Kinaxis Inc.

Management's discussion and analysis

for the three months ended March 31, 2022

May 5, 2022

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 March 31, 2022. This MD&A has been prepared with an effective date of May 5, 2022.

This MD&A for the three months ended March 31, 2022 should be read in conjunction with our condensed consolidated interim financial statements and the related notes thereto as at and for the three months ended March 31, 2022 and the annual audited consolidated financial statements for the year ended December 31, 2021. The financial information presented in this MD&A is derived from our interim financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board. 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 certain trademarks, trade names and service marks which are protected under applicable intellectual property laws and are the property of Kinaxis. Solely for convenience, our trademarks, such as "Kinaxis" and "RapidResponse", may appear without the ® or ™ symbol, but such references are not intended to indicate, in any way, that we will not assert our rights to these trademarks, trade names and service marks to the fullest extent under applicable law. Trademarks used in this MD&A, other than those that belong to Kinaxis, 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 and ratios

This MD&A makes reference to certain non-IFRS measures and ratios such as "Adjusted profit", "Adjusted EBITDA" and "Adjusted diluted earnings per share". These non-IFRS measures and ratios 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 and ratios should be read in conjunction with our condensed consolidated interim financial statements and the related notes thereto as at and for three months ended March 31, 2022. Readers should not place undue reliance on non-IFRS measures and ratios and should instead view them in conjunction with the most comparable IFRS financial measures. See the reconciliations of Adjusted profit, Adjusted EBITDA and Adjusted diluted earnings per share to the most comparable IFRS financial measure in the "Reconciliation of non-IFRS measures and ratios" 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", "could", "expect", "anticipate", "aim", "estimate", "plan", "seek", "believe", "potential", "predict", "ongoing", "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 about our revenue, expenses and operations;
- our anticipated cash needs;

- our ability to protect, maintain and enforce our intellectual property rights, including our ability to defend against third party claims;
- 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 our people;
- our expectations with respect to advancement in our technologies;
- our competitive position and our expectations regarding competition;
- regulatory developments and the regulatory environments we operate in;
- anticipated trends and challenges in our business and the markets we operate in;
- expansion of our partnerships;
- completion of our new building and opportunities related to it;
- expectations relating to a hybrid office/work-from-home approach and results on the Company's carbon footprint;
- anticipated trends, standards and challenges in our business and the markets we operate in; and
- expected impact of COVID-19 on the Company's future operations and performance.

Forward-looking statements are based on certain assumptions and analyses 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 behavior, 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.

All of the forward-looking statements in this MD&A are qualified by these cautionary statements and other cautionary statements or factors contained herein. There is no assurance that the actual results or developments will be realized or, even if substantially realized, that they will have the expected consequences to, or effects on, Kinaxis.

The forward-looking statements made in this MD&A relate only to events or information as of the date of this MD&A and are expressly qualified in their entirety by this cautionary statement. 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, unless we are required by law to do so.

Risks and uncertainties

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

Strategic risks

- If we're 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 adequately scale our operations to meet and sustain our growth objectives, it could affect our ability to remain competitive and adversely affect our business.

- 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.
- If we're unable to assess and adapt to rapid technological developments, it could impair our ability to remain competitive.
- If we fail to protect our intellectual property and proprietary rights adequately, our business could be adversely affected.
- If a third party makes an assertion that we're infringing its intellectual property, it could subject us to costly and time-consuming litigation or expensive licenses which could harm our business.
- We participate in highly competitive markets, 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're unable to retain our key employees, or effectively compete for talent, our business would be harmed and we might not be able to implement our business plan successfully.
- Our growth depends on the continued development of our direct sales force.
- As we increase our emphasis on our partner ecosystem, we may encounter new risks, such as dependence on partners for a material portion of our revenue and potential channel conflict.
- 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.
- Our business may suffer if we do not develop widespread brand awareness cost-effectively.
- Our strategy includes pursuing acquisitions and our potential inability to successfully integrate newly-acquired companies or businesses may adversely affect our financial results.
- Efforts to reduce climate change could affect our sales and financial results.
- 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.

Financial risks

- If we're 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.
- We may incur operating losses in the future.
- 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 experience significant fluctuations in our rate of anticipated growth and do not balance our expenses with our revenue forecasts, our results could be harmed.

Operational risks

- 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 and privacy breaches, including ransomware and cyberattacks, 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 or privacy relating to customer information.
- We enter into service level agreements with all our customers. If we do not 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.
- If our productivity is impacted as a result of remote work, we may incur additional costs to address such issues and our financial condition and results may be adversely impacted.
- Events that are out of our control, such as a geopolitical crisis, widespread outbreak of an illness or other health issue, a natural disaster or terrorist attack could negatively affect various aspects of our business.
- Interruptions or delays in the services provided by third parties 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.
- Because our long-term success depends, in part, on our ability to continue to expand the sales of our solutions to customers located outside North America, our business will be susceptible to risks associated with international operations.

Regulatory and compliance risks

- Privacy and security concerns, including evolving laws and regulations in these areas, could adversely affect our business and operating results.
- 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.

Other risks

- Impacts related to the COVID-19 pandemic are expected to continue to pose risks to our business for the foreseeable future, may heighten many of the risks and uncertainties identified herein, and could have a material adverse impact on our business, operations or financial performance in a manner that is difficult to predict.
- The market price of our common shares may be volatile.
- We may issue additional common shares in the future which may dilute our shareholders' investments.

These risks are described in further detail in the section entitled "Risk Factors" in our most recently filed Annual Information Form.

Overview

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. We combine human intelligence with artificial intelligence (AI) and our unique concurrent planning technique to help companies plan for the future, monitor risks and opportunities and respond at the pace of change. Our industry-proven applications and extensible, cloud-based RapidResponse® platform empowers planners, business leaders and information technology (IT) professionals to know sooner, act faster and remove waste so they can make decisions that improve the bottom line, make better use of resources and facilitate better work-life balance.

We serve the needs of Global Fortune 100, Fortune 500 and other large and mid-size companies, primarily focusing on companies with revenues over US$250 million across seven vertical markets: high technology and electronics manufacturing, aerospace and defense, industrial products, life sciences and pharmaceuticals, automotive, consumer products and retail. Customers are primarily global enterprises with complex supply chain networks and significant unresolved supply chain challenges. Our customers include many leading organizations like Merck & Co., Ford Motor Company, Proctor & Gamble and Schneider Electric, and tend to select RapidResponse as a purpose-built solution to holistically address an end-to-end supply chain planning requirement (concurrent planning), rather than using bundled solutions from enterprise resource planning (ERP) vendors like Oracle or SAP. We believe this market is growing because of several factors, including the increased complexity and globalization of supply chains, outsourcing, a diversity of data sources and systems, competitive pressures and a growing awareness of the criticality of creating truly agile supply chains, as highlighted by the COVID-19 crisis.

Recurring revenue model

We sell our product using a subscription-based model, with the product being delivered from the cloud in the vast majority of cases, from locations we manage within leased third-party data center facilities. 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 subscription customers generally enter into three 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 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. We also provide professional services for implementation and configuration of the product, as well as ongoing technical services and training. Professional services are typically billed on a time and material basis.

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 the 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 expected annual SaaS revenue is recognized from customer contracts that are in place at the beginning of the year 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.

Strong financial track record

We have established a consistent financial track record of strong revenue growth, solid earnings performance and cash generation. Our SaaS revenue growth is driven both by contracts with new customers and expansion of our solution within our existing customer base. Subscription term license revenue is generally driven by the timing of renewals of the underlying on-premise customer contracts. Our combined net revenue retention from both SaaS and on-premise subscriptions is greater than 100%, reflecting our longer term contract structure and strong renewal history.

For the three months ended March 31, 2022, our SaaS revenue was $49.3 million (three months ended March 31, 2021 – $40.6 million), subscription term license revenue was $23.5 million (three months ended March 31, 2021 – $2.1 million) and total revenue was $98.1 million (three months ended March 31, 2021 – $57.7 million). For the three months ended March 31, 2022, our Adjusted EBITDA was 34% of revenue (three months ended March 31, 2021 – 16%). Our ending cash, cash equivalents and short-term investment balance was $252.2 million (December 31, 2021 – $233.4 million).

For the three months ended March 31, 2022, due to subscription term license revenue recognized in the period, our ten largest customers accounted for 40% of our total revenues (three months ended March 31, 2021 – 27%) with one customer accounting for greater than 10% of total revenues (three months ended March 31, 2021 – no customers).

Growth strategy

Increasing revenues through new customer wins is one of our highest organizational priorities. Our sales cycle can be lengthy, as much as 18 months. 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 system integrator, value added reseller and other service partners.

We continue to invest in our partnerships both from a sales and product implementation perspective. We work with global and regional system integrators, which are able to positively influence the decision-making process at major target customers and help customers realize end-to-end supply chain optimization by implementing our industry-leading concurrent planning solution. Such partners include Accenture, Deloitte, EY, Genpact, mSE Solutions, Argon Groupe and Cognizant. Our referral partners direct new opportunities to us under a business arrangement. We regard Value Added Resellers as an extension of our sales force that resells and supports RapidResponse in select markets, with a focus on mid-market companies. Finally, we work with solution extension partners, such as 4flow, OCYO Consulting and PlanetTogether to provide additional applications on our platform, and project44, LevaData and Blume Global to provide additional data streams and signaling to increase the value that customers gain from RapidResponse. These partners, which we work with under revenue sharing agreements, deliver digital inputs or domain-specific applications that leverage the power of concurrent planning and extend the capabilities of the platform.

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, most notably due to COVID-19 in recent periods, 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 are headquartered in Ottawa, Ontario. We have subsidiaries located in the United States, France, Germany, Ireland, the Netherlands, the United Kingdom, Hong Kong, South Korea, and Singapore, and subsidiaries and offices in Tokyo, Japan and Chennai, India. We continue to expand our operations internationally. For the three months ended March 31, 2022, 67% of our revenues were derived from North American customers (three months ended March 31, 2021 – 66%) and our remaining revenues were derived from European and Asian customers.

On February 11, 2022, we acquired 100% of the outstanding shares of a supply chain solutions company in exchange for total consideration of $3.1 million in cash. The acquired company is a provider of algorithm-driven supply chain planning software modules.

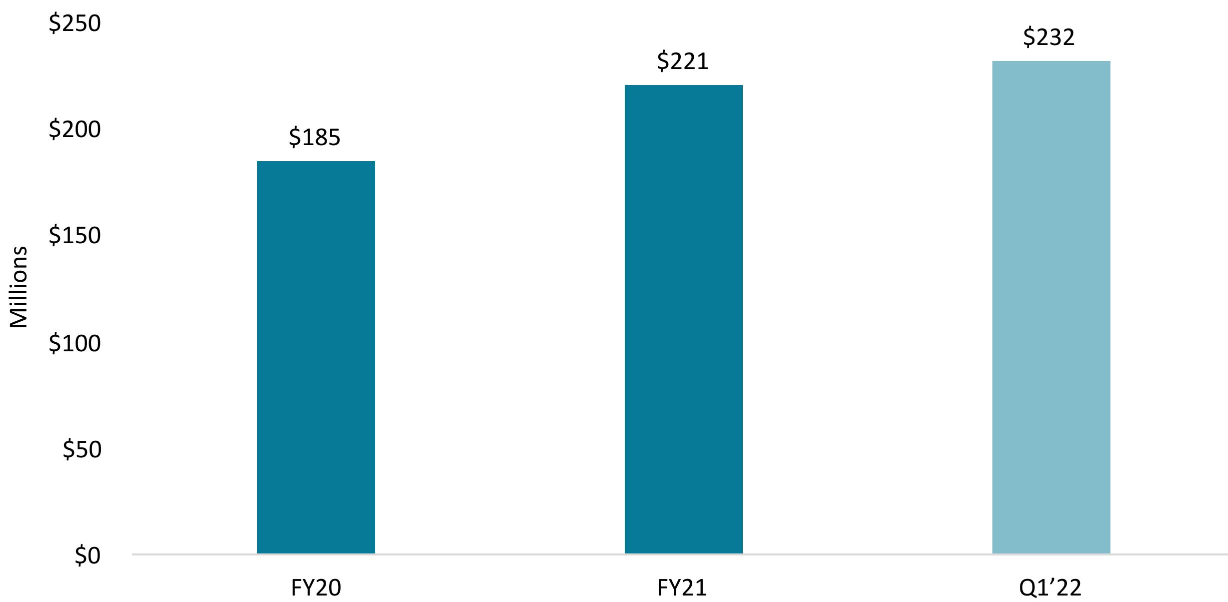
Key performance indicators

We use a number of key performance indicators to assess the performance of our business including Annual Recurring Revenue (ARR) and Remaining Performance Obligation (RPO). These financial measures do not have any standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures presented by other issuers and cannot be reconciled to a directly comparable IFRS measure. We evaluate our performance by comparing our actual results to budgets, forecasts and prior period results. Our key performance indicators may be calculated in a manner different than similar key performance indicators used by other companies.

Annual Recurring Revenue

Annual Recurring Revenue (ARR) is the total annualized value of recurring subscription amounts (ultimately recognized as SaaS, Subscription Term Licenses and Maintenance & Support revenue) of all subscription contracts at a point in time. Annualized subscription amounts are determined solely by reference to the underlying contracts, normalizing for the varying revenue recognition treatments under IFRS for cloud-based versus on-premise subscription amounts. It excludes one-time fees, such as for non-recurring professional services, and assumes that customers will renew the contractual commitments on a periodic basis as those commitments come up for renewal, unless such renewal is known to be unlikely at period end. We believe that this measure provides a more current indication of our performance in the growth of our subscription business than other metrics.

The Company's ARR at March 31, 2022 is $232 million, an increase of 22% year-over-year or 24% on a constant currency basis. We calculate constant currency growth rates by applying the applicable prior period exchange rates to current period results.

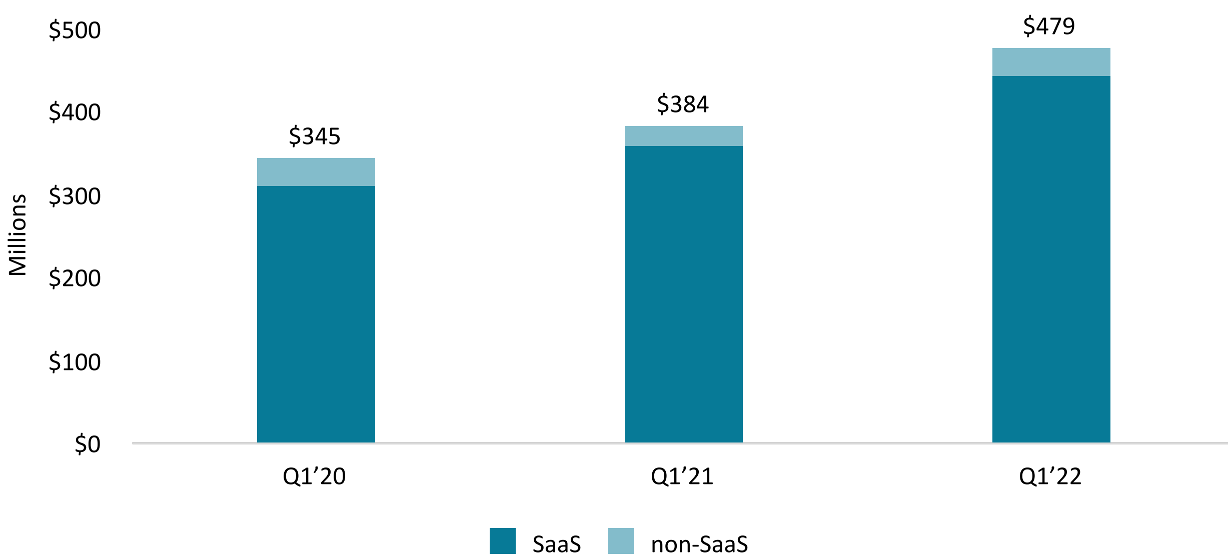


	FY20	FY21	Q1'22
Year-over-year growth	17%	19%	22%
Year-over-year growth in constant currency	15%	21%	24%

Remaining Performance Obligation

Remaining Performance Obligation (RPO) represents the minimum contracted revenue expected to be recognized in the future related to performance obligations that are unsatisfied or partially unsatisfied at period end. Our business model continues to focus on delivering long-term value to our customers. As a result, we typically enter into three to five-year agreements with our customers. RPO is not necessarily indicative of future revenue growth and is influenced by several factors, including seasonality, the timing of renewals, average contract terms, foreign currency exchange rates and fluctuations in new business growth. RPO is also impacted by acquisitions.

As at March 31, 2022, RPO amounts to $479 million, including $445 million in SaaS revenue (March 31, 2021 – $384 million and $361 million).



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 comprised of subscription 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.

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.

Subscription term license revenue is comprised of fees for the implied software component for on-premise and hybrid subscriptions, which is recognized as revenue upon term commencement. Hybrid subscription refers to the option of certain customers to take the hosted software on-premise.

Maintenance and support revenue is comprised of fees for the implied maintenance and support component for on-premise and hybrid subscriptions.

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, amortization related to acquired technology, depreciation related to our computer hardware and leased 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, in absolute dollars, will continue to increase.

Research and development expenses

Research and development 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 research and development 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 and amortization related to customer relationships. We expect that, in the future, general and administrative expenses will continue to 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, France, Germany and Ireland (Euro), the United Kingdom (British Pound) and India (Indian Rupee). 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 half of our expenses are incurred in Canadian dollars.

Results of operations

Summary of results

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

	Three months ended March 31,	
	2022	2021
	(In thousands of USD, except earnings per share)	
Statement of Operations		
Revenue	$ 98,108	$ 57,728
Cost of revenue	28,466	20,506
Gross profit	69,642	37,222
Operating expenses	48,467	38,062
	21,175	(840)
Foreign exchange loss	(1,165)	(468)
Net finance and other expense	(360)	(158)
Profit (loss) before income taxes	19,650	(1,466)
Income tax expense	7,128	68
Profit (loss)	$ 12,522	$ (1,534)
Adjusted profit[(1)]	$ 18,525	$ 3,773
Adjusted EBITDA[(1)]	$ 33,149	$ 9,041
Basic earnings (loss) per share	$ 0.46	$ (0.06)
Diluted earnings (loss) per share	$ 0.44	$ (0.06)
Adjusted diluted earnings per share[(1)]	$ 0.65	$ 0.13

Note:

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

	As at March 31, 2022	As at December 31, 2021
	(In thousands of USD)	
Total assets	$ 570,948	$ 520,269
Total non-current liabilities	59,816	53,242

Reconciliation of non-IFRS measures and ratios

To supplement our consolidated financial statements, which are prepared and presented in accordance with IFRS, we provide investors with the following non-IFRS financial measures and ratios: Adjusted profit, Adjusted diluted earnings per share and Adjusted EBITDA. We believe that securities analysts, investors and other interested parties frequently use non-IFRS measures and ratios in the evaluation of performance. Management also uses non-IFRS measures and ratios 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.

Adjusted profit and Adjusted diluted earnings per share

Adjusted profit represents profit adjusted to exclude our equity compensation plans and non-recurring items. Adjusted diluted earnings per share represents diluted earnings per share calculated using Adjusted profit. We use Adjusted profit and Adjusted diluted earnings per share as these measures and ratios better align with our performance and improve comparability against our peers.

Adjusted EBITDA

Adjusted EBITDA represents profit adjusted to exclude our equity compensation plans, non-recurring items, income tax expense (recovery), depreciation and amortization, foreign exchange loss (gain), and net finance expense (income). 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 have reconciled Adjusted profit and Adjusted EBITDA to the most comparable IFRS financial measure as follows:

	Three months ended	
	2022	**2021**
	(In thousands of USD)	
Profit (loss)	$ 12,522	$ (1,534)
Share-based compensation	6,003	5,307
Adjusted profit	$ 18,525	$ 3,773
Income tax expense	7,128	68
Depreciation and amortization	5,914	4,470
Foreign exchange loss	1,165	468
Net finance expense	417	262
	14,624	5,268
Adjusted EBITDA	$ 33,149	$ 9,041
Adjusted EBITDA as a percentage of revenue	34%	16%

Revenue

	Three months ended March 31,		2021 to 2022
	2022	2021	%
	(In thousands of USD)		
SaaS	$ 49,320	$ 40,576	22%
Subscription term license	23,474	2,059	1,040%
Professional services	21,458	12,027	78%
Maintenance and support	3,856	3,066	26%
	98,108	57,728	70%

Total revenue for the three months ended March 31, 2022 was $98.1 million, an increase of $40.4 million compared to the same period in 2021. The increase was due to significantly higher subscription term license revenue, as well as a 22% increase in SaaS revenues and a 78% increase in professional services revenue.

SaaS revenue

SaaS revenue for the three months ended March 31, 2022 was $49.3 million, an increase of $8.7 million compared to the same period in 2021. This increase was due to contracts secured with new customers, as well as expansion of existing customer subscriptions.

Subscription term license revenue

Subscription term license revenue for the three months ended March 31, 2022 was $23.5 million, an increase of $21.4 million compared to the same period in 2021. Generally, subscription term license revenue varies quarter to quarter due to the timing of renewals and expansions for on-premise and hybrid subscription arrangements. The current period fluctuations reflect the normal cycle of such renewals and expansions with existing customers.

Professional services revenue

Professional services revenue for the three months ended March 31, 2022 was $21.5 million, an increase of $9.4 million compared to the same period in 2021. The increase was due to increased deployment activity driven by new subscription customers. Professional services revenue varies quarter to quarter due to the size, timing and scheduling of customer engagements and the level of partner-led engagements.

Maintenance and support revenue

Maintenance and support revenue for the three months ended March 31, 2022 was $3.9 million, an increase of $0.8 million compared to the same period in 2021 driven by expansion of existing on-premise customers.

Cost of revenue

	Three months ended		2021 to
	2022	2021	%
	(In thousands of USD)		
Cost of revenue	$ 28,466	$ 20,506	39%
Gross profit	69,642	37,222	87%
Gross margin	71%	64%	
Software[1]	85%	81%	
Professional services	20%	1%	

Note:

(1) Software gross margin corresponds to SaaS, subscription term license and maintenance and support revenue.

Cost of revenue for the three months ended March 31, 2022 was $28.5 million, an increase of $8.0 million compared to the same period in 2021. The increase was due to higher headcount and related compensation costs, partner and third-party provider costs, IT costs and depreciation.

Gross margin for the three months ended March 31, 2022 was 71%, compared to 64% for the same period in 2021. Gross margin is driven by a mix of software and professional services gross margins. Software gross margin for the three months ended March 31, 2022 was 85%, compared to 81% for the same period in 2021. The higher software gross margin was due to a higher proportion of subscription term license revenue, which carries a higher gross margin than revenue recognized ratably over the term. Professional services gross margin for the three months ended March 31, 2022 was 20%, compared to 1% for the same period in 2021. The higher professional services gross margin was due to an increase in headcount utilization as related revenues increased in the period.

Selling and marketing expenses

	Three months ended March 31,		2021 to 2022
	2022	2021	%
	(In thousands of USD)		
Selling and marketing	$ 17,126	$ 12,838	33%
As a percentage of revenue	17%	22%	

Selling and marketing expenses for the three months ended March 31, 2022 were $17.1 million, an increase of $4.3 million compared to the same period in 2021. The increase was due to higher headcount and related compensation costs and marketing programs.

Research and development expenses

	Three months ended March 31, 2022	Three months ended March 31, 2021	2021 to 2022 %
	(In thousands of USD)		
Research and development	$ 18,157	$ 13,682	33%
As a percentage of revenue	19%	24%	

Research and development expenses for the three months ended March 31, 2022 were $18.2 million, an increase of $4.5 million compared to the same period in 2021. The increase was due to higher headcount and related compensation costs and public cloud service provider costs. Our investment in headcount supports ongoing programs to drive further innovation in our RapidResponse platform and ensure sustainable market leadership.

General and administrative expenses

	Three months ended March 31, 2022	Three months ended March 31, 2021	2021 to 2022 %
	(In thousands of USD)		
General and administrative	$ 13,184	$ 11,542	14%
As a percentage of revenue	13%	20%	

General and administrative expenses for the three months ended March 31, 2022 were $13.2 million, an increase of $1.6 million compared to the same period in 2021. The increase was due to higher headcount and related compensation costs, IT costs and depreciation. The increase in general and administrative expenses reflects investments in corporate infrastructure and capability to support our global expansion and growth strategy.

Other income and expense

	Three months ended March 31, 2022	Three months ended March 31, 2021	2021 to 2022 %
	(In thousands of USD)		
Other expense:			
Foreign exchange loss	$ (1,165)	$ (468)	149%
Net finance and other expense	(360)	(158)	128%
Total other expense	(1,525)	(626)	144%

Total other expense for the three months ended March 31, 2022 was $1.5 million, compared to $0.6 million for the same period in 2021. The increase in other expense was due to a higher foreign exchange loss during the period.

Income taxes

	Three months ended March 31, 2022	Three months ended March 31, 2021	2021 to 2022 %
	(In thousands of USD)		
Income tax expense	$ 7,128	$ 68	—[1]

Note:

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

Income tax expense for the three months ended March 31, 2022 was $7.1 million, compared to a nominal income tax expense for the same period in 2021. The increase was due to higher profit before income taxes, certain non-deductible share-based payments and other permanent differences in determining taxable income for the period.

Profit

	Three months ended March 31, 2022	Three months ended March 31, 2021	2021 to 2022 %
	(In thousands of USD except earnings per share)		
Profit (loss)	$ 12,522	$ (1,534)	—[2]
Adjusted profit[1]	18,525	3,773	391%
Adjusted EBITDA[1]	33,149	9,041	267%
Basic earnings (loss) per share	$ 0.46	$ (0.06)	
Diluted earnings (loss) per share	$ 0.44	$ (0.06)	
Adjusted diluted earnings per share[1]	$ 0.65	$ 0.13	

Note:

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

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

Profit for the three months ended March 31, 2022 was $12.5 million or $0.46 per basic share and $0.44 per diluted share, compared to a loss of $1.5 million or $0.06 per basic and diluted share for the same period in 2021. The increase in profit was due to an increase in revenue, including higher subscription term license revenue related to the normal cycle of on-premise customer renewals. This was partly offset by an increase in cost of revenue and operating expenses, primarily higher headcount and related compensation costs, IT costs and depreciation.

Adjusted EBITDA for the three months ended March 31, 2022 was $33.1 million, an increase of $24.1 million compared to the same period in 2021. The increase in Adjusted EBITDA was due to an increase in revenue, including higher subscription term license revenue, partly offset by an increase in cost of revenue and operating expenses.

Key balance sheet items

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Total assets	$	570,948	$	520,269
Total liabilities		224,457		199,051

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

Trade and other receivables

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Trade accounts receivable	$	76,511	$	71,118
Unbilled receivables		28,520		15,413
Taxes receivable		160		217
Other		1,623		2,499
Loss allowance		(99)		—
Total trade and other receivables		106,715		89,247

Trade accounts receivable at March 31, 2022 were $76.5 million, an increase of $5.4 million compared to December 31, 2021 due to variances in the timing of billings and collections on receivables. The aging of trade receivables is generally current or within 30 days past due and overdue amounts do not reflect any credit issues. 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 March 31, 2022 were $28.5 million, an increase of $13.1 million compared to December 31, 2021 due to renewals and expansion of on-premise or hybrid subscription agreements resulting in recognition of subscription term license revenue in advance of invoicing under the respective agreements, as well as an increase in unbilled professional services.

Property and equipment

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Land	$	18	$	18
Computer equipment		28,346		29,509
Computer software		1,217		781
Office furniture and equipment		3,214		2,831
Leasehold improvements		21,677		18,954
Total property and equipment		54,472		52,093

Property and equipment at March 31, 2022 was $54.5 million, an increase of $2.4 million compared to December 31, 2021. The increase is due to leasehold improvements for the new head office in Ottawa. Additions were partly offset by regular depreciation.

Right-of-use assets & lease obligations

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Right-of-use assets	$	57,452	$	53,578
Lease obligations:				
Current		3,324		2,526
Non-current		57,476		53,233
		60,800		55,759

The right-of-use assets and lease obligations relate to our leases for office space and data centres. Right-of-use assets at March 31, 2022 were $57.5 million, an increase of $3.9 million compared to December 31, 2021. Lease obligations at March 31, 2022 were $60.8 million, an increase of $5.0 million compared to December 31, 2021. The increase in right-of-use assets and lease obligations is due to the addition of a new office lease in Chennai, India.

Contract acquisition costs

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Contract acquisition costs	$	22,501	$	19,691

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. Variable compensation plans are determined on an annual basis and may differ in how they correlate to revenue from year to year. Contract acquisition costs at March 31, 2022 were $22.5 million, an increase of $2.8 million compared to December 31, 2021. This increase was due to commissions incurred in the period, partly offset by regular amortization.

Deferred revenue

		As at March 31, 2022		As at December 31, 2021
		(In thousands of USD)		
Deferred revenue	$	121,183	$	99,239

Deferred revenue at March 31, 2022 was $121.2 million, an increase of $21.9 million compared to December 31, 2021. 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:

	Three months ended							
	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021	Mar 31, 2021	Dec 31, 2020	Sep 30, 2020	Jun 30, 2020
	(In thousands of USD)							
Revenue:								
SaaS	$ 49,320	$ 46,855	$ 44,731	$ 42,301	$ 40,576	$ 39,815	$ 39,322	$ 35,741
Professional services	21,458	17,036	14,576	14,001	12,027	11,334	11,492	12,400
Subscription term licenses	23,474	1,442	1,997	620	2,059	1,948	1,035	10,003
Maintenance and support	3,856	3,173	3,132	3,134	3,066	1,848	3,267	3,229
	98,108	68,506	64,436	60,056	57,728	54,945	55,116	61,373
Cost of revenue	28,466	24,619	21,847	19,783	20,506	20,104	18,557	15,634
Gross profit	69,642	43,887	42,589	40,273	37,222	34,841	36,559	45,739
Operating expenses	48,467	46,608	41,557	35,825	38,062	38,326	35,754	30,618
	21,175	(2,721)	1,032	4,448	(840)	(3,485)	805	15,121
Foreign exchange gain (loss)	(1,165)	(194)	547	(443)	(468)	(364)	124	(5)
Net finance and other income (expense)	(360)	(36)	(69)	(1)	(158)	(91)	156	152
Profit (loss) before income taxes	19,650	(2,951)	1,510	4,004	(1,466)	(3,940)	1,085	15,268
Income tax expense (recovery)	7,128	(32)	1,310	916	68	(2,354)	354	6,264
Profit (loss)	$ 12,522	$ (2,919)	$ 200	$ 3,088	$ (1,534)	$ (1,586)	$ 731	$ 9,004
Share-based compensation	6,003	6,633	6,501	5,902	5,307	4,986	4,732	3,723
Non-recurring item	—	716	—	(7,906)	—	—	—	—
Adjusted profit(1)	$ 18,525	$ 4,430	$ 6,701	$ 1,084	$ 3,773	$ 3,400	$ 5,463	$ 12,727
Income tax expense (recovery)	7,128	(32)	1,310	916	68	(2,354)	354	6,264
Depreciation and amortization	5,914	6,557	4,784	4,598	4,470	4,494	4,500	3,627
Foreign exchange loss (gain)	1,165	194	(547)	443	468	364	(124)	5
Net finance income (loss)	417	128	136	108	262	191	(59)	(152)
	14,624	6,847	5,683	6,065	5,268	2,695	4,671	9,744
Adjusted EBITDA(1)	$ 33,149	$ 11,277	$ 12,384	$ 7,149	$ 9,041	$ 6,095	$ 10,134	$ 22,471
Basic earnings (loss) per share	$ 0.46	$ (0.11)	$ 0.01	$ 0.11	$ (0.06)	$ (0.06)	$ 0.03	$ 0.34
Diluted earnings (loss) per share	$ 0.44	$ (0.11)	$ 0.01	$ 0.11	$ (0.06)	$ (0.06)	$ 0.03	$ 0.32
Adjusted diluted earnings per share(1)	$ 0.65	$ 0.16	$ 0.24	$ 0.04	$ 0.13	$ 0.12	$ 0.20	$ 0.46

Note:

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

Our quarterly revenue has generally trended upwards over the past eight quarters, primarily due to sales of new subscriptions for RapidResponse as well as new customer deployment activity. 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.

Cost of revenue has increased as we continue to invest in personnel to support the growth in our business. Gross margin has ranged from 63% to 75% of revenue, with fluctuations due to the varying subscription term license revenue in each quarter and increases in cost of revenue. Operating expenses have increased for the majority of the periods presented primarily due to the addition of personnel in connection with the expansion of our business.

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.

	As at March 31, 2022	As at December 31, 2021
	(In thousands of USD)	
Cash and cash equivalents	$ 221,983	$ 203,220
Short-term investments	30,175	30,168
	252,158	233,388

Cash and cash equivalents increased $18.8 million to $222.0 million at March 31, 2022. Short-term investments remained consistent at $30.2 million. Total cash, cash equivalents and short-term investments increased $18.8 million to $252.2 million at March 31, 2022.

In addition to the cash, cash equivalents and short-term investment balances, we have a $20.0 million CAD revolving demand facility available to meet ongoing working capital requirements. As part of the acquisition of Rubikloud in 2020, a Standby Letter of Credit has been issued against this facility in the amount of $1.4 million CAD. Our principal cash requirements are for working capital and capital expenditures. Excluding deferred revenue, working capital at March 31, 2022 was $327.1 million. Given the ongoing cash generated from operations and our existing cash and credit facilities, we believe there is sufficient liquidity to meet our current contractual obligations of $100.1 million and finance our longer-term growth.

Cash flow

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

	Three months ended March 31,	
	2022	2021
	(In thousands of USD)	
Cash inflow (outflow) by activity		
Operating activities	$ 21,993	$ 20,649
Investing activities	(9,307)	(5,241)
Financing activities	5,700	1,088
Effects of exchange rates	377	(311)
Net cash inflows	18,763	16,185
Net purchase (redemption) of short-term investments	—	—
Net inflows from cash and short-term investments	18,763	16,185

Cash provided by operating activities

Cash generated by operating activities for the three months ended March 31, 2022 was $22.0 million compared to $20.6 million for the same period in 2021. The increase was due to higher profit, mostly offset by a net increase in operating assets and liabilities.

Cash used in investing activities

Cash used in investing activities for the three months ended March 31, 2022 was $9.3 million compared to $5.2 million for the same period in 2021. The increase was due to the acquisition of a supply chain software solutions company and an increase in purchases of property and equipment.

Cash provided by financing activities

Cash provided by financing activities for the three months ended March 31, 2022 was $5.7 million compared to $1.1 million for the same period in 2021. The increase was due to an increase in proceeds from stock options exercised.

Contractual obligations

Our lease commitments are primarily for office premises and secure data center facilities with expiry dates that range from July 2022 to February 2037. The largest lease commitment relates to our new head office in Ottawa, Canada, the lease of which commenced September 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 March 31, 2022, including commitments relating to leasing contracts:

	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total amount
			(In thousands of USD)		
Commitments					
Lease agreements	$ 10,102	$ 12,051	$ 7,094	$ 31,267	$ 60,514
Financial obligations					
Trade payables and accrued liabilities	39,583	—	—	—	39,583
Total contractual obligations	$ 49,685	$ 12,051	$ 7,094	$ 31,267	$ 100,097

The following table summarizes our contractual obligations as at December 31, 2021, including commitments relating to leasing contracts:

	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total amount
			(In thousands of USD)		
Commitments					
Lease agreements	$ 9,475	$ 13,215	$ 7,362	$ 31,546	$ 61,598
Financial obligations					
Trade payables and accrued liabilities	43,328	—	—	—	43,328
Total contractual obligations	$ 52,803	$ 13,215	$ 7,362	$ 31,546	$ 104,926

Off-balance sheet arrangements

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

Transactions with related parties

We did not have any transactions during the three months ended March 31, 2022 and 2021 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 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.

Market risk

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

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, and British Pound. 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 tied to Royal Bank prime rate and Royal Bank US base rate. No amounts have been drawn as at March 31, 2022.

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 of Kinaxis (the "Board") 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 annual consolidated financial statements for the year ended December 31, 2021 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.

Contingencies

We are involved in litigation with a competitor, whereby the competitor has made certain allegations concerning patent infringement. We will accrue a liability if we determine that it is more likely than not that a present obligation exists that will result in an outflow of resources and the amount of the obligation can be reliably estimated. Significant judgment is required in both the determination of probability and the determination as to whether an amount of an obligation is reliably estimable. We have assessed that our defense against these allegations will more likely than not be successful and a present obligation does not exist. At March 31, 2022, we have not recognized a liability regarding these allegations.

We are required to apply judgment with respect to any potential loss or range of loss in connection with litigation. The outcome of litigation and claims is intrinsically subject to considerable uncertainty.

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 quarter and based on the evaluation have concluded that the disclosure controls and procedures are effectively designed.

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 – *Certification of Disclosure in Issuers' Annual and Interim Filings* 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 March 31, 2022, management assessed the design of our ICFR and concluded that our ICFR is appropriately designed and there are no material weaknesses that have been identified. There were no significant changes to our ICFR for the three months ended March 31, 2022.

Outstanding share information

As at March 31, 2022, 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, deferred share units and performance share units outstanding for the three months ended March 31, 2022 and as of May 5, 2022 are summarized as follows:

Class of Security	Number outstanding at December 31, 2021	Net issued	Number outstanding at March 31, 2022	Net issued	Number outstanding at May 5, 2022
Common shares	27,462,834	122,937	27,585,771	5,625	27,591,396
Stock options	2,143,375	(73,574)	2,069,801	(7,125)	2,062,676
Restricted Share Units	96,583	110,140	206,723	(667)	206,056
Deferred Share Units	65,441	9,954	75,395	—	75,395
Performance Share Units	31,640	48,433	80,073	—	80,073

Our outstanding common shares increased by 122,937 shares in the first three months of 2022 due to the exercise of 112,789 stock options and vesting of 10,148 restricted and performance share units.

Our outstanding stock options decreased by 73,574 options in the first three months of 2022 due to the grant of 40,715 options less 112,789 options exercised and 1,500 options forfeited. Each option is exercisable for one common share.

Our outstanding restricted share units increased by 110,140 units in the first three months of 2022 due to the grant of 116,512 units less 6,372 units vested. Our outstanding deferred share units increased by 9,954 units in the first three months of 2022 due to 9,954 units granted. Our outstanding performance share units increased by 48,433 units in the first three months of 2022 due to 52,209 units granted less 3,776 units vested. Upon vesting, each 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.