Consolidated Financial Statements of

Kinaxis Inc.

Years ended December 31, 2021 and 2020

(In thousands of USD)

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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, 2021 and December 31, 2020
- the consolidated statements of comprehensive income (loss) 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, 2021 and December 31, 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

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.

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Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements for the year ended December 31, 2021.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have determined the matter described below to be the key audit matter to be communicated in our auditors' report.

Allocation of the Transaction Price to Multiple Performance Obligations in Contracts with Customers

Description of the matter

We draw attention to Notes 2(f) and 3(b) to the financial statements. The Entity's contracts with customers often include the delivery of multiple products and services, which are generally capable of being distinct and accounted for as separate performance obligations. The accounting for a contract or contracts with a customer that contain multiple performance obligations requires the Entity to allocate the contract or contracts' transaction price to the identified distinct performance obligations. The allocation of the transaction price requires significant judgment and estimates relating to the determination of the standalone selling price ("SSP") for each distinct performance obligation. The methodology used to determine the SSP depends on the nature of the products and services and how they are priced in contracts with customers. This allocation affects the amount and timing of revenue recognized for each performance obligation.

Why the matter is the key audit matter

We identified the allocation of the transaction price to multiple performance obligations in contracts with customers as a key audit matter. There was a significant risk of material misstatement relating to the methodology used to determine the SSP for each distinct performance obligation within a contract or contracts with a customer. In addition, significant auditor judgment was required to evaluate the results of our audit procedures due to the significant judgments and estimates associated with the determination of the SSP.

How the matter was addressed in the audit

The primary procedures we performed to address this key audit matter included the following:

We evaluated the methodology used to determine the SSP by comparing it to pricing patterns in customer contracts, historical methodologies used by the Entity, and general practices in the Entity's industry.

For a selection of new customer contracts with multiple performance obligations, we examined the key terms and assessed the allocation of the transaction price to each distinct performance obligation based on its respective SSP derived from the underlying methodology.

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) as issued by the International Accounting Standards Board (IASB), 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 generally 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.
- Determine, from the matters communicated with those charged with governance, those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our auditors' report because the adverse consequence of doing so would reasonably be expected to outweigh the public benefits of such communication.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants
The engagement partner on the audit resulting in this auditors' report is Anuj Madan.

Ottawa, Canada

March 1, 2022

Kinaxis Inc.

Consolidated Statements of Financial Position

As at December 31
(Expressed in thousands of USD)

		2021		2020
Assets				
Current assets:				
Cash and cash equivalents	$	203,220	$	182,958
Short-term investments		30,168		30,180
Trade and other receivables (note 5)		89,247		82,883
Prepaid expenses		10,282		9,264
Investment tax credits recoverable (note 20)		–		1,109
		332,917		306,394
Non-current assets:				
Property and equipment (note 6)		52,093		30,746
Right-of-use assets (note 7)		53,578		15,722
Contract acquisition costs (note 8)		19,691		16,484
Unbilled receivables (note 5)		512		2,013
Other receivables		1,096		752
Deferred tax assets (note 20)		6,000		2,308
Investment tax credits recoverable (note 20)		3,616		980
Intangible assets (note 9)		10,778		13,023
Goodwill (note 10)		39,988		39,988
		187,352		122,016
	$	520,269	$	428,410
Liabilities and Shareholders' Equity				
Current liabilities:				
Trade payables and accrued liabilities (note 11)	$	43,328	$	33,030
Deferred revenue (note 12)		99,239		94,275
Provisions (note 13)		716		–
Lease obligations (note 14)		2,526		4,554
		145,809		131,859
Non-current liabilities:				
Lease obligations (note 14)		53,233		12,065
Deferred tax liabilities (note 20)		9		2,729
		53,242		14,794
Shareholders' equity:				
Share capital (note 15)		195,414		173,104
Contributed surplus		54,739		35,846
Accumulated other comprehensive loss		(597)		(20)
Retained earnings		71,662		72,827
		321,218		281,757
	$	520,269	$	428,410

See accompanying notes to consolidated financial statements.

On behalf of the Board of Directors:

(signed) John (Ian) Giffen Director *(signed) Elizabeth Rafael* Director

Kinaxis Inc.

Consolidated Statements of Comprehensive Income (Loss)

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

		2021		2020
Revenue (note 17)	$	250,726	$	224,189
Cost of revenue		86,755		70,131
Gross profit		163,971		154,058
Operating expenses:				
Selling and marketing		59,078		52,630
Research and development		57,424		47,420
General and administrative		45,550		33,232
		162,052		133,282
		1,919		20,776
Other income (expense):				
Foreign exchange loss		(558)		(196)
Net finance and other income (expense)		(264)		890
		(822)		694
Profit before income taxes		1,097		21,470
Income tax expense (recovery) (note 20):				
Current		3,466		5,714
Deferred		(1,204)		2,026
		2,262		7,740
Profit (loss)		(1,165)		13,730
Other comprehensive income (loss):				
Items that are or may be reclassified subsequently to profit or loss:				
Foreign currency translation differences - foreign operations		(577)		328
Total comprehensive income (loss)	$	(1,742)	$	14,058
Basic earnings (loss) per share	$	(0.04)	$	0.51
Weighted average number of basic Common Shares (note 16)		27,248,193		26,716,027
Diluted earnings (loss) per share	$	(0.04)	$	0.49
Weighted average number of diluted Common Shares (note 16)		27,248,193		28,138,911

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	Total equity
Balance, December 31, 2019	$ 140,961	$ 30,392	$ (348)	$ 59,097	$ 230,102
Profit	–	–	–	13,730	13,730
Other comprehensive income	–	–	328	–	328
Total comprehensive income	–	–	328	13,730	14,058
Share options exercised	27,187	(6,807)	–	–	20,380
Restricted share units vested	4,956	(4,956)	–	–	–
Share-based payments	–	17,217	–	–	17,217
Total shareholder transactions	32,143	5,454	–	–	37,597
Balance, December 31, 2020	$ 173,104	$ 35,846	$ (20)	$ 72,827	$ 281,757
Loss	–	–	–	(1,165)	(1,165)
Other comprehensive loss	–	–	(577)	–	(577)
Total comprehensive loss	–	–	(577)	(1,165)	(1,742)
Share options exercised	14,221	(3,459)	–	–	10,762
Restricted share units vested	8,089	(8,089)	–	–	–
Share-based payments	–	30,441	–	–	30,441
Total shareholder transactions	22,310	18,893	–	–	41,203
Balance, December 31, 2021	$ 195,414	$ 54,739	$ (597)	$ 71,662	$ 321,218

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)

		2021		2020
Cash flows from operating activities:				
Profit (loss)	$	(1,165)	$	13,730
Items not affecting cash:				
Depreciation of property and equipment and right-of-use assets (note 19)		18,164		14,335
Amortization of intangible assets (note 19)		2,245		1,227
Share-based payments (note 15)		24,343		17,217
Net finance expense (income)		634		(890)
Income tax expense (note 20)		2,262		7,740
Investment tax credits recoverable (note 20)		(1,527)		(2,089)
Change in operating assets and liabilities (note 21)		5,523		10,492
Interest received		428		1,761
Interest paid		(1,050)		(674)
Income taxes received (paid)		281		(3,379)
		50,138		59,470
Cash flows used in investing activities:				
Acquisition of businesses, net of cash acquired (note 4)		(800)		(61,767)
Purchase of property and equipment (note 6)		(33,833)		(14,439)
Purchase of short-term investments		(71,599)		(110,616)
Redemption of short-term investments		71,599		110,558
		(34,633)		(76,264)
Cash flows from financing activities:				
Payment of lease obligations (note 14)		(4,911)		(3,742)
Common shares issued on exercise of stock options		10,762		20,380
		5,851		16,638
Increase (decrease) in cash and cash equivalents		21,356		(156)
Cash and cash equivalents, beginning of year		182,958		182,284
Effects of exchange rates on cash and cash equivalents		(1,094)		830
Cash and cash equivalents, end of year	$	203,220	$	182,958

See accompanying notes to consolidated financial statements.

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 3199 Palladium Drive, Ottawa, Ontario. The consolidated financial statements of the Company as at and for the years ended December 31, 2021 and 2020 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 registered offices in the United States, Japan, Hong Kong, The Netherlands, South Korea, United Kingdom, Singapore, France, Ireland, Germany, India, and 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 includes the accounts of Kinaxis Inc. and its wholly-owned subsidiaries, outlined in note 25.

The consolidated financial statements were authorized for issue by the Board of Directors on March 1, 2022.

(b) Comparative figures:

Certain comparative figures have been reclassified to conform to the current period presentation.

(c) 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.

(d) 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.

(e) Foreign currency:

Foreign currency transactions

The financial statements of the Company are measured using USD as the functional currency. The functional currency of the Company’s significant wholly-owned subsidiaries is outlined in note 25. Transactions in currencies other than the functional currency are translated at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated to the functional currency at the rates prevailing at that date. Exchange differences on monetary items are recognized in profit or

2. Basis of preparation (continued):

(e) Foreign currency (continued):

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 include the accounts of the Company's wholly-owned subsidiaries. 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.

(f) 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 include, but are not limited to, allocation of the transaction price to multiple performance obligations in contracts with customers, revenue recognition on fixed price contracts, recognition of deferred tax assets, valuation of trade and other receivables, valuation of share-based payments, valuation of contingent consideration, and valuation of acquired intangible assets. 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.

The continuing uncertainty around the novel coronavirus ("COVID-19") pandemic required the use of judgments and estimates in the preparation of the consolidated financial statements for the year ended December 31, 2021. The future impact of COVID-19 uncertainties could generate, in future reporting periods, a significant impact to the reported amounts of assets, liabilities, revenue and expenses in these and any future consolidated financial statements. Examples of accounting estimates and judgments that may be impacted by the pandemic include, but are not limited to: revenue recognition; impairment of property and equipment, right-of-use assets, intangible assets and goodwill; allowance for expected credit losses; and provisions.

Allocation of the transaction price to multiple performance obligations in contracts with customers

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

2. Basis of preparation (continued):

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

combined with another good or service and recognized as a combined unit of accounting may require judgment. In general, the Company's professional services are capable of being distinct as they could be performed by third party service providers and do not involve significant customization of the licensed software.

The allocation of the transaction price requires significant judgment and estimates relating to the determination of the standalone selling price ("SSP") for each distinct performance obligation. The methodology used to determine the SSP depends on the nature of the products and services and how they are priced in contracts with customers. This allocation affects the amount and timing of revenue recognized for each performance obligation. In order to determine the SSP of promised products or services, the Company conducts a regular analysis to determine whether various products or services have an observable SSP. If the Company does not have an observable SSP for a particular product or service, then SSP for that particular good or service is estimated using reasonably available information and maximizing observable inputs with approaches including historical pricing, cost plus a margin, adjusted market assessment, and the residual approach. 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.

Revenue recognition on fixed price contracts

For professional services contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of services performed. The Company determines this based on the actual labour hours incurred relative to the total forecasted hours. This requires the Company to estimate the labour hours required to complete the contract at the reporting date, the uncertainty inherent in which will not be resolved until the contract is completed.

Recognition of deferred tax assets

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.

2. Basis of preparation (continued):

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

Valuation of 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.

Valuation of share-based payments

The Company uses the Black-Scholes valuation model to determine the fair value of equity settled stock options and the Monte Carlo valuation model to determine the fair value of performance share units. Estimates are required for inputs to these models, including the expected life of the option, volatility, forfeiture rate, 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 or performance share unit realized from the original estimate. The assumptions and estimates used are further outlined in note 15.

Valuation of contingent consideration

The Company measures the contingent consideration payable in a business combination at the estimated fair value at each reporting date. The fair value is estimated based on the range of possible outcomes and the Company's assessment of the likelihood of each outcome.

Valuation of acquired intangible assets

The Company estimates the fair value of customer relationships and technology acquired in a business combination based on the income approach. The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows that the asset can be expected to generate over its remaining useful life. This valuation involves significant subjectivity and estimation uncertainty, including assumptions related to the future revenues attributable to acquired customer relationships or technology, customer attrition rates, technology migration rate, future expenses, and discount rates.

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.

3. Significant accounting policies (continued):

(b) Revenue recognition:

Revenue is recognized upon transfer of control of products or services to customers at an amount that reflects the transaction price the Company expects to receive in exchange for the products or services. The Company's contracts with customers often include the delivery of multiple products and services, which are generally capable of being distinct and accounted for as separate performance obligations. The accounting for a contract or contracts with a customer that contain multiple performance obligations requires the Company to allocate the contract or contracts' transaction price to the identified distinct 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 revenue is 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 over the 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 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

3. Significant accounting policies (continued):

(b) Revenue recognition (continued):

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.

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

The Company's financial assets are classified as follows:

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

Amortized cost

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

Impairment of financial assets

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

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

Financial liabilities

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

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

Amortized cost

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

De-recognition of financial liabilities

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

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 these investments approximates fair 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. 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.

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 right-of-use 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. 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.

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) Government assistance:

Government assistance is recognized when there is reasonable assurance that it will be received and that compliance with all related conditions has been achieved. When the government assistance relates to an expense item, it is recognized as a reduction of the related expense to match the government assistance on a systematic basis to the costs that it is intended to subsidize.

During 2021, the Company received $7,906 of non-refundable government grants relating to the COVID-19 pandemic. The grants are offset against cost of revenue and operating expenses.

(l) 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.

3. Significant accounting policies (continued):

(l) Income taxes (continued):

Current income tax

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

Deferred income tax

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

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

Uncertain tax positions

The Company periodically evaluates the positions taken in its tax returns with respect to situations in which applicable tax rules may be subject to interpretations. The Company establishes provisions related to tax uncertainties where appropriate, based on an estimate of the amount that ultimately will be paid to the tax authorities.

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

3. Significant accounting policies (continued):

(l) Income taxes (continued):

expenditures, which are primarily salaries and related benefits, are included in the determination of profit or loss as a reduction of the related research and development expenses.

(m) 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 and the Monte Carlo model for performance share unit grants. The market value of the Company's shares on the date of the grant is used to determine the fair value of restricted and deferred share units issued. Each tranche of an award is considered a separate award with its own vesting period and grant date fair value. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market performance conditions are expected to be met, such that the amount ultimately recognized is based on the number of awards that meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting (i.e. performance) conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

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

(n) Earnings per share:

Basic earnings per share is calculated by dividing profit or loss by the weighted average number of common shares outstanding during the reporting period. Diluted earnings per share is 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 of stock options or vesting of share units. Options and share units that have a dilutive impact are assumed to have been exercised or vested on the later of the beginning of the period or the date granted.

(o) Business combinations:

The Company accounts for business combinations using the acquisition method. Goodwill arising on acquisitions is measured as the fair value of the consideration transferred less the net recognized amount of the estimated fair value of identifiable assets acquired and liabilities

3. Significant accounting policies (continued):

(o) Business combinations (continued):

assumed, all measured as of the acquisition date. Transaction costs that the Company incurs in connection with a business combination are expensed as incurred.

The Company uses its best estimates and assumptions to reasonably value assets acquired and liabilities assumed at the acquisition date as well as contingent consideration, where applicable, and these estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company may record adjustments to the assets acquired and liabilities assumed with a corresponding offset to goodwill. Upon conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded in profit or loss.

(p) Acquired intangible assets:

The Company's intangible assets consist of customer relationships and technology acquired in a business combination. These intangible assets are recorded at their fair value at the acquisition date. The Company uses the income approach to value acquired technology and customer relationships intangible assets, which are the two material intangible asset categories reported in the financial statements.

The income approach is a valuation technique that calculates the fair value of an intangible asset based on the present value of future cash flows that the asset can be expected to generate over its remaining useful life. The discounted cash flow ("DCF") is the methodology used, which is a form of the income approach that begins with a forecast of the annual cash flows a market participant would expect the subject intangible asset to generate over a discrete projection period. The future cash flows for each of the years in the discrete projection period are then converted to their present value equivalent using a rate of return appropriate for the risk of achieving the intangible assets' projected cash flows, again, from a market participant perspective. The present value of the future cash flows are then added to the present value of the residual value of the intangible asset (if any) at the end of the discrete projection period to arrive at a conclusion with respect to the estimated fair value of the subject intangible asset. After initial recognition, intangible assets are measured at cost less any accumulated amortization and impairment losses.

Intangible assets with finite useful lives are amortized on a straight-line basis over their estimated useful lives. The estimated useful life for customer relationships is three to six years and the useful life for technology is seven years. Amortization methods, useful lives and residual values are reviewed at each financial year end and adjusted prospectively if appropriate.

Intangible assets with finite useful lives are tested for impairment whenever there is an indication that the asset may be impaired. An impairment loss is recognized if the recoverable amount of the asset is less than the carrying amount. The recoverable amount is the higher of fair value less costs to sell and value in use.

3. Significant accounting policies (continued):

(q) Goodwill:

Goodwill arises from a business combination as the excess of the consideration transferred over the identifiable net assets acquired. After initial recognition, goodwill is measured at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to the cash-generating unit that is expected to benefit from the related business combination. The Company as a whole has been assessed as a single CGU. The CGU is tested for impairment annually on December 31 and whenever there is an indication that the CGU may be impaired. The impairment testing methodology is based on a comparison between the recoverable amount (higher of fair value less costs to sell and value-in-use of the CGU) and the net asset carrying value (including goodwill). If the recoverable amount of the CGU is less than the carrying amount of the CGU, the impairment loss is first allocated to reduce the carrying amount of any goodwill allocated to the CGU and then to the other assets of the CGU. An impairment loss is recognized immediately in profit or loss. Any impairment loss in respect of goodwill is not reversed.

4. Business combinations:

Prana Consulting, Inc.

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 operating results of Prana have been consolidated into the Company's results subsequent to the acquisition date. The Company incurred acquisition-related costs of $204 which have been recorded in general and administrative expense.

The purchase price consists of cash consideration of $3,206 and contingent consideration with an estimated fair value of $800, resulting in total consideration of $4,006. The contingent consideration arrangement consisted of additional payments to the selling shareholder for attainment of specific revenue and team retention metrics in the year following the acquisition. Contingent consideration of $1,000 was paid in February 2021.

The following table presents the purchase price allocation at the acquisition date:

Assets acquired and liabilities assumed:		
Cash and cash equivalents	$	625
Trade and other receivables		701
Land		18
Customer relationships		750
Trade payables and accrued liabilities		(1,747)
		347
Goodwill		3,659
Total consideration	$	4,006

4. Business combinations (continued):

The trade and other receivables comprise gross contractual amounts of $636, which have been fully collected.

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 entire goodwill is deductible for tax purposes.

Rubikloud Technologies, Inc.

On July 2, 2020, the Company acquired 100% of the outstanding shares of Rubikloud Technologies, Inc. and all of its subsidiaries ("Rubikloud") in exchange for cash. Rubikloud is a provider of artificial intelligence solutions that automate supply chain prescriptive analytics and decision-making in the retail and consumer packaged goods industries. The operating results of Rubikloud have been consolidated into the Company's results subsequent to the acquisition date. The Company incurred acquisition-related costs of $1,009 which have been recorded in general and administrative expense.

The purchase price consists of cash consideration of $60,000, adjusted for Rubikloud's closing cash and indebtedness at the date of acquisition and subject to post-closing working capital adjustments, resulting in a total consideration of $60,358.

The following table presents the purchase price allocation at the acquisition date:

Assets acquired and liabilities assumed:		
Cash and cash equivalents	$	1,172
Trade and other receivables		1,077
Prepaid expenses		153
Contract acquisition costs		81
Property and equipment		322
Right-of-use assets		3,298
Intangible assets:		
Technology		10,700
Customer relationships		2,800
Deferred tax assets		8,929
Trade payables and accrued liabilities		(556)
Deferred revenue		(649)
Lease obligation		(3,298)
		24,029
Goodwill		36,329
Total consideration	$	60,358

The trade and other receivables comprise gross contractual amounts of $452, which have been fully collected.

The goodwill is primarily attributable to the expected synergies that will result from integrating Rubikloud's offerings with RapidResponse to enhance its demand planning capabilities, and the assembled workforce. The goodwill is not deductible for tax purposes.

5. Trade and other receivables:

	2021	2020
Trade accounts receivable	$ 71,118	$ 67,288
Unbilled receivables	15,413	13,800
Taxes receivable	217	–
Investment tax credits receivable	–	211
Other	2,499	1,584
	$ 89,247	$ 82,883

There were no trade accounts receivable written off in 2021 (2020 – $nil).

The following table presents changes in unbilled receivables:

	2021	2020
Balance, beginning of year	$ 15,813	$ 14,129
Amounts transferred to trade accounts receivable from the balance at the beginning of year	(13,752)	(13,654)
Amounts written off	(288)	–
Revenue in excess of billings, net of amounts transferred to trade accounts receivable	14,152	15,338
Balance, end of year	$ 15,925	$ 15,813
Current	$ 15,413	$ 13,800
Non-current	512	2,013

Unbilled receivables of $288 were written off in 2021 (2020 – $nil).

6. Property and equipment:

Cost	December 31, 2020	Additions	Dispositions	Effects of exchange rates	December 31, 2021
Land	$ 18	$ –	$ –	$ –	$ 18
Computer equipment	54,187	14,881	–	(1,148)	67,920
Computer software	3,234	529	–	(28)	3,735
Office furniture and equipment	1,154	2,603	–	(26)	3,731
Leasehold improvements	8,476	15,820	(450)	(189)	23,657
Total cost	$ 67,069	$ 33,833	$ (450)	$ (1,391)	$ 99,061

6. Property and equipment (continued):

Accumulated depreciation	December 31, 2020	Depreciation	Dispositions	Effects of exchange rates	December 31, 2021
Computer equipment	$ 29,340	$ 9,601	$ –	$ (530)	$ 38,411
Computer software	2,317	659	–	(22)	2,954
Office furniture and equipment	567	339	–	(6)	900
Leasehold improvements	4,099	1,153	(450)	(99)	4,703
Total accumulated depreciation	$ 36,323	$ 11,752	$ (450)	$ (657)	$ 46,968

Cost	December 31, 2019	Additions	Dispositions	Effects of exchange rates	December 31, 2020
Land	$ –	$ 18	$ –	$ –	$ 18
Computer equipment	42,647	10,825	(14)	729	54,187
Computer software	2,942	275	–	17	3,234
Office furniture and equipment	848	335	(37)	8	1,154
Leasehold improvements	5,361	3,326	(300)	89	8,476
Total cost	$ 51,798	$ 14,779	$ (351)	$ 843	$ 67,069

Accumulated depreciation	December 31, 2019	Depreciation	Dispositions	Effects of exchange rates	December 31, 2020
Computer equipment	$ 20,641	$ 8,420	$ (14)	$ 293	$ 29,340
Computer software	1,490	835	–	(8)	2,317
Office furniture and equipment	262	305	(37)	37	567
Leasehold improvements	3,701	672	(300)	26	4,099
Total accumulated depreciation	$ 26,094	$ 10,232	$ (351)	$ 348	$ 36,323

Carrying value	December 31, 2021	December 31, 2020
Land	$ 18	$ 18
Computer equipment	29,509	24,847
Computer software	781	917
Office furniture and equipment	2,831	587
Leasehold improvements	18,954	4,377
Total property and equipment	$ 52,093	$ 30,746

6. Property and equipment (continued):

There were no proceeds associated with asset dispositions in 2021 (2020 – $nil). Additions for the year ended December 31, 2020 include $340 of property and equipment acquired through business combinations, as outlined in note 4.

7. Right-of-use assets:

	December 31, 2020	Additions	Depreciation	Effects of exchange rates	December 31, 2021
Offices	$ 7,317	$ 41,795	$ (3,581)	$ (295)	$ 45,236
Data centres	8,405	3,096	(2,831)	(328)	8,342
Total cost	$ 15,722	$ 44,891	$ (6,412)	$ (623)	$ 53,578

	December 31, 2019	Additions	Depreciation	Effects of exchange rates	December 31, 2020
Offices	$ 1,987	$ 7,034	$ (1,780)	$ 76	$ 7,317
Data centres	6,684	3,779	(2,323)	265	8,405
Total cost	$ 8,671	$ 10,813	$ (4,103)	$ 341	$ 15,722

During 2021, the Company recorded additions of $41,552 for new leased office space in Ottawa, Canada. Additions for the year ended December 31, 2020 include $3,298 of right-of-use assets acquired through business combinations, as outlined in note 4.

8. Contract acquisition costs:

	2021	2020
Balance, beginning of year	$ 16,484	$ 15,497
Additions	9,713	7,090
Amortization	(6,359)	(6,229)
Effects on movements in exchange rates	(147)	126
Balance, end of year	$ 19,691	$ 16,484

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

9. Intangible assets:

	December 31, 2020	Additions	Amortization	December 31, 2021
Customer relationships	$ 3,087	$ –	$ (717)	$ 2,370
Technology	9,936	–	(1,528)	8,408
	$ 13,023	$ –	$ (2,245)	$ 10,778

	December 31, 2019	Additions	Amortization	December 31, 2020
Customer relationships	$ –	$ 3,550	$ (463)	$ 3,087
Technology	–	10,700	(764)	9,936
	$ –	$ 14,250	$ (1,227)	$ 13,023

10. Goodwill:

	2021	2020
Balance, beginning of year	$ 39,988	$ –
Acquisition of Prana Consulting, Inc. (note 4)	–	3,659
Acquisition of Rubikloud Technologies, Inc. (note 4)	–	36,329
Balance, end of year	$ 39,988	$ 39,988

The annual impairment test of goodwill was performed on December 31, 2021 and did not result in an impairment loss.

11. Trade payables and accrued liabilities:

	2021	2020
Trade accounts payable	$ 10,584	$ 5,896
Accrued liabilities	26,299	22,131
Taxes payable	6,445	5,003
	$ 43,328	$ 33,030

12. Deferred revenue:

	2021	2020
Balance, beginning of year	$ 94,275	$ 83,673
Amounts invoiced and revenue deferred	96,121	93,347
Recognition of deferred revenue included in the balance at the beginning of year	(91,157)	(82,745)
Balance, end of year	$ 99,239	$ 94,275

13. Provisions:

In 2021, the Company recorded a provision of $716 for the estimated future variable lease payments for office space which the Company has ceased using. These costs have been recorded in general and administrative expense.

14. Lease obligations:

The Company's leases are for office space and data centres with lease terms ranging from 2 to 20 years. These leases contain no renewal options or a renewal option for one, two, or five years. The Company has included renewal options in the lease term when it is reasonably certain to exercise the renewal option.

	2021	2020
Current	$ 2,526	$ 4,554
Non-current	53,233	12,065
Total lease obligations	$ 55,759	$ 16,619

The following table presents the contractual undiscounted cash flows for lease obligations as at December 31, 2021:

Less than one year	$ 4,261
One to five years	20,982
More than five years	45,374
Total undiscounted lease obligations	$ 70,617

Interest expense on lease obligations for 2021 was $1,050 (2020 – $674). The expense relating to variable lease payments not included in the measurement of lease obligations was $1,624 (2020 – $1,077). This consists of variable lease payments for operating costs, property taxes, and insurance. Expenses relating to short-term leases were $480 (2020 – $543) and expenses relating to leases of low value assets were not material. Total cash outflow for leases was $8,065 (2020 – $6,036), including $4,911 (2020 – $3,742) of principal payments on lease obligations.

15. Share capital:

Authorized

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

Issued Common Shares

	2021		2020	
	Shares	Amount	Shares	Amount
Shares outstanding, beginning of period	27,085,922	$ 173,104	26,403,004	$ 140,961
Shares issued from exercised options	291,680	14,221	618,531	27,187
Shares issued from vested restricted share units	85,232	8,089	64,387	4,956
Shares outstanding, end of period	27,462,834	$ 195,414	27,085,922	$ 173,104

Stock option plans

	2021		2020	
	Shares	Weighted average exercise price	Shares	Weighted average exercise price
Options outstanding, beginning of period	2,228,456	$ 68.82	2,228,738	$ 44.24
Granted	275,973	108.61	626,999	112.85
Exercised	(291,680)	36.89	(618,531)	32.94
Forfeited	(69,374)	126.21	(8,750)	71.34
Options outstanding, end of period	2,143,375	$ 76.56	2,228,456	$ 68.82
Options exercisable, end of period	1,150,389	$ 58.44	932,258	$ 40.73

15. Share capital (continued):

The following table presents information about stock options outstanding at December 31, 2021:

	Options outstanding			Options exercisable	
Range of exercise prices	Number outstanding	Weighted average remaining contractual life	Weighted average exercise price	Number exercisable	Weighted average exercise price
$1 to $30	39,375	2.32	$ 15.27	39,375	$ 15.27
$30 to $60	686,023	3.58	45.63	653,023	45.19
$60 to $90	914,754	2.39	72.50	400,366	69.85
$90 to $120	261,223	4.22	105.08	–	–
$120 to $150	47,000	3.44	135.21	11,000	134.95
$150 to $180	195,000	3.67	164.44	46,625	164.41
	2,143,375	3.13	$ 76.56	1,150,389	$ 58.44

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 Stock Option Plan and a new Non-Canadian Resident Stock Option Plan ("the Plans"). Stock options granted under the Plans have an exercise price equal to the stock's TSX price at the date of grant and the maximum term of these options is five years. Options are granted periodically and typically vest over four years.

In June 2021, Kinaxis shareholders voted to approve an amendment to the Plans to increase the maximum number of shares reserved for issue by 500,000. At December 31, 2021, there were 785,309 stock options available for grant under the Plans.

In 2021, the Company granted 275,973 options (2020 – 626,999) and recorded share-based compensation expense of $11,759 (2020 – $10,308) related to the vesting of options granted in 2021 and previous years. The per share weighted-average fair value of stock options granted during 2021 was $32.77 (2020 – $30.77) 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% (2020 – 0%), risk-free interest rate of 0.53% (2020 – 0.71%), expected life of three to five years (2020 – three to five years), and estimated volatility of 39% (2020 – 35%). The forfeiture rate is estimated at 15% (2020 – 15%) based upon an analysis of actual forfeitures.

Share Unit Plan

In June 2021, Kinaxis shareholders voted to approve an amendment to the Company's Share Unit Plan to increase the maximum number of shares reserved for issue by 500,000. At December 31, 2021, there were 560,715 share units available for grant under the Share Unit Plan.

15. Share capital (continued):

In 2021, the Company granted 106,001 restricted share units ("RSU") (2020 – 81,970). At December 31, 2021, there were 96,583 RSUs outstanding (2020 – 78,305). Each RSU entitles the participant to receive one Common Share. The RSUs generally vest over time in three equal annual tranches. The weighted-average grant date fair value of the RSUs granted during 2021 was $118.49 per unit (2020 – $94.04) using the fair value of a Common Share at time of grant. The Company recorded share-based compensation expense of $9,875 (2020 – $6,009) related to the RSUs.

In 2021, the Company granted 9,513 deferred share units ("DSU") (2020 – 10,842). At December 31, 2021, there were 65,441 DSUs outstanding (2020 – 55,928). 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 during 2021 was $110.36 per unit (2020 – $83.00) using the fair value of a Common Share at time of grant. The Company recorded share-based compensation of $1,050 (2020 – $900) related to the DSUs.

In 2021, the Company granted 31,640 performance share units ("PSU") (2020 – nil) that vest based upon the Company's total shareholder return relative to the total shareholder return of the constituents of the S&P Software & Services Select Industry Index over two- and three-year performance based vesting periods. At December 31, 2021, there were 31,640 PSUs outstanding. The weighted-average grant date fair value of the PSUs granted during 2021 was $129.74 per unit. The PSUs were valued using a Monte Carlo pricing model based on the fair value of a Common Share at time of grant and the following assumptions: expected dividend yield of 0%, risk-free interest rate of 0.51%, performance measurement period of 2 to 3 years, estimated volatility of 41%, and correlation coefficient to the S&P Software & Services Select Industry Index of 0.52. The Company recorded share-based compensation expense of $1,659 (2020 – $nil) related to the PSUs.

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

		2021		2020
Cost of revenue	$	2,001	$	1,693
Selling and marketing		4,950		5,218
Research and development		6,334		3,058
General and administrative		11,058		7,248
	$	24,343	$	17,217

16. Earnings per share:

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

	2021	2020
Issued Common Shares, beginning of year	27,085,922	26,403,004
Effect of shares issued from exercise of options	157,367	309,329
Effect of shares issued from vesting of restricted share units	4,904	3,694
Weighted average number of basic Common Shares	27,248,193	26,716,027
Effect of share options on issue	–	1,200,057
Effect of share units on issue	–	222,827
Weighted average number of diluted Common Shares	27,248,193	28,138,911

For 2021, all options and share units outstanding (2020 – 271,500 options) were excluded from the weighted average number of diluted common shares as their effect would have been anti-dilutive.

17. Revenue:

	2021	2020
SaaS	$ 174,463	$ 148,873
Professional services	57,640	45,899
Maintenance and support	12,505	11,527
Subscription term licenses	6,118	17,890
	$ 250,726	$ 224,189

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, 2021:

	2022	2023	2024 and thereafter	Total
SaaS	$ 178,858	$ 132,735	$ 111,871	$ 423,464
Maintenance and support	14,353	10,466	12,007	36,826
Subscription term licenses	23,474	–	30	23,504
	$ 216,685	$ 143,201	$ 123,908	$ 483,794

18. Personnel expenses:

	2021	2020
Salaries including bonuses	$ 128,890	$ 102,423
Benefits	20,105	15,993
Commissions	10,000	8,706
Share-based payments	24,343	17,217
	$ 183,338	$ 144,339

19. Depreciation and amortization:

The following table presents the depreciation expense of property and equipment and right-of-use assets by function:

	2021	2020
Cost of revenue	$ 9,461	$ 8,649
Selling and marketing	3	4
Research and development	3,047	2,755
General and administrative	5,653	2,927
	$ 18,164	$ 14,335

The following table presents the amortization expense of intangible assets by function:

	2021	2020
Cost of revenue	$ 1,528	$ 764
General and administrative	717	463
	$ 2,245	$ 1,227

20. Income tax expense:

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

	2021	2020
Current tax expense		
Current income tax	$ 3,466	$ 5,714
Deferred tax expense		
Origination and reversal of temporary differences	(1,204)	2,026
	$ 2,262	$ 7,740

20. 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:

	2021	2020
Canadian tax rate	26.50%	26.50%
Expected Canadian income tax expense	$ 291	$ 5,689
Increase (reduction) in income taxes resulting from:		
Permanent differences related to share-based payments	2,793	1,971
Other permanent differences	87	232
Change in estimates related to prior years	(1,015)	(298)
Change in unrecognized deferred tax assets/liabilities	295	4
Foreign tax rate differences	78	40
Other	(267)	102
	$ 2,262	$ 7,740

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

Deferred tax assets (liabilities)	December 31, 2020	Recognized in profit and loss	Recognized in equity	December 31, 2021
Tax effect of investment tax credits	$ (508)	$ (410)	$ –	$ (918)
Property and equipment	(3,916)	872	–	(3,044)
Right-of-use assets and liabilities	309	490	–	799
Contract acquisition costs	(4,471)	(289)	–	(4,760)
Intangible assets	(3,333)	609	–	(2,724)
Reserves and accruals	1,107	(530)	–	577
Share-based payments	2,294	1,913	5,208	9,415
Net operating loss carryforwards	8,100	(904)	–	7,196
Other	(3)	(547)	–	(550)
	$ (421)	$ 1,204	$ 5,208	$ 5,991

During 2021, the Company recorded $890 of current tax recovery directly in equity (2020 – $nil) related to tax deductions on share-based payments.

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, 2021 was $31,771 (2020 – $21,215).

20. Income tax expense (continued):

Deferred tax assets (liabilities)	Balance at December 31, 2019	Recognized in profit and loss	Balance at December 31, 2020
Tax effect of investment tax credits	$ (431)	$ (77)	$ (508)
Property and equipment	(3,541)	(375)	(3,916)
Right-of-use assets and liabilities	121	188	309
Contract acquisition costs	(3,666)	(805)	(4,471)
Intangible assets	–	(3,333)	(3,333)
Reserves and accruals	186	921	1,107
Share-based payments	1,329	965	2,294
Net operating loss carryforwards	–	8,100	8,100
Other	(941)	938	(3)
	$ (6,943)	$ 6,522	$ (421)

21. Statement of cash flows:

The following table presents changes in operating assets and liabilities:

	2021	2020
Trade and other receivables	$ (6,782)	$ (591)
Prepaid expenses	(1,100)	(2,516)
Contract acquisition costs	(3,407)	(775)
Trade payables and accrued liabilities	8,790	6,459
Deferred revenue	7,306	7,915
Provisions	716	–
	$ 5,523	$ 10,492

22. 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, 2021. As part of the acquisition of Rubikloud, a Standby Letter of Credit has been issued against this facility in the amount of CAD$1.4 million.

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, 2021 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$5.0 million, a borrowing limit applies that is based principally on the Company's accounts receivable.

23. Financial instruments:

(a) Fair value of financial instruments:

The carrying amounts of short-term investments, trade and other receivables, unbilled receivables, and trade payables and accrued liabilities approximate fair value due to the short-term maturity of these instruments and are considered to be Level 1 financial instruments. 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.

(b) Credit risk:

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

	2021	2020
United States	$ 41,031	$ 46,935
Europe	20,153	16,849
Canada	5,276	1,584
Asia	4,658	1,920
	$ 71,118	$ 67,288

The following table presents aging of trade accounts receivable:

	2021	2020
Current	$ 57,431	$ 53,190
Past due:		
0 – 30 days	8,351	9,093
31 – 60 days	1,040	3,105
Greater than 60 days	4,296	1,900
	$ 71,118	$ 67,288

At December 31, 2021, one customer individually accounted for greater than 10% of total trade accounts receivable (December 31, 2020 – two customers). For 2021, no customer individually accounted for greater than 10% of revenue (2020 – no customers).

The Company measures a loss allowance based on the lifetime expected credit losses. Lifetime expected credit losses are estimated based on factors such as the Company's past experience of collecting payments, the number of delayed payments in the portfolio past the average credit period, observable changes in national or local economic conditions that correlate with default on receivables, financial difficulty of the borrower, and it becoming probable that the borrower will enter bankruptcy or financial re-organization. Financial assets are written off when there is no reasonable expectation of recovery. During the year ended December 31, 2021, the Company

23. Financial instruments (continued):

(b) Credit risk (continued):

wrote off $288 of unbilled receivables that were deemed not collectible (2020 – $nil). As at December 31, 2021, the Company has not recorded a loss allowance (2020 – $nil).

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 short-term 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.

(c) 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, 2021, the Company had cash and cash equivalents and short-term investments totaling $233,388 (2020 – $213,138). Further, the Company has a credit facility as disclosed in note 22. The Company's trade payables and accrued liabilities are generally due within 3 months or less.

(d) 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, and Great British Pound. As a result, the Company is exposed to currency risk on these transactions. Additional earnings volatility arises from the translation of monetary assets and liabilities denominated in foreign currencies at the rate of exchange on each date of the Consolidated Statements of Financial Position, the impact of which is reported as a foreign exchange gain or loss.

23. Financial instruments (continued):

(d) Market risk (continued):

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 ended December 31, 2021, 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 $6,783 lower (2020 – $4,442 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, 2021 In thousands of local currency	USD	CAD	EUR	GBP	JPY
Trade receivables	60,018	1,204	4,431	1,412	365,154
Unbilled receivables	12,838	–	652	1,058	46,998
Other receivables	626	1,564	286	–	–
Trade payables	(7,612)	(1,974)	(231)	(539)	(47,267)
Accrued liabilities	(12,552)	(11,895)	(981)	(1,216)	(123,780)
	53,318	(11,101)	4,157	715	241,105

December 31, 2020 In thousands of local currency	USD	CAD	EUR	GBP	JPY
Trade receivables	58,386	179	680	4,934	122,257
Unbilled receivables	12,760	13	11	5	103,923
Other receivables	75	970	443	–	–
Trade payables	(1,350)	(1,115)	(61)	(1,159)	(203,337)
Accrued liabilities	(9,634)	(11,627)	(656)	(631)	(115,036)
	60,237	(11,580)	417	3,149	(92,193)

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, 2021, the Company has not drawn on the revolving demand credit facility.

24. 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: the design, development, marketing and sale of supply chain planning software and solutions.

Geographic information

The following table presents external revenue on a geographic basis:

	2021	2020
United States	$ 147,115	$ 139,762
Europe	62,461	50,128
Asia	33,719	29,548
Canada	7,431	4,751
	$ 250,726	$ 224,189

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

	2021	2020
Canada	$ 34,789	$ 16,800
United States	10,486	6,044
Asia	3,915	4,710
Europe	2,903	3,192
	$ 52,093	$ 30,746

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

	2021	2020
Canada	$ 45,955	$ 6,413
United States	3,155	2,220
Asia	3,713	5,843
Europe	755	1,246
	$ 53,578	$ 15,722

25. Related party transactions:

Details of the Company's significant subsidiaries at December 31, 2021 and 2020 are as follows:

Name of subsidiary	Principal activity	Place of incorporation and operation	Functional currency	Ownership interest	
				2021	2020
Kinaxis Corp.	Sales	State of Delaware, USA	USD	100%	100%
Kinaxis Europe B.V.	Sales	The Netherlands	EUR	100%	100%
Kinaxis India Private Limited	Support	India	INR	100%	100%
Kinaxis Japan K.K.	Sales	Japan	JPY	100%	100%
Kinaxis UK Limited	Sales	United Kingdom	GBP	100%	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:

	2021	2020
Salary and other short-term benefits	$ 7,377	$ 6,034
Share-based payments	17,123	16,403
	$ 24,500	$ 22,437

26. Capital management:

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

The Company has access to a revolving demand credit facility which bears interest at bank prime per annum which has not been drawn as at December 31, 2021. The terms of the facility require the Company to meet certain financial covenants which are monitored by senior management to ensure compliance, as outlined in note 22.

27. 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 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.

c) The Company is involved in litigation with a competitor, whereby the competitor has made certain allegations concerning patent infringement. The Company will accrue a liability if the Company determines 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. The Company has assessed that its defense against these allegations will more likely than not be successful and a present obligation does not exist. At December 31, 2021, the Company has not recorded a liability regarding these allegations.

   The Company is 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.

28. Subsequent event:

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

The cash consideration is based on a purchase price of $3,144, adjusted for the acquired company's closing cash and indebtedness at the date of acquisition and subject to post-closing working capital adjustments.

The financial effects of this transaction have not been recognized at December 31, 2021. At the time the financial statements were authorized for issue, the Company has not yet completed the initial accounting for the acquisition. 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, or about the goodwill that may be recognized.