OPTIVA INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FISCAL PERIOD ENDED DECEMBER 31, 2019

DATED: March 9, 2020

SCOPE OF ANALYSIS

This Management's Discussion and Analysis ("MD&A") covers the results of operations, financial condition and cash flows of Optiva Inc. (the "Company" or "Optiva") for the fifth quarter and year ended December 31, 2019. This document is intended to assist the reader in better understanding operations and key financial results as they are, in our opinion, at the date of this report.

The MD&A should be read in conjunction with the audited consolidated financial statements for the fifteen months ended December 31, 2019 and the twelve months ended September 30, 2018, which we prepared in accordance with International Financial Reporting Standards ("IFRS").

Certain information included herein is forward-looking and based upon assumptions and anticipated results that are subject to uncertainties. Should one or more of these uncertainties materialize or should the underlying assumptions prove incorrect, actual results may vary significantly from those expected. See "Forward-Looking Statements" and "Risks and Uncertainties". The consolidated financial statements and the MD&A have been reviewed by Optiva's Audit Committee and approved by its Board of Directors.

On December 12, 2018, the Board of Directors approved a change in the Company's fiscal year end from September 30 to December 31. The change is to better align the Company's fiscal year end with its business operations. The change in the year end has been filed with the regulatory authority.

The Company's fiscal reporting period is for the fifteen months ended December 31, 2019. The quarterly comparatives in this MD&A compares the quarter ended December 31, 2019 to the quarter ended December 31, 2018. The full year comparatives compare the fifteen months ended December 31, 2019 to the twelve months ended September 30, 2018.

Unless otherwise indicated, all dollar amounts are expressed in U.S. Dollars. In this document, "we," "us," "our," "Company" and "Optiva" all refer to Optiva Inc. collectively with its subsidiaries.

FORWARD-LOOKING STATEMENTS

Certain statements in this document may constitute "forward-looking" statements which involve known and unknown risks, uncertainties and other factors which may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this document, such statements use such words as "may", "will", "expect", "continue", "believe", "plan", "intend", "would", "could", "should", "anticipate" and other similar terminology. These statements reflect current assumptions and expectations regarding future events and operating performance and speak only as of the date of this document. Forward-looking statements involve significant risks and uncertainties, should not be read as guarantees of future performance or results, and will not necessarily be accurate indications of whether or not such results will be achieved. A number of factors could cause actual results or performance to differ materially from the results or performance discussed in the forward-looking statements and could have a material adverse effect on the Company, its business, results from operations and financial condition, including, but not limited to, the risk factors discussed under the "Risks and Uncertainties" section of this MD&A, and those described in the "Risk Factors" section of the

Company's most recently filed Annual Information Form. Although the forward-looking statements contained in this document are based upon what we believe are reasonable assumptions, we cannot assure investors that our actual results will be consistent with these forward-looking statements. We assume no obligation to update or revise these forward-looking statements to reflect new events or circumstances, except as required by securities law.

RISKS AND UNCERTAINTIES

- The Company's strategy depends on its ability to realize the benefits of its restructuring and strategic plan. The Company may continue to generate losses while it executes on its strategy of investing all of its expected earnings otherwise generated in cloud innovation. Unanticipated declines in revenue or increases in expenses or liabilities in the near term, and lack of customer adoption of cloud products in the longer term, may result in the Company not being able to satisfy its financial obligations without further financing.
- Failure of our solutions could expose the Company to significant liabilities. The Company's solutions are critical to our customers' ability to deliver and monetize services on their networks. If the Company fails to successfully deploy its solutions or if customers experience system outages caused by our software, the Company may be exposed to significant liabilities associated with unplanned remediation costs, penalties and claims for damages.
- The Company faces intense competition from several competitors and if it does not compete effectively with these competitors, its revenue may not grow and could decline. Many of the Company's competitors and potential competitors have significantly greater financial, technical, marketing or service resources than the Company. The Company's relatively small size and recent operating history may be considered negatively by prospective end-users.
- The Company's ability to recruit and retain personnel is crucial to its ability to develop, market, sell and support its products and services.
- The Company's quarterly revenue and operating results can be difficult to predict and can fluctuate substantially, which may harm its results of operations.
- The Company is exposed to credit risk related to accounts receivable from customers and unbilled revenue related to on-going customer projects. If customers fail to make payment in respect of amounts owing to the Company to an extent that is in excess of the Company's estimated default rates, the Company's business, financial condition and results of operation could be materially adversely affected.
- A substantial portion of the Company's revenue and expenses are transacted in currencies other than the Company's functional currency of U.S. dollars. Fluctuations in the exchange rate between the U.S. dollar and these currencies may have a material adverse effect on the Company's business, financial condition and operating results.
- The Company has entered into long term contracts with related parties, and will be purchasing significant development services and accessing skilled resources from these parties that are critical to the future success of the Company. The Company may not be able to fulfill its contractual obligations with its customers or may be exposed to significant operational and

financial risks should these related parties experience disruption in their operations, go out of business or choose not to work with the Company.

- The company's strategy can change should there be a material change of control, including the Board composition, as a result of shareholder activism.

OVERVIEW

Optiva Inc. is a leading company providing communication service providers ("CSPs") worldwide with cloud-native revenue management software on the public cloud. Operators and Mobile Virtual Network Operators ("MVNOs") can integrate our best-of-breed charging engine into a Business Support Systems ("BSS") stack or deploy our fully managed, end-to-end, SaaS-based platform. Optiva solutions offer unmatched speed, scale, security, and savings. Our market knowledge, analytical insights, and unique Customer Success Program ensure telecoms are equipped to achieve their strategic business goals.

Established in 1999, Optiva Inc. is on the Toronto Stock Exchange (TSX: OPT). For more information, visit www.optiva.com.

The Company derives its revenue from three main geographic areas, namely:

1. APAC – Asia and Pacific Rim
2. Americas – North America, Latin America, and Caribbean
3. EMEA – Europe, Middle East, and Africa

Optiva's award-winning, cloud-enabled, real-time converged charging, billing, and customer care platform delivers the benefits of a flexible, end-to-end software platform, including real-time charging, billing, product catalog, order management, policy management, and customer care for any digital services of a CSP. Optiva's product family supports any type of CSP from tier 1 to tier 4, on the cloud or on-premise. It enables a digital customer journey delivering innovative end-user services from real-time offerings to digital self-management of customer interactions.

Optiva supports the telecommunication industry with the following market solutions:

- **Optiva Charging Engine** – Optiva's highly scalable, convergent charging solution is a full cloud-enabled platform for private and public cloud. It monetizes any type of transaction and enables a smooth transition from a traditional telco business to digital CSP as a single monetization platform. The solution runs most efficiently with Google Cloud Platform ("GCP") and scales with Google Spanner above 500k transactions per second ("TPS"). Kubernetes and the customization framework enables fast adaptation to the market and new use cases with the shortest time to market and lowest total cost of ownership ("TCO") in the world. Today, Optiva's scalable solution is supporting more than 200 million subscribers at a single customer and enables operators to launch and monetize their 4G and 5G networks and deliver advanced data services, including Voice over LTE ("VoLTE"), M2M, IoT, cloud services, and Over the Top offerings.

- **Policy Management** – Optiva's Policy Management solution provides a single solution that enables service providers to take control of network resource usage, assure quality of experience for users, and offer personalized services and differentiated, service-specific charging. Optiva's

Policy Management solution is key to supporting operator data monetization strategies for real-time applications, such as video streaming, interactive gaming, and VoLTE.

- **Optiva BSS Platform** – Optiva BSS Platform provides a fully managed, end-to-end, cloud-native converged billing solution on the public cloud. For CSPs, including Mobile Network Operators ("MNOs"), Mobile Virtual Network Enablers ("MVNEs"), and MVNOs, Optiva BSS Platform, re-architected to be cloud-native and made available on the public cloud, is Optiva's new entry into the SaaS market. The multi-tenant platform allows customers the freedom to focus on their business, not on deploying and managing enterprise software. Customers can design marketing plans, load subscribers, and deploy their services — without having to install software on premise. With Optiva BSS Platform, customers can run on the public cloud: customer care, product catalog, unified rating and charging, customer self-care, payments and voucher management, billing and collections, order handling, policy control, dealer care, and wholesale settlement. Public cloud offers rapid, unlimited scale with capability for worldwide reach without the costs and complexities of bare metal or virtualized enterprise software deployments. Customers also benefit from a worry-free SaaS model, pay-as-you-grow pricing, lowest TCO with up to 80% savings, and rapid deployment capabilities. Public cloud deployment is 100% containerized, Kubernetes-based, and Oracle-free. Deployment, upgrades, testing, and configuration management are automated, using a continuous integration and deployment pipeline.

- **Wholesale Settlement** – Optiva's Wholesale Settlement is a cloud-based solution that provides operators with greater visibility into network transactions to achieve converged settlement and accurate interconnect billing. Optiva's solution helps service providers maximize the value of their network with a comprehensive and cost-effective interconnect, wholesale, roaming, MVNO, franchise management, and content settlement software solution.

- **E-Payments –** Optiva's e-payment solutions strengthen a customer's ability to monetize services with the provision of different payment methods, including voucher and voucher-less payment and top-up solutions. Optiva's solution allows service providers to offer end users the most convenient payment solutions in their market.

OUTLOOK

Investment in Cloud Innovation Initiatives

The Company believes the telecom industry will continue to shift its service platforms to the Public Cloud, and demand solutions from its vendors that can offer Cloud based products. Accordingly, Management is investing aggressively in upgrading its product offering to become fully Cloud-based. Revenues generated from ALL of Optiva's current platform will eventually decline to zero, and will be offset by new revenues generated by the Company's Cloud portfolio. Management believes this transition will take many years due to the complicated technology, regulatory, and security structures faced by the Telecom Industry.

For the fifteen months ended December 31, 2019, the Company spent approximately $14.2 million (Twelve months ended September 30, 2018 – $14.0 million) on Cloud innovation initiatives recorded as research and development expense in the consolidated statements of comprehensive loss. The life-to-date total spend on the Cloud innovation initiative has been approximately $28.2 million. The Company plans to spend up to another $71.8 million on Cloud innovation, including the Company's move to public cloud-based solutions and its partnership with Google, for a total estimated investment of approximately $100 million. The Company intends to raise additional capital of up to $100 million to accelerate its investment in Cloud innovation. Completion of any financing is dependent upon terms that are acceptable to the Company, obtaining necessary regulatory approvals, and under certain circumstances, consent from the preferred shareholder may be required.

Goodwill Impairment

The Company's goodwill was allocated to one CGU, which is the BSS business ("Legacy" CGU). The carrying amount of Goodwill originated primarily from two historical acquisitions completed by the Company, Nimbus Technologies and Orga Systems. The net assets of Nimbus are no longer producing revenues or cash flows for the Company, and revenues generated from the Orga assets are expected to decline significantly as customers leave the platform or move to Cloud based technologies. As previously discussed, the Company's long term strategy is to transform the BSS technology to be cloud enabled on the public cloud, and operate the business on a "Software as a Service" (SaaS) model. This is a material shift in technology, and the Company is investing significant amounts toward this goal. It is expected that in fiscal 2020, the Company will commence business operations using the BSS platform on public cloud, and pilots with certain customers are already in progress. The Company will commence a new CGU ("Cloud") beginning fiscal 2020 that will record the operating results and its cash flows associated with the Cloud business. It is also expected that over time, the value in use of the Legacy CGU will decline, as the revenue and cash flows generated from the on-premise BSS license business declines, while the revenue on the Cloud CGU continue to increase, on the new SaaS model. While this transition will take many years to be fully realized, the value in use of the Legacy CGU may decline significantly resulting in an impairment of goodwill, and this impairment could be triggered as early as fiscal 2020.

SELECTED CONSOLIDATED FINANCIAL INFORMATION

The following table sets out selected consolidated financial information of Optiva for the periods indicated. Each investor should read the following information in conjunction with those financial statements and related notes. The operating results for any past period are not necessarily indicative of results for any future period. The selected financial information set out below has been derived from the consolidated financial statements.

Q5 Fiscal 2019 Highlights	**Three Months Ended**		**Fifteen Months Ended**	**Twelve Months Ended**
($ US Thousands, except per share information)		**December 31,**	**December 31,**	**September 30,**
(Unaudited)	**2019**	**2018**	**2019**	**2018**
Revenue	20,530	27,617	120,883	121,627
Net income (loss)	(16,874)	538	(13,751)	(92,592)
Earnings (loss) Per Share	$(3.17)	$ 0.10	$(2.60)	$(17.69)
Cash generated from (used in) operating activities	(2,966)	(1,917)	(2,259)	(61,011)
Total cash, including restricted cash	32,699	35,385	32,699	39,683

Consolidated Statements of Comprehensive Income (Loss) (all amounts in thousands of US$, except per share amounts)	**Three Months Ended December 31,**		**Fifteen Months Ended December 31,**	**Twelve Months Ended September 30,**
(unaudited)	**2019**	**2018**	**2019**	**2018**
Revenue				
Support and subscription	13,985	21,272	86,860	84,747
Software, services and other	6,545	6,345	34,023	36,880
Total Revenue	**20,530**	**27,617**	**120,883**	**121,627**
Cost of revenue	5,664	8,624	39,351	50,712
Gross profit	**14,866**	**18,993**	**81,532**	**70,915**
Operating expenses				
Sales and marketing	1,726	2,707	12,553	11,332
General and administrative	3,760	5,640	22,586	31,076
Research and development	8,170	8,716	35,157	61,515
Restructuring costs (recovery)	104	596	(1,715)	51,775
Total Operating Expenses	**13,760**	**17,659**	**68,581**	**155,698**
Income (loss) from operations	**1,106**	**1,334**	**12,951**	**(84,783)**
Foreign exchange loss	(1,598)	(744)	(1,475)	(318)
Other expense	-	-	-	-
Finance income	126	88	605	524
Finance (costs) recovery	(10,153)	1,160	(14,190)	(2,572)
Income (loss) before income taxes	**(10,519)**	**1,838**	**(2,109)**	**(87,149)**
Income tax expense	6,355	1,300	11,642	5,443
Net Income (loss) for the period	**(16,874)**	**538**	**(13,751)**	**(92,592)**
Earnings (loss) per common share				
Basic	$ (3.17)	$ 0.10	$ (2.60)	$ (17.69)
Diluted	$ (3.17)	$ 0.10	$ (2.60)	$ (17.69)
Weighted average number of common shares (thousands)				
Basic	5,316	5,233	5,281	5,233
Diluted	5,316	5,646	5,281	5,233

The results for three and fifteen months ended December 31, 2019 includes the impact of IFRS 15 as explained in the Accounting Changes section included later in this MD&A.

Statement of Financial Position Data *$US Thousands (unaudited)*		As at December 31, 2019		As at September 30, 2018		$ Change	% Change
Cash, Cash Equivalents and Restricted Cash	$	32,699	$	39,683	$	(6,984)	(18%)
Trade Accounts, Other Receivables and Unbilled Revenue		16,953		29,394		(12,441)	(42%)
Goodwill and Intangible Assets		44,487		50,316		(5,829)	(12%)
Total Assets		101,520		130,762		(29,242)	(22%)
Trade Payable and Accrued Liabilities		17,869		34,401		(16,532)	(48%)
Deferred Revenue		7,066		14,959		(7,893)	(53%)
Provisions		3,667		13,317		(9,650)	(72%)
Other long-term liabilities		15,868		18,293		(2,425)	(13%)
Preferred Shares and Series A Warrant		89,025		79,617		9,408	12%
Total Liabilities		137,140		161,087		(23,947)	(15%)
Shareholders' Deficit		(35,621)		(30,326)		(5,295)	17%

CURRENT PERIOD OPERATING RESULTS

Revenue

The following tables set forth the Company's revenues by type and as a percentage of total revenue for the periods indicated:

$US Thousands	**Three Months Ended**		**Fifteen Months Ended**	**Twelve Months Ended**
		December 31,	**December 31,**	**September 30,**
(unaudited)	**2019**	**2018**	**2019**	**2018**
Support and Subscription	13,985	21,272	86,860	84,747
Software and Services	6,179	6,048	32,674	33,553
Third Party Software and Hardware	366	297	1,349	3,327
Total	**20,530**	**27,617**	**120,883**	**121,627**

Percentage of Total Revenue	**Three Months Ended**		**Fifteen Months Ended**	**Twelve Months Ended**
(unaudited)		**December 31,**	**December 31,**	**September 30,**
	2019	**2018**	**2019**	**2018**
Support and Subscription	68%	77%	72%	70%
Software and Services	30%	22%	27%	27%
Third Party Software and Hardware	2%	1%	1%	3%
Total	**100%**	**100%**	**100%**	**100%**

The Company recognizes revenue from the sale of software licenses, including initial perpetual licenses, term licenses, capacity increases and/or upgrades; professional services; third party hardware and software components and customer support contracts.

For the three-month period ended December 31, 2019, the Company's revenues have declined by $7.1 million from the previous year's comparative period to $20.5 million. The change by revenue type for the quarter ended December 31, 2019 is as follows: $7.3 million decrease in support and subscription revenue, $0.1 million increase in software and services revenue and $0.1 million increase in third party software and hardware revenue.

For the fifteen-month fiscal period ended December 31, 2019, the Company's revenues have declined by $0.7 million from the previous year's twelve-month period to $120.9 million. The change by revenue type for the fifteen months ended December 31, 2019 is as follows: $2.1 million increase in support and subscription revenue, $0.9 million decrease in software and services revenue and $1.9 million decrease in third party software and hardware revenue.

Support and Subscription Revenue

Support and subscription revenue consists of revenue from our customer support and maintenance contracts, and term-based software licensing. The term of these agreements typically commences on successful completion of acceptance testing of the software deployment with customers initially entering into these contracts for a period of one or more years and then renewing for similar periods thereafter.

Support and subscription revenue for the three-month period ended December 31, 2019 was $14.0 million, or 68% of total revenue, compared to $21.3 million, or 77% of total revenue, for the same period last year. The support and subscription revenue has decreased mainly due to the discontinuation of support to customers who had previously notified us of their exit.

For the fifteen-month fiscal period ended December 31, 2019, the Company's support and subscription increased to $86.9 million, or 72% of total revenue, compared to $84.7 million or 70% of total revenue for twelve-month fiscal year 2018. The increase in support and subscription revenue compared to last fiscal year is mainly due to the extra quarter this fiscal period. Based on annualized revenue, the support and subscription revenue has decreased mainly due to the discontinuation of support to customers who had previously notified us of their exit.

Software and Services Revenue

Software and services revenue consists of fees earned from the on-premise licensing, except for term based licenses which are recorded as subscription, and deployment of software products to our customers as well as the revenues resulting from consulting and training service contracts related to the software products.

Software and services revenue for the three-month period ended December 31, 2019 decreased to $6.2 million, or 30% of total revenue, compared to $6.1 million, or 22% of total revenue for the same period last year. For the fifteen-month fiscal period ended December 31, 2019, the Company's software and services revenue decreased to $32.7 million, or 27% of total revenue, compared to $33.6 million, or 27% of total revenue for twelve-month fiscal year 2018. The decline is mainly due to fewer software implementations compared to the prior period. We are expecting that our software and services revenue may be negatively impacted in the next two fiscal quarters by the global outbreak of the COVID-19 virus, as projects that require travel to customer sites may be suspended and service deliveries delayed indefinitely.

Effective October 1, 2018 the Company adopted the new revenue standard, IFRS 15, as explained in the Accounting Changes section below. The impact of IFRS 15 on Software and Services revenue in the three and fifteen months ended December 31, 2019 was $1.6 million decrease and $2.0 million decrease respectively, in revenue that would have been otherwise recognized.

Third Party Software and Hardware Revenue

Third party software and hardware revenue consists of revenue from the sale of other vendors' software and hardware components as part of Optiva's solutions, including server platforms, database software and other ancillary components.

Third party software and hardware revenue for the three-month period ended December 31, 2019 increased by $0.1 million to $0.4 million, compared to $0.3 million, for the same period last year.

For the fifteen-month fiscal period ended December 31, 2019, the Company's third party software and hardware revenue decreased to $1.3 million, or 1% of total revenue, compared to $3.3 million, or 3% of total revenue, for twelve-month fiscal year 2018. In the comparative period last year, there was a specific hardware delivery ordered by a customer in the Asia and Pacific Rim region. Management continues its initiative to minimize the sale of third party software and hardware components, which have minimal contribution to overall profitability.

Revenue by Geography

Revenue is attributed to geographic locations based on the location of the customer. The following tables set forth revenues by main geographic area and as a percentage of total revenue for the periods indicated:

$US Thousands (unaudited)	Three Months Ended December 31, 2019	Three Months Ended December 31, 2018	Fifteen Months Ended December 31, 2019	Twelve Months Ended September 30, 2018
Asia and Pacific Rim	4,348	5,945	28,629	37,203
North America, Latin America and Caribbean	6,524	7,152	29,640	25,706
Europe, Middle East and Africa	9,658	14,520	62,614	58,718
Total	**20,530**	**27,617**	**120,883**	**121,627**

Percentage of Total Revenue (unaudited)	Three Months Ended December 31, 2019	Three Months Ended December 31, 2018	Fifteen Months Ended December 31, 2019	Twelve Months Ended September 30, 2018
Asia and Pacific Rim	21%	22%	24%	31%
North America, Latin America and Caribbean	32%	26%	25%	21%
Europe, Middle East and Africa	47%	52%	51%	48%
Total	**100%**	**100%**	**100%**	**100%**

For the three-month period ended December 31, 2019, revenue from the APAC region was $4.3 million, or 21% of total revenue, compared to $5.9 million, or 22% of total revenue, for the same comparable period. This decrease is mainly a result of lower software and services and support and subscriptions revenue in the region. For the fifteen-month fiscal period ended December 31, 2019, revenue from the APAC region was $28.6 million, or 24% of total revenue, compared to $37.2 million, or 31% of total revenue, for the twelve-month fiscal 2018. Although the fifteen-month period ending December 31, 2019 has an extra quarter of revenue, there is still a decrease compared to the twelve-month fiscal 2018, as a result of lower software and services, support and subscriptions revenue and third party software and hardware revenue in the region.

For the three-month period ended December 31, 2019, revenue from the Americas region decreased to $6.5 million, or 32% of total revenue, compared to $7.2 million, or 26% of total revenue, for the same comparable period. For the fifteen-month fiscal period ended December 31, 2019, revenue from the Americas region increased to $29.6 million, or 25% of total revenue, compared to $25.7 million, or 21% of total revenue, for the twelve-month fiscal 2018. The increase in revenue compared to last fiscal year is mainly due to the extra quarter this fiscal period. Based on annualized revenue, the revenue from Americas region has actually decreased mainly due to lower support revenue due to the loss of certain customers.

For the three-month period ended December 31, 2019, revenue from the EMEA region decreased to $9.7 million, or 47% of total revenue, compared to $14.5 million, or 52% of total revenue, for the same comparable period. The decrease in revenue during the three months ended December 31, 2019 is mainly a result of lower support revenue due to loss of certain customers, compared to the same period last year. For the fifteen-month fiscal period ended December 31, 2019, revenue from the EMEA region increased to $62.6 million, or 51% of total revenue, compared to $58.7 million, or 48% of total revenue, for the for twelve-month fiscal year 2018. The increase in revenue compared to last fiscal year is mainly due to the extra quarter this fiscal period. Based on annualized revenue, the revenue from the EMEA region has actually decreased mainly due to lower support and subscription revenue in the region due to the loss of certain customers compared to same period last year and lower third party software and hardware, slightly offset by higher software and services revenue.

Cost of Revenue and Gross Margin

Cost of revenue consists of cross functional personnel costs providing professional services to implement and provide post sales technical support for our solutions, and the costs of third party hardware and software components sold as part of Optiva's solutions. In addition, cost of revenue includes an allocation of certain direct and indirect costs attributable to these activities and expected losses on any contracts when it is probable that the total contract costs will exceed contract revenues. Personnel levels are determined based on expected revenue and support demand levels therefore gross margin as a percentage of revenue can vary significantly from quarter to quarter. The Company has significant flexibility to scale its personnel levels as revenue and support demand levels change to address any expected sustained changes in demand for the Company's products and services.

For the three months ended December 31, 2019, cost of revenue decreased to $5.7 million from $8.6 million incurred for the same comparable period. The gross margin for the quarter has increased to 72% in the three months ended December 31, 2019 compared to 69% in the three months ended December 31, 2018, as fewer customizations with lower margins were ordered by customers that required fulfillment, as compared to the previous period. For the fifteen-month fiscal period ended December 31, 2019, cost of revenue decreased to $39.4 million from $50.7 million incurred for the twelve-month fiscal 2018. The decrease is primarily due to lower headcount and related costs incurred under the Company's cost structure optimization plan and lower third party costs. The gross margin has increased to 67% in fiscal period 2019 compared to 58% in the fiscal year 2018.

During the fiscal year ended September 30, 2018, the Company identified certain customer contracts where it was probable that the total cost to complete the contracts would exceed the contract revenue. During the fiscal period ended December 31, 2019, one of the contracts was assessed to no longer be onerous due to an amendment made in the contract with the customer. The estimated remaining revenue to be earned on this contract is expected to exceed the costs of completing the contract, resulting in the reversal of $1.5 million in the fiscal period ended December 31, 2019 (2018 – recognition of loss provision of $7.6 million) that has been recorded against the cost of revenue in the consolidated statements of comprehensive loss where the provision was initially recorded. Excluding the impact of the provisions, the gross margin as a percentage of revenue would have been 66% for fiscal period 2019 compared to 65% for fiscal year 2018.

Depreciation and amortization and stock-based compensation included in cost of revenue for the three and fifteen months ended December 31, 2019 was $nil and a recovery of $0.1 million respectively (Three months ended December 31, 2018 and twelve months ended September 30, 2018 - $0.1 million and $0.8 million).

Operating Expenses

Total operating expenses in the three months ended December 31, 2019 decreased to $13.8 million as compared to $17.7 million in the same period last year. Excluding depreciation, amortization and restructuring costs, total operating costs in the quarter ended December 31, 2019 decreased to $12.5 million, or 61% of total revenue, compared to $15.8 million, or 57% of total revenue, for the same period last year. The decrease in overall operating expenses (excluding depreciation, amortization and restructuring costs) is mainly attributable to lower sales and marketing, lower general and administrative costs and lower research and development costs, as further explained below by function.

Total operating expenses in the fifteen months ended December 31, 2019 decreased to $68.6 million as compared to $155.7 million in the twelve months ended September 30, 2018. Excluding depreciation, amortization and restructuring costs, total operating costs in the fifteen months ending December 31, 2019 decreased to $64.3 million, or 53% of total revenue, compared to $93.9 million, or 77% of total revenue, for the twelve months ended September 30, 2018. The decrease in overall operating expenses (excluding depreciation, amortization and restructuring costs) is mainly attributable to lower general and administrative costs and lower research and development costs, as further explained below by function.

The following tables set forth total operating expenses by function and as a percentage of total revenue for the periods indicated:

$US Thousands (unaudited)	**Three Months Ended December 31, 2019**	**Three Months Ended December 31, 2018**	**Fifteen Months Ended December 31, 2019**	**Twelve Months Ended September 30, 2018**
Sales and Marketing	1,726	2,707	12,553	11,332
General and Administrative	3,760	5,640	22,586	31,076
Research and Development	8,170	8,716	35,157	61,515
Restructuring Costs	104	596	(1,715)	51,775
Total Operating Expenses	**13,760**	**17,659**	**68,581**	**155,698**
Excluding Amortization and Depreciation	*12,597*	*16,411*	*62,585*	*145,706*

Percentage of Total Revenue (unaudited)	**Three Months Ended December 31, 2019**	**Three Months Ended December 31, 2018**	**Fifteen Months Ended December 31, 2019**	**Twelve Months Ended September 30, 2018**
Sales and Marketing	8%	10%	10%	9%
General and Administrative	18%	20%	19%	26%
Research and Development	40%	32%	29%	50%
Restructuring Costs	1%	2%	-1%	43%
Total Operating Expenses	**67%**	**64%**	**57%**	**128%**
Excluding Amortization and Depreciation	*61%*	*59%*	*52%*	*120%*

Depreciation and amortization and stock-based compensation by function included in operating expenses was as follows:

$US Thousands (unaudited)	Three Months Ended December 31, 2019	Three Months Ended December 31, 2018	Fifteen Months Ended December 31, 2019	Twelve Months Ended September 30, 2018
Sales and Marketing	-	9	(9)	(180)
General and Administrative	1,799	1,469	8,084	11,326
Research and Development	-	56	142	827
Total Operating Expenses	**1,799**	**1,534**	**8,217**	**11,973**

Sales and Marketing Expenses

Sales and Marketing ("S&M") expenses consist primarily of salaries, variable compensation costs and other personnel costs, travel, advertising, marketing and conference costs plus the allocation of certain overhead costs to support the Company's sales and marketing activities.

For the three-month period ended December 31, 2019, S&M expenditures decreased to $1.7 million, or 8% of total revenue, compared to $2.7 million, or 10% of total revenue, for the comparable period. The decrease is mainly due to lower headcount and related costs and the impact of other cost optimization initiatives.

For the fifteen-month fiscal period ended December 31, 2019, S&M expenditures increased to $12.6 million, or 10% of total revenue, compared to $11.3 million, or 9% of total revenue, for the twelve-month fiscal year ended September 30, 2019. The increase in S&M expenditures compared to last fiscal year is mainly due to the extra quarter this fiscal period. Based on the annualized expenditures the actual expenditures have decreased year over year. The decrease is mainly due to lower headcount and related costs and the impact of other cost optimization initiatives offset by more initiatives to educate and promote our cloud innovation and products, a larger presence at the Mobile World Congress 2019 at Barcelona, Spain and other trade conferences and related products.

As noted previously, the Company has commenced its planned spend of approximately $100 million associated with Cloud innovation, that includes specific expenses involving sales and marketing activities. The Company expects to accelerate its investment in Cloud sales and marketing expenses in the coming year in order to secure a leading position in the BSS cloud segment. The company incurred expenses on 2020 Mobile World Congress but since it was cancelled, the Company may have to spend additional funds on other marketing activities.

General and Administrative Expenses

General and administrative ("G&A") expenses include personnel costs, professional fees, depreciation and share-based compensation costs associated with the Company's corporate leadership, compliance and support activities such as finance, human resources, information technology, legal and tax.

For the three-month period ended December 31, 2019, G&A expenditures decreased to $3.8 million, or 18% of total revenue, from $5.6 million, or 20% of total revenue, to the same comparative period. For the fifteen-month fiscal period ended December 31, 2019, G&A expenditures decreased to $22.6 million, or 19% of total revenue, from $31.1 million, or 26% of total revenue, in the twelve-month fiscal 2018. Based on annualized expenditures, G&A has decreased by approximately $14M or 46%, compared to prior year. The decrease was mainly due to lower headcount and related costs, lower legal and professional fees, lower computer infrastructure costs, and lower facilities cost including depreciation due to closure of various office locations.

Research and Development Expenses

Research and development ("R&D") expenses consist primarily of personnel costs associated with product management, improvement of code quality and the development and testing of new products. R&D includes cost of technical services provided by DevFactory, a related party, as explained in the Related Party Transactions section below.

For the three-month period ended December 31, 2019, R&D expenditures decreased to $8.2 million, or 40% of total revenue, from $8.7 million, or 32% of total revenue, in the comparative period. For the fifteen-month fiscal period ended December 31, 2019, R&D expenditures decreased to $35.2 million, or 29% of total revenue, from $61.5 million, or 50% of total revenue, in twelve-month fiscal 2018. Based on annualized expenditures, R&D has decreased by approximately $35M or 57%, compared to prior year. The decrease is primarily due to lower headcount and related costs incurred under the Company's cost structure optimization plan, and lower DevFactory spend on R&D activities. In fiscal 2018, the Company expended significant efforts in R&D that resulted in an improvement in code quality. This resulted in higher efficiencies in project deployments and support and ultimately achieving better results in Customer Success metrics. The Company's spend on R&D activities, including those on account of Cloud innovation is discretionary in nature. Consequently, the R&D spend is generally expected to vary by quarter, and sometimes this can be significant.

As noted previously, the Company has commenced its planned spend of approximately $100 million associated with Cloud innovation, that includes specific projects involving R&D activities. The Company has spent $4.4 million and $14.2 million in the three and fifteen months ended December 31, 2019 respectively (Three months ended December 31, 2018 - $3.1 million and Twelve months ended September 30, 2018 - $14.0 million) in Cloud related projects. The Company expects to accelerate its investment in Cloud innovation in the coming year in order to secure a leading position in the BSS cloud segment.

Restructuring Costs

In November 2017, the Company implemented a restructuring plan and commenced implementing a reduction in workforce globally and vacating premises in multiple locations. The Company has completed the workforce reduction associated with this plan and has reduced its personnel levels (including contractors) by 947 since September 30, 2017 to 342 personnel as at December 31, 2019. The Company has also vacated its office premises in almost all jurisdictions, and maintains offices only in those jurisdictions where it is required by statute.

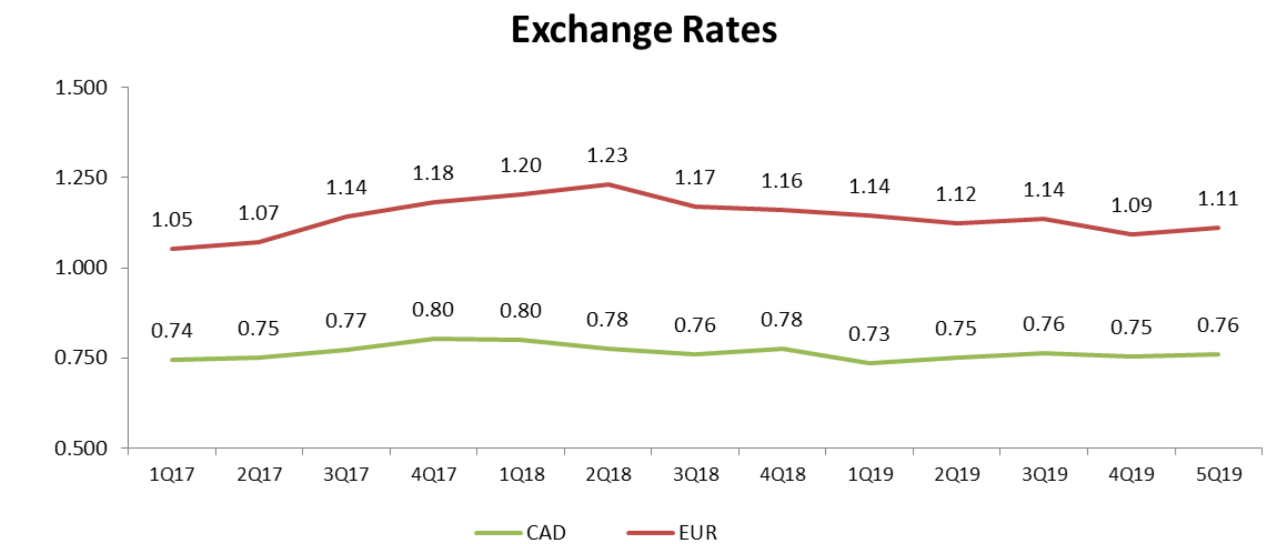
During the three months and fifteen months ended December 31, 2019, restructuring charges related to employee and lease terminations of $0.1 million and $2.1 million respectively (Three months ended December 31, 2018 - $0.6 million and Twelve months ended September 30, 2018 - $51.8 million) were recorded. During the fifteen months ended December 31, 2019, $3.8 million (2018 – nil) of restructuring provision was reversed, as full and final settlements with claimants were made at amounts less than previously estimated. The reversal was recorded in restructuring costs (recovery) in the consolidated statements of comprehensive income (loss).

For the fifteen months ended December 31, 2019, an amount of $6.2 million has been paid and an additional amount of $1.2 million is estimated as payable within one year. The balance of the restructuring provision of less than $0.1 million, classified as long-term, is payable over two years and has been discounted to its present value.

The Company has closed five of its subsidiaries as of December 31, 2019 as part of the legal entity reorganization. The Company's remaining restructuring activities under this plan primarily involve the winding up of 32 subsidiaries which will bring the total number of legal entities including Optiva Inc. down to nine from 43 at the outset of this restructuring. The legal entity reorganization is dependent upon completion of local statutory requirements including obtaining tax clearance prior to wind up, and may take several years to complete. The cost of the legal entity reorganization may exceed the Company's estimates due to uncertainties associated with tax and other statutory audits in multiple jurisdictions. The legal entity reorganization plan is expected to make our operations and back-office more cost efficient and reduce risks associated with operating in multiple jurisdictions.

Foreign Exchange Gain/Loss

We operate internationally and have foreign currency risks related to our revenue, operating expenses, monetary assets, monetary liabilities and cash denominated in currencies other than the U.S. Dollar, which is our functional currency. Consequently, movements in the foreign currencies in which we transact have and could significantly affect current and future net earnings. Currently, we do not use derivative instruments to hedge such currency risks. The graph below displays the change in rates of our significant currencies relative to the U.S. Dollar.



Source: Bank of Canada

The Company has monetary assets and liabilities in a number of currencies, the most significant of which are denominated in Euro and the Canadian Dollar. For the three months ended December 31, 2019, the Company had a foreign currency exchange loss of $1.6 million, compared to a foreign currency exchange loss of $0.7 million in the comparable period. For the fifteen months ended December 31, 2019, the Company had a foreign currency exchange loss of $1.5 million, compared to a foreign currency exchange loss of $0.3 million for twelve months ended September 30 2018. The U.S. Dollar weakened against the Euro during the three months ended December 31, 2019. The U.S. Dollar strengthened against the Euro for fifteen months ending December 31, 2019.

A change in foreign exchange rates as at December 31, 2019 of 10% would result in a gain or loss of approximately $1.2 million arising from the translation of the Company’s foreign currency denominated monetary assets and liabilities as at December 31, 2019. This foreign currency gain or loss arising from translation would be recorded in the consolidated statements of comprehensive loss.

Income Taxes

The Company’s operations are global, and the income tax provision is determined in each of the jurisdictions in which the Company conducts its business. The Company's current income tax expense for the fifteen months ended December 31, 2019 mainly includes $5.8 million (Twelve months ended September 30, 2018 - $2.2 million) of corporate tax expense incurred by foreign subsidiaries generating taxable profits and $3.3 million (Twelve months ended September 30, 2018 - $3.2 million) of foreign withholding taxes. The Company's deferred tax expense of $2.5 million (2018 – expense of $0.1 million) consists primarily of changes in temporary differences recognized during the current period.

A significant portion of the Company’s income tax expense relates to foreign subsidiaries that are planned to be made dormant and wound-up in due course, aggregating to approximately $6.3 million in the fiscal period ended December 31, 2019. The income tax expense relating to foreign subsidiaries that are virtually inactive may vary in future quarters as tax audits for previous years are brought to their conclusion, and there is a risk that such assessments may exceed the provision that the Company is carrying, resulting in additional income tax charges. It is expected that the effective rate of the income tax expense will decline as the Company fully implements its new legal and operating organization structure, after the completion of pending tax assessments in foreign subsidiaries that are inactive and awaiting voluntary wind-up.

SUMMARY OF EARNINGS RESULTS

All financial results are in thousands, unless otherwise stated, with the exception of per share amounts. The table below provides summarized information for our nine most recently completed quarters:

$US Thousands, except share and per share amounts (Unaudited)	5Q 19 (1)	4Q 19 (1)	3Q 19 (1)	2Q 19 (1)	1Q 19 (1)	4Q 18	3Q 18	2Q 18	1Q 18 (2)
Revenue	$20,530	$23,124	$24,670	$24,942	$27,617	$27,298	$32,034	$27,895	$34,400
Net Income (loss)	$(16,874)	$(963)	$ 3,069	$ 479	$ 538	$(14,369)	$(3,540)	$(10,228)	$(64,454)
Earnings (loss) per Share	$(3.17)	$(0.18)	$ 0.58	$ 0.09	$ 0.10	$(2.75)	$(0.68)	$(1.95)	$(12.32)
Diluted Earnings (loss) per Share	$(3.17)	$(0.18)	$ 0.54	$ 0.08	$ 0.10	$(2.75)	$(0.68)	$(1.95)	$(12.32)
Weighted average shares outstanding – Basic (thousands)	5,316	5,316	5,305	5,243	5,233	5,233	5,233	5,233	5,233
Weighted average shares outstanding - Diluted (thousands)	5,316	5,316	5,636	5,633	5,646	5,233	5,233	5,233	5,233

(1) Adoption of IFRS 15 revenue acccounting standard

(2) Increase in net loss due to significant charge taken for restructuring

LIQUIDITY AND CAPITAL RESOURCES

The Company’s objective in managing capital resources is to ensure sufficient liquidity to drive its organic growth, fund operations, complete its restructuring actions and implement its strategic plan, while managing financial risk. The Company currently funds its operations and capital expenditure requirements through cash flows generated by operating activities, proceeds from the issuance of equity instruments (including common shares, warrants and preferred shares) and cash on hand. The Company believes its restructuring activities are substantially complete and expects cash flow from operations to fund its future operations, including its investment in the Cloud strategy. The Company is considering raising additional capital to accelerate its investment in the Cloud strategy as discussed above on page 5.

The Company operates in several jurisdictions, some of which impose currency remittance restrictions and income tax withholdings, which impacts the timing and amount of cash which can be repatriated from these countries.

Key Balance Sheet Amounts and Liquidity Ratios *$US Thousands, except ratios and metrics (unaudited)*	As at December 31, 2019	As at September 30, 2018	$ Change	% Change
Cash, Cash Equivalents and Restricted Cash	32,699	39,683	(6,984)	(18%)
Trade Accounts Receivable	6,795	13,094	(6,299)	(48%)
Working capital	19,321	16,407	2,914	18%
Days sales outstanding in trade accounts receivable (days)	38	53	(15)	(28%)
Days sales outstanding in unbilled revenue (days)	45	49	(4)	(8%)

The Company uses working capital, days sales outstanding (DSO) in trade accounts receivable and DSO in unbilled revenue as measures to enhance comparisons between periods. Management believes these DSO measures to be important indicators of the Company's ability to convert trade receivables and unbilled revenue into cash. A lower DSO indicates a more efficient cash collection process and delivery and customer acceptance process. These terms do not have a standardized meaning under IFRS and are unlikely to be comparable to similarly titled measures reported by other issuers. The calculation of each of these items is more fully described below.

Days sales outstanding ("DSO") - The Company has calculated DSO based on annualized year to date revenue and the average of the beginning and ending accounts receivable balance for the fifteen month and twelve month period being reported.

Days sales outstanding in unbilled revenue - The Company has calculated days sales outstanding in unbilled revenue based on annualized year to date revenue and the average of the beginning and ending unbilled revenue balance for the fifteen month and twelve month period being reported.

Cash and restricted cash declined by $7.0 million to $32.7 million at December 31, 2019, compared to September 30, 2018, primarily as a result of $6.2 million in restructuring related payments, payment of dividends of $4.3 million, reduction of accounts payable and investment in Cloud initiatives, offset by declines in cost of revenue, non-Cloud research and development and general and administrative costs relative to fiscal 2018.

Working capital represents the Company's current assets less its current liabilities. The Company's working capital balance increased by $2.9 million to $19.3 million at December 31, 2019 from $16.4 million at September 30, 2018.

The table below outlines a summary of cash inflows (outflows) by activity.

Statement of Cash Flows Summary *($ US Thousands)* *(Unaudited)*	Three months ended December 31, 2019	 2018	Fifteen months ended December 31, 2019	Twelve months ended September 30, 2018
Cash inflows and (outflows) by activity:				
Operating activities	(2,966)	(1,917)	(2,259)	(61,011)
Investing activities	133	482	2,624	1,030
Financing activities	(2,265)	(2,000)	(4,265)	(11,641)
Effect of foreign currency exchange rate changes on cash and cash equivalents	253	(380)	(527)	(3,095)
Net cash inflows (outflows)	(4,845)	(3,815)	(4,427)	(74,717)
Cash and cash equivalents, beginning of period	36,593	36,175	36,175	110,892
Cash and cash equivalents, end of period	31,748	32,360	31,748	36,175
Cash (including Restricted Cash), end of period	32,698	35,385	32,698	39,683

Cash from Operating Activities

Net cash used by operating activities was $3.0 million in the three months ended December 31, 2019, compared to use of cash of $1.9 million in the same period last year. Net cash used by operating activities was $2.3 million in the fifteen months ended December 31, 2019, compared to use of cash of $61.0 million in the twelve months ended September 30, 2018. Cash used by operating activities in the three months ended December 31, 2019 mainly relates to cash used in working capital and restructuring payments made during the period. Cash used by operating activities in the fifteen months ended December 31, 2019 mainly relates to the cash used in working capital and restructuring payments made slightly offset by operating income during the year. For the year ended September 30, 2018, net cash consumed by operating activities was $61.0 million mainly related to restructuring payments made.

Cash used for Investing Activities

In the three months ended December 31, 2019, there was $0.1 million of cash generated by investing activities, compared to cash generated of $0.5 million during the same period in fiscal 2018. Cash generated by investing activities during the fifteen months ended December 31, 2019 was $2.6 million, compared to cash generated of $1.0 million during the twelve months ended September 30, 2018. The source of cash mainly relates to the release of restricted cash.

Cash from Financing Activities

In the three months ended December 31, 2019, net cash consumed by financing activities was $2.3 million, compared to cash used of $2.0 million during the same period last year. For the fifteen months ended December 31, 2019, cash used by financing activities was $4.3 million compared to cash used of $11.6 million during the twelve months ended September 30, 2018. The use of cash in each fiscal period relates to the dividends paid on the preferred shares.

MANAGEMENT OF CAPITAL

The Company’s objective in managing capital is to ensure sufficient liquidity to pursue its strategy of 100% customer success, fund research and development leading to innovative and market leading products and implement its strategic plan that will help towards increasing shareholder value, while managing financial risk. The Company’s capital is currently composed of Preferred Shares and Series A Warrant (classified as liability), Subordinated Voting Shares and Standby Warrant (classified as equity). The Company’s primary uses of capital are financing its operations including restructuring, increases in working capital, investment in Cloud R&D and payment of preferred share dividends, when approved by the Board of Directors. The Company currently funds these requirements from cash flows from operations.

TRADE ACCOUNTS AND OTHER RECEIVABLES

The Company’s Days Sales Outstanding in Trade Accounts Receivable (“DSO”) is at 38 days as of December 31, 2019 compared to 53 days as of September 30, 2018. In order to minimize the risk of loss for trade receivables, the Company's extension of credit to customers involves review and approval by senior management, as well as progress payments as contracts are performed. Credit reviews take into account the counterparty's financial position, past experience and other factors. Management regularly monitors customer credit limits. The Company also maintains credit insurance in certain jurisdictions. The Company believes that the concentration of credit risk from trade receivables is limited, as they are widely distributed among customers in various countries.

While the Company's credit controls and processes have been effective in mitigating credit risk, these controls cannot eliminate credit risk and there can be no assurance that these controls will continue to be effective or that the Company's low credit loss experience will continue. Most sales are invoiced with payment terms in the range of 30 to 120 days. The Company reviews its trade receivable accounts regularly and reduces amounts to their expected realizable values by making an allowance for doubtful accounts as soon as the account is determined not to be fully collectible.

The allowance for doubtful accounts as at December 31, 2019 was $1.6 million, compared to $2.1 million as at September 30, 2018. Estimates for allowance for doubtful accounts are determined based on an evaluation of collectability by customer and project at each consolidated statement of financial position reporting date, taking into account the amounts that are past due and any available relevant information on the customers' liquidity and ability to pay.

UNBILLED AND DEFERRED REVENUE

Unbilled revenue represents revenue that has been earned but not billed. Deferred revenue represents amounts that have been billed and collected in accordance with the terms of the contract but where the criteria for revenue recognition have not yet been met. All services provided from inception of the contracted arrangement are recoverable under the contract terms. Differences between the timing of billings, based upon contractual terms, collection of cash and the recognition of revenue result in either unbilled revenue or deferred revenue.

Revenue in a typical implementation project is earned as progress is made in project delivery. This earned revenue results in unbilled revenue until the customer is invoiced upon reaching a contractual term. Delays in the completion of a billing milestone do not indicate that the contract is on hold or that the customer is unwilling to pay its contracted fee. Most billing milestones are set at completion of a major phase of the project or when the projects are complete and in production.

Unbilled revenue decreased by $5.3 million to $9.1 million at December 31, 2019, as compared to $14.4 million as at September 30, 2018. Effective October 1, 2018 the Company adopted the new revenue standard, IFRS 15, as explained in the Accounting Changes section below. The impact of IFRS 15 on unbilled revenue on the opening balance as of October 1, 2018 was an increase of $3.2 million.

Deferred revenue decreased to $7.1 million at December 31, 2019, as compared to $15.0 million at September 30, 2018. The impact of IFRS 15 on deferred revenue on the opening balance as of October 1, 2018 was a decrease of $1.7 million. The decrease in deferred revenue is mainly attributable to the revenue recognized during the fifteen months ending December 31, 2019 and the IFRS 15 adjustment to the opening balance.

OTHER PROVISIONS

Other provisions include an intellectual property claim, terminated contracts and loss provisions related to certain customer contracts where it is probable that the total costs to complete these contracts will exceed the contract revenue.

During the fifteen month period ended December 31, 2019, the Company amended one of its existing customer loss contracts and settled a disputed contract termination. On review of the estimated costs to complete the revised scope of the customer contract, the Company determined the contract revenue was expected to exceed the contract costs and hence the provision was reversed. The reversal of the contract loss provision, and the subsequent settlement of a disputed contract termination, aggregating to $2.0 million, has been recorded as a recovery in the consolidated statements of comprehensive income (loss) where the provision was initially recorded. Subsequent to December 31, 2019, the Company has received a partial adverse award arising from a dispute relating to a contract with a former customer that was previously terminated. The Company intends to appeal this award and vigorously defend its position.

Although liability is not admitted, if a defense against any of these matters is unsuccessful, the Company may incur additional costs associated with the claims that may exceed the Company's best estimate of the provision at December 31, 2019.

COMMITMENTS AND CONTRACTUAL OBLIGATIONS

Lease Commitments

The Company leases certain property and equipment under operating leases. Operating lease payments are expensed on a straight-line basis over the term of the relevant lease agreements. Lease inducements received upon entry into an operating lease are recognized on a straight-line basis over the lease term. Operating lease payments for the fifteen months ending December 31, 2019, were $1.3

million (twelve months ended September 30, 2018 - $2.3 million). The Company is obligated to make future annual lease payments under operating leases for office equipment and premises.
Future minimum lease payments under non-cancellable operating leases as at December 31, 2019 are as follows:

	$ (thousands)
Less than 1 year	1,868
Between 1 and 5 years	–
More than 5 years	–
	1,868

OUTSTANDING SHARE DATA

The number of subordinate voting shares outstanding as at March 9, 2020 is 5,315,757 (September 30, 2018 – 5,233,047). During the fiscal period ended December 31, 2019, there were 82,710 shares issued from treasury under the restricted share unit plan ("RSU"). In addition, at December 31, 2019, there were 26,889 (September 30, 2018 – 51,775) stock options outstanding with exercise prices ranging from CAD $149.50 to CAD $315.00 per share.

SHARE CAPITAL

(a) Series A Preferred Shares and Subordinate Voting Shares :

On January 26, 2017, the Company issued 800,000 Series A Preferred Shares (the "Preferred Shares") and a warrant ("the "Series A Warrant") (collectively the "Financing Transaction") to the ESW Holdings, Inc. (formerly known as Wave Systems Corp.) (the "Investor"), an affiliate of ESW Capital LLC ("ESW Capital"). The Investor, as the holder of the Preferred Shares, is entitled to elect a number of directors that will be a majority of the Board of Directors, with the holders of the Common Shares being entitled to elect the balance of the directors, which resulted in the Common Shares becoming "restricted securities" under applicable securities laws and the TSX Company Manual, on January 26, 2017. The Preferred Shares are redeemable any time at the option of the Company and redeemable at the option of the Investor any time after 10 years of issuance. The holders of the Preferred Shares are entitled to dividends, payable quarterly at the rate of 10% per annum of the issue price. Provided that to the extent such dividends are not declared and paid, dividends shall accrue and compound monthly at the rate of 10%.

The Preferred Shares will be accreted to their face amount of $80.0 million plus accrued cumulative dividends over the 10-year maturity period using the effective interest rate method. During the fifteen months ended December 31, 2019, accretion expense, amortization of transaction costs and accrued dividends on the Preferred Shares amounted to $12.7 million (Twelve months ended September 30, 2018 - $9.8 million). These charges are included in finance costs in the consolidated statements of comprehensive income (loss). During the fifteen months ended December 31, 2019, cumulative dividends in amount of $4.3 million were paid (Twelve months ended September 30, 2018 - $11.6 million). The amount of accrued dividends have been included in the Preferred Shares on the consolidated statements of financial position.

(b) Series A Warrant and Standby Warrant :

As part of the Financing Transaction, the Company issued a Series A Warrant that entitles the Investor to subscribe for 925,712 Subordinate Voting Shares at $34.00 per share. The Series A Warrant is classified as a liability because it contains an adjustment provision if the Company issues Subordinate Voting Shares or securities exchangeable for or convertible into Subordinate Voting Shares at a price per share less than the Series A Warrant exercise price. The increase in fair value of the warrant liability of $0.9 million during the fifteen months ended December 31, 2019 (Twelve month ended September 30, 2018 – decrease of $7.9 million) is recorded in finance costs (recovery) in the consolidated statements of comprehensive income (loss). Any unexercised Series A Warrant expires on January 25, 2027. No Series A Warrant was exercised as at December 31, 2019 (September 30, 2018 – none).

Upon closing of the Rights Offering on September 6, 2017, the Company issued a warrant to the Investor that entitles the Investor to subscribe for 50,000 Subordinated Voting Shares at $25.00 per share (the “Standby Warrant”). The fair value of the Standby Warrant, classified as equity upon issuance at September 6, 2017, was $1.0 million. The Standby Warrant expires on September 5, 2027. No warrants were exercised as at December 31, 2019 (September 30, 2018 – none).

(c) Share-based Compensation

The share-based compensation relating to the Company's stock options, deferred share unit plan and under the share unit plan during the three and fifteen months ending December 31, 2019 was an expense of $0.6 million and $2.2 million (three months ended December 31, 2018 – $0.2 million and fiscal 2018 of $2.8 million). During the fifteen months ended December 31, 2019, there were 16,805 deferred share units ("DSUs") granted (twelve months ended September 30, 2018 – 14,200). In addition, there were 18,930 restricted share units (“RSU’s”) settled in cash and 82,710 RSU’s settled in shares during the fifteen months ended December 31, 2019. There were 65,971 shares granted under the share unit plan in the fifteen months ended December 31, 2019 that were accounted as cash-settled compensation.

RELATED PARTY TRANSACTIONS

Key Management Personnel

Key management personnel comprise the Company's directors and executive officers. The aggregate remuneration of key management personnel during the fifteen months ended December 31, 2019 and the twelve months ended September 30 is as follows:

$US Thousands	2019	2018
Salaries and employee benefits	$ 3,786	$ 1,753
Share-based compensation (a)	2,476	2,928
	$ 6,262	$ 4,681

(a) Share-based compensation includes cash-settled and equity-settled awards

Related Party Service Agreements

In September 2017, the Company entered into long term service agreements with Crossover Markets Inc. ("Crossover") and DevFactory FZ-LLC ("DevFactory"), (collectively the "Service Agreements") who provide cross functional and specialized technical services. The Service Agreements can be terminated by either party with 30 days written notice. The Service Agreements were negotiated and approved by the Special Committee of the Board of Directors. The contracted rates with these related parties are priced as agreed to by the parties and are to be settled in cash on normal payment terms upon receipt of invoices. The Company has not offered any security to these vendors.

Crossover provides Optiva with access to skilled temporary employees. These resources provide a variety of services, including operations, finance, and support functions, at any global location for pricing agreed to in the Crossover service agreement. During the three and fifteen months ended December 31, 2019, the Company has incurred $3.8 million and $26.7 million, respectively, of costs associated with services provided by Crossover (Three months ended December 31, 2018 – $6.4 million and 12 months ended September 30, 2018 - $28.0 million). The costs have been recorded in cost of revenue or operating expenses in accordance with the department of the contract resource in the consolidated statements of comprehensive income (loss).

DevFactory provides certain technology services to Optiva as per agreed statements of work. Effective June 30, 2019, the Service Agreement between Optiva and DevFactory was assigned to GTeam FZ-LLC as part of in internal reorganization by DevFactory. GTeam FZ-LLC is also fully owned by ESW Capital. On September 1, 2019, Gteam FZ-LLC changed its name to DevFactory Innovations FZ-LLC. The technology services include source code analysis, code cleanup service and various other technical services related to Optiva's software solutions. During three and fifteen months ended December 31, 2019, the Company has incurred $5.7 million and $25.1 million, respectively, of costs associated with services provided by DevFactory (Three months ended December 31, 2019 - $6.9 million and 12 months ended September 30, 2018 – $31.7 million). The costs have been recorded in cost of revenue and research and development expenses in accordance with the nature of the expenditure in the consolidated statements of comprehensive income (loss).

Amounts owing to Crossover and DevFactory as of December 31, 2019 aggregated to $8.9 million (September 30, 2018 - $18.8 million) and are included in both trade payables and accrued liabilities in the consolidated statement of financial position at the respective period ends.

In the normal course of business, the Company retained certain contractors with specialized skills and knowledge to assist the Company in its operations. These contractors are retained from other entities controlled by ESW Capital. The costs of these contractors are $nil and $0.1 million for the three and fifteen months ended December 31, 2019 (Three months ended December 31, 2018 – less than $0.1M and twelve months ended September 30, 2018 – $0.3 million) and have been recorded in general and administrative expense in the consolidated statements of comprehensive loss. Amounts owing for these services as at December 31, 2019 aggregated to $0.1 million (September 30, 2018 - $0.3 million) and are included in accrued liabilities in the consolidated statement of financial position.

FINANCIAL INSTRUMENTS AND CAPITAL MANAGEMENT

Fair values

The Company adopts a three-level fair value hierarchy that reflects the significance of the inputs used to measure fair value. The three levels of the fair value hierarchy based on the reliability of inputs are as follows:

- Level 1 - quoted prices (unadjusted) in active markets for identical financial assets or financial liabilities;
- Level 2 - inputs other than quoted prices included in Level 1 that are observable for the financial asset or financial liability, either directly (i.e. prices) or indirectly (i.e. derived from prices); and
- Level 3 - inputs for the financial asset or financial liability that are not based on observable market data (i.e. unobservable inputs that represent the Company's own judgments about what assumptions market place participants would use in pricing the asset or liability developed, based on the best information available in the circumstances).

In the table below, the Company has segregated all financial assets and financial liabilities that are measured at fair value into the most appropriate level within the fair value hierarchy, based on the inputs used to determine the fair value at the measurement date.

Financial assets and liabilities measured at fair value are summarized below:

	2019		2018	
$US Thousands	Carrying amount	Fair value	Carrying amount	Fair value
Warrant classified as liability (Level 2)	22,680	22,680	21,754	21,754
Preferred Shares (Level 2)	66,346	66,346	57,862	57,862

There were no transfers of financial assets between levels during the fiscal years ended December 31, 2019 and September 30, 2018.

Financial instruments are classified into one of the following categories: financial assets and financial liabilities at fair value.

The carrying values of trade accounts and other receivables, trade payables, accrued liabilities, provisions and other liabilities approximate fair values because of the short-term nature of these financial instruments.

Fair value estimates are made at a specific point in time based on relevant market information and information about the financial instruments. The estimates are subjective in nature and involve uncertainties and matters of judgment.

Financial Risk Management

The Board of Directors has the overall responsibility and oversight of the Company's risk management practices. The Company does not follow a specific risk model, but rather includes risk management analysis in all levels of strategic and operational planning. The Company's management, specifically the Senior Leadership Team, is responsible for developing and monitoring the Company's risk strategy. The Company's management reports regularly to the Board of Directors on its activities.

The Company's management identifies and analyzes the risks faced by the Company. Risk management strategy and risk limits are reviewed regularly to reflect changes in the market conditions and Company's activities. The Company's management aims to develop and implement a risk strategy that is consistent with the Company's corporate objectives.

The Company has exposure to the following risks from its use of financial instruments:

- Credit risk
- Liquidity risk
- Market risk

Credit risk:

Credit risk arises from the potential that a counterparty will fail to perform its obligations. The Company is exposed to credit risk from banks and customers.

The Company has credit risk relating to cash and cash equivalents and restricted cash, which it manages by dealing with large chartered Canadian and international banks and investing in highly liquid investments of a rating of no less than R1, the credit rating assigned to those who pay on time.

The Company's exposure to credit risk geographically for cash and cash equivalents and restricted cash as at December 31, 2019 and September 30, 2018 was as follows:

	2019	2018
Europe, Middle East and Africa	36%	47%
North America, Latin America and Caribbean	48%	43%
Asia and Pacific Rim	16%	10%
	100%	100%

For the fifteen months ending December 31, 2019, the Company had no customer (2018 – one) that accounted for greater than 10% of revenue. In order to minimize the risk of loss for trade receivables, the Company's extension of credit to customers involves review and approval by senior management, as well as, progress payments as contracts are performed. The Company also insures accounts receivable balances in certain countries.

Credit reviews take into account the counterparty's financial position, past experience and other factors. Management regularly monitors customer credit limits. The Company believes that the concentration of credit risk from trade receivables is limited, as they are widely distributed among customers in various countries.

The Company reviews its trade receivable accounts regularly and reduces amounts to their expected realizable values by making an allowance for doubtful accounts as soon as the account is perceived not to be fully collectible. The Company's trade receivables had a carrying value of $8.4 million as at December 31, 2019 (September 30, 2018 - $15.2 million), representing the maximum exposure to credit risk of those financial assets, exclusive of the allowance for doubtful accounts. Normal credit terms for amounts due from customers varies based upon the size of the customer, type of revenue and geographic region, and generally call for payment within 30 to 120 days. At December 31, 2019, approximately 17.7% of gross trade receivables, or $2.1 million was outstanding for more than 120 days (September 30, 2018 – 16.9% or $3.4 million).

The activity of the allowance for doubtful accounts for the fifteen months ended December 31, 2019 and the twelve months ended September 30, 2019 is as follows:

$US Thousands	2019	2018
Allowance for doubtful accounts, beginning of year	$ 2,093	$ 2,213
Bad debt recovery	792	(110)
Write-off of bad debts	(1,301)	(10)
	$ 1,584	$ 2,093

Allowance for doubtful accounts is charged to general and administrative expense. Estimates for allowance for doubtful accounts are determined on a customer-by-customer evaluation of collectability at each consolidated statement of financial position reporting date, taking into account the amounts that are past due and any available relevant information on the customers' liquidity and going concern risks.

The Company's exposure to credit risk for trade receivables by geographic area as at December 31, 2019 and September 30, 2018 was as follows:

	2019	2018
Europe, Middle East and Africa	55%	66%
North America, Latin America and Caribbean	36%	18%
Asia and Pacific Rim	9%	16%
	100%	100%

Liquidity risk:

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with its financial liabilities. The Company's financial liabilities as at December 31, 2019 will mature as follows:

US$ Thousands	Less than 1 year	1 to 2 years	2 years and thereafter
Trade payables	$ 7,351	$ –	$ –
Accrued liabilities	10,518	–	–
Provisions	3,631	37	–
Other liabilities	–	–	2,628
Preferred shares	–	–	66,346
	$ 21,500	$ 37	$ 68,974

Management believes the Company's existing cash and cash equivalents, restricted cash and cash from operating activities will be adequate to support all of its financial liabilities and contractual commitments as they become due.

The Company operates in a number of jurisdictions, some of which impose currency remittance restrictions and income tax withholdings, which impacts the timing and amount of cash which can be repatriated from these countries.

Market risk:

Market risk is the risk that the value of the Company's financial instruments will fluctuate due to changes in the market risk factors. The market risk factors which affect the Company are foreign currency and interest rates.

(a) Foreign currency risk:

The Company conducts a significant portion of its business activities in foreign countries. Foreign currency risk arises because of fluctuations in foreign currency exchange rates. The Company's objective in managing its foreign currency risk is to minimize its net exposures to foreign currency cash flows by converting foreign-denominated cash balances into U.S. dollars to the extent practical to match U.S. dollar obligations. The monetary assets and liabilities that are denominated in foreign currencies are affected by changes in the exchange rate between the U.S. dollar and these foreign currencies. The Company recognized a foreign currency exchange loss of $1.5 million during the fifteen months ending December 31, 2019 (twelve months ended September 30, 2018 – loss of $0.3 million).

If a shift in foreign currency exchange rates of 10% were to occur, the foreign currency exchange gain or loss on the Company's net monetary assets could change by approximately $1.2 million (2018 - $1.7 million) due to the fluctuation and this would be recorded in the consolidated statements of comprehensive loss.

(b) Interest rate risk:

Interest rate risk arises because of the fluctuation in interest rates. The Company is subject to interest rate risk on its cash and cash equivalents and restricted cash. If a shift in interest rates of 10% were to occur, the impact on cash and cash equivalents and restricted cash and the related income for the fifteen months ended December 31, 2019 and twelve months ended September 30, 2018 would not be material.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure controls and procedures within the Company have been designed to provide reasonable assurance that all relevant information is identified and passed to its Disclosure Committee to ensure appropriate and timely decisions are made regarding public disclosure.

Internal controls over financial reporting have been designed by management, with the participation of the Company's Chief Executive Officer ("CEO") and interim-Chief Financial Officer ("CFO"), to provide reasonable assurance regarding the reliability of the Company's financial reporting and its preparation of financial statements for external purposes in accordance with IFRS. The control framework used by the CEO and the interim-CFO to design the Company's internal control over financial reporting is the "Internal Control – Integrated Framework (2013)" published by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Changes in Internal Controls over Financial Reporting

There have been no changes to the Company's internal controls over financial reporting during the three and fifteen months ended December 31, 2019 that have materially affected, or are reasonably likely to materially affect, its internal controls over financial reporting.

Effective January 1, 2020, the Company has outsourced certain departments of its finance function to an independent third party service organization. As a result, the Company has implemented significant changes to its internal controls over financial reporting, including requiring the third party to provide customary assurances over its internal controls and transaction processing as a service organization.

ACCOUNTING CHANGES AND RECENTLY ISSUED ACCOUNTING PRONOUNCEMENTS

Accounting Changes

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

Effective October 1, 2018 the Company adopted IFRS 15 using the cumulative effect method which requires the Company to recognize the cumulative effect of initially applying IFRS 15 as an adjustment to the opening balance of equity as at October 1, 2018. Therefore, the comparative information has not been restated and continues to be reported under IAS 18, IAS 11 and related interpretations.

Adoption of IFRS 15 has had no impact on the accounting for the Company's professional services, third party goods and services and legacy post-contract support contracts on previously delivered perpetual licenses. Adoption has impacted certain customer arrangements containing software licenses for which the customer has the right to pay for the software as it increases its capacity usage over a fixed term.

The Company has certain license arrangements where the customer has the right to increase its licensed capacity within stated capacity thresholds over a fixed time period, subject to a contractual minimum license requirement. Prior to adopting IFRS 15, revenue was recognized based on customer usage and billed as such incremental capacity was delivered. Under IFRS 15, the Company considers these licenses to be perpetual in nature. The performance obligation containing the license is fully transferred at the time of customer acceptance of the license, and therefore the transaction price allocated to the minimum license commitment is recognized at that time. For these contracts, this results in earlier recognition of license revenue. In addition, where payment terms related to these licenses extend beyond a period of one year, the Company has determined that a significant financing component exists. The value of these financing components was assessed using an appropriate interest rate and best estimate of the value and timing of the remaining payments over the expected term of the agreement.

Prior to adopting IFRS 15, the Company reported unbilled revenue and deferred revenue balances in its consolidated balance sheet on the basis of the individual performance obligations within each customer arrangement. Under IFRS 15, the status of the contract must be presented on a net basis as either unbilled or deferred revenue to reflect the nature of the net underlying rights and performance obligations at the contract level on the statement of financial position. Where a contract is combined for accounting purposes with one or more other contracts, the net contract balance position must be determined and reported at the aggregate level for all combined contracts.

The Company reviewed the tax implications of adjustments made at adoption and determined that these resulted in an increase in deferred tax liabilities as a result of transferring revenue to the prior period. This increase is fully offset by recognition of previously unrecorded deferred tax assets of equal value and therefore no adjustment is required.

New and expanded annual disclosure requirements on revenue, performance obligations, and contract balances are also expected to be significant and require changes to processes to accumulate and report aggregated data requirements.

(ii) IFRS 9, Financial Instruments ("IFRS 9"):

Effective October 1, 2018, the Company adopted IFRS 9, which sets out requirements for recognition and measurement, impairment, derecognition and general hedge accounting. This standard simplifies the classification of financial assets as either at amortized cost or at fair value as opposed to the multiple classifications which were permitted under IAS 39, Financial Instruments: recognition and measurement ("IAS 39"). This standard also requires the use of a single impairment method as opposed to the multiple methods in IAS 39.

Cash and cash equivalents, restricted cash, trade and other receivables that were classified as loans and receivables under IAS 39, respectively, are now classified as financial assets measured at amortized cost. Trade payables, accrued liabilities provisions, long-term liabilities and preferred shares were classified as other financial liabilities under IAS 39, respectively, are now classified as financial liabilities measured at fair value. Series A warrant that was classified as financial liability at fair value through profit or loss under IAS 39, continues to be recognized as a financial liability at fair value through profit or loss under IFRS 9. There is no change to the initial measurement of the Company's financial assets. The adoption of IFRS 9 did not have any material impact on the consolidated financial statements.

New accounting pronouncements

The IASB has issued new standards and amendments to existing standards. These changes in accounting are not yet effective at December 31, 2019 and could have an impact on future periods.

(i) IFRS 16, Leases ("IFRS 16"):

On January 13, 2016, the IASB issued IFRS 16. The new standard is effective for annual periods beginning on or after January 1, 2019. IFRS 16 will replace IAS 17, Leases ("IAS 17"). This standard introduces a single lessee accounting model and requires a lessee to recognize assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. A lessee is required to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments.

This standard substantially carries forward the lessor accounting requirements of IAS 17, while requiring enhanced disclosures to be provided by lessors.

Other areas of the lease accounting model have been impacted, including the definition of a lease. Transitional provisions have been provided. The Company will adopt the standard effective January 1, 2020. However, management has assessed the extent of the impact of adoption of this standard and interpretations on the consolidated financial statements of the Company as of December 31, 2019 and does not expect them to have any material impact.

The Company will be applying the practical expedient not to recognize right-of-use asset and lease liability for short-term leases that have a lease term of 12 months or less and leases of low value assets. Substantially all of the existing leases in the Company as at December 31, 2019 would fall under the category of short-term leases or leases of low value assets. The lease payments associated with these leases will be recognized as an expense on a straight-line basis over the lease term.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Revenue Recognition

The Company's accounting policy under IFRS 15, adopted effective October 1, 2018, is as follows:

General

The Company's revenue is derived primarily from licensing of software products under non-cancellable license agreements, the provision of related professional services (including installation, integration and training) and post-contract customer support ("PCS"). In certain cases, the Company also provides customers with hardware in conjunction with its software offerings. Revenue comprises the fair value of consideration received or receivable from the sale or license of products or the provision of services in the ordinary course of business, net of discounts and sales taxes. Out-of-pocket expenses that are contractually reimbursable from customers are recorded as gross revenue and expenses.

Arrangements with multiple components

The Company enters into arrangements that contain separately identifiable components, which may include any combination of software, services, PCS and/or hardware.

Where multiple transactions or contracts are linked, such that the individual transactions have no commercial effect on their own, the transactions are evaluated as a combined customer arrangement for purposes of revenue recognition. When two or more revenue-generating activities or deliverables are sold under an arrangement, each deliverable that is considered a separate component is accounted for separately. A deliverable is separately accounted for when a delivered item has standalone value from undelivered items based on the substance of the arrangement. When services are essential to the functionality of the software, the software does not have standalone value and is combined with the essential services as a single component.

Where an arrangement includes multiple components, revenue is allocated to the different components based on their relative fair values or the residual method, as applicable. The Company generally uses optional stated renewal rates to evidence fair value of undelivered term-license/PCS services when the renewal fees and terms are substantive. When stated renewal rates do not exist for an arrangement, the Company considers fees charged on standalone PCS renewals in other similar arrangements to establish fair value. The Company typically evidences fair value for other products and services based on the pricing when those deliverables are sold separately. Where reasonable vendor-specific or third party inputs do not exist to reliably establish fair value, the Company allocates revenue based on its best estimate of selling price that the Company would transact at if the deliverable were sold on a standalone basis. For services, this includes the expected cost of delivery plus an estimated profit margin. Under the residual method, revenue is allocated to undelivered components of the arrangement based on their fair values and the residual amount of the arrangement revenue is allocated to delivered components.

The revenue policies below are applied to each separately identifiable component. Revenue associated with each component is deferred until the criteria required to recognize revenue have been met.

The Company recognizes revenue once persuasive evidence exists, generally in the form of an executed agreement, it is probable the economic benefits of the transaction will flow to the Company and revenue and costs can be measured reliably. If collection is not considered probable, revenue is recognized only once fees are collected.

Software

The Company sells on-premise software licenses primarily on a perpetual basis. Where licensed software is combined with non-distinct services as a combined performance obligation, revenue is recognized according to the percentage-of-completion method. The Company uses either the ratio of hours to estimated total hours or the completion of applicable milestones, as appropriate, as the measure of its progress to completion on each contract. If a loss on a contract is considered probable, the loss is recognized at the date determinable. Distinct software licenses, when not combined with services for accounting purposes, are recognized upon delivery and commencement of the customer's right to use the software.

Software-as-a-service (SaaS)

SaaS allows a customer access to the Company's software on a platform hosted by a third party without taking possession of the software. SaaS is typically offered on a fixed-term basis. Where fees are fixed for the term, revenue is recognized ratably over the term commencing when the customer has the right to access the platform. Where the fees are based on periodic activity, revenue is recognized as invoiced to the customer at each period.

Services

Revenue for installation, implementation, training and other services, when not combined with software as a combined performance obligation, is recognized as the services are delivered to the customer. Fixed fee service arrangements are recognized using the percentage-of-completion method based on labour input measures.

Post-contract customer support ("PCS")

PCS revenue is recognized rateably over the term of the PCS agreement.

Third party software and hardware

Third party software and hardware revenue is recognized when control of the product transfers to the customer. When the products are distinct, control typically transfers upon delivery to the customer.

Where such products are related to professional services as a combined performance obligation, the percentage-of-completion method is applied.

Trade receivables

The Company monitors the financial stability of its customers and the environment in which they operate to make estimates regarding the likelihood that the individual trade receivable balances will be paid. Credit risks for outstanding customer receivables are regularly assessed and allowances are recorded for estimated losses.

Unbilled and deferred revenue

Amounts are generally billable on reaching certain performance milestones, as defined by individual contracts. Revenue in excess of contract billings is recorded as unbilled revenue. Cash proceeds received in advance of performance under contracts are recorded as deferred revenue. Deferred and unbilled revenue is classified as long-term if it relates to performance obligations that are expected to be fulfilled greater than 12 months from period end.

Income Taxes and Deferred taxes

Income taxes comprise current and deferred tax. Current tax represents the expected tax payable on taxable income for the year using enacted or substantively enacted tax rates at the end of the reporting year, and any adjustments to tax payable related to prior years. Deferred tax assets and liabilities are determined based on differences between the carrying amounts of assets and liabilities for financial reporting purposes and tax bases of assets and liabilities and are measured using the substantively enacted tax rates and laws that will be in effect when the differences are expected to reverse. Deferred income tax assets are recognized to the extent that realization is considered probable. The ultimate realization of deferred income tax assets is dependent on the generation of future taxable income during the years in which those temporary differences become deductible. Management considers projected future taxable income, uncertainties related to the industry in which the Company operates and income tax planning strategies in making this assessment. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets and they relate to income taxes levied by the same authority on the same taxable entity, or on different tax entities where these entities intend to settle current tax liabilities and assets on a net basis or their tax assets and liabilities will be realized simultaneously.

Deferred tax assets and liabilities are recognized for temporary differences and for tax loss carryforwards. The valuation of deferred tax assets is based on management's estimates of future taxable profits in different tax jurisdictions against which the temporary differences and loss carryforwards may be utilized.

Pension and non-pension post-employment benefit plans

The actuarial valuation of defined benefit obligation and fair value of plan assets require estimates, including discount rates applied to the Company's pension plan and non-pension post-employment benefit liabilities.

Goodwill valuation

We use estimates in determining the recoverable amount of our cash-generating unit ("CGU") in performing annual impairment testing of goodwill. The determination of the recoverable amount for the purpose of impairment testing requires the use of significant estimates, such as future cash flows, terminal growth rate and discount rate.

We estimate value in use for impairment tests by discounting estimated future cash flows for periods up to five years to their present value. The future cash flows are based on our estimates of expected future operating results of the cash generating unit ("CGU") after considering economic conditions and a general outlook for the CGU's industry. Our discount rates consider market rates of return, debt to equity ratios and certain risk premiums, among other things. The terminal value is the value attributed to the CGU's operations beyond the projected time period of the cash flows using a perpetuity rate based on expected economic conditions and a general outlook for the industry.

We make certain assumptions when deriving expected future cash flows, which may include assumptions pertaining to discount and terminal growth rates. These assumptions may differ or change quickly depending on economic conditions or other events. It is therefore possible that future changes in assumptions may negatively affect future valuations of the CGU and goodwill, which could result in impairment losses.

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 a 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 less the expected benefits to be derived by the Company.

PATENT PORTFOLIO

As part of Optiva's commitment to R&D to maintain its position as a key industry innovator in the real-time BSS software space, the Company currently has a portfolio of 14 filed and over 100 granted patents. These numbers do not include all of the patents which were acquired as a result of the acquisition of Orga Systems. To date Optiva has not initiated any action with respect to assertions and/or claims of patent infringement.

ADDITIONAL INFORMATION

Additional information, including the quarterly and annual consolidated financial statements, annual information form, management proxy circular and other disclosure documents may be examined by accessing the SEDAR website at www.sedar.com.