OPTIVA INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FISCAL YEAR ENDED DECEMBER 31, 2021

DATED: March 8, 2022

SCOPE OF ANALYSIS

This Management's Discussion and Analysis ("MD&A") provides a review of the results of operations, financial condition and cash flows of Optiva Inc. (the "Company" or "Optiva") for the three and twelve month periods ended December 31, 2021.

The MD&A should be read in conjunction with the audited consolidated financial statements for the years ended December 31, 2021 and December 31, 2020, which we prepared in accordance with International Financial Reporting Standards ("IFRS").

Information contained in this MD&A is based on information available to management as of March 8, 2022.

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 INFORMATION

All information other than statements of current and historical fact contained in this MD&A is forward-looking information. In certain cases, forward-looking information can be identified by the use of words such as "plans", "expects", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "believes", or variations of such words and phrases, or statements that certain actions, events or results "may", "could", "would", "might" or "will", "occur" or "be achieved", and similar words or the negative thereof. The forward-looking information contained herein is expressly qualified in its entirety by this cautionary statement.

Forward-looking information in this MD&A includes, but is not limited to, the Company's beliefs regarding business trends, our customers' preferences and our ability to address their requirements, the basis for our future growth and competition in our industry. By its nature, forward-looking information is inherently uncertain, is subject to risk and is based on numerous assumptions, including those set out under the "Risks and Uncertainties" section of this MD&A, and assumptions that: the Company will continue to develop products that meet its customer's needs; that the Company will be able to implement business improvements, including development of an in-house R&D team, and achieve cost savings; the Company will be able to retain key personnel; currency exchanges rates in the jurisdictions in which the Company operates will remain relatively consistent; and capital can be obtained at reasonable costs; as well as risks and assumptions regarding present and future business strategies, the environment in which the Company will operate in the future, expected revenues, and the Company's ability to achieve its goals. Although management of the Company believes that the expectations represented in such forward-looking information are reasonable, there can be no assurance that such expectations will prove to be correct.

The future outcomes that relate to forward-looking information may be influenced by many factors that could cause actual future results, conditions, actions or events to differ materially from the targets, expectations, estimates or intentions expressed in the forward-looking information, including, but not limited to, risks associated with: the current COVID-19 pandemic; the effectiveness of the Company's strategic plan; the impact of management and other changes on the Company's business relationships;

the Company's solutions failing to perform as expected; cybersecurity risks, including the risk of system failures or data security breaches; the Company's investment in cloud as a growth strategy; market developments; intense competition; the ability to recruit and retain personnel; currency fluctuations; the time period of the Company's sales and product development cycles; customer credit and defaults; variances in quarterly revenue and operating results; customer concentration risks; intellectual property and infringement risks; product liability claims; transfer pricing; taxation; liquidity and financial resources; risks relating to the Debentures; dependence on sales channel partners and suppliers; and the other risk factors described under the heading "Risk Factors" in the Company's most recent Annual Information Form. The Company cautions that such list of factors is not exhaustive, and when relying on forward-looking information to make decisions with respect to the Company, readers should carefully consider these factors, as well as other uncertainties and potential events, and the inherent uncertainty of forward-looking information.

There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. Forward-looking information is provided as of the date of this MD&A or such other date specified herein, and the Company assumes no obligation to update or revise such forward-looking information to reflect new events or circumstances, except as required under applicable securities laws.

RISKS AND UNCERTAINTIES

- The Company's strategy depends on its ability to realize the benefits of its investment in its product roadmap. The Company may continue to generate losses while it executes on its strategy of investing in innovating and modernizing its Business Support System ("BSS") solutions and applications, specifically relating to cloud based products. Unanticipated declines in revenue or increases in expenses or liabilities in the near term, or slow adoption of Optiva cloud-based products by customers in the longer term, may result in the Company not being able to satisfy its financial obligations without further financing.

- Failure of the Company's solutions could expose the Company to significant liabilities. The Company's solutions are critical for its customers to deliver and monetize services on their networks. If the Company does not successfully deploy its solutions or if customers experience system outages caused by the Company's software, the Company may be exposed to significant liabilities associated with unplanned remediation costs, penalties and claims for damages.

- The Company faces intense competition and many of the Company's competitors and potential competitors have significantly greater financial, technical, marketing or service resources. The Company's relatively small size and recent operating history may be considered negatively by prospective end-users. If the Company does not compete effectively, the Company's revenue may not grow and could decline.

- 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 materially adversely impact 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 tax laws of various jurisdictions in which the Company conducts business have detailed transfer pricing rules which require that all transactions with non-resident related parties be priced using arm's length pricing principles and that contemporaneous documentation exists to support such pricing. If any of the Company's transfer pricing policies are successfully challenged, income tax expenses may be adversely affected and the Company could also be subjected to interest and penalty charges, which could have a significant impact on the Company's future earnings and future cash flows.

- As previously disclosed, on July 20, 2020, the Company completed the redemption of its outstanding preferred shares and completed a concurrent offering of 9.75% senior secured PIK toggle debentures due 2025 ("Debentures") in the principal amount of $90.0 million, the proceeds of which were used to fund the preferred share redemption. In connection with and following these transactions, almost all of the Company's Board was refreshed with new directors. The Company also recently hired a new Chief Executive Officer. The Company's strategy has and may continue to change as a result of these changes in its capital structure and related changes to the composition of the Company's Board and management and shareholder base.

- The Debentures represent a significant amount of indebtedness of the Company, the principal amount of which must be repaid on or before July 20, 2025. The Company's ability to pay principal and cash interest when due on the Debentures will depend on the success of the Company's operations and the Company's financial condition over the long term. If, and to the extent, the Company has insufficient cash to pay its debt obligations, cash from other sources will be required or the Company may be required to pay interest in-kind through the issuance of additional Debentures. The Company might also be required to sell some or all of its assets to meet its obligations, or to seek an extension to the Debentures, or to seek alternative debt or equity financing. The sale of some of the Company's assets and properties to satisfy the amounts owed pursuant to the Debentures could result in the partial or total loss of the Company's assets.

If a sale, extension or refinancing is not obtained or consummated, the Company could default on its obligations.

- The Company currently does not have any credit facility and relies on its own cash to meet its liquidity needs. The Company collects its cash from customers in various jurisdictions; there is a risk that repatriation of cash from foreign jurisdictions may take longer than anticipated, be subject to withholding taxes or be disrupted due to events outside the control of the Company. This may result in the Company being unable to meet its obligations when they become due.

- The Company is, has been and expects to continue to be dependent on a relatively small number of customers for a large percentage of its revenue. If one or more of the Company's end-users discontinues its relationship with the Company for any reason, or reduces or postpones current or expected purchases of the Company's products or services, the Company's business, results of operations and financial condition could be materially adversely affected.

- The Company may be required to defer recognizing revenue from the sale of products until all the conditions necessary for revenue recognition have been satisfied.

- The market for the Company's products depends on economic and geopolitical conditions affecting the broader market, which are beyond the Company's control. In addition, acts of terrorism and the outbreak of a global health crisis or hostilities and armed conflicts between countries can create geopolitical uncertainties that may affect the global economy. Downturns in the economy or geopolitical uncertainties, including uncertainties caused by the continuing COVID-19 pandemic, may cause end-users to delay or cancel projects, reduce their overall security or IT budgets, or reduce or cancel orders for the Company's products, which could have a material adverse effect on its business, results of operations and financial condition.

OVERVIEW

Optiva is a leading and innovative provider of cloud-native monetization products on the private and public cloud to Communication Service Providers ("CSPs") worldwide.

The Company's products and services empower CSPs to monetize on their various customer segments, including consumer, enterprise, wholesale and IoT. The Company's solutions allow the introduction of new innovative tariffs and marketing offerings, through its rating, charging and billing solutions. Coupled with complementing products such as payment solutions, policy control, wholesales billing, customer care and subscriber self-service applications, Optiva allows its customers to achieve their objectives and address their challenges, including monetization of their communication services, convergence of their service portfolio and diversification of their offering, all through improving customer experience and reduced costs.

The common shares of Optiva Inc. (TSX: OPT) are listed on the Toronto Stock Exchange (the "TSX"). The Debentures (NEO: OPT.DB.U) are listed on the NEO Exchange. 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-native, real-time converged charging and billing platform delivers the benefits of a flexible, end-to-end software platform, including real-time charging, rating, billing, product catalog, 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 5, in the private or public cloud. It enables a digital customer journey delivering innovative end-user services from real-time offering towards digital guide self-management of customer interaction.

Optiva supports the telecommunication industry with the following market solutions:

- **Optiva Charging Engine** – Optiva's highly scalable, convergent charging solution is a fully 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 natively on Google Cloud Platform and scales with Google Cloud Spanner, and it is also available on an OpenShift infrastructure on a private cloud. Kubernetes and the customization framework enables fast adaptation to the market and new use cases with the shortest time to market and among the 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"), machine to machine, IoT, cloud services, and OTT offerings.

- **Optiva BSS Platform** – Optiva BSS Platform™ provides a fully managed, end-to-end, cloud-native converged charging and billing solution on the private and public cloud. For CSPs, including MNOs, MVNEs, and MVNOs, Optiva BSS Platform™, re-architected to be cloud-native and made available on the public cloud, is Optiva's leading proposition in the software-as-a-service ("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 an end-to-end BSS stack with all of the mandatory components such as unified rating and charging, billing, customer care and self-care, product catalog, payments and voucher management, collections and settlements, and dealer care.

- **Policy Control** – Optiva's Policy Control 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 Control solution is key to supporting operator data monetization strategies for real-time applications, such as video streaming, interactive gaming, and VoLTE, and is a key to Optiva value proposition to 5G.

- **Optiva Wholesale Billing™** – Optiva Wholesale Billing™ 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.

- **Optiva Payment Solution –** Optiva's Payment Solution strengthens 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 BSS products and applications to the cloud, specifically the public cloud, and demand solutions from its vendors that can offer a cloud-native architecture. Management believes this transition is ongoing and continuous and will take a few years to fully materialize due to the complicated technological, regulatory, and security structures faced by the telecom industry. Accordingly, management of the Company is investing aggressively in upgrading Optiva's product offering to become fully cloud-native.

The Company continues to invest in cloud innovation, including the Company's use of public cloud solutions, to be integrated into Optiva cloud-native products. The Company continues to build on the strength of its in-house research and development ("R&D") team and working with other strategic partners to enhance its R&D activities. The Company continues to evaluate the need and timing of additional funding and any evolution of our strategy.

COVID-19 OPERATIONAL UPDATE

COVID-19 continues to significantly impact Canadians and economies around the world. In March, 2020, the Company took swift action to ensure the health and safety of our team members, and to mitigate the business impact on the Company caused by the unprecedented global economic disruption. At the onset of the pandemic, the Company adopted a mandatory work-from-home program which will continue to remain in place until such time the Company has clear guidance from government authorities in various jurisdictions, with respect to this pandemic. As substantially all of the Company's day-to-day activities can be fully performed by personnel working remotely, the Company has been able to remain fully operational during this period, and continues to seek new revenue opportunities, execute on its product development roadmap and generate consistent revenue from our existing customer base. The Company is in compliance with all federal, provincial and municipal regulations that have been put in place since the beginning of the pandemic. The Company will continue to closely monitor developments in this regard, with the health and safety of the Company’s employees and management as the primary concern. The Company has not experienced any significant impact to the COVID-19 pandemic.

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 Company’s audited consolidated financial statements.

Q4 Fiscal 2021 Highlights	**Three Months Ended**		**Twelve Months Ended**		**Fifteen Months Ended**
($ US Thousands, except per share information)	**December 31,**				**December 31,**
(Unaudited)	**2021**	**2020**	**2021**	**2020**	**2019**
Revenue	16,169	18,142	65,236	75,916	120,883
Net Income (Loss)	(3,310)	1,670	18,503	(41,520)	(13,751)
Earnings (Loss) Per Share	$(0.54)	$ 0.31	$ 3.12	$(7.81)	$(2.60)
Cash from (used in) operating activities	(3,300)	(2,621)	2,647	(7,900)	(2,259)
Total cash, including restricted cash	30,379	18,290	30,379	18,290	32,699

Consolidated Statements of Comprehensive Income (loss) (all amounts in thousands of US$, except per share amounts)	**Three Months Ended December 31,**		**Twelve Months Ended**		**Fifteen Months Ended December 31,**
(unaudited)	**2021**	**2020**	**2021**	**2020**	**2019**
Revenue					
Support and subscription	11,954	14,258	47,635	58,289	86,860
Software, services and other	4,215	3,884	17,601	17,627	34,023
Total Revenue	**16,169**	**18,142**	**65,236**	**75,916**	**120,883**
Cost of revenue	4,110	4,479	14,875	19,604	39,351
Gross profit	**12,059**	**13,663**	**50,361**	**56,312**	**81,532**
Operating expenses					
Sales and marketing	2,628	1,680	8,130	7,952	12,553
General and administrative	4,779	6,165	16,762	30,059	22,586
Research and development	3,339	2,674	10,510	25,537	35,157
Restructuring costs	-	(39)	-	163	(1,715)
Total Operating Expenses	**10,746**	**10,480**	**35,402**	**63,711**	**68,581**
Income (loss) from operations	**1,313**	**3,183**	**14,959**	**(7,399)**	**12,951**
Foreign exchange gain (loss)	(369)	(100)	266	(1,999)	(1,475)
Finance income (costs)	64	156	535	406	605
Finance (costs) recovery	(3,241)	2,029	6,259	(26,254)	(14,190)
Income (loss) before income taxes	**(2,232)**	**5,268**	**22,019**	**(35,246)**	**(2,109)**
Income tax expense	1,078	3,598	3,516	6,274	11,642
Net Income (loss) for the period	**(3,310)**	**1,670**	**18,503**	**(41,520)**	**(13,751)**
Earnings (loss) per common share					
Basic	$ (0.54)	$ 0.31	$ 3.12	$ (7.81)	$ (2.60)
Diluted	$ (0.54)	$ 0.29	$ 3.11	$ (7.81)	$ (2.60)
Weighted average number of common shares (thousands)					
Basic	6,154	5,316	5,928	5,316	5,281
Diluted	6,154	5,698	5,949	5,316	5,281

Statement of Financial Position Data *$US Thousands (unaudited)*	**As at December 31, 2021**	**As at December 31, 2020**	$ Change	% Change
Cash, Cash Equivalents and Restricted Cash	30,379	18,290	12,089	66%
Trade Accounts, Other Receivables and Unbilled Revenue	18,290	15,475	2,815	18%
Goodwill and Intangible Assets	34,076	35,527	(1,451)	(4%)
Total Assets	92,660	77,380	15,280	20%
Trade Payable and Accrued Liabilities	14,989	18,489	(3,500)	(19%)
Deferred Revenue	4,146	5,556	(1,410)	(25%)
Provisions	4,200	5,555	(1,355)	(24%)
Other long-term liabilities	12,264	19,278	(7,014)	(36%)
Debentures	86,990	86,338	652	1%
Preferred Shares and Series A Warrant	1,668	16,663	(14,995)	(90%)
Total Liabilities	127,725	156,812	(29,087)	(19%)
Shareholders' Deficit	(35,064)	(79,432)	44,368	(56%)

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 (unaudited)	**Three Months Ended December 31, 2021**	**Three Months Ended December 31, 2020**	**Twelve Months Ended December 31, 2021**	**Twelve Months Ended December 31, 2020**
Support and Subscription	11,954	14,258	47,635	58,289
Software and Services	4,027	3,522	17,147	16,617
Third Party Software and Hardware	188	362	454	1,010
Total	**16,169**	**18,142**	**65,236**	**75,916**

Percentage of Total Revenue (unaudited)	**Three Months Ended December 31, 2021**	**Three Months Ended December 31, 2020**	**Twelve Months Ended December 31, 2021**	**Twelve Months Ended December 31, 2020**
Support and Subscription	74%	79%	73%	77%
Software and Services	25%	19%	26%	22%
Third Party Software and Hardware	1%	2%	1%	1%
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, 2021, the Company's revenues have declined by $2.0 million from the previous year's comparative period to $16.2 million. The change by revenue type for the quarter ended December 31, 2021, is as follows: $2.3 million decrease in support and subscription revenue, $0.5 million increase in software and services revenue and $0.2 million decrease in third-party software and hardware revenue.

For the year ended December 31, 2021, the Company's revenues have declined by $10.7 million from the previous year's comparative period to $65.2 million. The change by revenue type for the year ended December 31, 2021, is as follows: $10.7 million decrease in support and subscription revenue, $0.5 million increase in software and services revenue and $0.5 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, 2021, was $12.0 million, or 74% of total revenue, compared to $14.3 million, or 79% of total revenue, for the same period last year. For the year ended December 31, 2021, the Company's support and subscription decreased to $47.6 million, or 73% of total revenue, compared to $58.3 million or 77% of total revenue for the same period last year. The decrease in support and subscription revenue compared to last period is 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, 2021, increased to $4.0 million, or 25% of total revenue, compared to $3.5 million, or 19% of total revenue for the same period last year. The marginal increase in software and services revenue compared to last year is mainly due to higher software implementations compared to the prior period. For the year ended December 31, 2021, the Company's software and services revenue was $17.1 million, or 26% of total revenue, compared to $16.6 million, or 22% of total revenue for the same period last year. We are expecting that our software and services revenue may be impacted in the next few quarters by the COVID-19 pandemic, as projects that require travel to customer sites is limited and service deliveries delayed.

Third-Party Software and Hardware Revenue

Third-party software and hardware revenue consist 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, 2021 marginally decreased to $0.2 million, compared to $0.4 million, for the same period last year. For the year ended December 31, 2021, the Company's third party software and hardware revenue decreased to $0.5 million, compared to $1.0 million, for the same period last year. 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,**		**Twelve Months Ended December 31,**	
	2021	**2020**	**2021**	**2020**
Asia and Pacific Rim	3,260	4,103	14,199	18,330
North America, Latin America and Caribbean	4,103	6,256	19,213	24,582
Europe, Middle East and Africa	8,806	7,783	31,824	33,004
Total	**16,169**	**18,142**	**65,236**	**75,916**

Percentage of Total Revenue (unaudited)	**Three Months Ended December 31,**		**Twelve Months Ended December 31,**	
	2021	**2020**	**2021**	**2020**
Asia and Pacific Rim	20%	23%	22%	24%
North America, Latin America and Caribbean	25%	34%	29%	32%
Europe, Middle East and Africa	55%	43%	49%	44%
Total	**100%**	**100%**	**100%**	**100%**

For the three-month period ended December 31, 2021, revenue from the APAC region was $3.3 million, or 20% of total revenue, compared to $4.1 million, or 23% of total revenue, for the same comparable period. For the year ended December 31, 2021, revenue from the APAC region was $14.2 million, or 22% of total revenue, compared to $18.3 million, or 24% of total revenue, for the same comparable period. This decrease is mainly a result of lower support and subscriptions revenue and lower revenue from software implementation in the region.

For the three-month period ended December 31, 2021, revenue from the Americas region decreased to $4.1 million, or 25% of total revenue, compared to $6.3 million, or 34% of total revenue, for the same comparable period. For the year ended December 31, 2021, revenue from the Americas region decreased to $19.2 million, or 29% of total revenue, compared to $24.6 million, or 32% of total revenue, for the same comparable period. The decrease is mainly due to lower support revenue in the region.

For the three-month period ended December 31, 2021, revenue from the EMEA region increased to $8.8 million, or 55% of total revenue, compared to $7.8 million, or 43% of total revenue, for the same comparable period. The increase in revenue during the three months ended December 31, 2021, is mainly a result of higher revenue from software implementation in the region and increase in support revenue, compared to the same period last year. For the year ended December 31, 2021, revenue from the EMEA region decreased to $31.8 million, or 49% of total revenue, compared to $33.0 million, or 44% of total revenue, for the same comparable period. The decrease in revenue during the three and twelve months ended December 31, 2021, is mainly a result of lower support revenue due to the loss of certain customers offset by higher revenue from software implementation in the region, compared to the same period last year.

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.

For the three months ended December 31, 2021, cost of revenue decreased to $4.1 million from $4.5 million incurred for the same comparable period. The gross margin for the quarter remained the same at 75% in the three months ended December 31, 2021, compared to 75% in the three months ended December 31, 2020.

For the year ended December 31, 2021, cost of revenue decreased to $14.9 million from $19.6 million incurred for the same comparable period. The gross margin has increased to 77% for the year ended December 31, 2021 compared to 74% in the year ended December 31, 2020. The decrease cost of revenue 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 this year is higher as fewer customizations with lower margins were ordered by customers that required fulfillment compared to the previous period, higher license revenue and there was still high percentage of revenue from support and subscription revenue that has a higher margin. We expect our gross margins may fluctuate as we prove our cloud-native model and product capabilities to new and existing customers when they onboard to the public or private cloud in future periods.

Operating Expenses

Total operating expenses in the three months ended December 31, 2021, increased to $10.7 million as compared to $10.5 million in the same period last year. Excluding depreciation, amortization and restructuring costs, total operating costs in the quarter ended December 31, 2021, increased to $10.3 million, or 64% of total revenue, compared to $8.7 million, or 48% of total revenue, for the same period last year. The increase in overall operating expenses (excluding depreciation, amortization and restructuring costs) is mainly attributable to higher sales and marketing and higher R&D costs, as further explained below by function.

Total operating expenses in the year ended December 31, 2021, decreased to $35.4 million as compared to $63.7 million in the year ended December 31, 2021. Excluding depreciation, amortization and restructuring costs, total operating costs in the year ended December 31, 2021, decreased to $33.8 million, or 52% of total revenue, compared to $54.6 million, or 72% of total revenue, for the year ended December 31, 2020. The decrease in overall operating expenses (excluding depreciation, amortization and restructuring costs) is mainly attributable to lower R&D cost, and lower general and administrative 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,**		**Twelve Months Ended December 31,**	
	2021	**2020**	**2021**	**2020**
Sales and Marketing	2,628	1,680	8,130	7,952
General and Administrative	4,779	6,165	16,762	30,059
Research and Development	3,339	2,674	10,510	25,537
Restructuring Costs	-	(39)	-	163
Total Operating Expenses	**10,746**	**10,480**	**35,402**	**63,711**
Excluding Amortization and Depreciation	*10,297*	*8,660*	*33,781*	*54,751*

Percentage of Total Revenue (unaudited)	**Three Months Ended December 31,**		**Twelve Months Ended December 31,**	
	2021	**2020**	**2021**	**2020**
Sales and Marketing	16%	9%	12%	10%
General and Administrative	29%	34%	26%	40%
Research and Development	21%	15%	16%	34%
Restructuring Costs	0%	0%	0%	0%
Total Operating Expenses	**66%**	**58%**	**54%**	**84%**
Excluding Amortization and Depreciation	*64%*	*48%*	*52%*	*72%*

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, 2021, S&M expenditures increased to $2.6 million, or 16% of total revenue, compared to $1.7 million, or 9% of total revenue, compared to the same comparable period. The increase three months ended December 31, 2021 is mainly due to increase in sales commissions. For the year ended December 31, 2021, S&M expenditures increased to $8.1 million, or 12% of total revenue, compared to $8.0 million, or 10% of total revenue, for the comparable period. The increase in S&M expenditures for the year ended December 31, 2021 is mainly due to higher sales commissions offset by lower marketing costs as travel has been restricted during the COVID 19 pandemic.

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, 2021, G&A expenditures decreased to $4.8 million, or 29% of total revenue, from $6.2 million, or 34% of total revenue, compared to the same comparative period. The decrease is mainly due to lower legal and advisory costs related to activities of the special committee of the Board incurred last year, lower amortization costs offset by higher stock-based compensation and higher compensation costs.

For the year ended December 31, 2021, G&A expenditures decreased to $16.8 million, or 26% of total revenue, from $30.1 million, or 40% of total revenue, to the same comparative period. The decrease in the period was mainly due to lower legal and advisory costs related to activities of the special committee of the Board incurred last year, lower amortization costs, lower legal costs due to reversal of a provision related to an intellectual property claim of $1.3 million made this year and due to an additional provision made last year to reflect changes in status of certain claims and costs to settle, slightly offset by higher stock-based compensation. Excluding the impact of provisions, amortization and stock-based compensation, the G&A expenditures decreased by $4.4 million compared to the same comparative period last year. The decrease was mainly due to decrease in legal and advisory costs related to the activities of the special committee of the Board slightly offset by higher compensation costs.

Research and Development Expenses

R&D expenses consist primarily of personnel costs associated with product management, improvement of code quality and the development and testing of new products and features.

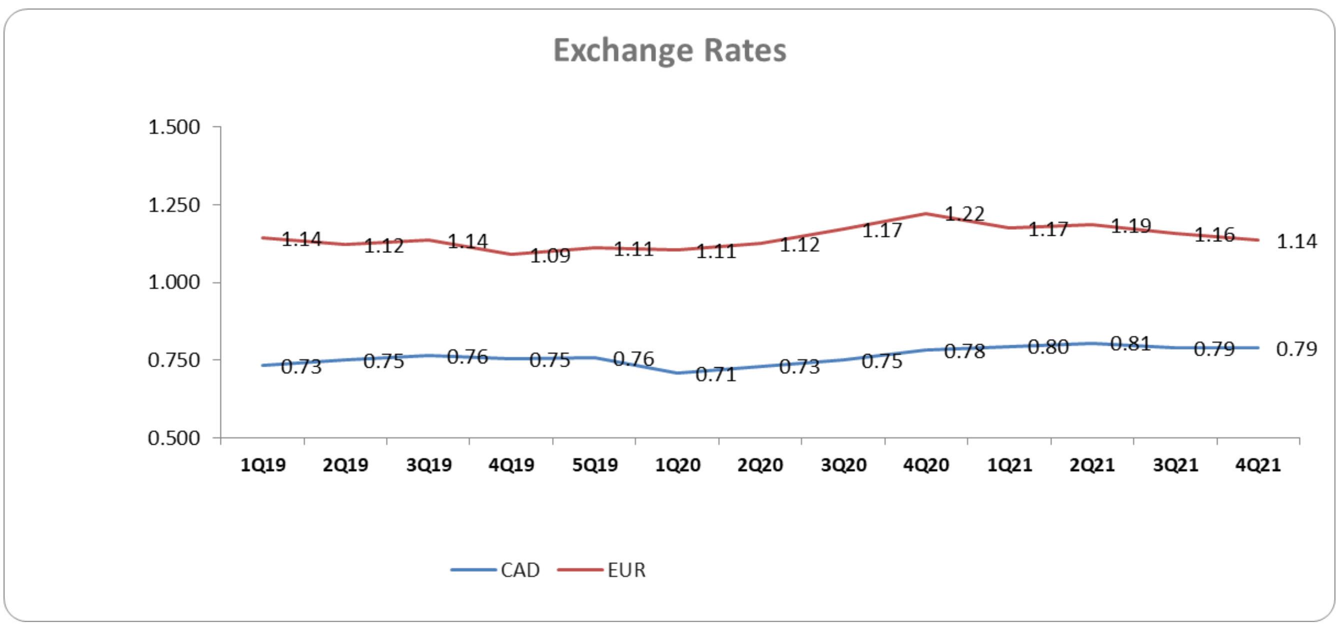
For the three-month period ended December 31, 2021, R&D expenditures increased to $3.3 million, or 21% of total revenue, from $2.7 million, or 15% of total revenue, as compared to the same comparative period. The increase is mainly due to ramp up of the Company's in-house R&D team as compared to the same period last year when there were lower costs incurred with Crossover Markets Inc. ("Crossover") and no costs incurred with DevFactory FZ-LLC ("Devfactory").

For the year ended December 31, 2021, R&D expenditures decreased to $10.5 million, or 16% of total revenue, from $25.5 million, or 34% of total revenue, as compared to the same comparative period. Under the Separation Agreement with ESW Capital, LLC ("ESW"), an amount of $2.1 million owing to DevFactory was forgiven which was credited to R&D expenses in the first quarter of 2021. Excluding the credit, R&D expenditures decreased to $12.6 million compared to $25.5 million last year. The decrease is mainly due to lower DevFactory and Crossover spend on overall R&D activities, including significantly lower cloud-related spend, offset by higher in-house spend on compensation and higher stock-based compensation. 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 variation can be significant.

The Company is in the process of building an in-house R&D team and is also working with other strategic partners to enhance its R&D activities.

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.



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, 2021, the

Company had a foreign currency exchange loss of $0.4 million, compared to a foreign currency exchange loss of $0.1 million in the comparable period. The U.S. Dollar strengthened against the Euro during the three months ended December 31, 2021. For the year ended December 31, 2021, the Company had a foreign currency exchange gain of $0.3million, compared to a foreign currency exchange loss of $2.0 million in the comparable period. The U.S. Dollar weakened against the Canadian dollar and the Euro during the year ended December 31, 2021.

A change in foreign exchange rates as at December 31, 2021, 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, 2021. This foreign currency gain or loss arising from translation would be recorded in the consolidated statements of comprehensive income.

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 year ended December 31, 2021 of $3.9 million mainly includes $1.9 million (year ended December 31, 2020 - $3.2 million) of corporate tax expense incurred by foreign subsidiaries generating taxable profits and $2.0 million (year ended December 31, 2020 - $2.6 million) of foreign withholding taxes. The Company's deferred tax recovery of $0.3 million (year ended December 31, 2020 – expense of $0.5 million) consists primarily of changes in temporary differences recognized during the current period.

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, and have been prepared in accordance with IFRS. The table below provides summarized information for our eight most recently completed quarters:

$US Thousands, except share and per share amounts (Unaudited)	4Q 21	3Q 21	2Q 21	1Q 21	4Q 20	3Q 20	2Q 20	1Q 20
Revenue	$16,169	$16,666	$16,311	$16,091	$18,142	$18,804	$19,933	$19,037
Net Income (loss)	$(3,310)	$ 3,783	$ 1,331	$ 16,698	$ 1,670	$(29,221)	$(14,777)	$ 808
Earnings (loss) per Share	$(0.54)	$ 0.62	$ 0.22	$ 3.14	$ 0.31	$(5.50)	$(2.78)	$ 0.15
Diluted Earnings (loss) per Share	$(0.54)	$ 0.61	$ 0.22	$ 3.01	$ 0.29	$(5.50)	$(2.78)	$ 0.14
Weighted average shares outstanding – Basic (thousands)	6,154	6,151	6,076	5,316	5,316	5,316	5,316	5,316
Weighted average shares outstanding - Diluted (thousands)	6,154	6,159	6,128	5,544	5,698	5,316	5,316	5,632

Revenue this quarter decreased sequentially mainly due to decrease in Software and Services revenue offset by revenue from Support and Subscription. The net loss in the current quarter is mainly due to the increase in value of warrants, compared to previous quarter. Revenue in first quarter of 2021 has declined sequentially compared to fourth quarter of 2020 was mainly because of lower support and subscription revenue due to discontinuation of support to customers who had previously notified us of the exit and lower software and services revenue due to fewer implementations. The high net income in the first quarter of 2021 is mainly due to the decrease in value of the warrants by $13.6 million. The net loss in third quarter of 2020 was mainly due to the accretion of preferred shares to the face value and accrued dividends of $21.9 million due to redemption of the preferred shares and increase in fair value of warrant liability of $5.6 million. The net loss in the second quarter of 2020 was mainly due to increases in fair value of the warrant liability and the cloud related spend. There is a significant variability in the net income or loss due to the change in fair value of the warrant liability.

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), proceeds from the issuance of debentures and cash on hand. The Company believes its restructuring activities as it relates to workforce and facility optimization are substantially complete and expects cash flow from operations to fund its future operations, including its investment in the Cloud strategy.

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. Approximately 3% (December 31, 2020 – 50%) of our cash is in foreign subsidiaries, where repatriation to the parent Company in Canada could take longer than 30 days.

Key Balance Sheet Amounts and Liquidity Ratios	**As at December 31,**	**As at December 31,**		
$US Thousands, except ratios and metrics (unaudited)	**2021**	**2020**	$ Change	% Change
Cash, Cash Equivalents and Restricted Cash	30,379	18,290	12,089	66%
Trade Accounts Receivable	4,169	4,748	(578)	(12%)
Working capital	26,576	3,005	23,572	785%
Days sales outstanding in trade accounts receivable (days)	25	28	(3)	(11%)
Days sales outstanding in unbilled revenue (days)	52	40	12	30%

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.

DSO - The Company has calculated DSO based on annualized revenue and the average of the beginning and ending accounts receivable balance for the three-month period being reported.

DSO in unbilled revenue - The Company has calculated DSO in unbilled revenue based on annualized revenue and the average of the beginning and ending unbilled revenue balance for the three-month period being reported.

Cash and restricted cash increased by $12.1 million to $30.4 million at December 31, 2021, compared to December 31, 2020.

Working capital represents the Company's current assets less its current liabilities. The Company's working capital balance increased by $23.6 million to $26.2 million at December 31, 2021, from $3.0 million at December 31, 2020. This is mostly related to increase in cash from the private placement, increase in accounts receivable and unbilled revenue, decrease in accounts payable and decrease in provisions.

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

Statement of Cash Flows Summary	**Three months ended**		**Twelve Months Ended**	
($ US Thousands)	**December 31,**		**December 31,**	
(Unaudited)	**2021**	**2020**	**2021**	**2020**
Cash inflows and (outflows) by activity:				
Operating activities	(3,300)	(2,621)	2,647	(7,900)
Investing activities	250	64	(1,219)	326
Financing activities	566	(618)	10,891	(7,522)
Effect of FX changes on cash and cash equivalents	39	224	(397)	1,012
Net cash inflows (outflows)	(2,445)	(2,951)	11,922	(14,084)
Cash and cash equivalents, beginning of period	32,032	20,615	17,664	31,748
Cash and cash equivalents, end of period	29,587	17,664	29,586	17,664
Cash (including Restricted Cash), end of period	30,379	18,290	30,379	18,290

Cash From (Used for) Operating Activities

Net cash used by operating activities was $3.3 million in the three months ended December 31, 2021, compared to use of cash of $2.6 million in the same period last year. Cash used by operating activities in the three months ended December 31, 2021, mainly relates to cash taxes paid during the quarter. For the quarter ended December 31, 2020, net cash used by operating activities was $2.6 million mainly related to cash used in working capital and cash taxes paid during the quarter offset by operating income.

Net cash generated by operating activities was $2.6 million in the year ended December 31, 2021, compared to use of cash of $7.9 million in the same period last year. Cash generated by operating activities in the year ended December 31, 2021, mainly relates to operating income offset by cash used in working capital and cash taxes paid during the period. For the year ended December 31, 2020, net cash used by operating activities was $7.9 million mainly related to operating loss, cash taxes paid and cash used in working capital.

Cash From (Used for) Investing Activities

In the three months ended December 31, 2021, there was $0.3 million of cash generated by investing activities, compared to cash generated of $0.1 million during the same period in fiscal 2020. In the year ended December 31, 2021, there was $1.2 million of cash used by investing activities, compared to cash generated of $0.3 million during the same period in fiscal 2020. The use of cash in year ending December 31, 2021 mainly relates to purchase of computer hardware and increase in restricted cash.

Cash From (Used for) Financing Activities

In the three months ended December 31, 2021, net cash generated by financing activities was $0.6 million. The cash generated relates to the issue of common shares to three former directors of the Company.

For the year ending December 31, 2021, net cash generated from financing activities was $10.9 million compared to cash used of $7.5 million during the year ended December 31, 2020. Cash generated for the year ending December 31, 2021 relates to the private placement of common shares partially offset by interest paid on loans and borrowings. The use of cash in the year ended December 31, 2020 relates to payment of dividends on the Company's previously outstanding preferred shares, the redemption of preferred shares offset by issuance of debentures.

MANAGEMENT OF CAPITAL

The Company’s objective in managing capital is to ensure sufficient liquidity to pursue its strategy of 100% customer success, fund R&D, 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 Debentures and Series A Warrant (classified as liability), Subordinated Voting Shares and Standby Warrant (classified as liability in 2021 vs equity in 2020). The Company’s primary uses of capital are financing its operations including restructuring, increases in working capital, capital expenditures, and acquisitions. The Company currently funds these requirements from cash flows from operations and cash raised through past share and debt issuances.

TRADE ACCOUNTS AND OTHER RECEIVABLES

The Company’s DSO in Trade Accounts Receivable is at 25 days as of December 31, 2021, compared to 28 days as of December 31, 2020. 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, 2021, was $0.2 million, compared to $0.9 million as at December 31, 2020. 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 increased by $3.5 million to $11.1 million at December 31, 2021, as compared to $7.6 million as at December 31, 2020.

Deferred revenue decreased by $1.4 million to $4.2 million at December 31, 2021, as compared to $5.6 million at December 31, 2020.

OTHER PROVISIONS

Other provisions at December 31, 2021, include estimated costs to settle contractual disputes. During the year ended December 31, 2021, the Company revised its previously recorded provision related to an intellectual property claim. Management’s provision reflects changes in the status of the claims, expected outcomes and costs to settle, if any. Estimates are preliminary and subject to adjustment based on changes in facts and circumstances, such changes could be material.

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 significantly exceed the Company’s estimate of the provision at December 31, 2021.

COMMITMENTS AND CONTRACTUAL OBLIGATIONS

Commitments

At December 31, 2021, the Company had various lease payments and purchase commitments in normal course of operations. Below is a summary of future minimum payments for contractual obligations that are not recognized as liabilities at December 31, 2021:

	$ (thousands)
Less than 1 year	2,110
Between 1 and 5 years	1,661
More than 5 years	–
	3,771

OUTSTANDING SHARE DATA

The number of common shares outstanding as at March 8, 2022, is 6,177,581 (December 31, 2020 - 5,316,057). In addition, at December 31, 2021, there were 357,087 (December 31, 2020 – 270,239) stock options outstanding with exercise prices ranging from CAD $32.45 to CAD $186.00 per share. The Series A Warrant and the Standby Warrant are outstanding and equivalent to 925,712 and 50,000 common shares respectively as at December 31, 2021 (as at December 31, 2020 – 925,712 and 50,000, respectively).

SHARE CAPITAL

(a) Private Placement:

On April 9, 2021, the Company closed a private placement offering of its common shares. A total of 834,500 common shares were issued by the Company at a price of CAD $30.00 per share for aggregate gross proceeds of $19.9 million (CAD $25.0 million). All common shares issued under the offering are subject to a hold period of four months and one day from the date of issuance of the common shares.

Transaction costs directly associated with this issuance of common shares of $0.8 million (CAD $1.0 million) have been recognized as a reduction of the proceeds.

In December 2021, In December 2021, another 27,024 common shares were issued by the Company for aggregate proceeds of $0.6 million (CDN$0.7 million) to three former directors of the Company.

(b) Series A Warrant and Standby Warrant:

As part of a financing transaction, the Company issued a Series A Warrant on January 26, 2017 to ESW Holdings, Inc. (the “Investor”) that entitles the Investor to subscribe for 925,712 common shares at $34.00 per share. The Series A Warrant is classified as a liability and measured at its estimated fair value. The increase in fair value of the Series A Warrant liability of $0.7 million during the three months ended December 31, 2021 (three months ended December 31, 2020 – decrease of $4.6 million) is recorded in finance costs (recovery) in the consolidated statements of comprehensive income (loss). The decrease in fair value of the warrant liability of $15.2 million during the year ended December 31, 2021 (year ended December 31, 2020 – decrease of $6.0 million) is recorded in finance costs (recovery) in the consolidated statements of comprehensive income (loss).

In addition, upon closing of a rights offering of its common shares on September 6, 2017, the Company issued a warrant to the Investor that entitles the Investor to subscribe for 50,000 common shares at $25.00 per share (the “Standby Warrant”).

On March 11, 2021, under the Separation Agreement with ESW, in connection with amendments to certain provisions of the Standby Warrant, this instrument is now classified as a financial liability and measured at its estimated fair value. The increase in fair value of the Standby Warrant liability of $0.1 million during the three months ended December 31, 2021 (three months ended December 31, 2020 – $nil) is recorded in finance costs (recovery) in the consolidated statements of comprehensive income (loss). The decrease in fair value of the warrant liability of $0.8 million during the year ended December 31, 2021 (year ended December 31, 2020 – $nil) is recorded in finance costs (recovery) in the consolidated statements of comprehensive income (loss).

Under the Separation Agreement, any unexercised Series A Warrant and the Standby Warrant expires on March 1, 2023. No Series A or Standby Warrant was exercised as at December 31, 2021 (year ended December 31, 2020 – none).

(c) Share-based Compensation

The share-based compensation relating to the Company's stock options, deferred share unit plan and share unit plan during the three and twelve months ended December 31, 2021 was an expense of $1.9 million and $3.8 million (three and twelve months ended December 31, 2020 – recovery of $0.4 million and expense of $0.2 million). During the year ended December 31, 2021, there were 100,000 options granted (year ended December 31, 2020 – 250,000). During the year ended December 31, 2021, there were 63,175 deferred share units granted (year ended December 31, 2020 – 28,198).

DEBENTURES

On July 20, 2020, the Company closed a $90.0 million financing (the "Debenture Financing") of 9.75% secured PIK toggle Debentures due 2025. The Debentures are guaranteed by certain of the Company's subsidiaries and constitute senior secured obligations of the Company.

As at December 31, 2021, $90.0 million (December 31, 2020 - $90.0 million) is outstanding and interest computed on a 365-day (or 366-day, as applicable) basis, payable semi-annually on July 20 and January 20 of each year commencing on January 20, 2021. As of December 31, 2021, the Company incurred $3.9 million of transaction costs and has recorded these costs as deferred financing costs that are being amortized over the expected five-year term of the Debentures. During the three and twelve months ended December 31, 2021, $0.2 million and $0.7 million, respectively, of deferred financing fees was amortized, (three and twelve months ended December 31, 2020 - $0.1 million and $0.3 million, respectively).

For the three and twelve months ended December 31, 2021, interest expense of $2.2 million and $8.8 million, respectively, (for three and twelve months ended December 31, 2020 - $2.3 million and $4.0 million, respectively) in connection with Debenture Financing has been recognized in the consolidated statements of comprehensive income (loss).

RELATED PARTY TRANSACTIONS

Key Management Personnel

The aggregate remuneration of key management personnel during the years ended December 31, 2021 and 2020 is as follows:

$US Thousands	2021	2020
Salaries and employee benefits	$ 4,300	$ 3,574
Share-based compensation (a)	3,720	994
	$ 8,020	$ 4,568

(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 and DevFactory (collectively the "Service Agreements") who provide cross-functional and specialized technical services. Each of Crossover and DevFactory are affiliates of ESW.

On March 11, 2021, as a part of the Separation Agreement, ESW also agreed to terminate all of its related party agreements with Optiva.

Crossover provided Optiva with access to skilled temporary employees. These resources provide a variety of services, including HR, operations, finance, and support functions, at any global location for pricing agreed to in the Crossover service agreement. During the three and twelve months ended December 31, 2021, the Company has incurred $nil and $0.6 million of costs associated with services provided by Crossover (three and twelve months ended December 31, 2020 – $1.0 million and $12.6 million, respectively). 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). The Crossover agreement was terminated as part of the Separation Agreement with ESW.

DevFactory provided certain technology services to Optiva as per agreed statements of work. Effective December 31, 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. 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 the three and twelve months ended December 31, 2021, the Company has incurred $nil and $nil, respectively, of costs associated with services provided by DevFactory (three and twelve months ended December 31, 2020 – $nil and $16.4 million, respectively). 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).

In connection with the termination of the DevFactory Agreements, the Company delivered to DevFactory a promissory note in the principal amount of $2.0 million that was accepted as full and complete satisfaction of the $4.1 million owing by the Company to DevFactory under the DevFactory Agreements. The maturity date of the promissory note is twelve months from date of the agreement. The forgiveness of $2.1 million was credited to research and development expenses in the consolidated statements of comprehensive income (loss) in the year ended December 31, 2021.

Amounts owing to Crossover and DevFactory as of December 31, 2021 aggregated to $2.0 million (December 31, 2020 - $5.0 million) and are included in both accrued liabilities and trade payables in the consolidated statement of financial position at the respective period ends.

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:

	2021		2020	
$US Thousands	Carrying amount	Fair value	Carrying amount	Fair value
Series A Warrant classified as liability (Level 2)	1,495	1,495	16,663	16,663
Standby Warrant classified as liability (Level 2)	173	173	–	–

There were no transfers of financial assets between levels during the fiscal periods ended December 31, 2021 and 2020.

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. The carrying values of Debentures approximate their fair values because the interest rates approximate the market interest rates for similar debts.

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 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 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, 2021 and 2020 was as follows:

	2021	2020
Europe, Middle East and Africa	34%	31%
North America, Latin America and Caribbean	60%	33%
Asia and Pacific Rim	6%	36%
	100%	100%

For the year ended December 31, 2021, the Company had no customers (year ended December 31, 2020 – none) 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 $4.4 million as at December 31, 2021 (2020 - $5.6 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, 2021, approximately 25.3% of gross trade receivables, or $1.8 million was outstanding for more than 120 days (2020 – 27.5% or $2.2 million).

The activity of the allowance for doubtful accounts for the years ended December 31, 2021 and December 31, 2020 was as follows.

$US Thousands	2021	2020
Allowance for doubtful accounts, beginning of year	$ 893	$ 1,584
Bad debt expense (recovery)	(318)	889
Write-off of bad debts	(387)	(1,580)
	$ 188	$ 893

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, 2021 and December 31, 2020 was as follows:

	2021	2020
Europe, Middle East and Africa	66%	68%
North America, Latin America and Caribbean	11%	18%
Asia and Pacific Rim	23%	14%
	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, 2021 will mature as follows:

US$ Thousands	Less than 1 year	1 to 2 years	2 years and thereafter
Trade payables	$ 2,084	$ –	$ –
Accrued liabilities	12,905	–	–
Provisions	4,200	–	–
Other liabilities	–	–	2,096
Debentures	–	–	90,000
	$ 19,189	$ –	$ 92,096

The Company also has contractual obligations in the form of operating leases and certain purchase commitments.

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 gain of $0.3 million during the year months ended December 31, 2021 (year ended December 31, 2020 – loss of $2.0 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 (2020 - $1.0 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 year ended December 31, 2021 would not be material.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING (“ICFR”)

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 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 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

Effective March 31, 2021, the Company has brought the bookkeeping and financial analysis responsibilities of its finance function back in-house. Previously, the Company had outsourced these activities to an independent third-party service organization. As a result, the Company has implemented changes to its internal controls over financial reporting in the year. The key areas impacted include the processes that support the Company’s general ledger, back-office transaction processing, preparation of monthly internal financial statements and processes supporting budgetary control activities.

Effective January 1, 2022, the Company has implemented a new ERP system. As a result, the Company expects to implement significant changes to its internal controls over financial reporting in 2022.

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 rateably 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. 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.

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 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 with several pending patent applications and over 40 patents. 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.