



ANNUAL REPORT





Eliminating volatility in a 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.

Our values

In 2020, we reviewed our corporate values and the result was a re-commitment to these core Kinaxis tenets:

BE REAL

We are authentic, respectful, and act with integrity

BE SELF- EMPOWERED

We are an empowered group of problem-solvers, thinkers, and doers

BE CUSTOMER- CENTRIC

We feel great pride and a deep connection to our customers—both internal and external

LAUGH OFTEN

We laugh, have fun, and joke around—it's how we build meaningful relationships

STRONGER TOGETHER

We know the whole is greater than the sum of our parts

BE A GLOBAL CITIZEN

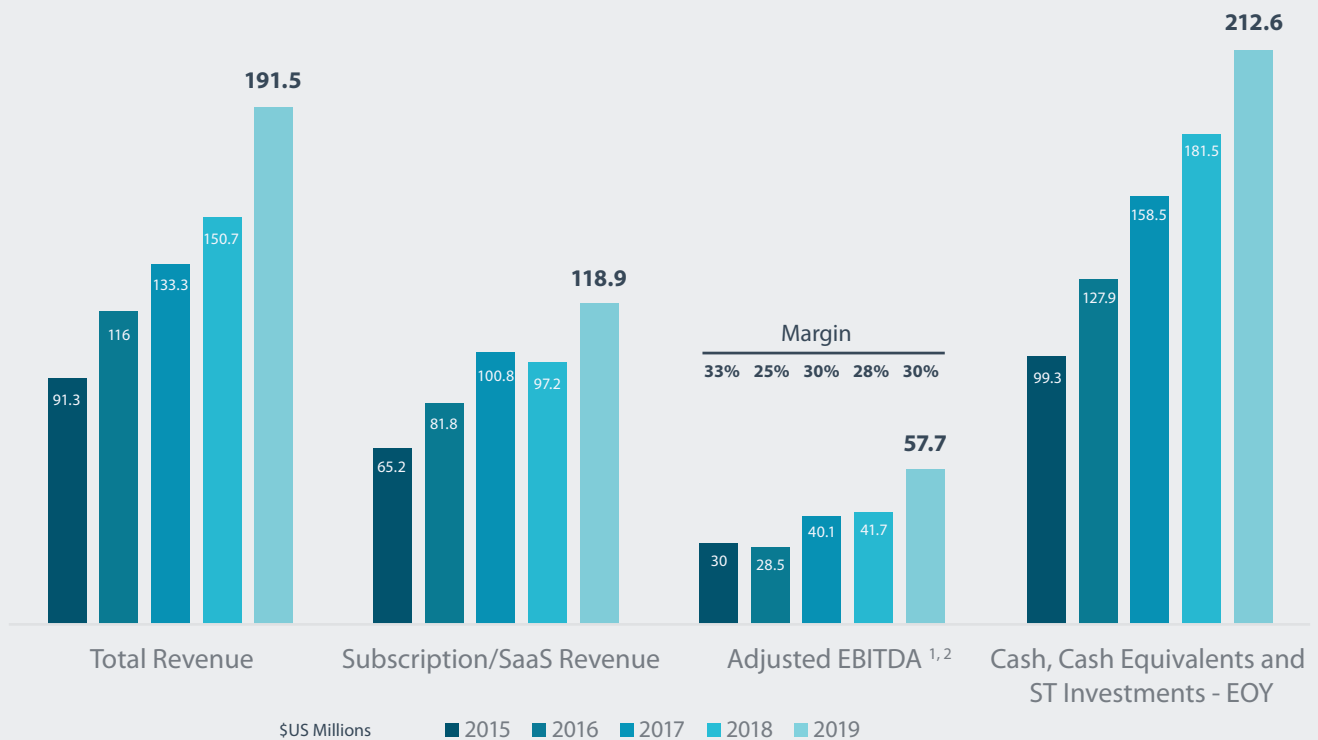
We are connected to our global team, active in our communities, and here to make the world better

Report Contents

Financial highlights	4
Letter to shareholders	6
Case study: Saving lives. RapidResponse and COVID-19	10
Case study: Saving the planet. Tracking CO ₂ emissions through the supply chain	12
Case study: Saving the future. Using machine learning to sense short-term demand	15
Consolidated Financial Statements, Years Ended December 31, 2019 and 2018 Kinaxis Inc	17
Management's Discussion and Analysis for the Year Ended December 31, 2019	55

Financial highlights

Our customers sign multi-year subscription agreements for our RapidResponse® supply chain planning platform. The business model provides a predictable, recurring revenue base which has grown rapidly over time as we have added new customers across six vertical markets and expanded deployments with our existing customers. Unlike many SaaS companies, we have also been highly profitable and continue to generate significant cash.

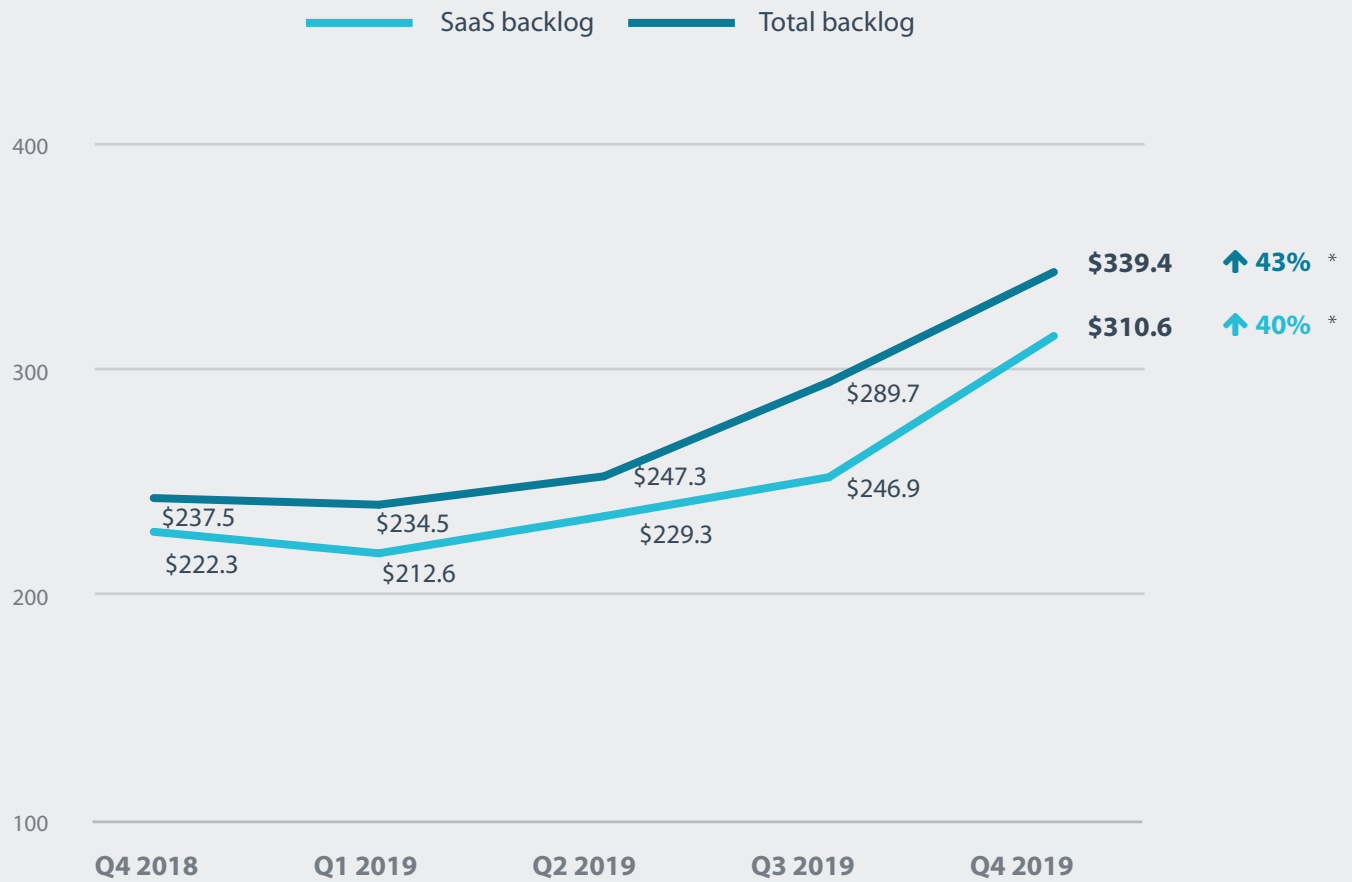


¹ Adjusted EBITDA[®] is a non-IFRS measure and is not a recognized, defined or a standardized measure under IFRS. This measure as well as other non-IFRS financial measures reported by Kinaxis are defined in the "Non-IFRS Measures" section of Kinaxis' Management's Discussion and Analysis for the year ended December 31, 2019 dated February 25, 2020.

² Results for 2018 and 2019 are impacted by the change to the IFRS accounting standard.

Backlog

Our backlog represents revenue that we expect to recognize in the future related to firm performance obligations that are unsatisfied (or partially unsatisfied) at December 31, 2019, for our signed, multi-year contracts:



* Percentage of growth compared to Q4 2018 figures.

John Sicard

President and Chief Executive Officer



2019 in review

2019 was a very successful year for Kinaxis. We significantly expanded the business while meeting or exceeding our published targets for our key financial metrics. We grew our Software-as-a-Service (SaaS) revenue by 22% to \$119 million and achieved an Adjusted EBITDA¹ margin of 30% for the year. Our total revenue grew to \$192 million. This success was fueled by renewals and expansions of some important multi-year customer subscriptions and a record number of new customer additions.

We were excited to welcome several new world-class customers that include automotive companies such as Honda and Yamaha Motors; leading pharmaceutical companies like Dr. Reddy's Laboratories, Lundbeck A/S and Teva Pharmaceuticals; high-tech giants, including Lenovo; and major industrial companies such as Johnson Electric. We also successfully renewed contracts with Fortune Global 500

companies including Unilever and Schneider Electric. We are privileged to be associated with such incredible brands.

Our success in 2019 was also driven by our relationships with partners, who influenced the significant majority of our new customer wins and accelerated their support of our deployments. We now work with approximately 25 partners globally, including a number of highly respected supply chain consultancies in new regions of Europe and Asia. More than ever, we see our Global Alliances strategy as instrumental to effectively and efficiently scaling our business globally.

2020 and ahead

We ended 2019 with a strong backlog of committed subscription business. Our multi-year SaaS revenue backlog was up 40% from a year ago,

which will help underpin our growth for 2020 and subsequent years.

We believe that our market and our position in it is strengthening. Events that are wildly disrupting supply chains globally continue to reinforce the need for our unique concurrent planning technique. From tariffs to Brexit to the recent COVID-19 crisis, the need for synchronized planning in real-time across all functional supply chain areas has never been more evident.

Our customers and market, like investors, are increasingly focused on the issue of sustainability in addition to all the usual benefits of concurrent planning. Our offering – the Kinaxis RapidResponse platform – is core to the creation of savings in a supply chain. Customers and prospects are keen to identify and implement ways we can help them remove inefficiencies and waste, both in real and dollar terms. We have provided some real-world examples of how we are helping customers plan for improved sustainability later in this report.

Kinaxis is also laser-focused on innovation and we aim to continue to outpace competitors in that regard. There is increasing acceptance that supply chains need to go through a digital transformation to become more agile. We have seen a sharp increase over the past year in the number of unsolicited inbound requests from prospective customers considering such a transformation.

In both 2018 and 2019, we roughly doubled the size of our global sales team, with a focus primarily in Europe and Asia. Since then, we have seen significant success with customers in those regions, as demonstrated by some of our public announcements over that time. The time

is right to continue to accelerate our investment in people and capabilities on a global basis and across all functions of the business. In 2020, we are targeting to grow the full Kinaxis team by roughly 40% from our base of over 650 people at the end of 2019. As always, we will be guided by our core strategy elements: innovation first, drive customer excellence, evolve our amazing culture globally and diversify growth strategies.

Innovation first

Our investment in our product group will accelerate in 2020 as we launch several exciting new innovations announced last year and as we continue to execute our longer-term roadmap. During 2020, customers will have access to exciting new capabilities, such as:

- Demand sensing, which uses machine learning/AI to unearth factors that can hone short-term demand forecasts
- Platform extensibility, which will allow third parties to develop their own applications and algorithms on top of RapidResponse. Customers will be able to add unique capabilities that relate to their specific business. Our partners can help, too, whether building functionality for individual customers or entire vertical markets
- Intuitive new visualizations and a vastly enhanced user experience to quickly point users to supply chain issues and opportunities, and greatly simplify and personalize the work of supply chain planners
- A faster, more scalable and flexible core concurrent planning engine

Drive customer excellence

We will continue to target sales and marketing investments throughout 2020 to ensure we align sales coverage with growing demand. We will also place other roles in the field, closer to our end markets. We have already enhanced our services capabilities through the acquisition of a long-time business partner, Prana Consulting, which developed an India-based RapidResponse consultancy with more than 70 professionals, including a team in North America. Over the past 15 years, Prana has supported many successful customer deployments and this team will be instrumental in scaling our ability in deployment, customer care and product development for our ever-growing global customer base.

Evolve our amazing culture globally

Kinaxis is recognized as a special place to work with a special culture. More than ever, we need to ensure that our culture propagates globally as we continue to grow. We will continue to integrate corporate support functions into our regions to ensure employees are consistently provided the support and resources they require to drive value, regardless of their locale. We also continue to make plans for our new Ottawa head office and look forward to moving into a brand new state-of-the-art building in the future.

Diversifying growth strategies

Entering new markets and tackling new customer use cases have been the cornerstones of our growth. While we're strongly focused on Tier 1 companies in six vertical markets across three sales regions, we do have customers today that fall outside those target parameters. Working with

such companies is one way to learn about new opportunities for growth. We will continue to actively investigate ways to augment our revenue streams in 2020 and beyond.

In closing

I would like to thank our management team and employees around the world for their unrelenting efforts, particularly during the extremely challenging global COVID-19 crisis. I am incredibly happy and proud that they remain healthy and are maintaining a razor focus on delivering value to our customers. I would also like to thank our distinguished Board of Directors – which now includes former Apple and Cisco executive, Betsy Rafael – for collaborating 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.

Kinaxis customers

In 2019, Kinaxis won a record number of new customers, including world-class brands across all of our vertical markets.

Dr.Reddy's 

 YAMAHA

 JOHNSON
ELECTRIC

Kinaxis helps billion-dollar companies transform their supply chains
to achieve breakthroughs.

 NCR



HermanMiller




Unilever

 IPSEN
Innovation for patient care

Schneider
Electric

 KENNAMETAL

NISSAN
MOTOR CORPORATION

LOCKHEED MARTIN 

Santen

JABIL

Our vertical markets



AEROSPACE/DEFENCE



AUTOMOTIVE



CONSUMER PRODUCTS



HIGH TECH & ELECTRONICS



INDUSTRIAL



LIFE SCIENCES



Saving lives: RapidResponse and COVID-19

The scope and speed of the global COVID-19 pandemic is unlike anything ever seen previously and, for manufacturers, supply chain agility is the main muscle exercised in times like these. Executives and supply chain practitioners are analyzing and determining the best course of action against multiple simultaneous and interdependent scenarios not just daily, but hourly or by the minute, for the entire supply chain.

While we are currently helping our customers make fast, confident decisions around COVID-19, Kinaxis has also been used by our customers to help with all types of disruption, including hurricanes¹, earthquakes, disease, cyberattacks, financial crisis and war.

In terms of the COVID-19 disruption, Kinaxis customers have been using our RapidResponse platform to act quickly and aggressively to lead through the supply chain crisis. In March, we took a look at some usage statistics and our observations at the time included:

- Our customers responded on a global basis. We had supply chain practitioners using the Kinaxis cloud service from over 75 countries on every continent. We observed a higher than normal usage first in Europe and then in the US. The largest increase in usage at the time was from Germany. The one location with a 20%+ drop in usage in the period was China, due to the impact of their manufacturing shutdown.
- Industries were impacted differently. There was first a surge in usage by our high-tech vertical customers due to dependencies on suppliers in China. As the outbreak spread, other verticals such as life sciences and consumer products increased their activity as their supply chains responded to spikes in demand for life-saving and life-sustaining products such as medicine/pharmaceuticals, medical products, consumer cleaning supplies and other core consumer necessities.
- The usage rate of people accessing Kinaxis increased by over 33% in the period as more of the supply chain collaborated on new scenarios to respond to the dynamic situation. To assist, Kinaxis provided our customers with free unlimited report access users through the crisis period.
- The number of simulation scenarios skyrocketed 2x. We saw our first three-month period with over 10 billion planning assessment calculations. Kinaxis customers were creating complete lossless digital twins of their end-to-end supply chains and running “what-if” scenarios imagining different futures and their potential impacts on key corporate, financial and supply chain metrics.

COVID-19 has created uncertainty and fear for millions across the globe. But these data points are further proof that the world in general, and our customers in particular, are working diligently and smartly to ensure that basic needs are met.

¹<https://www.forbes.com/sites/stevebanker/2019/11/05/procter--gamble-embraces-continuous-planning-and-execution/#20472f923ed1>



Saving the planet: Tracking CO₂ emissions through the supply chain

In 2018, a leading global automotive manufacturer was improving its fleet to meet emissions reductions standards under Clean Air for Europe (CAFE) regulations. CAFE set target emissions for each manufacturer and penalties for failure to comply. At first, the company met early targets ahead of schedule but over time, it began to fall behind. Customer demand for higher-emitting vehicles made it challenging to produce clean fleets that could compete in the market, and early gains in fuel efficiency and battery technology weren't enough to keep pace with ever-lowering emissions caps.

Between 2017 and 2018, the European Commission phased in stricter emissions tests for all new cars, including an assessment to measure output in real-world driving conditions¹. Penalties for exceeding targets would increase in 2019 which could result in millions of dollars in fines each year, but manufacturers were only given months to prepare.

The company decided its best opportunity for lowering emissions would come at the supply chain level. Although the company couldn't control demand for high-emitting models like trucks and SUVs, better planning could limit other contributing factors. For example, optional features in cars, such as sunroofs, paint color and wheel size, could alter a vehicle's emissions by as much as 30%. If planners had the ability to track these features, they could adjust their market availability and reduce emissions.

The company's planners couldn't do this with the planning software they had in place when the new emissions tests were announced. Instead, they based emission-level estimates on limited information about the vehicles being produced. Planners assumed the best and worst case scenario for each model and then estimated what mixture of high-emitting and low-emitting vehicles would be sold in each market. The estimates weren't accurate, and the lack of visibility limited the actions the company could take to reduce emissions and avoid penalties.

The company's planners needed a solution that could track granular changes to individual vehicles while still providing high-level aggregate data on revenues and emissions targets.

The Kinaxis difference

Planners' and manufacturers' needs were met when the company found Kinaxis RapidResponse. With access to detailed information for each vehicle being built, planners are able to craft and evaluate multiple scenarios to pick the vehicle volume and mix that will boost revenues and stay within regulation targets.

Before RapidResponse, the company had to estimate emissions for its entire fleet using a base model for each vehicle. Now, because demand data is continuously updated, planners can constantly monitor the supply chain and recommend ways to lower fleets' emissions and remain profitable. The company can then proactively adjust the models and options they plan to produce and make available for sale in each country to avoid exceeding targets and facing fines.





GRANULAR- LEVEL DATA

on the vehicle models and options mixes
being sold in Europe



SCENARIO PLANNING

to find emission-reduction opportunities
before reaching annual targets



VISIBILITY

into supply chains serving 13 brands
across 28 countries



AGGREGATE REPORTING

on emissions throughout Europe

Results that matter

Company leaders now feel confident they can reach future European emissions targets. That conviction couldn't come at a better time: analysts are warning about a "2020 CO₂ Cliff." Independent researchers predict that companies across the automotive industry could each pay billions in penalties by the end of that year.² In that environment, better supply chain planning will give the company an opportunity to surpass its peers' emissions goals and avoid hefty fines.

¹https://ec.europa.eu/growth/content/clean-mobility-new-emissions-tests-become-mandatory-all-new-cars-1-september-2018_en

²<https://www.bloomberg.com/news/articles/2019-06-26/europe-s-tough-new-emissions-rules-come-with-39-billion-threat>



Saving the future: Using machine learning to sense short-term demand

Planning in silos has proven to produce plans that companies have little or no confidence in. The best demand plans include input from all stakeholders. This includes people closest to the customer, in sales and marketing, as well as those closest to suppliers, in operations and finance. Together, these teams can balance market and customer needs against supply chain capabilities and risk.

For years, our Demand Planning application has let planning teams create statistical forecasts and consensus demand plans in a collaborative process that's orchestrated using a single platform. It combines demand planning with strategic capacity and supply management to reduce planning risk, actively monitor performance and adjust demand plans when variances arise.

We've been adding another collaborator to the Demand Planning team: machine learning. Kinaxis is bringing deeper demand sensing capabilities to the RapidResponse platform, incorporating machine learning to identify signals, inside and outside an organization, that can dramatically impact short demand. Weather, social media sentiment, company or competitor promotions, point of sale data – all of these signals and many others could impact short-term demand for certain products, but do they? It's the perfect question for machine learning algorithms.

A Kinaxis customer in Asia that manufactures food products has tested our demand sensing capabilities and the results were staggering. Our algorithms looked at data related to 55 products, distributed through 140 retail locations, over roughly a two-year historical period, with the first 500 days used to initially train the machine learning model for prediction over the next 200 days. Training of the model also continued during the 200-day period.

Our demand sensing capabilities quickly discerned that certain factors, like the time since the last promotion, the week of the year, and the time until the next holiday, were highly correlated to short-term demand – facts that would have been nearly impossible to uncover at scale without machine learning.

Applying the trained demand sensing model to the 200-day forecast period, the food manufacturer discovered that it would have experienced 60% fewer stockout days across the retail outlets and would have been able to carry 7% less finished goods inventory. The benefits are obvious: higher sales, happier customers and less waste – both financial and physical. Food for thought.

System under test

55
PRODUCTS

140
STORES

Demand sensing results

-60%
STOCKOUT DAYS

-7%
INVENTORY

Consolidated Financial Statements of

Kinaxis Inc.

Years ended December 31, 2019 and 2018

(In thousands of USD)



KPMG LLP
150 Elgin Street, Suite 1800
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, 2019 and December 31, 2018
- 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, 2019 and December 31, 2018, 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.



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 Anuj Madan.

Ottawa, Canada

February 25, 2020

Kinaxis Inc.

Consolidated Statements of Financial Position

As at December 31

(Expressed in thousands of USD)

	2019	2018
Assets		
Current assets:		
Cash and cash equivalents	\$ 182,284	\$ 126,144
Short-term investments	30,319	55,404
Trade and other receivables (note 4)	81,336	64,330
Prepaid expenses	6,534	5,815
	<u>300,473</u>	<u>251,693</u>
Non-current assets:		
Property and equipment (note 5)	25,704	22,785
Right-of-use assets (note 6)	8,671	8,873
Contract acquisition costs (note 7)	15,497	13,902
Unbilled receivables	249	457
Deferred tax assets (note 16)	149	49
	<u>\$ 350,743</u>	<u>\$ 297,759</u>
Liabilities and Shareholders' Equity		
Current liabilities:		
Trade payables and accrued liabilities (note 8)	\$ 20,770	\$ 21,623
Deferred revenue (note 9)	83,673	78,496
Lease obligations (note 10)	2,288	2,572
	<u>106,731</u>	<u>102,691</u>
Non-current liabilities:		
Lease obligations (note 10)	6,818	6,311
Deferred tax liabilities (note 16)	7,092	4,075
	<u>13,910</u>	<u>10,386</u>
Shareholders' equity:		
Share capital (note 11)	140,961	124,951
Contributed surplus	30,392	24,284
Accumulated other comprehensive loss	(348)	(319)
Retained earnings	59,097	35,766
	<u>230,102</u>	<u>184,682</u>
Contingencies (note 23)		184,682
	<u>\$ 350,743</u>	<u>\$ 297,759</u>

See accompanying notes to consolidated financial statements.

On behalf of the Board of Directors:

(signed) John (Ian) Giffen Director

(signed) John Sicard Director

Kinaxis Inc.

Consolidated Statements of Comprehensive Income

For the years ended December 31

(Expressed in thousands of USD, except share and per share data)

	2019	2018
Revenue (note 13)	\$ 191,549	\$ 150,727
Cost of revenue	53,850	47,032
Gross profit	137,699	103,695
Operating expenses:		
Selling and marketing	44,270	35,055
Research and development	34,125	27,626
General and administrative	26,852	20,167
	105,247	82,848
	32,452	20,847
Other income (expense):		
Foreign exchange loss	(226)	(181)
Net finance income	3,037	1,810
	2,811	1,629
Profit before income taxes	35,263	22,476
Income tax expense (recovery) (note 16):		
Current	9,015	8,930
Deferred	2,917	(862)
	11,932	8,068
Profit	23,331	14,408
Other comprehensive loss:		
Items that are or may be reclassified subsequently to profit or loss:		
Foreign currency translation differences - foreign operations	(29)	(35)
Total comprehensive income	\$ 23,302	\$ 14,373
Basic earnings per share	\$ 0.89	\$ 0.56
Weighted average number of basic Common Shares (note 12)	26,180,034	25,820,518
Diluted earnings per share	\$ 0.87	\$ 0.54
Weighted average number of diluted Common Shares (note 12)	26,967,805	26,824,435

See accompanying notes to 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 loss	Retained earnings (deficit)	Total equity
Balance, December 31, 2017	\$ 108,253	\$ 19,294	\$ (284)	\$ (2,475)	\$ 124,788
Adjustment on initial application of IFRS 15	–	–	–	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 11)	–	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
Profit	–	–	–	23,331	23,331
Other comprehensive loss	–	–	(29)	–	(29)
Total comprehensive income (loss)	–	–	(29)	23,331	23,302
Share options exercised	12,042	(3,291)	–	–	8,751
Restricted share units vested	3,968	(3,968)	–	–	–
Share based payments (note 11)	–	13,367	–	–	13,367
Total shareholder transactions	16,010	6,108	–	–	22,118
Balance, December 31, 2019	\$ 140,961	\$ 30,392	\$ (348)	\$ 59,097	\$ 230,102

See accompanying notes to consolidated financial statements.

Kinaxis Inc.

Consolidated Statements of Cash Flows

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

	2019	2018
Cash flows from operating activities:		
Profit	\$ 23,331	\$ 14,408
Items not affecting cash:		
Depreciation of property and equipment and right-of-use assets (note 15)	11,908	9,272
Share-based payments (note 11)	13,367	11,568
Investment tax credits recoverable	–	911
Net finance income	(3,037)	(1,810)
Income tax expense (note 16)	11,932	8,068
Change in operating assets and liabilities (note 17)	(9,161)	(13,215)
Interest received	3,653	2,413
Interest paid	(531)	(773)
Income taxes paid	(14,863)	(2,927)
	36,599	27,915
Cash flows used in investing activities:		
Purchase of property and equipment (note 5)	(11,719)	(12,310)
Purchase of short-term investments	(60,108)	(112,684)
Redemption of short-term investments	85,108	112,588
	13,281	(12,406)
Cash flows from financing activities:		
Payment of lease obligations (note 10)	(2,674)	(2,160)
Common shares issued on exercise of stock options	8,751	10,120
	6,077	7,960
Increase in cash and cash equivalents	55,957	23,469
Cash and cash equivalents, beginning of year	126,144	103,392
Effects of exchange rates on cash and cash equivalents	183	(717)
Cash and cash equivalents, end of year	\$ 182,284	\$ 126,144

See accompanying notes to consolidated financial statements.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

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, 2019 and 2018 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; Tokyo, Japan; Hong Kong, China; Amsterdam, The Netherlands; Seoul, South Korea; London, United Kingdom; Singapore; 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 eight wholly-owned subsidiaries, Kinaxis Corp., Kinaxis US Corp., Kinaxis Asia Limited, Kinaxis Japan K.K., Kinaxis Korea Limited, Kinaxis Europe B.V., Kinaxis UK Limited and Kinaxis Singapore Pte. Ltd.

The consolidated financial statements were authorized for issue by the Board of Directors on February 25, 2020.

(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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

2. Basis of preparation (continued):

(d) Foreign currency (continued):

recognized in profit or loss in the period in which they arise. Non-monetary items carried at fair 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 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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

2. Basis of preparation (continued):

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

being distinct as they could be performed by third party service providers and do not involve significant customization of the licensed software.

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.

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 11.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

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.

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 expects the costs to be recoverable, and has determined that certain sales incentive programs meet the requirements to be capitalized. Capitalized contract acquisition costs are

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018

(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(b) Revenue recognition (continued):

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.

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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

The Company's financial assets are classified as follows:

<u>Financial asset</u>	<u>Classification under IFRS 9</u>
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.

Financial liabilities

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

<u>Financial liability</u>	<u>Classification under IFRS 9</u>
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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(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.

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

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

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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(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.

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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(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.

(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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(k) Income taxes (continued):

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.

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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

3. Significant accounting policies (continued):

(l) Share-based payments (continued):

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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

4. Trade and other receivables:

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

	2019	2018
Trade accounts receivable	\$ 65,406	\$ 56,618
Unbilled receivables	13,880	6,408
Taxes receivable	382	566
Other	1,690	738
	81,358	64,330
Loss allowance	(22)	–
	\$ 81,336	\$ 64,330

Trade and other receivables of \$2,768 were written off in 2019 (2018 – \$561).

The Company had a dispute with an Asian-based customer that was the subject of confidential, binding arbitration proceedings. The parties have agreed to resolve their dispute amicably, with no admission by either party and with no payment by either party to the other. The arbitration has been discontinued. The trade and other receivables from this customer of \$2,532 were written off to general and administrative expenses in 2019.

The following table presents changes in unbilled receivables:

	2019	2018
Balance, beginning of year	\$ 6,865	\$ 11,280
Amounts transferred to trade accounts receivable from the balance at the beginning of year	(5,614)	(9,690)
Amounts written off	(794)	–
Revenue in excess of billings, net of amounts transferred to trade accounts receivable	13,672	5,275
Balance, end of year	\$ 14,129	\$ 6,865
Current	\$ 13,880	\$ 6,408
Non-current	249	457

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

5. Property and equipment:

The following table presents property and equipment for the Company:

Cost	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
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
Additions	9,672	1,063	447	537	11,719
Dispositions	(329)	(219)	(92)	–	(640)
Effects of movement in exchange rates	(64)	–	–	5	(59)
Balance, December 31, 2019	\$ 42,647	\$ 2,942	\$ 848	\$ 5,361	\$ 51,798

Accumulated depreciation	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
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
Depreciation	7,231	650	130	755	8,766
Dispositions	(329)	(219)	(92)	–	(640)
Effects of movement in exchange rates	(28)	–	–	3	(25)
Balance, December 31, 2019	\$ 20,641	\$ 1,490	\$ 262	\$ 3,701	\$ 26,094

Carrying value	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
December 31, 2018	\$ 19,601	\$ 1,039	\$ 269	\$ 1,876	\$ 22,785
December 31, 2019	\$ 22,006	\$ 1,452	\$ 586	\$ 1,660	\$ 25,704

There were no proceeds associated with asset dispositions in 2019 (2018 – no asset dispositions).

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

6. Right-of-use assets:

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

	Offices	Data centres	Total right-of-use assets
Balance, January 1, 2018	\$ 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
Additions	203	2,746	2,949
Depreciation	(1,154)	(1,988)	(3,142)
Effects of movement in exchange rates	(16)	7	(9)
Balance, December 31, 2019	\$ 1,987	\$ 6,684	\$ 8,671

7. Contract acquisition costs:

The following table presents changes in contract acquisition costs:

	2019	2018
Balance, beginning of year	\$ 13,902	\$ 11,514
Additions	5,951	6,088
Amortization	(4,356)	(3,700)
Balance, end of year	\$ 15,497	\$ 13,902

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

8. Trade payables and accrued liabilities:

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

	2019	2018
Trade accounts payable	\$ 4,285	\$ 1,406
Accrued liabilities	13,360	9,141
Taxes payable	3,125	11,076
	\$ 20,770	\$ 21,623

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

9. Deferred revenue:

The following table presents changes in deferred revenue:

	2019	2018
Balance, beginning of year	\$ 78,496	\$ 63,639
Amounts invoiced and revenue deferred	82,949	73,192
Recognition of deferred revenue included in the balance at the beginning of year	(77,772)	(58,335)
Balance, end of year	\$ 83,673	\$ 78,496

10. 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:

	2019	2018
Current	\$ 2,288	\$ 2,572
Non-current	6,818	6,311
Total lease obligations	\$ 9,106	\$ 8,883

The following table presents the contractual undiscounted cash flows for lease obligations as at December 31, 2019:

Less than one year	\$ 2,729
One to five years	7,301
More than five years	158
Total undiscounted lease obligations	\$ 10,188

Interest expense on lease obligations for 2019 was \$531 (2018 -\$501). The expense relating to variable lease payments not included in the measurement of lease obligations was \$730 (2018 -\$739). This consists of variable lease payments for operating costs, property taxes, and insurance. Expenses relating to short-term leases were \$556 (2018 -\$256) and expenses relating to leases of low value assets were not material. Total cash outflow for leases was \$4,491 (2018 -\$3,656), including \$2,674 of principal payments on lease obligations (2018 -\$2,160).

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

10. Lease obligations (continued):

During 2019, the Company entered into commitments to lease office space in Ottawa, Canada and Tokyo, Japan, and to expand data centres in Tokyo, Japan and Osaka, Japan. The office lease in Ottawa is expected to commence in late 2021 and the minimum payments required under this commitment are \$43,103 over a fifteen year period. The office lease in Tokyo will commence in April 2020 and the minimum payments required under this commitment are \$1,987 over a three year period. The expanded data centre lease in Tokyo, Japan and Osaka, Japan will commence in April 2020 and the minimum payments required under this commitment are \$1,187 over a three year period.

11. 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, 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
Shares issued from exercised options	261,929	12,042
Shares issued from vested restricted share units	62,894	3,968
Shares outstanding at December 31, 2019	26,403,004	\$ 140,961

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

11. Share capital (continued):

Stock option plans

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

	2019		2018	
	Shares	Weighted average exercise price	Shares	Weighted average exercise price
Options outstanding, beginning of year	2,089,873	\$ 38.32	2,232,735	\$ 31.92
Granted	468,044	57.81	522,000	63.65
Exercised	(261,929)	33.41	(511,862)	19.77
Forfeited	(67,250)	54.98	(153,000)	53.96
Options outstanding, end of year	2,228,738	44.24	2,089,873	\$ 38.32
Options exercisable, end of year	1,041,110	30.43	851,622	\$ 22.16

The following table presents information about stock options outstanding at December 31, 2019:

Range of exercise prices	Options outstanding			Options exercisable	
	Number outstanding	Weighted average contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
\$1 to \$4	235,599	1.65	\$ 1.74	235,599	\$ 1.74
\$9 to \$20	150,500	4.20	10.68	150,500	10.68
\$29 to \$36	454,650	5.98	34.29	323,400	34.24
\$46 to \$50	154,381	5.99	47.68	88,481	47.51
\$52 to \$56	326,496	3.25	54.42	111,996	54.75
\$58 to \$59	572,862	4.86	58.51	55,884	58.02
\$62 to \$67	249,750	3.31	64.70	57,000	64.76
\$72 to \$76	84,500	3.78	73.10	18,250	72.74
	2,228,738	4.33	\$ 44.24	1,041,110	\$ 30.43

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, 2019, there were 1,119,156 stock options available for grant under the Plans.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018

(Expressed in thousands of USD, except share and per share amounts)

11. Share capital (continued):

In 2019, the Company granted 468,044 (2018 – 522,000) options and recorded share-based compensation expense of \$8,271 (2018 – \$8,232) related to the vesting of options granted in 2019 and previous years. The per share weighted-average fair value of stock options granted in 2019 was \$18.51 (2018 – \$17.34) 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 2.45% (2018 – 2.65%), an expected life of 3 to 5 years (2018 – 2 to 5 years), estimated volatility of 38% (2018 – 38%). The forfeiture rate was estimated at 15% (2018 – 10%). The forfeiture rate is estimated based upon an analysis of actual forfeitures.

Share Unit Plan

At December 31, 2019, there were 268,895 share units available for grant under the Share Unit Plan.

In 2019, the Company granted 70,982 (2018 – 58,200) restricted share units (“RSU”) and none were forfeited (2018 – 13,098). There were 60,722 (2018 – 52,634) RSUs outstanding at December 31, 2019. 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 2019 was \$63.13 (2018 – \$66.16) per unit using the fair value of a Common Share at time of grant. The Company recorded share-based compensation expense of \$4,196 (2018 – \$2,436) related to the RSUs.

In 2019, the Company granted 14,256 (2018 – 13,800) deferred share units (“DSU”). There were 45,086 (2018 – 30,830) DSUs outstanding at December 31, 2019. 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 2019 was \$63.13 (2018 – \$65.23) per unit using the fair value of a Common Share at time of grant. The Company recorded share-based compensation of \$900 (2018 – \$900) related to the DSUs.

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

	2019	2018
Cost of revenue	\$ 900	\$ 844
Selling and marketing	5,484	4,644
Research and development	1,574	1,053
General and administrative	5,409	5,027
	<u>\$ 13,367</u>	<u>\$ 11,568</u>

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

12. Earnings per share:

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

	2019	2018
Issued Common Shares, beginning of year	26,078,181	25,507,922
Effect of shares issued from exercise of options	98,234	300,799
Effect of shares issued from vesting of restricted share units	3,619	2,161
Effect of shares issued from vesting of deferred share units	–	9,636
Weighted average number of basic Common Shares	26,180,034	25,820,518
Effect of share options on issue	644,062	890,135
Effect of share units on issue	143,709	113,782
Weighted average number of diluted Common Shares	26,967,805	26,824,435

For 2019, 1,233,608 (2018 – 352,000) options were excluded from the weighted average number of diluted common shares as their effect would have been anti-dilutive.

13. Revenue:

The following table presents revenue of the Company:

	2019	2018
SaaS	\$ 118,860	\$ 97,157
Professional services	33,549	31,854
Subscription term licenses	26,218	9,935
Maintenance and support	12,922	11,781
	\$ 191,549	\$ 150,727

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, 2019:

	2020	2021	2022 and thereafter	Total
SaaS	\$ 122,090	\$ 91,778	\$ 96,729	\$ 310,597
Maintenance and support	11,145	8,272	4,887	24,304
Subscription term licenses	4,533	–	–	4,533
	\$ 137,768	\$ 100,050	\$ 101,616	\$ 339,434

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

14. Personnel expenses:

The following table presents personnel expenses of the Company:

	2019	2018
Salaries including bonuses	\$ 71,823	\$ 59,538
Benefits	11,274	9,355
Commissions	6,190	5,329
Share-based payments	13,367	11,568
	\$ 102,654	\$ 85,790

15. Depreciation:

The following table presents total depreciation expense by function:

	2019	2018
Cost of revenue	\$ 8,384	\$ 6,299
Selling and marketing	4	4
Research and development	1,365	1,282
General and administrative	2,155	1,687
	\$ 11,908	\$ 9,272

16. Income tax expense:

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

	2019	2018
Current tax expense		
Current income tax	\$ 9,015	\$ 8,930
Deferred tax (recovery) expense		
Origination and reversal of temporary differences	2,917	(862)
	\$ 11,932	\$ 8,068

The current tax expense and deferred tax expense for 2019 include a recovery of \$1,272 and an expense of \$1,392, respectively, arising from a prior period.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018

(Expressed in thousands of USD, except share and per share amounts)

16. Income tax expense (continued):

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

	2019	2018
Canadian tax rate	26.50%	26.50%
Expected Canadian income tax expense	\$ 9,345	\$ 5,956
Increase (reduction) in income taxes resulting from:		
Difference between current and future tax rates and other	308	13
Foreign tax rate differences	133	60
Permanent difference of share-based payments	2,146	2,045
Foreign exchange differences	–	(6)
	\$ 11,932	\$ 8,068

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

	Balance at December 31, 2018	Recognized in profit and loss	Balance at December 31, 2019
Deferred tax assets (liabilities):			
Tax effect of investment tax credits	\$ (395)	\$ (36)	\$ (431)
Share issuance costs	96	(96)	–
Property and equipment	(2,197)	(1,344)	(3,541)
Contract acquisition costs	(3,360)	(306)	(3,666)
Stock based compensation	1,070	259	1,329
Net operating loss carryforwards	658	(658)	–
Other	102	(736)	(634)
	\$ (4,026)	\$ (2,917)	\$ (6,943)

	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)

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

16. Income tax expense (continued):

The company does not have foreign net operating loss carryforwards as at December 31, 2019 (2018 – \$2,520).

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, 2019 was \$14,913 (2018 – \$10,714).

17. Statement of cash flow:

The following table presents changes in operating assets and liabilities:

	2019	2018
Trade and other receivables	\$ (16,776)	\$ (23,302)
Prepaid expenses	(716)	(1,633)
Contract acquisition costs	(1,566)	(2,429)
Trade payables and accrued liabilities	4,726	(1,118)
Deferred revenue	5,171	15,267
	\$ (9,161)	\$ (13,215)

18. Credit facility:

The Company has a CAD\$20.0 million revolving demand credit facility which bears interest at bank prime per annum and has not been drawn as at December 31, 2019.

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, 2019 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\$5 million, a borrowing limit applies that is based principally on the Company's accounts receivable.

19. 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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

19. Financial instruments (continued):

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.

(a) Credit risk (continued):

The following table presents maximum exposure to credit risk for trade receivables by geographic region:

	2019	2018
United States	\$ 45,950	\$ 36,684
Europe	15,889	16,397
Asia	2,057	2,827
Canada	1,510	710
	\$ 65,406	\$ 56,618

The following table presents aging of trade receivables:

	2019	2018
Current	\$ 41,209	\$ 40,321
Past due:		
0 – 30 days	17,854	13,269
31 – 60 days	2,453	746
Greater than 60 days	3,890	2,282
	\$ 65,406	\$ 56,618

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, 2019, one customer individually accounted for greater than 10% of total trade receivables (December 31, 2018 – no customer). For 2019, no customer individually accounted for greater than 10% of revenue (2018 – no customer).

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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

19. Financial instruments (continued):

(a) Credit risk (continued):

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, 2019, the Company wrote off \$2,768 of trade receivables that were deemed not collectible (2018 – \$561 written off). As at December 31, 2019, the Company has recorded a loss allowance of \$22 (2018 – no allowance).

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, 2019, the Company had cash and cash equivalents and short-term investments totaling \$212,603 (2018 – \$181,548). Further, the Company has a credit facility as disclosed in Note 18. 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

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

19. Financial instruments (continued):

(c) Market risk (continued):

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.

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, 2019, 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 \$3,250 lower (2018 – \$2,953 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, 2019						
In thousands of local currency	USD	CAD	EUR	JPY	GBP	KRW
Trade receivables	55,994	212	4,852	171,150	1,651	68,969
Unbilled receivables	11,830	4	414	171,829	1	–
Other receivables	623	115	10	104,172	5	1,269
Trade payables	(775)	(1,093)	(135)	(200,587)	(491)	(2,139)
Accrued liabilities	(5,091)	(7,634)	(593)	(69,950)	(776)	(46,992)
	62,581	(8,396)	4,548	176,614	390	21,107

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

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, 2019, the Company has not drawn on the revolving demand facility.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018

(Expressed in thousands of USD, except share and per share amounts)

20. 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

The following table presents external revenue on a geographic basis:

	2019	2018
United States	\$ 125,591	\$ 103,060
Europe	41,275	33,226
Asia	19,584	12,373
Canada	5,099	2,068
	\$ 191,549	\$ 150,727

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

	2019	2018
Canada	\$ 14,020	\$ 12,547
United States	5,851	3,422
Asia	3,450	4,616
Europe	2,383	2,200
	\$ 25,704	\$ 22,785

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

	2019	2018
Canada	\$ 2,984	\$ 4,214
United States	2,743	608
Asia	2,097	2,966
Europe	847	1,085
	\$ 8,671	\$ 8,873

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

21. Related party transactions:

Details of the Company's subsidiaries at December 31, 2019 and 2018 are as follows:

Name of subsidiary	Principal activity	Place of incorporation and operation	Proportion of ownership interest and voting power held	
			2019	2018
Kinaxis Asia Limited	Sales	Hong Kong	100%	100%
Kinaxis Corp.	Sales	State of Delaware, USA	100%	100%
Kinaxis US Corp.	Holding	State of Delaware, USA	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%	100%
Kinaxis Singapore Pte. Ltd.	Sales	Singapore	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:

	2019	2018
Salary and other short-term benefits	\$ 5,135	\$ 4,063
Share-based payments	10,061	8,002
	\$ 15,196	\$ 12,065

22. 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.

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018
(Expressed in thousands of USD, except share and per share amounts)

22. Capital management (continued):

The Company has access to a revolving demand facility bears interest at bank prime per annum which has not been drawn as at December 31, 2019. The terms of the facility require the Company to meet certain financial covenants which are monitored by senior management to ensure compliance.

23. Contingencies:

- a) 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.
- b) 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.

24. Subsequent event:

On January 31, 2020, the Company acquired 100% of the outstanding shares of Prana Consulting, Inc. and all of its subsidiaries ("Prana") in exchange for cash and contingent consideration. Prana provides consulting services for implementation of the Company's software.

The cash consideration is based on a purchase price of \$3,650, adjusted for Prana's working capital surplus or deficit at the date of acquisition and subject to post-closing working capital adjustments.

The contingent consideration arrangement consists of additional payments to the selling shareholder for attainment of specific revenue and team retention metrics in the year following the acquisition. The potential undiscounted amount of all future payments that the Company could be required to make

Kinaxis Inc.

Notes to Consolidated Financial Statements

For the years ended December 31, 2019 and 2018

(Expressed in thousands of USD, except share and per share amounts)

24. Subsequent event (continued):

under this arrangement is between \$150 and \$1,000. The Company estimates that the fair value of contingent consideration at the date of acquisition is \$800.

The financial effects of this transaction have not been recognized at December 31, 2019. At the time the financial statements were authorized for issue, the Company has not yet completed the initial accounting for the acquisition of Prana. In particular, the fair value assessment of the assets acquired and liabilities assumed is incomplete. It is not yet possible to provide detailed information about each class of net assets and any contingent liabilities of the acquired entity.

The provisionally determined goodwill arising from the acquisition is \$4,450. The goodwill is attributable mainly to the skills and technical talent of Prana's work force and the synergies expected to be achieved from integrating Prana into the Company's existing professional services business. The goodwill is expected to be deductible for tax purposes.



KINAXIS INC.

**MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE YEAR ENDED DECEMBER 31, 2019**

DATED: February 25, 2020

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, 2019. This MD&A has been prepared with an effective date of February 25, 2020.

This MD&A for the year ended December 31, 2019 should be read in conjunction with our annual audited consolidated financial statements for the year ended December 31, 2019. 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, 2019. 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;

- 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.

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. Our SaaS and subscription term license revenue growth is driven both by contracts with new customers and expansion of our solution and service engagements within our existing customer base. For the three months and year ended December 31, 2019, our Adjusted EBITDA was 32% and 30% of revenue, respectively (2018 – 23% and 28%), and ending cash and short-term investment balances grew to \$212.6 million (2018 – \$181.5 million).

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 product delivered from the cloud is recorded as

Software as a Service (“SaaS”) revenue. Certain customers, have licensed our subscription product on an on-premise basis or have retained the option to take the hosted software on-premise as a hybrid subscription. Under IFRS 15, for on-premise and hybrid customers the deemed software component for the applicable subscription term is recognized as “subscription term license revenue” upon initiation or renewal of the subscription contract term, with the remaining maintenance and support component and hosting services for hybrid subscriptions recognized ratably over the term as “maintenance and 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. The 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 three months and year ended December 31, 2019, our ten largest customers accounted for 39% and 32%, respectively, of our total revenues (2018 – 34% and 33%) with no customer accounting for greater than 10% of total revenues (2018 – no customer).

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 supported by our Strategic, Reseller and other service 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 SaaS revenue growth has been derived from new customers. Our net revenue retention from both SaaS and on-premise subscriptions 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, Deloitte, and EY, which are able to positively influence the decision making process at major target customers. These partners and others, such as Genpact, mSE Solutions, Crimson and Co., and Cognizant, 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, Hong Kong and Singapore and subsidiaries and offices in Seoul, South Korea and Tokyo, Japan. We continue to expand our operations internationally. For the three months and year ended December 31, 2019, 71% and 68% of our revenues, respectively, were derived from North American customers (2018 – 67% and 70%) and our remaining revenues were derived from European and Asian 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.

Recurring revenue model

Our subscription customers generally enter into two to five year agreements which are paid annually in advance. SaaS and on-premise 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 SaaS and subscription term license 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 includes SaaS 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 or renewal (as a subscription term license). The amount and timing of any recurring subscription term license revenue from on-premise subscription agreements is subject to the timing and length of renewal term of the agreement.

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 annual 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 SaaS and maintenance and support 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 revenue, subscription term license revenue, professional services revenue, and maintenance and support revenue.

SaaS 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 revenue is comprised of fees for the implied software component for on-premise subscriptions, which is recognized as revenue upon term commencement.

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 the implied maintenance and support component for on-premise and hybrid subscriptions as well as a small amount of 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 SaaS 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.

Results of Operations

The following table sets forth a summary of our results of operations:

	Three months ended December 31,		Year ended December 31,		
	2019	2018	2019	2018	2017 ⁽¹⁾
(In thousands of USD, except earnings per share)					
Statement of Operations					
Revenue	\$ 56,312	\$ 38,299	\$ 191,549	\$ 150,727	\$ 133,317
Cost of revenue	14,872	12,390	53,850	47,032	39,780
Gross profit	41,440	25,909	137,699	103,695	93,537
Operating expenses	29,695	22,418	105,247	82,848	66,826
	11,745	3,491	32,452	20,847	26,711
Foreign exchange loss	(40)	22	(226)	(181)	(84)
Net finance income	610	1,208	3,037	1,810	1,131
Profit before income taxes	12,315	4,721	35,263	22,476	27,758
Income tax expense	4,484	1,796	11,932	8,068	7,375
Profit	\$ 7,831	\$ 2,925	\$ 23,331	\$ 14,408	\$ 20,383
Adjusted profit ⁽²⁾	\$ 11,008	\$ 5,849	\$ 36,698	\$ 25,976	\$ 30,129
Adjusted EBITDA ⁽²⁾	\$ 18,134	\$ 8,986	\$ 57,727	\$ 41,687	\$ 40,075
Basic earnings per share	\$ 0.30	\$ 0.11	\$ 0.89	\$ 0.56	\$ 0.81
Diluted earnings per share	\$ 0.29	\$ 0.11	\$ 0.87	\$ 0.54	\$ 0.77
Adjusted diluted earnings per share ⁽²⁾	\$ 0.40	\$ 0.22	\$ 1.36	\$ 0.97	\$ 1.14

Note:

- (1) We adopted IFRS 15 and 16 effective January 1, 2018. Under this adoption, the comparative information for 2017 was not restated.
 (2) 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.

	As at December 31, 2019	As at December 31, 2018	As at December 31, 2017 ⁽¹⁾
(In thousands of USD)			
Total assets	\$ 350,743	\$ 297,759	\$ 212,693
Total non-current liabilities	13,910	10,386	9,689

Note:

- (1) We adopted IFRS 15 and 16 effective January 1, 2018. Under this adoption, the comparative information for 2017 was not restated.

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,		
	2019	2018	2019	2018	2017 ⁽¹⁾
	(In thousands of USD)				
Profit.....	\$ 7,831	\$ 2,925	\$ 23,331	\$ 14,408	\$ 20,383
Share-based compensation.....	3,177	2,924	13,367	11,568	9,746
Adjusted profit.....	<u>\$11,008</u>	<u>\$ 5,849</u>	<u>\$ 36,698</u>	<u>\$ 25,976</u>	<u>\$ 30,129</u>
Income tax expense.....	4,484	1,796	11,932	8,068	7,375
Depreciation.....	3,212	2,571	11,908	9,272	3,618
Foreign exchange loss.....	40	(22)	226	181	84
Net finance income.....	(610)	(1,208)	(3,037)	(1,810)	(1,131)
	<u>7,126</u>	<u>3,137</u>	<u>21,029</u>	<u>15,711</u>	<u>9,946</u>
Adjusted EBITDA.....	<u>\$ 18,134</u>	<u>\$ 8,986</u>	<u>\$ 57,727</u>	<u>\$ 41,687</u>	<u>\$ 40,075</u>
Adjusted EBITDA as a percentage of revenue.....	32%	23%	30%	28%	30%

Note:

(1) We adopted IFRS 15 and 16 effective January 1, 2018. Under this adoption, the comparative information for 2017 was not restated.

Revenue

	Three months ended December 31,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
SaaS.....	\$ 32,006	\$ 25,492	26%	\$ 118,860	\$ 97,157	22%
Professional services.....	8,931	7,447	20%	33,549	31,854	5%
Subscription term license.....	12,120	2,390	407%	26,218	9,935	164%
Maintenance and support.....	3,255	2,970	10%	12,922	11,781	10%
	<u>56,312</u>	<u>38,299</u>	<u>47%</u>	<u>191,549</u>	<u>150,727</u>	<u>27%</u>

Total revenue for the three months ended December 31, 2019 was \$56.3 million, an increase of \$18.0 million compared to the same period in 2018. This increase was primarily due to higher subscription term license revenue and a 26% increase in SaaS revenue. Total revenue for the year ended December 31, 2019 was \$191.5 million, an increase of \$40.8 million compared to the same period in 2018. This increase was primarily due to a 22% increase in SaaS revenue and a 164% increase in subscription term license revenue.

SaaS revenue

SaaS revenue for the three months and year ended December 31, 2019 was \$32.0 million and \$118.9 million, an increase of \$6.5 million and \$21.7 million, respectively, compared to the same periods in 2018. This increase was due to contracts secured with new customers, as well as expansion of existing customer subscriptions.

Professional services revenue

Professional services revenue for the three months and year ended December 31, 2019 was \$8.9 million and \$33.5 million, an increase of \$1.5 million and \$1.7 million, respectively, compared to the same periods in 2018. Professional services revenue varies quarter to quarter due to the size, timing and scheduling of customer engagements and the level of partner led engagements.

Subscription term license revenue

Subscription term license revenue for the three months and year ended December 31, 2019 was \$12.1 million and \$26.2 million, an increase of \$9.7 million and \$16.3 million, respectively, compared to the same periods in 2018. Subscription term license revenue varies quarter to quarter due to the timing of new contracts, expansions and renewals for on-premise and hybrid subscription arrangements.

Maintenance and support revenue

Maintenance and support revenue for the three months and year ended December 31, 2019 was \$3.3 million and \$12.9 million, an increase of \$0.3 million and \$1.1 million, respectively, compared to the same periods in 2018.

Cost of Revenue

	Three months ended December 31,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
Cost of revenue	\$ 14,872	\$ 12,390	20%	\$ 53,850	\$ 47,032	14%
Gross profit.....	41,440	25,909	60%	137,699	103,695	33%
Gross profit percentage	74%	68%		72%	69%	

Cost of revenue for the three months and year ended December 31, 2019 was \$14.9 million and \$53.9 million, an increase of \$2.5 million and \$6.8 million, respectively, compared to the same periods in 2018. Cost of revenue increased due to higher headcount and related compensation costs, depreciation costs associated with the expansion of data center capacity, and partner and third-party service provider costs. In 2018 and 2019, we expanded existing data centers and launched new data centers in Japan to support new and ongoing customer engagements as well as global expansion.

Gross profit for the three months and year ended December 31, 2019 was \$41.4 million and \$137.7 million, an increase of \$15.5 million and \$34.0 million, respectively, compared to the same periods in 2018. The increase for the three months and year was due to an increase in SaaS and subscription term license revenue, partly offset by the increase in cost of revenue.

As a percentage of revenue, gross profit was 74% and 72% for the three months and year ended December 31, 2019, compared to 68% and 69%, respectively, for the same periods in 2018.

Selling and Marketing Expenses

	Three months ended December 31,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
Selling and marketing.....	\$ 13,747	\$ 10,285	34%	\$ 44,270	\$ 35,055	26%
As a percentage of revenue.....	24%	27%		23%	23%	

Selling and marketing expenses for the three months and year ended December 31, 2019 were \$13.7 million and \$44.3 million, an increase of \$3.5 million and \$9.2 million, respectively, compared to the same periods in 2018. The increase in selling and marketing expenses was due to higher headcount and related compensation costs, commissions expense, stock-based compensation, and sales and marketing event activity. We continue to expand our sales team, particularly in Europe and Asia, as well as our partner network.

As a percentage of revenue, selling and marketing expenses were 24% and 23% for the three months and year ended December 31, 2019, compared to 27% and 23%, respectively, for the same periods in 2018.

Research and Development Expenses

	Three months ended December 31,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
Research and development.....	\$ 9,443	\$ 7,105	33%	\$ 34,125	\$ 27,626	24%
As a percentage of revenue.....	17%	19%		18%	18%	

Research and development expenses for the three months and year ended December 31, 2019 were \$9.4 million and \$34.1 million, an increase of \$2.3 million and \$6.5 million, respectively, compared to the same periods in 2018. The increase in research and development expenses was due to higher headcount and related compensation costs. The investment in headcount supports ongoing programs to drive further innovation in our RapidResponse platform and ensure sustainable market leadership.

As a percentage of revenue, research and development expenses were 17% and 18%, for the three months and year ended December 31, 2019, compared to 19% and 18%, respectively, for the same periods in 2018.

General and Administrative Expenses

	Three months ended December 31,		2018 to	Year ended December 31,		2018 to
	2019	2018	2019	2019	2018	2019
			%			%
	(In thousands of USD)					
General and administrative.....	\$ 6,505	\$ 5,028	29%	\$ 26,852	\$ 20,167	33%
As a percentage of revenue.....	12%	13%		14%	13%	

General and administrative expenses for the three months and year ended December 31, 2019 were \$6.5 million and \$26.9 million, an increase of \$1.5 million and \$6.7 million, respectively, compared to the same periods in 2018. General and administrative expenses for the year ended December 31, 2019 include a \$2.5 million write off of trade and other receivables. We had a dispute with an Asian-based customer that was the subject of confidential, binding arbitration proceedings. We have agreed with the customer to resolve our dispute amicably, with no admission by either party and with no payment by either party to the other. The arbitration has been discontinued. Prior to the effect of this write off, general and administrative expenses increased \$4.2 million or 21% for the year ended December 31, 2019 compared to the same period in 2018.

The remaining increase, excluding the write-off, was due to higher headcount and related compensation costs in support of ongoing investment in global expansion, particularly in Europe and Asia, and higher legal fees.

As a percentage of revenue, general and administrative expenses were 12% and 14% for the three months and year ended December 31, 2019, respectively, compared to 13% for the same periods in 2018.

Other Income and Expense

	Three months ended December 31,		2018 to	Year ended December 31,		2018 to
	2019	2018	2019	2019	2018	2019
			%			%
	(In thousands of USD)					
Other income (expense):						
Foreign exchange loss	\$ (40)	\$ 22	— ⁽¹⁾	\$ (226)	\$ (181)	25%
Net finance income.....	610	1,208	(50%)	3,037	1,810	68%
Total other income	570	1,230	(54%)	2,811	1,629	73%

Note:

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

Total other income for the three months ended December 31, 2019 was \$0.6 million, compared to \$1.2 million for the same period in 2018. The decrease for the three month period was due to lower interest earnings.

Total other income for the year ended December 31, 2019 was \$2.8 million, compared to \$1.6 million for the same period in 2018. The increase for the year was due to interest earned on higher balances of cash and cash equivalents and short-term investments.

Income Taxes

	Three months ended December 31,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
Income tax expense	\$ 4,484	\$ 1,796	150%	\$ 11,932	\$ 8,068	48%
As a percentage of profit before income taxes	36%	38%		34%	36%	

Income tax expense for the three months and year ended December 31, 2019 was \$4.5 million and \$11.9 million, compared to \$1.8 million and \$8.1 million, respectively, for the same periods in 2018. The increase in income tax expense was due to higher profit before income taxes. As a percentage of profit before taxes, income tax expense was 36% and 34% for the three months and year ended December 31, 2019, compared to 38% and 36%, respectively, for the same periods in 2018.

Income tax expense as a 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,		2018 to 2019	Year ended December 31,		2018 to 2019
	2019	2018	%	2019	2018	%
	(In thousands of USD)					
Profit	\$ 7,831	\$ 2,925	168%	\$ 23,331	\$ 14,408	62%
Adjusted profit ⁽¹⁾	11,008	5,849	88%	36,698	25,976	41%
Adjusted EBITDA ⁽¹⁾	18,134	8,986	102%	57,727	41,687	38%
Basic earnings per share	\$ 0.30	\$ 0.11		\$ 0.89	\$ 0.56	
Diluted earnings per share	\$ 0.29	\$ 0.11		\$ 0.87	\$ 0.54	
Adjusted diluted earnings per share ⁽¹⁾	\$ 0.40	\$ 0.22		\$ 1.36	\$ 0.97	

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.

Profit for the three months ended December 31, 2019 was \$7.8 million or \$0.30 per basic share and \$0.29 per diluted share, compared to \$2.9 million or \$0.11 per basic and diluted share for the same period in 2018. Profit for the year ended December 31, 2019 was \$23.3 million or \$0.89 per basic share and \$0.87 per diluted share, compared to \$14.4 million or \$0.56 per basic share and \$0.54 per diluted share for the same period in 2018. The increase in profit for the three months and year was due to an increase in revenue and gross profit, partly offset by an increase in operating expenses.

Adjusted EBITDA for the three months and year ended December 31, 2019 was \$18.1 million and \$57.7 million, compared to \$9.0 million and \$41.7 million, respectively, for the same periods in 2018. The increase in Adjusted EBITDA was due to an increase in revenue and gross profit, partly offset by an increase in operating expenses excluding stock-based compensation and depreciation and the \$2.5 million write off of trade and other receivables related to the discontinued arbitration proceedings. Prior to the effect of this write off, Adjusted EBITDA for the year ended December 31, 2019 was \$60.3 million, or 31% of revenue.

Key Balance Sheet Items

	<u>As at December 31, 2019</u>	<u>As at December 31, 2018</u>
	(In thousands of USD)	
Total assets	\$ 350,743	\$ 297,759
Total liabilities.....	120,641	113,077

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

Trade and other receivables

	<u>As at December 31, 2019</u>	<u>As at December 31, 2018</u>
	(In thousands of USD)	
Trade accounts receivable.....	\$ 65,406	\$ 56,618
Unbilled receivables	13,880	6,408
Taxes receivable	382	566
Other	1,690	738
Loss allowance	(22)	—
Total trade and other receivables	<u>81,336</u>	<u>64,330</u>

Trade and other receivables at December 31, 2019 were \$81.3 million, an increase of \$17.0 million compared to December 31, 2018 due to variances in the timing of billings and collections on receivables. The balance at any point in time is impacted by the timing of the annual subscription billing cycle for each customer and when new customer contracts are secured. Unbilled receivables at December 31, 2019 were \$13.9 million, an increase of \$7.5 million compared to December 31, 2018 due to renewals and expansion of on-premise subscription agreements resulting in recognition of subscription term license revenue in advance of invoicing under the respective agreements. The aging of trade receivables is generally current or within 30 days past due and overdue amounts do not reflect any credit issues. We have a nominal allowance for expected losses recorded as at December 31, 2019.

Right-of-use assets & Lease obligations

	<u>As at December 31, 2019</u>	<u>As at December 31, 2018</u>
	(In thousands of USD)	
Right-of-use assets	\$ 8,671	\$ 8,873
Lease obligations:		
Current	2,288	2,572
Non-current	6,818	6,311
	<u>9,106</u>	<u>8,883</u>

The right-of-use assets and lease obligations relate to our leases for office space and data centers.

Right-of-use assets at December 31, 2019 were \$8.7 million, a decrease of \$0.2 million compared to December 31, 2018. This decrease was due to regular amortization, mostly offset by additional data center leases entered into during the year. Lease obligations at December 31, 2019 were \$9.1 million, an increase of \$0.2 million compared to December 31, 2018. This increase was due to additional data center leases entered into during the year, mostly offset by regular lease payments.

Contract acquisition costs

	<u>As at December 31, 2019</u>	<u>As at December 31, 2018</u>
	(In thousands of USD)	
Contract acquisition costs	\$ 15,497	\$ 13,902

Contract acquisition costs are capitalized and amortized over the expected life of the customer upon commencement of the related revenue. Contract acquisition costs consist of sales commissions paid to employees and third party referral fees. Contract acquisition costs at December 31, 2019 were \$15.5 million, an increase of \$1.6 million compared to December 31, 2018.

Deferred revenue

	<u>As at December 31, 2019</u>	<u>As at December 31, 2018</u>
	(In thousands of USD)	
Deferred revenue	\$ 83,673	\$ 78,496

Deferred revenue at December 31, 2019 was \$83.7 million, an increase of \$5.2 million compared to December 31, 2018. We generally bill our customers annually in advance for SaaS agreements resulting in initially recording the amount billed as deferred revenue which is subsequently drawn down to revenue over the agreement 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.

Summary of Quarterly Results

The following table summarizes selected results for the eight most recent completed quarters to December 31, 2019.

Three months ended

	December 31, 2019	September 30, 2019	June 30, 2019	March 31, 2019	December 31, 2018	September 30, 2018	June 30, 2018	March 31, 2018
Revenue:								
SaaS.....	\$ 32,006	\$ 31,229	\$ 28,283	\$ 27,342	\$ 25,492	\$ 24,489	\$ 23,873	\$ 23,303
Professional services.....	8,931	9,348	8,358	6,912	7,447	8,657	9,640	6,110
Subscription term license.....	12,120	3,278	2,414	8,406	2,390	508	2,543	4,494
Maintenance and support	3,255	3,276	3,297	3,094	2,970	2,931	2,938	2,942
	56,312	47,131	42,352	45,754	38,299	36,585	38,994	36,849
Cost of revenue	14,872	13,803	12,984	12,191	12,390	12,014	12,493	10,135
Gross profit	41,440	33,328	29,368	33,563	25,909	24,571	26,501	26,714
Operating expenses	29,695	27,810	24,368	23,374	22,418	20,660	20,398	19,372
	11,745	5,518	5,000	10,189	3,491	3,911	6,103	7,342
Foreign exchange gain (loss).....	(40)	(101)	85	(170)	22	(177)	(222)	196
Net finance income	610	841	821	765	1,208	264	193	145
Profit before income taxes.....	12,315	6,258	5,906	10,784	4,721	3,998	6,074	7,683
Income tax expense	4,484	1,725	1,905	3,818	1,796	1,333	1,809	3,130
Profit	\$ 7,831	\$ 4,533	\$ 4,001	\$ 6,966	\$ 2,925	\$ 2,665	\$ 4,265	\$ 4,553
Share-based compensation	3,177	3,537	3,581	3,072	2,924	2,959	2,527	3,158
Adjusted profit ⁽¹⁾	\$ 11,008	\$ 8,070	\$ 7,582	\$ 10,038	\$ 5,849	\$ 5,624	\$ 6,792	\$ 7,711
Income tax expense	4,484	1,725	1,905	3,818	1,796	1,333	1,809	3,130
Depreciation ⁽²⁾	3,212	3,045	2,974	2,677	2,571	2,483	2,398	1,820
Foreign exchange loss (gain).....	40	101	(85)	170	(22)	177	222	(196)
Net finance income.....	(610)	(841)	(821)	(765)	(1,208)	(264)	(193)	(145)
	7,126	4,030	3,973	5,900	3,137	3,729	4,236	4,609
Adjusted EBITDA ⁽¹⁾⁽²⁾	\$ 18,134	\$ 12,100	\$ 11,555	\$ 15,938	\$ 8,986	\$ 9,353	\$ 11,028	\$ 12,320
Basic earnings per share.....	\$ 0.30	\$ 0.17	\$ 0.15	\$ 0.27	\$ 0.11	\$ 0.10	\$ 0.17	\$ 0.18
Diluted earnings per share.....	\$ 0.29	\$ 0.17	\$ 0.15	\$ 0.26	\$ 0.11	\$ 0.10	\$ 0.16	\$ 0.17
Adjusted diluted earnings per share ⁽¹⁾	\$ 0.40	\$ 0.30	\$ 0.28	\$ 0.37	\$ 0.22	\$ 0.21	\$ 0.25	\$ 0.29

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) Figures have been adjusted for the three months ended March 31, 2018, June 30, 2018, and September 30, 2018 as a result of adjustments identified in connection with issuing our consolidated financial statements for the year ended December 31, 2018. Certain variable lease payments previously recorded as lease assets and obligations have been recorded as operating expenses. These adjustments were not considered material and did not affect our consolidated revenue or consolidated profit.

SaaS revenue has increased due to the acquisition of new customers and expansion within existing customers. 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. Subscription term license revenue varies quarter to quarter due to the timing of new contracts, expansions and renewals for on-premise and hybrid subscription arrangements. Maintenance and support revenue is consistent, reflecting the recurring support component of on-premise and hybrid subscription arrangements and legacy perpetual licenses.

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 74% 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 from 2018 to 2019.

Liquidity and Capital Resources

Our primary source of cash flow is sales of subscriptions for our software and sales of professional 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.

	<u>As at</u> <u>December 31, 2019</u>	<u>As at</u> <u>December 31, 2018</u>
	(In thousands of USD)	
Cash and cash equivalents	\$ 182,284	\$ 126,144
Short-term investments	30,319	55,404
	<u>212,603</u>	<u>181,548</u>

Cash and cash equivalents increased \$56.1 million to \$182.2 million at December 31, 2019. Short-term investments decreased \$25.1 million to \$30.3 million at December 31, 2019. Total cash and cash equivalents and short-term investments increased \$31.1 million to \$212.6 million at December 31, 2019.

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, 2019 was \$277.4 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 \$78.7 million and finance our longer-term growth.

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

	<u>Three months ended</u> <u>December 31,</u>		<u>Year ended</u> <u>December 31,</u>	
	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
	(In thousands of USD)			
Cash inflow (outflow) by activity				
Operating activities	\$ 8,025	\$ 6,654	\$ 36,599	\$ 27,915
Investing activities	(1,378)	13,744	13,281	(12,406)
Financing activities	3,749	(104)	6,077	7,960
Effects of exchange rates	(69)	(190)	183	(717)
Net cash inflows.....	<u>10,327</u>	<u>20,104</u>	<u>56,140</u>	<u>22,752</u>

Cash provided by operating activities

Cash generated by operating activities for the three months ended December 31, 2019 was \$8.0 million, compared to \$6.7 million for the same period in 2018. The increase was due to higher profit, partly offset by fluctuations in operating assets and liabilities including a larger increase in trade and other receivables compared to the same period in 2018. Cash generated by operating activities for the year ended December 31, 2019 was \$36.6 million, compared to \$27.9 million for the same period in 2018. The increase was due to higher profit and collection of trade and other receivables, partly offset by income tax payments and a smaller increase in deferred revenue compared to the same period in 2018.

Cash provided by (used in) investing activities

Cash provided by/used in investing activities is driven by net redemption 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 used in investing activities for the three months ended December 31, 2019 was \$1.4 million, compared to cash provided by investing activities of \$13.7 million for the same period in 2018. The change was due to net redemptions of short-term investments for the three month period in 2018. Cash provided by investing activities for the year ended December 31, 2019 was \$13.3 million, compared to cash used in investing activities of \$12.4 million for the same period in 2018. The change was due to net redemptions of short-term investments in 2019. We expect 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 (used in) financing activities

Cash provided by financing activities for the three months ended December 31, 2019 was \$3.7 million, compared to cash used in financing activities of \$0.1 million for the same period in 2018. The change was due to higher proceeds from stock options exercised. Cash provided by financing activities for the year ended December 31, 2019 was \$6.1 million, compared to \$8.0 million for the same period in 2018. The decrease was due to lower proceeds from stock options exercised.

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 February 2037. The largest lease commitment relates to a new head office in Ottawa, Canada, the lease of which commences in 2021 and expires in 2037. 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, 2019, 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.....	\$ 4,437	\$ 13,182	\$ 5,572	\$ 34,757	\$ 57,948
Financial Obligations					
Trade payables and accrued liabilities..	20,770	-	-	-	20,770
Total Contractual Obligations	<u>\$ 25,207</u>	<u>\$ 13,182</u>	<u>\$ 5,572</u>	<u>\$ 34,757</u>	<u>\$ 78,718</u>

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	<u>\$ 25,301</u>	<u>\$ 7,926</u>	<u>\$ 695</u>	<u>\$ -</u>	<u>\$ 33,922</u>

Recent Developments

On January 31, 2020, we acquired 100% of the outstanding shares of Prana Consulting, Inc. and all of its subsidiaries ("Prana") in exchange for cash and contingent consideration. Prana provides consulting services for implementation of our software.

The cash consideration is based on a purchase price of \$3,650, adjusted for Prana's working capital surplus or deficit at the date of acquisition and subject to post-closing working capital adjustments.

The contingent consideration arrangement consists of additional payments to the selling shareholder for attainment of specific revenue and team retention metrics in the year following the acquisition. The potential undiscounted amount of all future payments that we could be required to make under this arrangement is between \$150 and \$1,000. We estimate that the fair value of contingent consideration at the date of acquisition is \$800.

The financial effects of this transaction have not been recognized at December 31, 2019. At the effective date of this MD&A, we have not yet completed the initial accounting for the acquisition of Prana. In particular, the fair value assessment of the assets acquired and liabilities assumed is incomplete. It is not yet possible to provide detailed information about each class of net assets and any contingent liabilities of the acquired entity.

The provisionally determined goodwill arising from the acquisition is \$4,450. The goodwill is attributable mainly to the skills and technical talent of Prana's work force and the synergies expected to be achieved from integrating Prana into our existing professional services business. The goodwill is expected to be deductible for tax purposes.

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 year ended December 31, 2019 and 2018 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 Royal Bank prime rate and Royal Bank US base 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 2019 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.

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 end of 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. As at December 31, 2019, management assessed the effectiveness of our ICFR and concluded that our ICFR is effective and there are no material weaknesses that have been identified. There were no significant changes to our ICFR for the year ended December 31, 2019.

Outstanding Share Information

As of December 31, 2019, 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, 2019 and as of February 25, 2020 are summarized as follows:

Class of Security	Number outstanding at December 31, 2018	Net issued	Number outstanding at December 31, 2019	Net issued	Number outstanding at February 25, 2020
	Common shares	26,078,181	324,823	26,403,004	4,669
Stock options	2,089,873	138,865	2,228,738	(5,919)	2,222,819
Restricted Share Units	52,634	8,088	60,722	–	60,722
Deferred Share Units	30,830	14,256	45,086	–	45,086

Our outstanding common shares increased by 324,823 shares in 2019 due to the exercise of 261,929 stock options and vesting of 62,894 restricted share units.

Our outstanding stock options increased by 138,865 options in 2019 due to the grant of 468,044 options less 261,929 options exercised and 67,250 options forfeited. Each option is exercisable for one common share.

Our outstanding restricted share units increased by 8,088 units in 2019 due to the grant of 70,982 restricted share units less 62,894 units vested. Our outstanding deferred share units increased by 14,256 units in 2019 due to the grant of 14,256 deferred share units. 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.



www.kinaxis.com

