFRS 15. The adoption of IFRS 15 as of January 1, 2018 decreased the deferred

revenue balance due to the acceleration of revenue recognized for the implied software component of on-premise and hybrid subscription arrangements, the payments for which had been received and revenue deferred over the contract term prior to the adoption of IFRS 15.

Summary of Quarterly Results

The following table summarizes selected results for the eight most recent completed quarters to December 31, 2018.

	Three months ended							
					Prior to IFRS 15/16			
	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018	December 31, 2017	September 30, 2017	June 30, 2017	March 31, 2017
Revenue:								
SaaS and subscription	$ 25,492	$ 24,489	$ 23,873	$ 23,303	$ 26,961	$ 25,796	$ 24,202	$ 23,854
Subscription term license support	2,707	2,668	2,669	2,686	–	–	–	–
Professional services	7,447	8,657	9,640	6,110	7,202	7,431	8,395	8,441
Subscription term license	2,390	508	2,543	4,494	–	–	–	–
Maintenance and support	263	263	269	256	260	259	269	247
	38,299	36,585	38,994	36,849	34,423	33,486	32,866	32,542
Cost of revenue	12,390	12,014	12,493	10,135	9,737	9,681	9,985	10,377
Gross profit	25,909	24,571	26,501	26,714	24,686	23,805	22,881	22,165
Operating expenses(2)	22,418	20,660	20,398	19,372	16,964	16,202	16,496	17,164
	3,491	3,911	6,103	7,342	7,722	7,603	6,385	5,001
Foreign exchange gain (loss)	22	(177)	(222)	196	(31)	(30)	(12)	(11)
Net finance income	1,208	264	193	145	378	276	310	167
Profit before income taxes	4,721	3,998	6,074	7,683	8,069	7,849	6,683	5,157
Income tax expense	1,796	1,333	1,809	3,130	2,584	1,817	1,043	1,931
Profit	$ 2,925	$ 2,665	$ 4,265	$ 4,553	$ 5,485	$ 6,032	$ 5,640	$ 3,226
Share-based compensation	2,924	2,959	2,527	3,158	2,334	2,299	2,397	2,716
Adjusted profit(1)	$ 5,849	$ 5,624	$ 6,792	$ 7,711	$ 7,819	$ 8,331	$ 8,037	$ 5,942
Income tax expense	1,796	1,333	1,809	3,130	2,584	1,817	1,043	1,931
Depreciation(2)	2,571	2,483	2,398	1,820	1,101	911	818	788
Foreign exchange loss (gain)	(22)	177	222	(196)	31	30	12	11
Net finance income	(1,208)	(264)	(193)	(145)	(378)	(276)	(310)	(167)
	3,137	3,729	4,236	4,609	3,338	2,482	1,563	2,563
Adjusted EBITDA(1)	$ 8,986	$ 9,353	$ 11,028	$ 12,320	$ 11,157	$ 10,813	$ 9,600	$ 8,505
Basic earnings per share	$ 0.11	$ 0.10	$ 0.17	$ 0.18	$ 0.22	$ 0.24	$ 0.22	$ 0.13
Diluted earnings per share	$ 0.11	$ 0.10	$ 0.16	$ 0.17	$ 0.21	$ 0.23	$ 0.21	$ 0.12
Adjusted diluted earnings per share(1)	$ 0.22	$ 0.21	$ 0.25	$ 0.29	$ 0.30	$ 0.31	$ 0.30	$ 0.23

Note:
(1) Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share are non-IFRS measures. See “Non-IFRS Measures”. For a reconciliation of these measures to the closest IFRS measure, where a comparable IFRS measure exists, see “Reconciliation of Non-IFRS Measures” above.
(2) During the fiscal 2018 audit, in applying more recently available guidance and interpretations for the adoption of IFRS 16, it was determined that certain lease payments that were recorded as lease assets and lease obligations were considered variable and should be recorded as operating expenses in the period incurred. The impact of this change has been reflected in the quarterly results for the three months ended March 31, 2018, June 30, 2018, and September 30, 2018.

Prior to IFRS 15, SaaS and subscription revenue has increased due to the acquisition of new customers and expansion within existing customers. With the adoption of IFRS 15, SaaS and subscription revenue is lower due to separate recognition of on-premise subscription arrangements. With the adoption of IFRS 15, subscription term license support is consistent, reflecting the recurring support component of on-premise subscription arrangements. Professional services revenue has fluctuated due to an increase in new customer deployment activity, as well as a significant increase in our partners assuming deployment activity and the related professional services revenue. With the adoption of IFRS 15, subscription term license revenue varies from quarter to quarter based on the timing of new on-premise subscription arrangements. Maintenance and support revenue has remained consistent over the quarters

reflecting support contracts with legacy customers with perpetual licenses that continue to be renewed. Cost of revenue has increased as we continue to invest in the capacity to support the growth in our business with gross margin ranging from 67% to 72% of revenue. Operating expenses have increased as we invest in sales, marketing, and product development. As a significant component of our operating expenses are denominated in Canadian dollars, fluctuations in the foreign exchange rate with the U.S. dollar have had a generally positive impact on operating expenses and quarterly profit in 2017 to 2018.

Liquidity and Capital Resources

Our primary source of cash flow is sales of subscriptions for our software and sales of services. Our approach to managing liquidity is to ensure, to the extent possible, that we always have sufficient liquidity to meet our liabilities as they come due. We do so by continuously monitoring cash flow and actual operating expenses compared to budget.

	As at December 31, 2018	As at December 31, 2017
	(In thousands of USD)	
Cash and cash equivalents	$ 126,144	$ 103,392
Short-term investments	55,404	55,138
	181,548	158,530

Cash and cash equivalents increased $22.8 million to $126.1 million at December 31, 2018. Short-term investments increased $0.3 million to $55.4 million at December 31, 2018.

In addition to the cash and short-term investment balances, we have a $20.0 million CAD revolving demand facility available to meet ongoing working capital requirements. No amounts have been drawn against this facility. Our principal cash requirements are for working capital and capital expenditures. Excluding deferred revenue, working capital at December 31, 2018 was $227.1 million. Given the ongoing cash generated from operations and our existing cash and credit facilities, we believe there is sufficient liquidity to meet our current contractual obligations of $33.9 million and our longer-term growth.

The following table provides a summary of cash inflows and outflows by activity:

	Three months ended December 31,		Year ended December 31,	
	2018	2017	2018	2017
	(In thousands of USD)			
Cash inflow (outflow) by activity				
Operating activities	$ 6,654	$ 12,514	$ 27,915	$ 33,563
Investing activities	13,744	(5,845)	(12,406)	(65,155)
Financing activities	(104)	281	7,960	6,713
Effects of exchange rates	(190)	13	(717)	361
Net cash inflows	20,104	6,963	22,752	(24,518)

Cash provided by operating activities

Cash generated by operating activities for the three months ended December 31, 2018 was $6.7 million, compared to $12.5 million for the same period in 2017. Cash generated by operating activities for the year ended December 31, 2018 was $27.9 million, compared to $33.6 million for the same period in 2017. The decrease for the three months and year was due to an increase in trade and other receivables.

Cash used in investing activities

Cash used in investing activities is driven by net purchases of short-term investments as well as purchases of property and equipment primarily related to computer equipment for use in our hosting facilities and to support research and development requirements. Cash provided by investing activities for the three months ended December 31, 2018 was $13.7 million, compared to cash used by investing activities of $5.8 million for the same period in 2017. The change in cash inflow/outflow is due to net redemption of short-term investments in the three months ended December 31, 2018 and purchases related to investment in data center capacity for the same period in 2017. Cash used in investing activities for the year ended December 31, 2018 was $12.4 million, compared to $65.2 million for the same period in 2017. The decrease was due to net purchases of short-term investments in 2017, partly offset by investment in computer equipment for our new data centers in Europe, Japan, and Canada in 2018. We expect to continue to invest in additional property and equipment to support the growth in our customer base and to take advantage of new and advanced technology.

Cash provided by financing activities

Payments of lease obligations are recorded as financing outflows with the adoption of IFRS 16 as of January 1, 2018. Prior to adoption of IFRS 16, all lease payments constituted a portion of operating cash flows. Cash used by financing activities for the three months ended December 31, 2018 was $0.1 million, compared to cash provided by financing activities of $0.3 million for the same period in 2017. The change in cash inflow/outflow was due to payments of lease obligations in 2018. Cash provided by financing activities for the year ended December 31, 2018 was $8.0 million, compared to $6.7 million for the same period in 2017. The increase was due to an increase in proceeds from stock options exercised, partly offset by payments of lease obligations.

Contractual Obligations

Our operating lease commitments are primarily for office premises and secure data center facilities with expiry dates that range from November 2019 to May 2023. The largest lease commitment relates to our head office in Ottawa, Canada, the lease of which expires in May 2023. Given the ongoing cash generated from operations and our existing cash and credit facilities, we believe there is sufficient liquidity to meet our contractual obligations.

The following table summarizes our contractual obligations as at December 31, 2018, including commitments relating to leasing contracts:

	Less than 1 year	1 to 3 years	4 to 5 years	More than 5 years	Total amount
			(In thousands of USD)		
Commitments					
Operating lease agreements	$ 3,755	$ 7,926	$ 695	$ –	$ 12,376
Financial Obligations					
Trade payables and accrued liabilities	21,546	–	–	–	21,546
Total Contractual Obligations	$ 25,301	$ 7,926	$ 695	$ –	$ 33,922

The following table summarizes our contractual obligations as at December 31, 2017, including commitments relating to leasing contracts:

	Less than 1 year	1 to 3 years	4 to 5 years	More than 5 years	Total amount
			(In thousands of USD)		
Commitments					
Operating lease agreements	$ 2,908	$ 6,824	$ 2,115	$ –	$ 11,847
Financial Obligations					
Trade payables and accrued liabilities	11,176	–	–	–	11,176
Total Contractual Obligations	$ 14,084	$ 6,824	$ 2,115	$ –	$ 23,023

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements, other than variable payments related to operating leases and operating leases with terms of twelve months or less (which have been included in the disclosed obligations under "*Liquidity and Capital Resources - Contractual Obligations*"), that have, or are likely to have, a current or future material effect on our consolidated financial position, financial performance, liquidity, capital expenditures or capital resources.

Transactions with Related Parties

We did not have any transactions during the three months and year ended December 31, 2018 and 2017 between the Company and a related party outside the normal course of business.

Financial Instruments and Other Instruments

We recognize financial assets and liabilities when we become party to the contractual provisions of the instrument. On initial recognition, financial assets and liabilities are measured at fair value plus transaction costs directly attributable to the financial assets and liabilities, except for financial assets or liabilities at fair value through profit and loss, whereby the transactions costs are expensed as incurred. The carrying amounts of our financial instruments approximate fair market value due to the short-term maturity of these instruments.

Credit risk

Credit risk is the risk of an unexpected loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. Our credit risk is primarily attributable to trade and other receivables.

The nature of our subscription based business results in payments being received in advance of the majority of the services being delivered; as a result, our credit risk exposure is low.

We invest our excess cash in short-term investments with the objective of maintaining safety of principal and providing adequate liquidity to meet all current payment obligations and future planned capital expenditures with the secondary objective of maximizing the overall yield of the investment. We manage our credit risk on investments by dealing only with major Canadian banks and investing only in instruments that we believe have high credit ratings. Given these high credit ratings, we do not expect any counterparties to these investments to fail to meet their obligations.

Currency risk

A portion of our revenues and operating costs are realized in currencies other than our functional currency, such as the Canadian dollar, Japanese Yen, Euro, British Pound, and Korean Won. As a result, we are exposed to currency risk on these transactions. Also, additional earnings volatility arises from the translation of monetary assets and liabilities, investment tax credits recoverable and deferred tax assets and liabilities denominated in foreign currencies at the rate of exchange on each date of our consolidated statements of financial position; the impact of which is reported as a foreign exchange gain or loss or as income tax expense for deferred tax assets and liabilities.

Our objective in managing our currency risk is to minimize exposure to currencies other than our functional currency. We do not engage in hedging activities. We manage currency risk by matching foreign denominated assets with foreign denominated liabilities.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. We believe that interest rate risk is low for our financial assets as the majority of investments are made in fixed rate instruments. We do have interest rate risk related to our credit facilities. The rates on our Revolving Facility are variable to bank prime rate.

Capital management

Our capital is composed of shareholders' equity which includes our common shares. Our objective in managing our capital is financial stability and sufficient liquidity to increase shareholder value through organic growth and investment in sales, marketing and product development. Our senior management team is responsible for managing the capital through regular review of financial information to ensure sufficient resources are available to meet operating requirements and investments to support our growth strategy. The Board of Directors is responsible for overseeing this process. In order to maintain or adjust our capital structure, we could issue new shares, repurchase shares, approve special dividends or issue debt.

Critical Accounting Policies and Estimates

See our 2018 annual consolidated financial statements and the related notes thereto for a discussion of the accounting policies and estimates that are critical to the understanding of our business operations and the results of our operations.

Adoption of New Accounting Standards

IFRS 15: Revenue from Contracts with Customers ("IFRS 15")

Effective January 1, 2018, we adopted IFRS 15 using the cumulative effect method, with the effect of adopting this standard recognized on January 1, 2018, the date of initial application. Accordingly, the information presented for 2017 has not been restated. It remains as previously reported under IAS 18, IAS 11 and related interpretations.

Adoption of IFRS 15 has not impacted the accounting for our SaaS, professional services or maintenance and support arrangements for our legacy perpetual software licenses. However, adoption has impacted the accounting for our on-premise and hybrid subscription license arrangements, our accounting for contract acquisition costs as well as requiring expanded disclosure on revenue, performance obligations and contract balances.

Prior to adopting IFRS 15, subscription fees for licenses and coterminous maintenance and support and hosting services were combined and recognized ratably over the term of the subscription contract. Under IFRS 15, the fees for on-premise and hybrid subscriptions are separately allocated to each distinct performance obligation. Revenue attributable to the distinct software license component is recognized upfront upon term commencement and revenue allocated to maintenance and support and hosting components is recognized ratably over the term. This results in earlier recognition of revenue for these subscription arrangements.

Prior to adopting IFRS 15, contract acquisition costs, including commissions paid to employees and referral fees to third parties, were expensed upon commencement of the related contract revenue. Under IFRS 15, contract acquisition costs are capitalized and amortized over the expected customer renewal period which we have determined to be six years. We applied the practical expedient to not capitalize contract acquisition costs if the amortization period is one year or less.

Effective January 1, 2018, revenue from SaaS arrangements is reported as SaaS and subscription revenue. Revenue for maintenance and support from on-premise and hybrid arrangements and hosting services from hybrid arrangements is separately reported as subscription term license support revenue. Revenue for the software license component from on-premise arrangements is separately reported as subscription term license revenue. Professional services revenue and revenue from maintenance and support on legacy perpetual license arrangements continue to be reported separately.

We elected to apply the practical expedient to not adjust the total consideration over the contract term for the effect of a financing component if the period between the transfer of services to the customer and the customer's payment for these services is expected to be one year or less.

In our adoption of IFRS 15, we elected to apply the requirements of the new standard only to contracts that are incomplete at the date of initial application. We also elected to apply the contract modification practical expedient and reflect the aggregate effect of all contract modifications prior to the transition date.

IFRS 16: Leases ("IFRS 16")

Effective January 1, 2018, we early adopted IFRS 16, which specifies how to recognize, measure, present and disclose leases. The standard provides a single lessee accounting model, requiring lessees to recognize assets and liabilities for all leases.

We adopted IFRS 16 using the modified retrospective approach and accordingly the information presented for 2017 has not been restated. We elected to apply the practical expedient not to recognise right-of-use assets and lease liabilities for short-term leases that have a lease term of 12 months or less and leases of low-value assets. We also elected to apply the practical expedient to account for each lease component and any non-lease components as a single lease component.

On initial application, we elected to record right-of-use assets based on the corresponding lease liability. Right-of-use assets and lease obligations of $7.2 million were recorded as of January 1, 2018, with no net impact on retained earnings.

IFRS 9: Financial Instruments ("IFRS 9")

Effective January 1, 2018, we adopted IFRS 9, which sets out requirements for recognition and measurement, impairment, derecognition and general hedge accounting. This standard simplifies the classification of a financial asset as either at amortized cost or at fair value as opposed to the multiple classifications which were permitted under IAS 39. This standard also requires the use of a single impairment method as opposed to the multiple methods in IAS 39. The approach in IFRS 9 is based on how an entity manages its financial instruments in the context of its business model and the contractual cash flow characteristics of the financial assets. The standard also adds guidance on the classification and measurement of financial liabilities.

Trade and other receivables that were classified as loans and receivables under IAS 39 are classified as financial assets measured at amortized cost. There is no change to the initial measurement of our financial assets. Impairment of financial assets is based on an expected credit loss ("ECL") model under IFRS 9, rather than the incurred loss model under IAS 39. ECLs are a probability-weighted estimate of credit losses. We calculated ECLs based on consideration of customer specific factors and actual credit loss experience over the past five years. As a percentage of revenue, our actual credit loss experience has not been material.

The adoption of IFRS 9 has not had an effect on our accounting policies related to financial liabilities.

There was no material impact of transition to IFRS 9 on our statement of financial position at January 1, 2018.

Controls and Procedures

Disclosure Controls and Procedures

The Company's Chief Executive Officer ("**CEO**") and Chief Financial Officer ("**CFO**") are responsible for establishing and maintaining our disclosure controls and procedures. We maintain a set of disclosure controls and procedures designed to provide reasonable assurance that information required to be publicly disclosed is recorded, processed, summarized and reported on a timely basis. Our CEO and CFO have evaluated the design and effectiveness of our disclosure controls and procedures at the financial year end and based on the evaluation have concluded that the disclosure controls and procedures are effective.

Internal Controls over Financial Reporting

Our internal controls over financial reporting ("**ICFR**") are designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Our management is responsible for establishing and maintaining adequate ICFR. Management, including our CEO and CFO, does not expect that our ICFR will prevent or detect all errors and all fraud or will be effective under all future conditions. A control system is subject to inherent limitations and even those systems determined to be effective can provide only reasonable, but not absolute, assurance that the control objectives will be met with respect to financial statement preparation and presentation.

National Instrument 52-109 of the Canadian Securities Administrators requires our CEO and CFO to certify that they are responsible for establishing and maintaining ICFR and that those internal controls have been designed and are effective in providing reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with IFRS. Our CEO and CFO are also responsible for disclosing any changes to our internal controls during the most recent period that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Our management under the supervision of our CEO and CFO has evaluated the design of our ICFR based on the Internal Control – Integrated Framework issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission. We have made changes and additions to our internal controls over financial reporting as a result of the adoption of IFRS 15, IFRS 16 and IFRS 9. Controls were designed and implemented to ensure risks associated with the adoption of these new standards were addressed and ensure that the inputs, processes and outputs are complete and accurate including the controls over the adjustments required at transition. As at December 31, 2018, management assessed the effectiveness of our ICFR. Management concluded that our ICFR is effective and there are no material weaknesses that have been identified by management. Other than the changes to address adoption of IFRS 15, 16 and 9 noted above and other certain improvements, there were no significant changes to our ICFR for the three months and year ended December 31, 2018.

Outstanding Share Information

As of December 31, 2018, our authorized capital consists of an unlimited number of common shares with no stated par value. Changes in the number of common shares, options, restricted share units and deferred share units outstanding for the year ended December 31, 2018 and as of February 28, 2019 are summarized as follows:

Class of Security	Number outstanding at December 31, 2017	Net issued	Number outstanding at December 31, 2018	Net issued	Number outstanding at February 28, 2019
Common shares	25,507,922	570,259	26,078,181	6,250	26,084,431
Stock options	2,232,735	(142,862)	2,089,873	(58,000)	2,031,873
Restricted Share Units	45,097	7,537	52,634	–	52,634
Deferred Share Units	37,862	(7,032)	30,830	–	30,830

Our outstanding common shares increased by 570,259 shares in 2018 due to the exercise of 511,862 options and 20,832 deferred share units and vesting of 37,565 restricted share units.

Our outstanding stock options decreased by 142,862 options in 2018 due to the grant of 522,000 options less 511,862 options exercised and 153,000 options forfeited. Each option is exercisable for one common share.

Our outstanding restricted share units increased by 7,537 in 2018 due to the grant of 58,200 restricted share units less 37,565 units vested and 13,098 units forfeited. Our outstanding deferred share units decreased by 7,032 in 2018 due to the grant of 13,800 deferred share units less 20,832 units exercised. Upon vesting, each restricted share unit and deferred share unit can be paid out or settled in cash, an equivalent number of common shares, or a combination thereof, as elected by the Compensation Committee of the Board of Directors.

- our plans for and timing of expansion of our solutions and services;
- our future growth plans;
- the acceptance by our customers and the marketplace of new technologies and solutions;
- our ability to attract new customers and develop and maintain existing customers;
- our ability to attract and retain personnel;
- our expectations with respect to advancement in our technologies;
- our competitive position and our expectations regarding competition;
- regulatory developments and the regulatory environments in which we operate; and
- anticipated trends and challenges in our business and the markets in which we operate.

Forward-looking statements are based on certain assumptions and analysis made by us in light of our experience and perception of historical trends, current conditions and expected future developments and other factors we believe are appropriate. Expected future developments include growth in our target market, an increase in our subscription revenue and decrease in maintenance and support revenue based on trends in customer behaviour, increasing sales and marketing expenses, research and development expenses and general and administrative expenses based on our business plans and our continued ability to realize on the benefits of tax credits in the near term. Although we believe that the assumptions underlying the forward-looking statements are reasonable, they may prove to be incorrect.

This MD&A also includes forward-looking statements in relation to a contract dispute and arbitration proceeding with an Asian-based customer. These forward-looking statements are based on our assessment and analysis of the merits of the parties' positions. This assessment and analysis may evolve as the relevant proceedings are at a very early stage. Whether actual results, performance or achievements will conform to our expectations and predictions is subject to a number of known and unknown risks and uncertainties, including those set forth below under the heading "Risks and Uncertainties". These risks and uncertainties could cause our actual results, performance, achievements and experience to differ materially from the future expectations expressed or implied by the forward-looking statements. In light of these risks and uncertainties, readers should not place undue reliance on forward-looking statements.

The forward-looking statements made in this MD&A relate only to events or information as of the date on which the statements are made in this MD&A and are expressly qualified in their entirety by this cautionary statement. Except as required by law, we do not assume any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, after the date on which the statements are made or to reflect the occurrence of unanticipated events.

Readers should read this MD&A with the understanding that our actual future results may be materially different from what we expect.

Risks and Uncertainties

We are exposed to risks and uncertainties in our business, including the risk factors set forth below:

- If we are unable to attract new customers or sell additional products to our existing customers, our revenue growth and profitability will be adversely affected.
- We derive a significant portion of our revenue from a relatively small number of customers, and our growth depends on our ability to retain existing customers and add new customers.
- We encounter long sales cycles, particularly with our larger customers, which could have an adverse effect on the amount, timing and predictability of our revenue.
- We rely significantly on recurring revenue, and if recurring revenue declines or contracts are not renewed, our future results of operations could be harmed.

- Downturns or upturns in new sales will not be immediately reflected in operating results and may be difficult to discern.
- Our quarterly results of operations may fluctuate. As a result, we may fail to meet or exceed the expectations of investors or securities analysts which could cause our share price to decline.
- Our solutions are complex and customers may experience difficulty in implementing or upgrading our products successfully or otherwise achieving the benefits attributable to our products.
- Security breaches could delay or interrupt service to our customers, harm our reputation or subject us to significant liability and adversely affect our business and financial results.
- Our ability to retain customers and attract new customers could be adversely affected by an actual or perceived breach of security relating to customer information.
- Privacy and security concerns, including evolving government regulation in the area of consumer data privacy, could adversely affect our business and operating results.
- We have incurred operating losses in the past and may incur operating losses in the future.
- If we are unable to develop new products and services, sell our solutions into new markets or further penetrate our existing markets, our revenue will not grow as expected.
- If we do not maintain the compatibility of our solutions with third party applications that our customers use in their business processes, demand for our solutions could decline.
- Our inability to assess and adapt to rapid technological developments could impair our ability to remain competitive.
- We enter into service level agreements with all of our customers. If we fail to meet these contractual commitments, we could be obligated to provide credits or refunds for prepaid amounts related to unused subscription services or face contract terminations, which could adversely affect our revenues.
- Downturns in general economic and market conditions and reductions in IT spending may reduce demand for our solutions, which could negatively affect our revenue, results of operations and cash flows.
- We are subject to fluctuations in currency exchange rates.
- If we fail to protect our intellectual property and proprietary rights adequately, our business could be adversely affected.
- An assertion by a third party that we are infringing its intellectual property could subject us to costly and time-consuming litigation or expensive licenses which could harm our business.
- The markets in which we participate are highly competitive, and our failure to compete successfully would make it difficult for us to add and retain customers and would reduce or impede the growth of our business.
- If we fail to retain our key employees, our business would be harmed and we might not be able to implement our business plan successfully.
- Our growth is dependent upon the continued development of our direct sales force.
- As we increase our emphasis on our partnership program, we may encounter new risks, such as dependence on partners for a material portion of our revenue and potential channel conflict.
- If we experience significant fluctuations in our rate of anticipated growth and fail to balance our expenses with our revenue forecasts, our results could be harmed.
- Interruptions or delays in the services provided by third party data centers and/or internet service providers could impair the delivery of our solutions and our business could suffer.

- We may experience service failures or interruptions due to defects in the software, infrastructure, third party components or processes that comprise our existing or new solutions, any of which could adversely affect our business.
- The use of open source software in our products may expose us to additional risks and harm our intellectual property.
- Mergers or other strategic transactions involving our competitors or customers could weaken our competitive position, which could harm our results of operations.
- We may not receive significant revenue as a result of our current research and development efforts.
- Because our long-term success depends, in part, on our ability to continue to expand the sales of our solutions to customers located outside of North America, our business will be susceptible to risks associated with international operations.
- Current and future accounting pronouncements and other financial reporting standards might negatively impact our financial results.
- We are subject to taxation in various jurisdictions and the taxing authorities may disagree with our tax positions.
- If we fail to develop widespread brand awareness cost-effectively, our business may suffer.
- Our strategy includes pursuing acquisitions and our potential inability to successfully integrate newly-acquired companies or businesses may adversely affect our financial results.
- The market price for our common shares may be volatile.
- We may issue additional common shares in the future which may dilute our shareholders' investments.
- We may need to raise additional funds to pursue our growth strategy or continue our operations, and we may be unable to raise capital when needed or on acceptable terms.

A comprehensive discussion of risks, including risks not specifically listed above, can be found in our most recently filed Annual Information Form. Additional risks and uncertainties not presently known to us or that we currently consider immaterial also may impair our business and operations and cause the price of our shares to decline. If any of the noted risks actually occur, our business may be harmed and our financial condition and results of operations may suffer significantly.

Overview

We are a leading provider of cloud-based subscription software that enables our customers to improve and accelerate analysis and decision-making across their supply chain operations. Our RapidResponse product provides supply chain planning and analytics capabilities that create the foundation for managing multiple, interconnected supply chain management processes, including demand planning, supply planning, inventory management, order fulfillment and capacity planning. Our professional services team supports deployment of RapidResponse in new customers and assists existing customers in fully leveraging the benefits of the product.

Our target market is large global enterprises that have significant unresolved supply chain challenges. We believe this market is growing as a result of a number of factors, including increased complexity and globalization of supply chains, outsourcing, a diversity of data sources and systems, and competitive pressures on our customers.

We have established a consistent financial track record of strong revenue growth, solid earnings performance and cash generation. On a pre-IFRS 15/16 basis, our subscription and total annual revenues have grown at a compound annual growth rate (CAGR) of 23% and 19% respectively for the three years ended December 31, 2018. Our subscription revenue growth is driven both by contracts with new customers and expansion of our solution and service engagements within our existing customer base. Under IFRS 15 and 16, for the three months and year ended December 31, 2018, our Adjusted EBITDA was 23% and 28% of revenue and ending cash and short-term investment balances grew to $181.5 million. Prior to applying IFRS 15 and 16 (see "Adoption of New Accounting Standards" below) our Adjusted EBITDA for the three months and year ended December 31, 2018 was 22% and 26% of revenue.

Our customers are generally large national or multinational enterprises with complex supply chain requirements. We target multiple key industry verticals including high technology and electronics manufacturing, aerospace and defense, industrial products, life sciences and pharmaceuticals, automotive, and consumer packaged goods.

We sell our product using a subscription-based model, with the product being delivered from the cloud in the vast majority of cases, from data centers that we operate. Revenue from these customers is recorded as Software as a Service ("**SaaS**") and subscription revenue. Certain customers, including some long term customers who converted to the subscription model several years ago, have licensed our subscription product on an on-premise basis. Under IFRS 15, for on-premise customers the deemed software component for the applicable subscription term is now recognized as "subscription term license revenue" with the remaining maintenance and support component recognized ratably over the term as "subscription term license support revenue". Our agreements with customers are typically two to five years in length. Our subscription fee generally depends on the size of our customer, the number of applications deployed, the number of users and the number of licensed manufacturing, distribution and inventory sites. Average annual contract value fluctuates from period to period depending on the number and size of new customer arrangements and the extent to which we are successful in expanding adoption of our products by existing customers.

For the year ended December 31, 2018, our ten largest customers accounted for 33% of our total revenues with no one customer accounting for greater than 10% of total revenues.

Increasing revenues through new customer wins is one of our highest organizational priorities. Our sales cycle can be lengthy, as we generally target very large organizations with significant internal processes for adoption of new systems. We currently pursue a revenue growth model that includes both direct sales through our internal sales force, as well as indirect sales through channels including resellers and other partners.

Due to the growth in the market and the increasing need for solutions, we expect competition in the industry from new entrants and larger incumbent vendors to increase. In addition to this increased competitive pressure, changes in the global economy may have an impact on the timing and ability of these enterprises to make buying decisions, which may have an impact on our performance.

We continue to drive growth in our business through new customer acquisition and expansion of existing customers through our land and expand strategy. Approximately 65% of subscription service revenue growth has been derived from new customers. Our net subscription service revenue retention is greater than 100%, reflecting our longer term contract structure and renewal history.

We continue to invest in our partnerships both from a sales and product implementation perspective. We work with major consulting organizations as Strategic Partners, such as Accenture and Deloitte Consulting LLP, which are able to positively influence the decision making process at major target customers. These partners, and our Service Partners, such as Barkawi Management Consultants, mSE Solutions, Cognizant and others, help customers realize end-to-end supply chain optimization by implementing our industry-leading concurrent planning solution for our customers. Finally, in Asia we work with certain organizations as Reseller Partners, as that is frequently the most effective way to engage accounts in those markets.

We are headquartered in Ottawa, Ontario. We have subsidiaries located in the United States, the Netherlands, the United Kingdom and Hong Kong and subsidiaries and offices in Seoul, South Korea and Tokyo, Japan. We continue to expand our operations internationally. For the year ended December 31, 2018, 70% of our revenues were derived from North American based customers and our remaining revenues were derived principally from Asian and European based customers.

Key Performance Indicators

The key performance indicators that we use to manage our business and evaluate our financial results and operating performance are: total revenue, total new customers, incremental subscription revenue and bookings, net revenue retention, secured subscription backlog, operating expenses, Adjusted profit (as discussed below), Adjusted EBITDA (as discussed below), Adjusted diluted earnings per share (as discussed below), and cash flow from operations. Some of these measures are non-IFRS measures. See "Non-IFRS Measures" above. Management reconciles non-IFRS measures to IFRS measures (See "Reconciliation of Non-IFRS Measures" below). We evaluate our performance by comparing our actual results to budgets, forecasts and prior period results.

Net revenue retention

Our subscription customers generally enter into two to five year agreements which are paid annually in advance. In certain circumstances, customers will prepay subscription fees for the term of the agreement. Subscription agreements are generally subject to price increases upon renewal reflecting both inflationary increases and the additional value provided by our solutions. In addition to the expected increase in subscription revenue from price increases over time, existing customers may subscribe for additional applications, users or sites during the terms of their agreements.

Our subscription model results in a high proportion of recurring revenue, which we define as SaaS and subscription revenue, subscription term license support revenue and maintenance and support revenue (see "Significant Factors Affecting Results of Operations – Revenue"). While the underlying contracts for on-premise subscription agreements are typically structured in the same manner as for our cloud-delivered customers, including contracted, recurring annual payments, under IFRS 15 for on-premise customers we are required to separately report revenue as two components: the deemed software component and the maintenance and support component. The deemed software component for the entire term of these on-premise subscriptions is recognized as revenue upon contract term commencement (as a subscription term license), and therefore not recorded as recurring revenue. See "Adoption of New Accounting Standards" below for further discussion of this change in accounting standards.

We believe the power of the subscription model is only fully realized when a vendor has high retention rates. High customer retention rates generate a long customer lifetime and a very high lifetime value of the customer. Our net revenue retention rates remain over 100%, which includes sales of additional applications, users and sites to existing customers.

The recurring nature of our revenue provides high visibility into future performance, and upfront payments result in cash flow generation in advance of revenue recognition. Typically, approximately 80% of our annual subscription revenue is recognized from customers that are in place at the beginning of the year (excluding the effect of renewals) and this continues to be our target model going forward. However, this also means that agreements with new customers or agreements with existing customers purchasing additional applications, users or sites in a quarter may not contribute significantly to revenue in the current quarter. For example, a new customer who enters into an agreement late in a quarter will typically have limited contribution to the revenue recognized in that quarter.

Significant Factors Affecting Results of Operations

Our results of operations are influenced by a variety of factors, including:

Revenue

Our revenue consists of SaaS and subscription revenue, subscription term license support revenue, professional services revenue, subscription term license revenue, and maintenance and support revenue.

SaaS and subscription revenue is primarily comprised of fees for provision of RapidResponse as software as a service in our hosted, cloud environment. This includes hosting services and maintenance and support for the solution over the term of the contract when the product is provided from the cloud under a SaaS arrangement.

Subscription term license support revenue is comprised of fees for the implied maintenance and support component for on-premise subscriptions Prior to IFRS 15, this revenue was recognized over the term of the subscription agreement as subscription revenue.

Subscription term license revenue is comprised of fees for the implied software component for on-premise subscriptions, which is recognized as revenue upon term commencement. Prior to adopting IFRS 15, this revenue was recognized over the term of the subscription agreement as subscription revenue.

Professional services revenue is comprised of fees charged to assist organizations to implement and integrate our solution and train their staff to use and deploy our solution. Professional service engagements are contracted on a time and materials basis including billable travel expenses and are billed and recognized as revenue as the service is delivered. In certain circumstances, we enter into arrangements for professional services on a fixed price basis; in these cases, revenue is recognized by reference to the stage of completion of the contract.

Maintenance and support revenue is comprised of fees for maintenance and support for certain legacy customers who licensed our software on a perpetual basis prior to our conversion to a SaaS model in 2005. Over time, maintenance and support for legacy customers is expected to decline as more customers eventually convert to our more comprehensive, subscription based service or customers choose to let their support contracts lapse.

Cost of revenue

Cost of revenue consists of personnel, travel and other overhead costs related to implementation teams supporting initial deployments, training services and subsequent stand-alone engagements for additional services. Cost of revenue also includes personnel and overhead costs associated with our customer support team, the cost of our data center facilities where we physically host our on-demand solution, and network connectivity costs for the provisioning of hosting services under SaaS arrangements.

Selling and marketing expenses

Selling and marketing expenses consist primarily of personnel and related costs for our sales and marketing teams, including salaries and benefits, contract acquisition costs including commissions earned by sales personnel and partner referral fees partner programs support and training, and trade show and promotional marketing costs.

We plan to continue to invest in sales and marketing by expanding our domestic and international selling and marketing activities, building brand awareness, developing partners, and sponsoring additional marketing events. We expect that in the future, selling and marketing expenses will continue to increase.

Research and development expenses

Research and development ("**R&D**") expenses consist primarily of personnel and related costs for the teams responsible for the ongoing research, development and product management of RapidResponse. These expenses are recorded net of any applicable scientific research and experimental development investment tax credits ("**investment tax credits**") earned for expenses incurred in Canada against eligible projects. We only record non-refundable tax credits to the extent there is reasonable assurance we will be able to use the investment tax credits to reduce current or future tax liabilities. As the Company has an established history of profits, we do expect to realize the benefit of these tax credits in the near term. Further, we anticipate that spending on R&D will also be higher in absolute dollars as we expand our research and development and product management teams.

General and administrative expenses

General and administrative expenses consist primarily of personnel and related costs associated with administrative functions of the business including finance, human resources and internal information system support, as well as legal, accounting and other professional fees. We expect that, in the future, general and administrative expenses will increase in absolute dollars as we invest in our infrastructure and we incur additional employee-related costs and professional fees related to the growth of our business and international expansion.

Foreign exchange

Our presentation and functional currency is USD with the exception of our subsidiaries in South Korea (Korean Won), Japan (Japanese Yen), the Netherlands (Euro) and the United Kingdom (British Pound). We derive most of our revenue in USD. Our head office and a significant portion of our employees are located in Ottawa, Canada, and as such approximately a third of our expenses are incurred in Canadian dollars.

Adoption of IFRS 15

Effective January 1, 2018, we adopted IFRS 15: Revenue from Contracts with Customers. The adoption of this standard has not impacted the revenue recognized from our cloud-based SaaS arrangements. However, revenue recognized from software subscriptions delivered on-premise on a fixed term basis are accounted for differently. Prior to adoption of IFRS 15 subscription revenue from on-premise arrangements was deferred and recognized over the term of the arrangement, consistent with our cloud-based SaaS arrangements. Under IFRS 15, the implied software component for on-premise arrangements is recognized up-front upon commencement of the term and the implied maintenance and support component is recognized ratably over the term. Subscription revenue from SaaS arrangements is recognized as "SaaS and subscription" revenue. The implied maintenance and support component for on-premise arrangements is recognized as "subscription term license support" revenue. The implied software

component for on-premise arrangements is recognized as "subscription term license" revenue. There has been no impact on the recognition of professional services revenue or maintenance and support revenue from legacy perpetual licenses.

In addition to the impact on revenue recognition, the adoption of IFRS 15 impacts the recognition of customer acquisition costs. Prior to adopting IFRS 15, customer acquisition costs including commissions paid to employees and third party referral fees were expensed upon commencement of the related contract revenue. Under IFRS 15, these costs are capitalized and amortized over the expected life of the customer.

We adopted IFRS 15 using the cumulative effect method with the effect of adopting this standard recognized in retained earnings on January 1, 2018. Accordingly, we have not restated the 2017 comparative information and have presented the 2018 results prior to giving effect to IFRS 15 for comparative purposes and will form the basis of our discussion and analysis. The total impact, net of related income tax, recorded in retained earnings on January 1, 2018 was an increase of $23.8 million. The acceleration of revenue recognition for on-premise arrangements noted above resulted in recording a $20.9 million increase in retained earnings for revenue that would otherwise have been recorded in the future but will now not be reported as revenue on any of our statements of comprehensive income. The deferral of customer acquisition costs increased retained earnings by $11.5 million for costs previously expensed that have been deferred and will be re-expensed in the future as selling and marketing expenses over the estimated life of the customer.

Results of Operations

The following table sets forth a summary of our results of operations for the three months and year ended December 31, 2018 and 2017:

	Three months ended December 31,			Year ended December 31,			
		Pre-IFRS 15/16			Pre-IFRS 15/16		
	2018	2018	2017	2018	2018	2017	2016
	(In thousands of USD, except earnings per share)						
Statement of Operations							
Revenue	$ 38,299	$ 39,460	$ 34,423	$ 150,727	$ 154,951	$ 133,317	$ 115,591
Cost of revenue	12,390	12,450	9,737	47,032	47,168	39,780	35,777
Gross profit	25,909	27,010	24,686	103,695	107,783	93,537	80,174
Operating expenses	22,418	23,157	16,964	82,848	85,225	66,826	62,280
	3,491	3,853	7,722	20,847	22,558	26,711	17,894
Foreign exchange gain (loss)	22	(117)	(31)	(181)	(507)	(84)	(198)
Net finance income	1,208	1,270	378	1,810	2,583	1,131	307
Profit before income taxes	4,721	5,006	8,069	22,476	24,634	27,758	18,003
Income tax expense	1,796	2,028	2,584	8,068	8,788	7,375	7,258
Profit	$ 2,925	$ 2,978	$ 5,485	$ 14,408	$ 15,846	$ 20,383	$ 10,745
Adjusted profit(1)	$ 5,849	$ 5,902	$ 7,819	$ 25,976	$ 27,414	$ 30,129	$ 18,885
Adjusted EBITDA(1)	$ 8,986	$ 8,671	$ 11,157	$ 41,687	$ 40,854	$ 40,075	$ 28,528
Basic earnings per share	$ 0.11	$ 0.11	$ 0.22	$ 0.56	$ 0.61	$ 0.81	$ 0.44
Diluted earnings per share	$ 0.11	$ 0.11	$ 0.21	$ 0.54	$ 0.59	$ 0.77	$ 0.41
Adjusted diluted earnings per share(1)	$ 0.22	$ 0.22	$ 0.30	$ 0.97	$ 1.02	$ 1.14	$ 0.73

Note:
(1) Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share are non-IFRS measures. See "Non-IFRS Measures". For a reconciliation of these measures to the closest IFRS measure, where a comparable IFRS measure exists, see "Reconciliation of Non-IFRS Measures" below.

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