



Management's Discussion and Analysis
For three months ended October 31, 2021

Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") is prepared as of December 7, 2021 and is intended to assist in understanding the results of operations and the financial condition of Patriot One Technologies Inc. (the "Company"). Throughout the MD&A, reference to the Company is on a consolidated basis. This MD&A should be read in conjunction with the unaudited condensed consolidated interim financial statements for the period ended October 31, 2021 which are prepared in accordance with International Financial Reporting Standards ("IFRS"). The policies applied in the unaudited condensed consolidated interim financial statements are based on IFRS policies effective as of December 7, 2021, the date the Board of Directors approved the condensed consolidated interim financial statements. All amounts in this MD&A are expressed in Canadian Dollars unless otherwise indicated. The business of the Company is subject to a number of risks and uncertainties. Please refer to the Company's annual information form (the "AIF") for the year ended July 31, 2021, available under the Company's profile at www.sedar.com, for more information about these risks and uncertainties.

Forward Looking Information

This MD&A contains forward-looking information that involves material assumptions and known and unknown risks and uncertainties, of which are beyond the Company's control. Such assumptions, risks and uncertainties include, without limitation, those associated with loss of markets, expected sales, future revenue recognition, currency fluctuations, the effect of global and regional economic conditions, industry conditions, changes in laws and regulations and how they are interpreted and enforced, the lack of qualified personnel or management, fluctuations in foreign exchange or interest rates, demand for the Company's products, and availability of funding. The Company's performance could differ materially from that expressed in, or implied by, this forward-looking information and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking information will transpire or occur, or if they do so, what benefits the Company will derive therefrom. The forward-looking information is made as of the date of this MD&A, and the Company does not undertake any obligation to update publicly or to revise any of the included forward-looking information, whether as a result of new information, future events or otherwise, except as may be required by applicable securities laws. Actual events or results could differ materially from the Company's expectations and projections.

Corporate Structure and Profile

The Company's common shares are listed for trading on the TSX under the trading symbol "PAT", "PTOTF" on the OTCQX in the United States, and "OPL" on the Frankfurt Stock Exchange in Germany. The Company is a reporting issuer in British Columbia, Alberta, Saskatchewan, Manitoba, and Ontario. The principal regulator of the Company is the Ontario Securities Commission.

As at October 31, 2021, the Company had five wholly-owned subsidiaries, Patriot One Detection Ltd., a limited company incorporated under the laws of British Columbia, Canada, Patriot One (UK) Limited, a limited company incorporated under the laws of England and Wales, United Kingdom, Patriot One Detection Technologies Inc., a limited company incorporated under the laws of the state of Colorado, United States of America, EhEye Inc. ("Eh-Eye"), a limited company incorporated under the laws of the province of New Brunswick, Canada and Xtract Technologies Inc. ("Xtract"), a limited company incorporated under the laws of British Columbia, Canada.

The Company, through Patriot One Detection Technologies Inc., has a 49% interest in Sotech Secure, LLC ("Sotech"), an incorporated entity formed under the laws of the State of Delaware.

Business Highlights for the fiscal quarter ended October 31, 2021

The following is a summary of the key business highlights for the Company for three month period ended October 31, 2021:

- Finalized an agreement with Raytheon Intelligence and Space (“RIS”) wherein RIS will provide \$2 million USD in non-dilutive cash funding under the Government of Canada’s Industrial and Technological Benefits (“ITB”) program for continued development of our threat detection solutions;
- Continued to build the Company’s sales funnel and backlog of customer commitments with a total backlog of over \$3 million as of October 31, 2021 that management expects will result in revenue that will be recognized in future periods;
- Commercially released the next phase of its threat detection multi-sensor gateway with technology enhancements that make it increasingly accurate, flexible, deployable and practical for sports and entertainment venues;
- Introduced Facility Insights, a new solution built on its artificial intelligence-powered Platform, which will give security venue operators a new way to make data-driven, intelligent decisions about overall security requirements and vulnerabilities; and
- Completed a number of third-party evaluations and certifications of our Platform including certification by Semper Vigilo Security (“SVS”), a third party organization founded by former U.S. Federal Marshals, for four national standards in multiple industries including large stadiums and venues.

Business of the Company

The principal business of the Company is to commercialize an integrated, layered, multi-sensor platform of technologies, referred to as the “Platform” (previously referred to as the “PATSCAN” or “PATSCAN platform”), with the aim of enhancing public health and safety. The Company’s mission is to be one of the foremost global proponents and providers of commercial threat countermeasures for community safety. The Company has two distinct operating segments being its Platform and Xtract business units. The Platform business unit develops and commercializes a platform of multi-sensor threat detection technologies, while Xtract develops and commercializes advanced artificial intelligence (“AI”) solutions for customers.

COVID-19 Impact to Operations

The COVID-19 global pandemic, with its discrete economic, political and social challenges, necessitated the Company to take a comprehensive and holistic assessment of the impact such a profoundly impactful development has made on its planned strategic initiatives. The Company, not alone in its challenge, experienced delays in its ability to fully satiate reseller, customer, and other end-user performance obligations according to original planned timeframes. In the past few quarters, the United States lifted many of its lockdown restrictions and began returning to a degree of normalcy. This has helped generate strong interest for our Platform solutions and allowed us to commence many delayed pilots and deployments. The Company is hopeful that the conditions related to the pandemic will continue to improve which will continue to drive sales momentum.

In parallel and in concert with the challenges referenced above, the Company seized on the pronounced opportunities the COVID-19 pandemic provided in relation to technology-based solutions that empower private organizations, public entities, and society at large in returning to a routine that permits and encourages free movement and social gathering in a safe manner. This opportunity is reflected in a series of initiatives, which notably included:

- Obtaining \$3.4 million of co-investment funding from the Canadian Digital Technology Supercluster (“DTS”), for the advanced development and deployment of the PATSCAN VRS health and safety detection modules; and
- Partnering with EcoMine Technologies Inc. in advancing an innovative, low-cost, on-the-spot pathogen screening technology, and advancing the partnership into an investment in Gemina Labs.

Although the recent steps towards reopening are encouraging, the Company continues to experience uncertainty in near-term planning as it relates to sales, supply chain management and implementation activities as a result of the ongoing pandemic.

Outlook and Overall Performance

Platform Operating Segment

During the quarter, substantial progress has been made in the commercialization of the Company's Platform. In recent months, the Company has secured multiple small-medium sized contracts and is currently in negotiation for a number of larger contracts. Some of these smaller contracts are for single locations with the potential to grow to dozens of locations. Revenue related to Platform subscription arrangements or upfront sales amounted to \$189,000 during the quarter. The backlog of sales commitments related to the Platform is now over \$1 million and continues to grow. As the Company continues to sell its platform using a subscription model, management expects monthly recurring revenue and sales backlog to increase, providing predictable long term cash flow.

This quarter, the Company completed multiple third-party evaluations and certifications on behalf of the Pro-Sports leagues. These evaluations were conducted as part of multi-phased programs to validate the solution, develop league best practices, and prepare the leagues and teams for deployment. The

Company has also deployed the Platform at multiple events for assorted National Football League, National Hockey League, National Basketball Association and live entertainment organizations. We expect that these successful league events and phased activities, will be a key factor in the positive decision process by multiple sports and commercial organizations for the delivery of their security screening solution.

The Company continued to invest in the research and development of its suite of technologies that form the Platform and advance the functionality of its product offerings in response to the growing market opportunities and feedback from early-adopter customers, resellers and partnership organizations. The Company continues to accelerate its product development roadmaps in response to market opportunities and customer needs, focusing on the industry-specific utility of the various solutions and capabilities under development.

Management is encouraged by the ongoing level of interest in its Platform solution and sees the recent growth in customer commitments and sales pipeline as indicative of the hearty market opportunity as businesses, facilities and public spaces return to activities, events, and gatherings that had temporarily ceased, or at least dramatically reduced as a result of the COVID-19 pandemic.

The Company has refined the focus of its sales, marketing and business development activities to address businesses, facilities and other venues that are focused on welcoming guests, patrons, the public and employees in a safe manner, in accordance with necessary security, social distancing, capacity limits and other such screening guidelines as appropriate. Such interest is increasing in the United States from casinos, sporting and entertainment venues, and certain manufacturing and logistics organizations. During the past few quarters, many mandated lockdown measures were lifted, allowing the Company to commence in-person activities, including site surveys, trials and certain installation and deployment activities. In anticipation of increased sales volume, the Company has hired additional sales and installation staff.

Xtract Operating Segment

In September 2019, the Company acquired AI company Xtract, a highly talented and award-winning team of AI experts, as part of an ongoing strategic initiative to bring together leading-edge technologies and services to enhance the Company's Platform. Xtract's development and deployment of AI solutions are built upon an understanding of deep neural networks. Xtract has developed novel neural network architecture and fusion techniques that are more robust, efficient, and require lower memory than comparable standards. Xtract's video solutions use proprietary algorithms to apply human understanding to video and its analysis and have been successfully deployed for military, health and emergency services and environmental applications. Xtract's text solutions automate the digitization, parsing and understanding of large collections of text data, allowing users to address complex real-world challenges.

The Xtract team continues to dually focus on supporting the internal Platform development efforts and the associated machine learning complexities of the various solutions under development in close coordination with the product development and data science teams, while also developing the AI based solutions contracted through public sector agencies and entities along with a growing number of private sector parties.

In addition to \$520,000 of revenue recognized during the quarter related to professional service contracts, Xtract maintains a backlog of signed or awarded contracts of over \$2 million. This innovative AI team continues to build a robust pipeline of opportunities and an ever-expanding set of capabilities,

which continue to inform and advance the strategic aims of the Company. Critical strategic decisions for Xtract are made in close consultation and coordination with the Company's leadership to ensure maximum synergies are achieved.

Investing in Research and Development

During the quarter, the Company continued to invest in research and development activities focused around three specific project areas to advance the functionality of its product offerings in response to the growing market opportunities and feedback from early-adopter customers.

During the quarter, the Company entered into an agreement with RIS for the provision of US\$2 million in non-dilutive cash funding as a part of the Canada's ITB program for the further development of these product offerings.

Multi-Sensor Gateway

The first multi-sensor gateway ("MSG" or the "Gateway") was initially released to the market in August 2020, followed by an enhanced version of the Gateway in September 2021 which incorporated technology and functionality enhancements that made the patron screening product increasingly accurate, flexible and practical for sports and entertainment venues.

The MSG product is a crucial product within the Company's technology portfolio due to the significant market demand for digital threat detection screening solutions. Accordingly, the Company intends to continue to make certain development modifications and enhancements to the MSG product throughout the remainder of fiscal 2022, to further align the solution to meet the demands of its current and future customers and to maintain its status a market leader for patron screening solutions. These enhancements are expected to continue to improve the capabilities of the gateway, thereby expanding the addressable market for the Gateway beyond the current target markets.

Video Recognition Software Platform

The Company released its first commercial version of its video recognition software ("VRS") to the market in fiscal 2020. During the quarter, the Company continued to invest heavily in the VRS solution to integrate the artificial intelligence (AI)-powered Platform with its MSG product. This work was substantially completed in October 2021, resulting in new software capabilities and giving security venue operators a new way to make data-driven, intelligent decisions about overall security requirements and vulnerabilities and thereby enhancing the overall patron experience.

With the successful integration of the VRS platform with our MSG product, the product is well positioned to address our current target markets. The Company intends to make certain modifications and enhancements to the VRS Platform throughout the remainder of fiscal 2022 to further align the solution to meet the demands of our customers.

Video Recognition Software Modules

During the quarter, the Company continued to invest research and development into the VRS platform to support a number of specific modules including the VRS weapons detection, VRS health and safety and VRS temperature detection software modules. These modules were substantially completed as of October 31, 2021.

During the quarter, the Company also developed and released a mobile app that extends the functionality of its platform, providing a broad set of mobile options for security operations teams to design security processes to match their business model. This module is also substantially complete. The Company does not anticipate investing additional research and development efforts into these modules.

Technology Update

Over the past year, the Company has made great strides with its AI-powered security offering and recently announced the launch of several new and innovative product enhancements. The Company has also built its own threat detection and health security platform that enables customers to enhance their security infrastructure. The Platform is now able to take in information from multiple sources including camera sensors, environmental sensors and its own proprietary sensors to detect and provide important insights about potential threats. The Platform's AI algorithms have the ability to recognize certain threats and provide actionable intelligence to users that enhances the secure operation of the event or the property.

During the first quarter of the 2022 fiscal year, we delivered a new version of our Gateway product with additional sensing capabilities and AI features that further improve weapons-detection accuracy. The additions enabled improved detection for small weapons including knives, lower false alarm rates due to heavier clutter in pockets, and directional alerting. The new release also includes customer requested features to further optimize security personnel requirements, activities, and processes. Further enhancements included the addition of an optional kiosk with integrated camera and streamlined screening. These additional capabilities will allow us to better address high traffic areas and in particular, large event venues such as stadiums and arenas. During the quarter, the Gateway was successfully used for several large scale deployments demonstrating the Gateway's ability to significantly improve throughput without sacrificing security measures.

During the quarter, the Company continued to invest heavily in the VRS software solution to integrate the artificial intelligence (AI)-powered Platform with its MSG product. By integrating advanced analytics, the Company continues to refine the efficacy of the solution, while also building out an AI platform for a broader set of market applications. The development of the Company's multi-input, machine-learning ("ML") platform correlates smart AI insights and provides the end user with actionable intelligence. The Company owns a robust AI platform solution that has proven itself in multiple test applications in various vertical markets. The Company recently completed trials using its advanced analytics to do mask detection, thermal screening and crowd disturbances. The Company is currently analyzing the outputs of these projects to determine new capabilities and market opportunities.

This leading-edge AI powered security platform is unique in the marketplace and has the flexibility to address varying market needs, while also supporting the creation of customizable solutions. All of this provides interesting considerations for both the near-term and long-term strategic opportunities for the Company. The Company continually assesses ways to expand its capabilities and addressable market and has a high-powered engineering team who can quickly deliver on these opportunities.

Market Opportunity

In the short term, the Company is focusing on markets where its solution operates effectively in the customer's physical environment, where the customer has a specific stated need that fits the Company's solution, and where sales cycles are reasonable. This strategy has been adopted to deliver near-term revenue. The Company has identified the following key market segments that are well suited for the Company's threat detection solutions:

- Stadiums, arenas, theatres and outdoor event spaces
- Casinos
- Commercial and retail buildings

The Company has been using marketing campaigns targeted at these industry groups which have led to promising opportunities and helped secure early commitments. During the quarter, the Company made meaningful progress with many customers and was able to build up its backlog. Some of the Company's initial sales are smaller commitments from large enterprise customers which will potentially lead to much larger installations. These customers prefer to roll out the Platform to a few entrances to ensure they are comfortable with the solution and their related security protocols before using it throughout their venues. The Company is focused on the success of these initial deployments which we believe will lead to much larger commitments.

Although the Company is focusing on these target markets in the short term, it will expand into additional markets with future releases of the product. The Company continues to make significant enhancements to its products and improve their capabilities and address customer needs. As our products continue to develop, we will expand our focus to other market verticals.

The global physical security market is expected to reach USD \$292 billion by 2025. Governments across different countries and regions are taking up smart city initiatives to enhance their infrastructure and are deploying improved security systems. Additionally, modernizing existing infrastructure with robust security measures and strengthening the security of government agencies have been some of the top priorities for governments across developed countries. Organizations are increasingly concerned about employee and patron safety and are hence setting up systems to prevent unauthorized access and gun violence, further driving the demand for physical security solutions.

The video analytics market size was valued at \$4.1 billion in 2019 and is projected to reach \$20.8 billion by 2027, growing at a CAGR of 22.5% from 2020 to 2027. Used to help make surveillance operations more efficient, video analytics software comes in a variety of different formats and can be used to detect motion, read license plates, count people, and assist with other real-world challenges. In the case of physical security and video monitoring, video analytics software is primarily used to detect crime, weapons detection, and crowd disturbances. The adoption of cloud-based video analytics software will rise, allowing security companies to capitalize on all the benefits of video analytics completely remotely. Companies that adopt this form of software are opening their doors to a cost-effective solution that will benefit from constant updates and improvements via the cloud.

The safety and security market remains a robust market with growing threats from both man-made tragedies along with natural, biological threats underpinning higher rates of growth in this market worldwide. The public health safety market is currently undergoing monumental changes on account of the COVID-19 pandemic, presenting immense opportunities to the Company and many others to support businesses, governments, and private citizens in resuming less restrictive routines. The

Company will continue to focus on opportunities where it can provide technology-based solutions to assist in the resumption of less restrictive routines.

The Company is currently expanding its reseller base, covering larger geographical territories and their respective end-user clientele. In furtherance of these initiatives, the Company is also commencing, in parallel, a direct to end-user sales model which will more precisely address our target industry groups. This will give more visibility into opportunities allowing us to forecast more accurately, control the sales process, remain competitive, increase sales margins, maintain the relationship with the end user and learn directly from these early customers for further enhancements to the platform. The effect of this approach has already been seen with an increase in the sales pipeline and well qualified opportunities where we have intimate knowledge of the customer and their processes. In parallel, we are building a program to support the recruitment of strategic alliance partners that offer complementary technologies where we can develop integrations and connect our products to offer more complete solutions together. This will provide us with access to a larger install base and promote direct sales.

Throughout the quarter, the Company was engaged in selected opportunities for collaboration, innovation, and business development relationships to accelerate the growth and expand the presence globally. The Company is actively pursuing opportunities to leverage new technologies, execute on new business opportunities and grow our client base while providing business value to our clients.

The Company has recently instituted competitive sales programs and pricing schemes in close coordination with early-adopter reseller and end-user customers to ensure that our solutions directly address customer needs.

Quarterly Financial Performance

Selected Financial Data - Summary of Quarterly Results

	Three months ended October 31,		
	2021	2020	% Change
Revenue	\$ 709,460	\$ 376,152	89%
Expenses			
Sales and marketing	320,530	452,379	(29%)
Research and development	(445,846)	218,824	(304%)
General and administration	350,656	632,858	(45%)
Personnel costs	1,004,302	1,163,212	(14%)
Professional fees	194,664	377,083	(48%)
Hardware	24,197	-	100%
Amortization	201,475	228,392	(12%)
Depreciation	194,144	244,448	(21%)
Share-based compensation	57,682	394,350	(85%)
	1,901,804	3,711,546	(49%)
Loss from operations	1,192,344	3,335,394	(64%)
Unrealized loss (gain) on investments	(102,083)	25,800	(496%)
Interest income	(2,182)	(35,726)	(94%)
Loss and comprehensive loss	\$ 1,088,079	\$ 3,325,468	(67%)
Weighted average number of shares	150,860,622	150,728,622	
Basic and diluted loss per share	\$ 0.01	\$ 0.02	(50%)

Overall Quarterly Results

Overall loss and comprehensive loss for three month period ended October 31, 2021 was \$1.1 million compared with \$3.3 million for the same period ended October 31, 2020, representing a decrease of \$2.2 million or 67%. The decrease in loss for the period ended October 31, 2021 was mainly attributable to the non-dilutive funding from Raytheon of approximately \$1.8 million during the period. In addition, the increase in revenue for the three month period ended October 31, 2021 also contributed to the reduced net loss.

Revenue

The Company earned revenue of \$709,460 during the three month period ended October 31, 2021, compared with \$376,152 for the same period ended October 31, 2020, representing an increase of \$333,308 or 89%.

The Company recognized \$189,252 in revenue related to the sale of the Platform during the three month period ended October 31, 2021 as compared to \$nil during the same period ended October 31, 2020. The Company believe that revenue from this operating segment will grow further in the upcoming quarters due to the increase in customer site surveys, trials, market activity and certain installation and deployment activities.

The Company recognized revenue of \$520,208 in revenue related to work completed on contracts from the Xtract operating segment for the three month period ended October 31, 2021, as compared to \$376,152 for the same period ended October 31, 2020. The increase was mainly attributable to an increased number of contracts being worked on. With the recent contracts Xtract has been awarded, we expect Xtract revenue to be significantly larger in this Fiscal year.

The Company's backlog of contracted commitments is broken down as follows:

	Less than one year	Greater than one year	As of October 31,		% Change
			2021	2020	
Platform revenue	\$ 525,558	\$ 493,520	\$ 1,019,078	\$ 564,457	81%
Xtract revenue	1,420,282	614,400	2,034,682	346,379	487%
Total backlog	\$ 1,945,840	\$ 1,107,920	\$ 3,053,760	\$ 910,836	235%

The Company recorded Platform backlog of \$1,019,078 as of October 31, 2021, as compared with \$564,457 as of October 31, 2020, representing an increase of 81% or \$454,621. The increase is mainly attributable to several new contracts the Company has secured. As the Company continues to sell its platform using a subscription model, management expects continued increase to sales backlog providing predictable long term cash flow.

The Company recorded Xtract backlog of \$2,034,682 as of October 31, 2021, as compared with \$346,379 as of October 31, 2020, representing an increase of 487% or \$1,688,303. The increase is mainly attributable to recently awarded contracts Xtract has secured through its ongoing business development efforts.

Sales and marketing

Sales and marketing costs were \$320,530 for the three month period ended October 31, 2021, as compared with \$452,379 for the same period ended October 31, 2020, representing a decrease of 29% or \$131,849. The reduction in these costs during the period was primarily attributable to the Company's continued effort to refocus and refine its marketing strategy. We expect sales and marketing will remain steady or increase slightly as sales activity continues to grow in the upcoming periods.

Research and development

Research and development (“R&D”) costs were (\$445,846) for the three month period ended October 31, 2021 as compared with \$218,824 for the same period ended October 31, 2020, representing a decrease of 304% or \$664,670. The decrease in R&D expenses was primarily attributable to the non-dilutive funding received from RIS during the period ended October 31, 2021.

R&D costs are presented net of related non-dilutive funding provided to reimburse research and development costs. This includes COVID-19 relief funding from the Canadian government and non-dilutive funding from Raytheon, as well as Supercluster funding for the development of COVID-19 response solutions.

The following table details our gross R&D costs and offsetting funding:

	Three months ended Oct 31,		
	2021	2020	% Change
R&D costs before grants	\$ 1,920,836	\$ 1,671,863	15%
Raytheon ITB program funding	(1,767,826)	(345,800)	411%
Supercluster funding	(410,530)	(320,000)	28%
R&D allocation of Covid-19 relief funding	(188,326)	(787,239)	(76%)
	(2,366,682)	(1,453,039)	63%
R&D costs net of grants	(445,846)	\$ 218,824	(304%)

R&D expenses before grants increased by 15% or \$248,973 during the three month period ending October 31, 2021 compared with the same period ended October 31, 2020. The increase in R&D costs before grants during the period was attributable to the widening the scope of development streams to focus on a larger number of sensor technology solutions within the Platform technology portfolio.

COVID-19 relief, Supercluster and ITB funding of \$2,366,682 was recorded as an offset to R&D costs during the three month period ended October 31, 2021 as compared with \$1,453,039 for the period ended October 31, 2020. The Company has accrued a receivable of \$1,767,826 related to Raytheon funding obtained during the quarter to offset expenses between December 1, 2020 through October 31, 2021 in accordance with the terms of the agreement. The COVID-19 relief and Supercluster funding have officially concluded as of October 31, 2021. The Company will continue to pursue non-dilutive funding opportunities in the future.

General and administration

General and administrative costs were \$350,656 for the three month period ended October 31, 2021, as compared with \$632,858 for the same period ended October 31, 2020, representing a decrease of 45% or \$282,202. The reduction in these costs during the period was primarily attributable to the COVID-19 related rent subsidies provided by the Canadian government during the first quarter of 2021 (2020 - \$nil) and the cessation of other discretionary expenditures. The Company is continually looking for opportunities to reduce non-strategic expenses.

Personnel costs

Personnel costs, excluding those costs associated with research and development activities, were \$1,004,302 for the three month period ended October 31, 2021 as compared with \$1,163,212 for the same period ended October 31, 2020, representing the decrease of 14% or \$158,910.

Personnel costs are presented net of COVID-19 relief funding from the Canadian government. When personnel costs are normalized by removing this offsetting funding, they decreased by 38% or \$663,965 for the three month period ended October 31, 2021 as compared with the same period ended October 31, 2020. This decrease was primarily due to the termination of a number of consultants and contractors as part of the Company's ongoing efforts to reduce non-strategic expenditures.

COVID-19 relief funding of \$86,355 was recorded as an offset to personnel costs during the three month period ended October 31, 2021 as compared with \$591,410 for the same period ended October 31, 2020. The COVID-19 relief programs have officially concluded as of October 31, 2021.

Professional fees

Professional fees were \$194,664 for the three month period ended October 31, 2021 as compared with \$377,083 for the same period ended October 31, 2020, representing a decrease of 48% or \$182,419. The decrease was primarily due to the Company's ongoing efforts to reduce non-strategic expenditures.

Hardware

Hardware expenses were \$24,197 for the three month period ended October 31, 2021 as compared with \$nil for the same period ended October 31, 2020, representing an increase of 100% or \$24,197. The increase was attributable a Platform sale during the period ended October 31, 2021.

Amortization

Amortization costs were \$201,475 for the three month period ended October 31, 2021 as compared with \$228,392 for the same period ended October 31, 2020, representing a decrease of 12% or \$26,917. The decrease in amortization expense relates to the amortization of specific government contracts obtained in the Xtract acquisition for the quarter ended October 31, 2020.

Depreciation

Depreciation expense was \$194,144 for the three month period ended October 31, 2021, as compared with \$244,448 for the same period ended October 31, 2020, representing a decrease of 21% or \$50,304. The decrease is attributable to certain research and development assets and office leases recorded under IFRS 16 no longer in use.

Share-based compensation

Share-based compensation was \$57,682 for the three month period ended October 31, 2021, as compared with \$394,350 for the same period ended October 31, 2020, representing a decrease of 85% or \$336,668. The decrease was attributable to a decrease in the number of stock options outstanding during the three month period ended October 31, 2021.

Unrealized gain/loss on investments

Unrealized gain on investment was \$102,083 for the three month period ended October 31, 2021, as compared with the unrealized loss of \$25,800 for the same period ended October 31, 2020, representing an increase of 496% or \$127,968. The increase is mainly attributable to the change in fair value of the Company's investment in Gemina Labs during the three month period ended October 31, 2021.

Interest income

Interest income was \$2,182 for the three month period ended October 31, 2021 as compared with \$35,726 for the same period ended October 31, 2020, representing a decrease of 94% or \$ 33,544. The decrease was due to a reduction in the Company's cash balance and a decrease in market interest rates.

Financial Data - Summary of Quarterly Results (in \$000s)

	Quarter Ended							
	Oct 31, 2021	Jul 31, 2021	Apr 30, 2021	Jan 31, 2021	Oct 31, 2020	Jul 31, 2020	Apr 30, 2020	Jan 31, 2020
Revenue	\$ 709	\$ 266	\$ 153	\$ 287	\$ 376	\$ 385	\$ 1,168	\$ 402
Expenses								
Sales and marketing	320	336	284	399	452	571	671	1,168
Research and development	(446)	964	985	589	219	802	1,918	1,595
General and administration	351	357	24	374	633	733	389	376
Personnel costs	1,004	851	1,248	1,100	1,163	2,005	1,162	1,285
Professional fees	195	186	87	211	377	558	585	398
Hardware	24	-	28	-	-	-	194	-
Amortization	201	202	201	202	228	283	282	282
Depreciation	194	244	251	241	245	359	342	293
Share-based compensation	58	208	266	311	394	268	789	670
Loss on inventory write-down	-	-	-	-	-	246	-	-
Loss on retirement of assets	-	-	-	-	-	171	-	-
Loss from operations	1,192	3,082	3,221	3,140	3,335	5,611	5,164	5,665
Proportionate share of loss on investment	-	-	-	-	-	151	191	629
Unrealized loss (gain) on fair value investment	(102)	3,686	149	118	26	1,018	-	-
Other income - Interest	(2)	124	(56)	(57)	(36)	(35)	(136)	(107)
Loss before income taxes	1,088	6,892	3,314	3,201	3,325	6,745	5,219	6,187
Current tax recovery	-	-	(110)	(60)	-	(333)	-	-
Loss and comprehensive loss	\$ 1,088	\$ 6,892	\$ 3,204	\$ 3,141	\$ 3,325	\$ 6,412	\$ 5,219	\$ 6,187
Basic and diluted loss per share	\$ (0.01)	\$ (0.05)	\$ (0.02)	\$ (0.02)	\$ (0.02)	\$ (0.05)	\$ (0.03)	\$ (0.04)
Working capital	\$ 12,129	\$ 12,841	\$ 19,175	\$ 21,745	\$ 24,523	\$ 27,335	\$ 27,182	\$ 31,908
Total assets	\$ 48,087	\$ 49,398	\$ 56,234	\$ 59,708	\$ 63,188	\$ 66,010	\$ 70,734	\$ 75,141
Non-current liabilities	\$ 597	\$ 677	\$ 740	\$ 855	\$ 947	\$ 595	\$ 683	\$ 635

Quarterly Results Trend Analysis

The quarterly expenditure trend across the previous eight fiscal quarters above reflects the evolution from a single product focused strategy in 2018 to the current multi-sensor platform strategy. The Company's primary objective remains the development and commercialization of an integrated platform-based technology solution, using various sensor technologies. The general trend of increased expenditures across the various cost categories up until July 31, 2020 reflects the investments being made throughout the organization to achieve this goal, as well as the organizational capacity to support commercialization at scale. Beginning in the first quarter of fiscal 2021, the Company began cutting non-strategic expenses and focus its spending on activities leading to near-term revenue or setting the

foundation for mid to long-term revenue growth.

The Company has no discontinued operations.

Liquidity and Capital Resources

As at October 31, 2021, the Company had working capital of \$12,129,177 which included cash of \$6,986,938 available to meet current liabilities of \$1,561,952. The Company's accounts payable and accrued liabilities have contractual maturities of less than 30 days and are subject to normal trade terms. The Company has non-current liabilities of \$597,099, related to the long-term portion of the capitalized lease liabilities in accordance with IFRS 16.

Selected Financial Data – Summary of Results for the three month periods ended October 31

	2021	2020	% Change
Cash beginning of period	\$ 9,652,493	\$ 22,407,251	(57%)
Cash used in operating activities	(2,642,408)	(3,089,351)	(14%)
Cash used in investing activities	(38,781)	(386,808)	(90%)
Cash received from financing activities	15,634	-	100%
Change in cash for the period	(2,665,555)	(3,476,159)	(23%)
Cash end of period	\$ 6,986,938	\$ 18,931,092	(63%)

During the three month period ended October 31, 2021, the Company had negative cash flow from operations, investing and financing activities of \$2.7 million, compared with \$3.5 million for the same period ended October 31, 2020.

The cash flow used in operating activities was \$2.6 million for the three month period ended October 31, 2021 as compared with \$3.1 million for the same period ended October 31 2020, representing a change of \$0.4 million or 14%. The decrease in negative cash flow from operating activities can be attributed primarily to a reduction in the loss for the three month period of \$2.2 million. This was partially offset by an increase in the investment of working capital of \$1.2 million and a decrease of \$0.7 million in non-cash operating expenses.

Cash flow used in investing activities was \$0.04 million for the three month period ended October 31, 2021 as compared with \$0.4 million for the same period in 2020 representing a decrease of \$0.3 million or 90%. The decrease in negative cash flow from investing activities can be attributed primarily to reduced fixed asset purchases during the three month period ended October 31, 2021, as well as a leasehold improvement recovery during the three month period ended October 31, 2020.

Cash flow from financing activities was \$0.02 million for the three month period ended October 31, 2021 as compared to \$nil for the same period ended October 31, 2020. Cash received from financing activities for the current period relates to proceeds on issuance of share capital upon exercise of stock options net of lease payments.

Liquidity risk is the risk that the Company will encounter difficulty in satisfying financial obligations as they become due. The Company manages its liquidity risk by forecasting cash flows from operations and

anticipated investing and financing activities. The Company's objective in managing liquidity risk is to safeguard its ability to continue as a going concern and to sustain future development of the business. Our objective is met by retaining adequate cash reserves to provide for the possibility that cash flows from operations will not be sufficient to meet future cash flow requirements. To maintain or adjust our capital structure, we may issue shares, such as through private placements or other possible arrangements. The Board of Directors does not establish a quantitative return on capital criteria for management. The Company is not subject to any externally imposed capital requirements.

Use of Proceeds from Bought Deal Financings

Use of Proceeds Category	Net Proceeds from October 2017, February 2018 and November 2018 Bought Deal Financings	Approximate spending allocation for the period October 25, 2017- October 31, 2021	Proceeds unspent as at October 31, 2021
Product Development	\$29,108,000	\$16,626,000	\$12,482,000
Reserved for Potential Acquisitions of Complementary Technology	\$6,900,000	\$14,000,000	(\$7,100,000)
Sales and Marketing	\$8,786,000	\$9,262,000	(\$476,000)
Production and Operations	\$8,795,000	\$15,228,000	(\$6,433,000)
General and Administration	\$9,770,000	\$12,092,000	(\$2,322,000)
International Business Development	\$6,344,000	\$3,445,000	\$2,899,000
Working Capital	\$7,322,000	N/A	\$7,322,000
Total	\$77,025,000	\$70,653,000	\$6,372,000

In addition to the above noted expenditures, certain expenditures have been capitalized in accordance with the Company's stated accounting policies. This would include items such as the purchase of property and equipment and changes in working capital, such as capitalized prepaid expenses and the procurement of inventory.

The Company's intention to spend the net proceeds of the offering as set forth above was based on the expectations of management at the time of the financing raises. However, there may be circumstances where, for sound business reasons, a reallocation of funds may be necessary. At the current time, there are no significant changes to the business objectives and milestones and the Company believes the current objectives and milestones are achievable with the current spending trajectory.

Financial Instruments and Other Instruments

The Company's only material financial instruments are cash, receivables and its investment in Gemina Laboratories Ltd. ("Gemina Labs").

The Company's risk exposures and the impact on our financial instruments are summarized below:

Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company ensures there is sufficient capital to meet short-term business requirements, after taking into account cash flows from operations and the Company's holdings of cash. The Company believes that these sources are sufficient to cover the likely short-term cash requirements over the next twelve months, but that further funding or net income from operating activities will be required to meet long-term requirements. As at October 31, 2021, the Company had cash of \$6,986,938 to settle current liabilities of \$1,561,952. Most of the Company's financial liabilities have contractual maturities of 30 days or less and are subject to normal trade terms.

Credit risk

Credit risk is the risk of an unexpected loss if a customer or third party to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its cash and receivables. The Company limits exposure to credit risk by maintaining its cash with large financial institutions. The Company does not have cash that is invested in asset-backed commercial paper. Most of the Company's receivables primarily consist of sales tax refundable from the Canada Revenue Agency, grant funding from the Canadian Government and accounts receivable under the Canadian Industrial and Technological Benefits ("ITB") program and is not subject to significant credit risk.

Market risk

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and equity prices.

Interest rate risk

Interest rate risk arises from changes in market rates of interest that could adversely affect the Company. The Company currently has no interest-bearing financial instruments other than cash, so its exposure to interest rate risk is insignificant.

Foreign currency risk

Foreign currency risk is the risk that is related to the fluctuation of foreign exchange rates. Most of the Company's assets and liabilities are denominated in Canadian dollars. As at October 31, 2021, the Company did not have any material monetary assets or liabilities denominated in a foreign currency and consequently is not exposed to significant foreign currency risk.

Price risk

The Company is exposed to price risk with respect to equity prices. Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. The Company closely monitors individual equity movements, and the stock market to determine the appropriate course of action to be taken by the Company.

Critical Accounting Policies and Estimates

For a complete description of the Company's significant accounting policies, please see the accompanying notes to the condensed consolidated interim financial statements for the three month period ended October 31, 2021 and the audited consolidated financial statements for the year ended July 31, 2021.

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amount of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amount of revenues and expenses during the year. Actual results may differ from these estimates.

Recent Accounting Pronouncements

The International Accounting Standards Board (IASB) has published new standards and amendments or interpretations to existing standards which are mandatory for periods beginning on or after January 1, 2022, as outlined below.

New accounting standards issued but not yet in effect

Classification of liabilities as current or non-current (Amendments to IAS 1)

The IASB has published Classification of Liabilities as Current or Non-Current (Amendments to IAS 1) which clarified the guidance on whether a liability should be classified as either current or non-current. The amendments:

- (i) Clarify that the classification of liabilities as current or non-current should only be based on rights that are in place "at the end of the reporting period";
- (ii) Clarify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability; and
- (iii) Make clear that settlement includes transfers to the counterparty of cash, equity instruments, other assets or services that result in extinguishment of the liability.

This amendment is effective for annual periods beginning on or after January 1, 2023. Earlier application is permitted. The Company does not expect the adoption of this new amendment to have a significant impact on the consolidated financial statements.

Provisions, Contingent Liabilities and Contingent Assets (Amendments to IAS 37)

The IASB has published Onerous Contracts — Cost of Fulfilling a Contract (Amendments to IAS 37) to clarify the definition of the 'cost of fulfilling' a contract. The amendments:

- (i) Clarify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract';
- (ii) Clarify that the costs that relate directly to a contract can either be incremental costs of fulfilling that contract or an allocation of other costs that relate directly to fulfilling contracts.

This amendment is effective for annual periods beginning on or after January 1, 2022. Earlier application

is permitted. The Company does not expect the adoption of this new amendment to have a significant impact on the consolidated financial statements.

Related Party Balances and Transactions

Key management personnel includes persons having the authority and responsibility for planning, directing, and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of executive and non-executive members of the Board of Directors and corporate officers. Key management compensation paid to officers and directors of the Company during the three month period ended October 31, 2021 was \$297,487 (2020 - \$398,265). In addition, share-based compensation expense relating to key management for the three month period ended October 31, 2021 was \$78,511 (2020 - \$166,118).

As at October 31, 2021, there is no outstanding amount (2020 - \$nil) in accounts payable and accrued liabilities due to officers and directors of the Company or to companies controlled by directors and officers of the Company. There were no other related party transactions during the three month period ended October 31, 2021.

Controls and Procedures

Evaluation of disclosure controls and procedures:

Management is responsible for establishing and maintaining disclosure controls and procedures as defined under National Instrument 52-109. At October 31, 2021, the Chief Executive Officer and Chief Financial Officer concluded that the design and operation of these disclosure controls and procedures were effective and that material information relating to the Company, including its subsidiaries, was made known to them and was recorded, processed, summarized and reported within the time periods specified under applicable securities legislation.

Internal controls over financial reporting:

Chief Executive Officer and Chief Financial Officer have designed, or caused to be designed under their supervision, disclosure controls and procedures which provide reasonable assurance that material information regarding the Company is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer in a timely manner.

In addition, the Chief Executive Officer and Chief Financial Officer have designed, or caused it to be designed under their supervision internal controls over financial reporting ("ICFR") to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements.

The Chief Executive Officer and Chief Financial Officer have been advised that the control framework used to design the Company's ICFR is recognized by the Committee of Sponsoring Organizations of the Treadway Commission.

The Chief Executive Officer and the Chief Financial Officer have evaluated, or caused to be evaluated under their supervision, whether there were changes to its ICFR during the three month period ended October 31, 2021 that have materially affected or are reasonably likely to materially affect the Company's ICFR. No such changes were identified through their evaluation.

A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that its objectives are met. Due to inherent limitations in all such systems, no evaluations of controls can provide absolute assurance that all control issues, if any, within a company have been detected. Accordingly, our disclosure controls and procedures and our internal controls over financial reporting are effective in providing reasonable, not absolute, assurance that the objectives of our control systems have been met.

Risk and Uncertainties

The Company's business is subject to a number of risk factors which are described in our most recently filed AIF. Additional risks and uncertainties not presently known to us or that we currently consider immaterial also may impair our business and operations and cause the price of the common shares to decline. If any of the noted risks occur, business plans may be impacted and the financial condition and results of operation may suffer, potentially significantly. In that event, the trading price of the common shares could decline, and shareholders may lose all or part of their investment.

Additional information and other publicly filed documents relating to the Company are available through the internet on the Canadian Securities Administrators' System for Electronic Document Analysis and Retrieval ("SEDAR"), which can be accessed at www.sedar.com.

Off-Balance Sheet Arrangements

The Company does not utilize off-balance sheet arrangements.

Disclosure of Outstanding Share Data

The Company is authorized to issue an unlimited number of common shares without par value. As of the date of this MD&A, the Company has 151,678,622 common shares issued and outstanding. The Company also has stock options outstanding to purchase an additional 7,498,987 common shares with exercise prices ranging from \$0.43 to \$2.48 per share.