Consolidated Financial Statements of

Kinaxis Inc.

Years ended December 31, 2020 and 2019

(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, 2020 and December 31, 2019
- the consolidated statements of comprehensive income for the years then ended
- the consolidated statements of changes in shareholders' equity for the years then ended
- the consolidated statements of cash flows for the years then ended
- and notes to the consolidated financial statements, including a summary of significant accounting policies

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

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at December 31, 2020 and December 31, 2019, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for Opinion

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

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

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

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, 2020. 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 matters described below to be the key audit matters 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 contracts 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 a 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 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.

Initial measurement of customer relationships and technology acquired in the Rubikloud Technologies, Inc. business combination

Description of the matter

We draw attention to Notes 2(f), 3(o) and 4 to the financial statements. On July 2, 2020, the Entity acquired 100% of the outstanding shares of Rubikloud Technologies, Inc. and its subsidiaries (collectively, “Rubikloud”) in a business combination. The Entity’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 acquisition date fair value of the customer relationships and technology was $2,800 thousand and $10,700 thousand, respectively. The Entity 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 rate, technology migration rate, future expenses, and discount rates.

Why the matter is a key audit matter

We identified the evaluation of the initial measurement of the customer relationships and technology acquired in the Rubikloud business combination as a key audit matter. This matter represented a significant risk of material misstatement given the magnitude of the intangible assets, and the income approach included significant assumptions for which there was limited observable market information. Significant auditor judgment was required due to the high degree of subjectivity and estimation uncertainty within the significant assumptions used to determine the fair value of the intangible assets at the acquisition date.

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 appropriateness of the future revenues and expenses, customer attrition rate, and technology migration rate assumptions by considering past performance, industry data, and assessing against comparable companies.

We involved valuation professionals with specialized skills and knowledge, who assisted in assessing the appropriateness of the discount rates by comparing the Entity’s inputs to the discount rates to publicly available data for comparable entities.

Other Information

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

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

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

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

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

We have nothing to report in this regard.

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

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

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

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

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

Auditors' Responsibilities for the Audit of the Financial Statements

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

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

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

As part of an audit in accordance with Canadian 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 other 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 consequences of doing so would reasonably be expected to outweigh the public interest 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 3, 2021

Kinaxis Inc.

Consolidated Statements of Financial Position

(Expressed in thousands of USD)

	December 31, 2020	December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 182,958	$ 182,284
Short-term investments	30,180	30,319
Trade and other receivables (note 5)	82,883	80,623
Investment tax credits recoverable (note 19)	1,109	–
Prepaid expenses	9,264	6,534
	306,394	299,760
Non-current assets:		
Property and equipment (note 6)	30,746	25,704
Right-of-use assets (note 7)	15,722	8,671
Contract acquisition costs (note 8)	16,484	15,497
Unbilled receivables (note 5)	2,013	249
Other receivables	752	713
Deferred tax assets (note 19)	2,308	149
Investment tax credits recoverable (note 19)	980	–
Intangible assets (note 9)	13,023	–
Goodwill (note 10)	39,988	–
	$ 428,410	$ 350,743
Liabilities and Shareholders' Equity		
Current liabilities:		
Trade payables and accrued liabilities (note 11)	$ 33,030	$ 20,770
Deferred revenue (note 12)	94,275	83,673
Lease obligations (note 13)	4,554	2,288
	131,859	106,731
Non-current liabilities:		
Lease obligations (note 13)	12,065	6,818
Deferred tax liabilities (note 19)	2,729	7,092
	14,794	13,910
Shareholders' equity:		
Share capital (note 14)	173,104	140,961
Contributed surplus	35,846	30,392
Accumulated other comprehensive loss	(20)	(348)
Retained earnings	72,827	59,097
	281,757	230,102
	$ 428,410	$ 350,743

See accompanying notes to consolidated financial statements.

On behalf of the Board of Directors:

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

Kinaxis Inc.

Consolidated Statements of Comprehensive Income

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

	2020	2019
Revenue (note 16)	$ 224,189	$ 191,549
Cost of revenue	70,131	53,850
Gross profit	154,058	137,699
Operating expenses:		
Selling and marketing	52,630	44,270
Research and development	47,420	34,125
General and administrative	33,232	26,852
	133,282	105,247
	20,776	32,452
Other income (expense):		
Foreign exchange loss	(196)	(226)
Net finance and other income	890	3,037
	694	2,811
Profit before income taxes	21,470	35,263
Income tax expense (note 19):		
Current	5,714	9,015
Deferred	2,026	2,917
	7,740	11,932
Profit	13,730	23,331
Other comprehensive income (loss):		
Items that are or may be reclassified subsequently to profit or loss:		
Foreign currency translation differences - foreign operations	328	(29)
Total comprehensive income	$ 14,058	$ 23,302
Basic earnings per share	$ 0.51	$ 0.89
Weighted average number of basic Common Shares (note 15)	26,716,027	26,180,034
Diluted earnings per share	$ 0.49	$ 0.87
Weighted average number of diluted Common Shares (note 15)	28,138,911	26,967,805

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 income (loss)	Retained earnings	Total equity
Balance, December 31, 2018	$ 124,951	$ 24,284	$ (319)	$ 35,766	$ 184,682
Profit	–	–	–	23,331	23,331
Other comprehensive loss	–	–	(29)	–	(29)
Total comprehensive income (loss)	–	–	(29)	23,331	23,302
Share options exercised	12,042	(3,291)	–	–	8,751
Restricted share units vested	3,968	(3,968)	–	–	–
Share based payments (note 14)	–	13,367	–	–	13,367
Total shareholder transactions	16,010	6,108	–	–	22,118
Balance, December 31, 2019	$ 140,961	$ 30,392	$ (348)	$ 59,097	$ 230,102
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 (note 14)	–	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

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)

	2020	2019
Cash flows from operating activities:		
Profit	$ 13,730	$ 23,331
Items not affecting cash:		
Depreciation of property and equipment and right-of-use assets (note 18)	14,335	11,908
Amortization of intangible assets (note 18)	1,227	–
Share-based payments (note 14)	17,217	13,367
Net finance income	(890)	(3,037)
Income tax expense (note 19)	7,740	11,932
Investment tax credits recoverable (note 19)	(2,089)	–
Change in operating assets and liabilities (note 20)	10,492	(9,161)
Interest received	1,761	3,653
Interest paid	(674)	(531)
Income taxes paid	(3,379)	(14,863)
	59,470	36,599
Cash flows used in investing activities:		
Acquisition of businesses, net of cash acquired (note 4)	(61,767)	–
Purchase of property and equipment (note 6)	(14,439)	(11,719)
Purchase of short-term investments	(110,616)	(60,108)
Redemption of short-term investments	110,558	85,108
	(76,264)	13,281
Cash flows from financing activities:		
Payment of lease obligations (note 13)	(3,742)	(2,674)
Common shares issued on exercise of stock options	20,380	8,751
	16,638	6,077
Increase (decrease) in cash and cash equivalents	(156)	55,957
Cash and cash equivalents, beginning of year	182,284	126,144
Effects of exchange rates on cash and cash equivalents	830	183
Cash and cash equivalents, end of year	$ 182,958	$ 182,284

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 700 Silver Seven Road, Ottawa, Ontario. The consolidated financial statements of the Company as at and for the years ended December 31, 2020 and 2019 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 24.

The consolidated financial statements were authorized for issue by the Board of Directors on March 3, 2021.

(b) Comparative figures:

Certain comparative figures have been adjusted for the year ended December 31, 2019. Lease security deposits previously reported with the current portion of trade and other receivables have been classified as long-term. This adjustment was not considered material and did not affect the Company's consolidated revenue or consolidated profit.

(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.

2. Basis of preparation (continued):

(e) Foreign currency:

Foreign currency transactions

The financial statements of the Company are measured using USD as the functional currency. The functional currency of Kinaxis' significant wholly-owned subsidiaries is outlined in Note 24. Transactions in currencies other than USD are translated at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are translated to the functional currency at the rates prevailing at that date. Exchange differences on monetary items are recognized in profit or loss in the period in which they arise. Non-monetary items carried at fair value that are denominated in foreign currencies are translated to the functional currency at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the rates at the date of the transaction.

Foreign operations

The consolidated financial statements also include the accounts of its wholly-owned subsidiaries. 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, recognition of deferred tax assets, valuation of trade and other receivables, valuation of share-based payments, the fair value of contingent consideration and valuation of intangible assets acquired in business combinations. 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.

2. Basis of preparation (continued):

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

The continuing uncertainty around the outbreak of 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, 2020. 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 goodwill and intangible assets, 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 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, we conduct 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.

2. Basis of preparation (continued):

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

Income taxes

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

Trade and other receivables

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

Fair value of share-based payments

The Company uses the Black-Scholes valuation model to determine the fair value of equity settled stock options. Estimates are required for inputs to this model including the fair value of the underlying shares, the expected life of the option, volatility, 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 realized from the original estimate. The assumptions and estimates used are further outlined in Note 14.

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 Management's assessment of the likelihood of each outcome.

Fair value 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.

(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 for a term. The license component and maintenance and support/hosting components are each allocated revenue using their relative estimated SSP. Revenue allocated to the bundled maintenance and support and hosting is recognized ratably over the term of the maintenance and support services. Professional services are provided for implementation and configuration of software licenses and SaaS, as well as ongoing technical services and training.

Professional services are typically billed on a time and material basis and revenue is recognized over time as the services are performed. For professional services contracts billed on a fixed price basis, revenue is recognized over time based on the proportion of services performed.

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

3. Significant accounting policies (continued):

(b) Revenue recognition (continued):

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 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.

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

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

The Company's financial assets are classified as follows:

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

Amortized cost

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

Impairment of financial assets

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

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

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.

3. Significant accounting policies (continued):

(c) Financial instruments (continued):

De-recognition of financial liabilities

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

(d) Cash and cash equivalents:

Cash and cash equivalents include cash investments in interest-bearing accounts and term deposits which can readily be redeemed for cash without penalty or are issued for terms of three months or less from the date of acquisition.

(e) Short-term investments:

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

(f) Property and equipment:

Property and equipment are measured at cost less accumulated depreciation and accumulated impairment losses. 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").

3. Significant accounting policies (continued):

(f) Property and equipment (continued):

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

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

(g) Leases:

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

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

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received. The 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. Lease terms range from 2 to 6 years for offices and data centres. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

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

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

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

3. Significant accounting policies (continued):

(g) Leases (continued):

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

(h) Employee benefits:

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

(i) Provisions:

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

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

(j) Research and development expense:

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

(k) Income taxes:

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

3. Significant accounting policies (continued):

(k) 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 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.

3. Significant accounting policies (continued):

(k) Income taxes (continued):

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

(l) Share-based payments:

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

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

(m) Earnings per share:

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

3. Significant accounting policies (continued):

(n) 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 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.

(o) 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.

3. Significant accounting policies (continued):

(o) Acquired intangible assets (continued):

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.

(p) 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 payable is measured at the estimated fair value at each reporting date.

The contingent consideration arrangement consists of additional payments to the selling shareholder for attainment of specific revenue and team retention metrics in the year following the acquisition.

The potential undiscounted amount of all future payments that the Company could be required to make under this arrangement is between $150 and $1,000.

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

4. Business combinations (continued):

Prana Consulting, Inc. (continued):

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
Accounts payable and accrued liabilities		(1,747)
		347
Goodwill		3,659
Total consideration	$	4,006

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.

Since the date of acquisition, the acquisition had no significant impact on revenue and net earnings for the year ended December 31, 2020. Pro forma results of operations for this acquisition have not been presented as they are not considered material to our consolidated result of operations.

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.

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

4. Business combinations (continued):

Rubikloud Technologies, Inc. (continued):

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, of which $262 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. Since the date of acquisition, the acquisition had no significant impact on revenue and net earnings for the year ended December 31, 2020. Pro forma results of operations for this acquisition have not been presented as they are not considered material to our consolidated result of operations.

Cash flows used in the acquisition of businesses include the total consideration paid, net of cash acquired and contingent consideration.

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

5. Trade and other receivables:

	December 31, 2020	December 31, 2019
Trade accounts receivable	$ 67,288	$ 65,406
Unbilled receivables	13,800	13,880
Investment tax credits receivable	211	–
Taxes receivable	–	382
Other	1,584	977
	82,883	80,645
Loss allowance	–	(22)
	$ 82,883	$ 80,623

There were no trade and other receivables written off in 2020 (2019 – $2,768).

The following table presents changes in unbilled receivables:

	2020	2019
Balance, beginning of year	$ 14,129	$ 6,865
Amounts transferred to trade accounts receivable from the balance at the beginning of year	(13,654)	(5,614)
Amounts written off	–	(794)
Revenue in excess of billings, net of amounts transferred to trade accounts receivable	15,338	13,672
Balance, end of year	$ 15,813	$ 14,129
Current	$ 13,800	$ 13,880
Non-current	2,013	249

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

6. Property and equipment:

Cost	Land	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
Balance, December 31, 2018	$ –	$ 33,368	$ 2,098	$ 493	$ 4,819	$ 40,778
Additions	–	9,672	1,063	447	537	11,719
Dispositions	–	(329)	(219)	(92)	–	(640)
Effects of movement in exchange rates	–	(64)	–	–	5	(59)
Balance, December 31, 2019	$ –	$ 42,647	$ 2,942	$ 848	$ 5,361	$ 51,798
Additions	18	10,825	275	335	3,326	14,779
Dispositions	–	(14)	–	(37)	(300)	(351)
Effects of movement in exchange rates	–	729	17	8	89	843
Balance, December 31, 2020	$ 18	$ 54,187	$ 3,234	$ 1,154	$ 8,476	$ 67,069

Accumulated depreciation	Land	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
Balance, December 31, 2018	$ –	$ 13,767	$ 1,059	$ 224	$ 2,943	$ 17,993
Depreciation (note 18)	–	7,231	650	130	755	8,766
Dispositions	–	(329)	(219)	(92)	–	(640)
Effects of movement in exchange rates	–	(28)	–	–	3	(25)
Balance, December 31, 2019	$ –	$ 20,641	$ 1,490	$ 262	$ 3,701	$ 26,094
Depreciation (note 18)	–	8,420	835	305	672	10,232
Dispositions	–	(14)	–	(37)	(300)	(351)
Effects of movement in exchange rates	–	293	(8)	37	26	348
Balance, December 31, 2020	$ –	$ 29,340	$ 2,317	$ 567	$ 4,099	$ 36,323

Carrying value	Land	Computer equipment	Computer software	Office furniture and equipment	Leasehold improvements	Total property and equipment
December 31, 2019	$ –	$ 22,006	$ 1,452	$ 586	$ 1,660	$ 25,704
December 31, 2020	$ 18	$ 24,847	$ 917	$ 587	$ 4,377	$ 30,746

Additions for the year ended December 31, 2020 include $340 in acquisitions through business combinations, as outlined in note 4, and $2,200 in leasehold improvements in progress related to our new office lease in Ottawa, Canada, as outlined in note 13. There were no proceeds associated with asset dispositions in 2020 (2019 – no proceeds associated with asset dispositions).

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

7. Right-of-use assets:

	Offices	Data centres	Total right-of-use assets
Balance, January 1, 2019	$ 2,954	$ 5,919	$ 8,873
Additions	203	2,746	2,949
Depreciation (note 18)	(1,154)	(1,988)	(3,142)
Effects of movement in exchange rates	(16)	7	(9)
Balance, December 31, 2019	$ 1,987	$ 6,684	$ 8,671
Additions	7,034	3,779	10,813
Depreciation (note 18)	(1,780)	(2,323)	(4,103)
Effects of movement in exchange rates	76	265	341
Balance, December 31, 2020	$ 7,317	$ 8,405	$ 15,722

Additions for the year ended December 31, 2020 include $3,298 in right-of-use assets acquired through business combinations, as outlined in note 4.

8. Contract acquisition costs:

	2020	2019
Balance, beginning of year	$ 15,497	$ 13,902
Additions	7,090	5,951
Amortization	(6,229)	(4,356)
Effects on movements in exchange rates	126	–
Balance, end of year	$ 16,484	$ 15,497

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

9. Intangible assets:

	Customer relationships	Technology	Total intangible assets
Balance, December 31, 2019	$ –	$ –	$ –
Additions (note 4)	3,550	10,700	14,250
Amortization (note 18)	(463)	(764)	(1,227)
Balance, December 31, 2020	$ 3,087	$ 9,936	$ 13,023

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

10. Goodwill:

	2020	2019
Balance, beginning of year	$ –	$ –
Acquisition of Prana Consulting, Inc. (note 4)	3,659	–
Acquisition of Rubikloud Technologies, Inc. (note 4)	36,329	–
Balance, end of year	$ 39,988	$ –

The annual impairment test of goodwill was performed on December 31, 2020 and did not result in an impairment loss.

11. Trade payables and accrued liabilities:

	December 31, 2020	December 31, 2019
Trade accounts payable	$ 5,896	$ 4,285
Accrued liabilities	22,131	13,360
Taxes payable	5,003	3,125
	$ 33,030	$ 20,770

12. Deferred revenue:

	2020	2019
Balance, beginning of year	$ 83,673	$ 78,496
Amounts invoiced and revenue deferred	93,347	82,949
Recognition of deferred revenue included in the balance at the beginning of year	(82,745)	(77,772)
Balance, end of year	$ 94,275	$ 83,673

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

13. Lease obligations:

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

	December 31, 2020	December 31, 2019
Current	$ 4,554	$ 2,288
Non-current	12,065	6,818
Total lease obligations	$ 16,619	$ 9,106

The following table presents the contractual undiscounted cash flows for lease obligations as at December 31, 2020:

Less than one year	$ 5,188
One to five years	12,798
Total undiscounted lease obligations	$ 17,986

Interest expense on lease obligations for 2020 was $674 (2019 – $531). The expense relating to variable lease payments not included in the measurement of lease obligations was $1,077 (2019 – $730). This consists of variable lease payments for operating costs, property taxes, and insurance. Expenses relating to short-term leases were $543 (2019 – $556) and expenses relating to leases of low value assets were not material. Total cash outflow for leases was $6,036 (2019 – $4,491), including $3,742 (2019 – $2,674) of principal payments on lease obligations.

The Company has entered into commitments to lease office space in Ottawa, Canada, and to expand data centres in Montreal, Canada. The office lease in Ottawa is expected to commence in late 2021 and the minimum payments required under this commitment are $44,060 over a fifteen year period. The data center lease expansions in Montreal will commence in January 2021 and July 2021 and the minimum payments required under these commitments are $1,659 over a three to four year period.

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

14. Share capital:

Authorized

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

Issued

	Common shares	
	Shares	Amount
Shares outstanding, December 31, 2018	26,078,181	$ 124,951
Shares issued from exercised options	261,929	12,042
Shares issued from vested restricted share units	62,894	3,968
Shares outstanding, December 31, 2019	26,403,004	$ 140,961
Shares issued from exercised options	618,531	27,187
Shares issued from vested restricted share units	64,387	4,956
Shares outstanding, December 31, 2020	27,085,922	$ 173,104

Stock option plans

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

		2020		2019
	Shares	Weighted average exercise price	Shares	Weighted average exercise price
Options outstanding, beginning of period	2,228,738	$ 44.24	2,089,873	$ 38.32
Granted	626,999	112.85	468,044	57.81
Exercised	(618,531)	32.94	(261,929)	33.41
Forfeited	(8,750)	71.34	(67,250)	54.98
Options outstanding, end of period	2,228,456	$ 68.82	2,228,738	44.24
Options exercisable, end of period	932,258	$ 40.73	1,041,110	30.43

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

14. Share capital (continued):

The following table presents information about stock options outstanding at December 31, 2020:

	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	148,524	3.09	$ 11.22	148,524	$ 11.22
$30 to $60	1,210,173	4.09	50.04	712,599	44.04
$60 to $90	598,259	3.47	80.05	71,135	69.16
$120 to $150	44,000	4.36	134.68	–	–
$150 to $180	227,500	4.61	164.08	–	–
	2,228,456	3.92	$ 68.82	932,258	$ 40.73

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

At December 31, 2020, there were 498,407 stock options available for grant under the Plans.

In 2020, the Company granted 626,999 options (year ended December 31, 2019 – 468,044) and recorded share-based compensation expense of $10,308 (2019 – $8,271) related to the vesting of options granted in 2020 and previous years. The per share weighted-average fair value of stock options granted during 2020 was $30.77 (2019 – $18.51) on the date of grant using the Black Scholes option-pricing model with the following weighted-average assumptions: exercise price is equal to the price of the underlying share, expected dividend yield of 0%, risk-free interest rate of 0.71% (2019 – 2.45%), an expected life of three to five years (2019 – three to five years), and estimated volatility of 35% (2019 – 38%). The forfeiture rate is estimated at 15% (2019 – 15%) based upon an analysis of actual forfeitures.

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

14. Share capital (continued):

Share Unit Plan

At December 31, 2020, there were 205,378 share units available for grant under the Share Unit Plan.

In 2020, the Company granted 81,970 restricted share units ("RSU") (2019 – 70,982). At December 31, 2020, there were 78,305 RSUs outstanding (2019 – 60,722). 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 2020 was $94.04 per unit (2019 – $63.13) using the fair value of a Common Share at time of grant. The Company recorded share-based compensation expense of $6,009 (2019 – $4,196) related to the RSUs.

In 2020, the Company granted 10,842 deferred share units ("DSU") (2019 – 14,256). At December 31, 2020, there were 55,928 DSUs outstanding (2019 – 45,086). 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 the 2020 was $83.00 per unit (2019 – $63.13) using the fair value of a Common Share at time of grant. The Company recorded share-based compensation of $900 (2019 – $900) related to the DSUs.

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

	2020	2019
Cost of revenue	$ 1,693	$ 900
Selling and marketing	5,218	5,484
Research and development	3,058	1,574
General and administrative	7,248	5,409
	$ 17,217	$ 13,367

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

15. Earnings per share:

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

	2020	2019
Issued Common Shares, beginning of year	26,403,004	26,078,181
Effect of shares issued from exercise of options	309,329	98,234
Effect of shares issued from vesting of restricted share units	3,694	3,619
Weighted average number of basic Common Shares	26,716,027	26,180,034
Effect of share options on issue	1,200,057	644,062
Effect of share units on issue	222,827	143,709
Weighted average number of diluted Common Shares	28,138,911	26,967,805

For 2020, 271,500 (2019 – 1,233,608) options were excluded from the weighted average number of diluted common shares as their effect would have been anti-dilutive.

16. Revenue:

The following table presents revenue of the Company:

	2020	2019
SaaS	$ 148,873	$ 118,860
Professional services	45,899	33,549
Subscription term licenses	17,890	26,218
Maintenance and support	11,527	12,922
	$ 224,189	$ 191,549

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, 2020:

	2021	2022	2023 and thereafter	Total
SaaS	$ 144,479	$ 104,877	$ 104,100	$ 353,456
Maintenance and support	12,224	8,313	5,075	25,612
Subscription term licenses	2,183	–	–	2,183
	$ 158,886	$ 113,190	$ 109,175	$ 381,251

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

17. Personnel expenses:

	2020	2019
Salaries including bonuses	$ 102,423	$ 71,823
Benefits	15,993	11,274
Commissions	8,706	6,190
Share-based payments	17,217	13,367
	$ 144,339	$ 102,654

18. Depreciation and amortization:

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

	2020	2019
Cost of revenue	$ 8,649	$ 8,384
Selling and marketing	4	4
Research and development	2,755	1,365
General and administrative	2,927	2,155
	$ 14,335	$ 11,908

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

	2020	2019
Cost of revenue	$ 764	–
General and administrative	463	–
	$ 1,227	–

19. Income tax expense:

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

	2020	2019
Current tax expense		
Current income tax	$ 5,714	$ 9,015
Deferred tax expense		
Origination and reversal of temporary differences	2,026	2,917
	$ 7,740	$ 11,932

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

19. 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:

	2020	2019
Canadian tax rate	26.50%	26.50%
Expected Canadian income tax expense	$ 5,689	$ 9,345
Increase (reduction) in income taxes resulting from:		
Difference between current and future tax rates and other	40	308
Foreign tax rate differences	40	133
Permanent difference of share-based payments	1,971	2,146
	$ 7,740	$ 11,932

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

	Balance at December 31, 2019	Recognized in profit and loss	Balance at December 31, 2020
Deferred tax assets (liabilities):			
Tax effect of investment tax credits	$ (431)	$ (77)	$ (508)
Intangible property	–	(3,333)	(3,333)
Property and equipment	(3,541)	(375)	(3,916)
Contract acquisition costs	(3,666)	(805)	(4,471)
Share-based payments	1,329	965	2,294
Net operating loss carryforwards	–	8,100	8,100
Other	(634)	2,047	1,413
	$ (6,943)	$ 6,522	$ (421)

The company has net operating loss carryforwards as at December 31, 2020 of $8,100 (2019 – $nil). The Company has investment tax credits available to reduce federal income taxes payable in Canada of $2,089, with $980 classified as a non-current asset at December 31, 2020 (2019 – $nil).

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, 2020 was $21,215 (2019 – $14,913).

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

19. Income tax expense (continued):

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

20. Statement of cash flow:

The following table presents changes in operating assets and liabilities:

	2020	2019
Trade and other receivables	$ (591)	$ (16,776)
Prepaid expenses	(2,516)	(716)
Contract acquisition costs	(775)	(1,566)
Trade payables and accrued liabilities	6,459	4,726
Deferred revenue	7,915	5,171
	$ 10,492	$ (9,161)

21. 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, 2020. 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, 2020 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.

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

22. 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 market 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:

	2020	2019
United States	$ 46,935	$ 45,950
Europe	16,849	15,889
Asia	1,920	2,057
Canada	1,584	1,510
	$ 67,288	$ 65,406

The following table presents aging of trade accounts receivable:

	2020	2019
Current	$ 53,190	$ 41,209
Past due:		
0 – 30 days	9,093	17,854
31 – 60 days	3,105	2,453
Greater than 60 days	1,900	3,890
	$ 67,288	$ 65,406

At December 31, 2020, two customers individually accounted for greater than 10% of total trade accounts receivable (December 31, 2019 – one customer). For 2020, no customer individually accounted for greater than 10% of revenue (2019 – 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

22. Financial instruments (continued):

(b) Credit risk (continued):

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, 2020, the Company did not deem any receivables to be uncollectable (2019 – $2,768 written off). As at December 31, 2020, the Company has not recorded a loss allowance (2019 – $22).

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

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

(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, 2020, the Company had cash and cash equivalents and short-term investments totaling $213,138 (2019 – $212,603). Further, the Company has a credit facility as disclosed in Note 21. The Company's trade payables and accrued liabilities are 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.

22. Financial instruments (continued):

(d) Market risk (continued):

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.

The Company is also subject to currency risk on its income tax expense due to foreign exchange impacts resulting from translating financial results to local currency for Canadian tax reporting purposes.

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

The Company is mainly exposed to fluctuations between the U.S. dollar and the Canadian dollar. For the year ending December 31, 2020, if the Canadian dollar had strengthened 5% against the U.S. dollar, with all other variables held constant, pre-tax income for the year would have been $2,525 lower (2019 – $2,953 lower). Conversely, if the Canadian dollar had weakened 5% against the U.S. dollar with all other variables held constant, there would be an equal, and opposite impact, on pre-tax income.

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

December 31, 2020 In thousands of local currency	USD	CAD	EUR	JPY	GBP
Trade receivables	58,515	6	686	122,257	4,934
Unbilled receivables	12,771	13	3	103,923	5
Other receivables	3,179	(3,145)	505	3,927	8
Trade payables	(2,293)	(1,103)	(2,249)	(107,655)	812
Accrued liabilities	1,751	(22,174)	(1,509)	(167,690)	(659)
	73,923	(26,403)	(2,564)	(45,238)	5,100

December 31, 2019 In thousands of local currency	USD	CAD	EUR	JPY	GBP
Trade receivables	55,994	212	4,852	171,150	1,651
Unbilled receivables	11,830	4	414	171,829	1
Other receivables	623	115	10	104,172	5
Trade payables	(775)	(1,093)	(135)	(200,587)	(491)
Accrued liabilities	(5,091)	(7,634)	(593)	(69,950)	(776)
	62,581	(8,396)	4,548	176,614	390

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

22. Financial instruments (continued):

(d) Market risk (continued):

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, 2020, the Company has not drawn on the revolving demand facility.

23. 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:

	2020	2019
United States	$ 139,762	$ 125,591
Europe	50,128	41,275
Asia	29,548	19,584
Canada	4,751	5,099
	$ 224,189	$ 191,549

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

	2020	2019
Canada	$ 16,800	$ 14,020
United States	6,044	5,851
Asia	4,710	3,450
Europe	3,192	2,383
	$ 30,746	$ 25,704

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

23. Segmented information (continued):

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

	2020	2019
Canada	$ 6,413	$ 2,984
United States	2,220	2,743
Asia	5,843	2,097
Europe	1,246	847
	$ 15,722	$ 8,671

24. Related party transactions:

Details of the Company's significant subsidiaries at December 31, 2020 and 2019 are as follows:

Name of subsidiary	Principal activity	Place of incorporation and operation	Functional Currency	Proportion of ownership interest and voting power held	
				2020	2019
Kinaxis Asia Limited	Sales	Hong Kong	USD	100%	100%
Kinaxis Corp.	Sales	State of Delaware, USA	USD	100%	100%
Kinaxis Europe B.V.	Sales	The Netherlands	EUR	100%	100%
Kinaxis Japan K.K.	Sales	Japan	JPY	100%	100%
Kinaxis Korea Limited	Sales	South Korea	KRW	100%	100%
Kinaxis UK Limited	Sales	United Kingdom	GBP	100%	100%
Kinaxis Singapore Pte. Ltd.	Sales	Singapore	USD	100%	100%
Prana Consulting Services Private Ltd.	Support	India	INR	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:

	2020	2019
Salary and other short-term benefits	$ 6,034	$ 5,135
Share-based payments	16,403	10,061
	$ 22,437	$ 15,196

25. Capital management:

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

The Company has access to a revolving demand facility which bears interest at bank prime per annum which has not been drawn as at December 31, 2020. 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 21.

26. 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.

26. Contingencies (continued):

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, 2020, 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.