



Management's Discussion and Analysis
Three and six months ended January 31, 2022

Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") is prepared as of March 9, 2022 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 January 31, 2022 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 March 9, 2022, 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 January 31, 2022, 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 six months ended January 31, 2022

The following is a summary of the key business highlights for the Company for six month period ended January 31, 2022:

- Accelerated revenue growth and recognized approximately \$1.9 million of revenue during the first half of the fiscal year, \$1.2 million of which was from the current quarter;
- Continued to build the Company's backlog totaling over \$3.5 million with an additional \$1.2 million pending successful trials that will result in revenue that will be recognized in future periods;
- Completed a third party operational exercise with the National Center for Spectator Sports Safety and Security ("NCS⁴") to demonstrate Platform performance relative to industry and professional sports leagues' security standards;
- Earned and collected \$2 million USD in non-dilutive cash funding from Raytheon Technologies Corporation ("Raytheon") under the Government of Canada's Industrial and Technological Benefits ("ITB") program for continued development of our threat detection solutions;
- Secured a contract worth \$1 million with Canada's Department of National Defence (DND), to further develop an artificial intelligence ("AI")-enabled full motion video analytics application;
- Signed a contract with the Office of the Inspector General to provide patron screening solution for use at its headquarters to secure employee entrances;
- 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 AI-powered Platform, which will give security venue operators a new way to make data-driven, intelligent decisions about overall security requirements and vulnerabilities; and
- Filed a final short form base shelf prospectus allowing the Company to offer and issue up to \$50 million of securities over a 25-month period.

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 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 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. Over the past year, 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. 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 solutions. In recent months, the Company has secured multiple contracts for its gateway products and is currently in negotiation for a number of additional agreements. 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 \$420,787 during the first two quarters. The backlog of sales commitments related to the Platform is now over \$1.2 million and continues to grow. This excludes an additional \$1.2 million in signed agreements that are pending successful pilots. 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.

Over the past few months, 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 most notable of these being the operational exercise completed by NCS⁴ which has generated immense inbound interest. 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 successful deployments, customer commitments and sales pipeline as validation of its product performance and the addressable market.

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 \$1.5 million of revenue recognized during the first half of fiscal 2022 related to professional service contracts, Xtract maintains a backlog of signed or awarded contracts of \$2.3 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 first half of the Fiscal year, the Company continued to invest in research and development activities focused around two specific project focus areas to advance the functionality of its product offerings in response to the growing market opportunities and feedback from early-adopter customers.

The Company entered into an agreement with Raytheon and received US\$2 million in non-dilutive cash funding as a part of 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 Gateway 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 Gateway

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 as 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 AI-powered Platform with its Gateway 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 Gateway 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.

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. Following a very busy first quarter where the Company conducted very high profile operational exercises with NCS⁴, and simultaneously conducted a large-scale deployment at the Climate Pledge Arena, the research and development team identified numerous enhancements to the product that would make it a more effective patron screening solution and worked on these during the quarter. These enhancements were designed to improve the screening experience for patrons and reduce effort from security personnel without sacrificing the system's weapons detection accuracy. These additional capabilities will allow us to better address high traffic areas and large event venues such as stadiums and arenas.

This leading-edge AI-powered security platform is unique in the marketplace and has the flexibility to address varying market needs and was bolstered with enterprise gateway features to support facilities with large numbers of Gateway systems. All of this provides interesting considerations for both the near-term and long-term and the Company continually assesses ways to expand its capabilities through development partnerships and strategic integrations. During this past quarter, the Company also continued to work with potential customers who showed considerable interest in our VRS solutions to improve safety, security and patron experience at their facilities both as a standalone solution and as an integrated solution with our Gateway products.

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 their related security protocols before using it throughout their venues. The Company is focused on the success of these initial deployments which have and will continue to lead to much larger commitments.

Although the Company is focusing on these target markets in the short term, we intend to expand into additional markets with future releases of the product. The Company has also selectively engaged with customers in other market verticals such as manufacturing or healthcare where there is a strong product fit. The Company continues to make significant enhancements to its products to improve their capabilities and address customer needs. As our products continue to develop, we will expand our focus to other market verticals.

The total addressable market available to the company in the physical security space is \$135 billion and is expected to experience rapid growth and transformation. Organizations are becoming increasingly concerned about employee and patron safety while being unwilling to sacrifice the patron experience. These organizations are looking for creative solutions to these competing priorities which is driving demand for unique and innovative physical security solutions. The Company believes its patron screening solutions help address both of these problems far better than anything else on the market today.

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 growth and expand its 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.

Financial Performance

Selected Financial Data – Summary of Results

	Three months ended January 31,			Six months ended January 31,		
	2022	2021	% Change	2022	2021	% Change
Revenue	\$ 1,177,219	\$ 286,665	311%	\$ 1,886,679	\$ 662,817	185%
Expenses						
Sales and marketing	606,180	399,128	52%	926,710	851,507	9%
Research and development	879,521	589,267	49%	433,675	808,091	(46%)
General and administration	543,225	373,343	46%	893,881	1,006,201	(11%)
Personnel costs	1,137,340	1,100,105	3%	2,141,642	2,263,317	(5%)
Professional fees	349,224	211,068	65%	543,888	588,151	(8%)
Hardware	177,306	-	100%	201,503	-	100%
Amortization	201,475	201,475	0%	402,950	429,867	(6%)
Depreciation	193,412	241,347	(20%)	387,556	485,795	(20%)
Share-based compensation	147,832	311,232	(53%)	205,514	705,582	(71%)
Loss on inventory write-down	78,913	-	100%	78,913	-	100%
	4,314,428	3,426,965	26%	6,216,232	7,138,511	(13%)
Loss from operations	3,137,209	3,140,300	(0%)	4,329,553	6,475,694	(33%)
Unrealized loss (gain) on investments	(43,751)	117,650	100%	(145,834)	143,450	(202%)
Interest income	(10,534)	(57,286)	(82%)	(12,716)	(93,012)	(86%)
Loss before income taxes	\$ 3,082,924	\$ 3,200,664	(4%)	\$ 4,171,003	\$ 6,526,132	(36%)
Current tax recovery	-	(59,608)	(100%)	-	(59,608)	(100%)
Loss and comprehensive loss	\$ 3,082,924	\$ 3,141,056	(2%)	\$ 4,171,003	\$ 6,466,524	(35%)
Weighted average number of shares	151,660,490	150,728,622		151,275,070	150,728,622	
Basic and diluted loss per share	\$ 0.02	\$ 0.02	0%	\$ 0.03	\$ 0.04	(25%)

Overall Quarterly Results

Overall loss and comprehensive loss for the three month period ended January 31, 2022 was \$3.08 million compared with \$3.14 million for the same period ended January 31, 2021, representing a decrease of \$0.06 million or 2%. Overall loss and comprehensive loss for the six month period ended January 31,

2022 was \$4.2 million compared with \$6.5 million for the same period ended January 31, 2021, representing a decrease of \$2.3 million or 35%. The decrease in loss for the six month period ending January 31, 2022 was mainly attributable to the \$2.6 million non-dilutive funding from Raytheon. In addition, the increase in revenue for the six month period ended January 31, 2022 also contributed to the reduced net loss.

Revenue

The Company earned revenue of \$1,177,219 during the three month period ended January 31, 2022, compared with \$286,665 for the same period ended January 31, 2021, representing an increase of \$890,554 or 311%. The Company earned revenue of \$1,886,679 during the six month period ended January 31, 2022 compared with \$662,817 for the same period ended January 31, 2021, representing an increase of \$1,223,862 or 185%.

The Company recognized \$420,787 in revenue related to the sale of the Platform during the six month period ended January 31, 2022, as compared to \$nil during the same period ended January 31, 2021. The Company believe that revenue from this operating segment will grow further in the upcoming quarters due to the extensive backlog it has built up as well as the increase in customer site surveys, trials, and deployment activities.

The Company recognized revenue of \$1,465,892 in revenue related to work completed on contracts from the Xtract operating segment for the six month period ended January 31, 2022, as compared to \$662,817 for the same period ended January 31, 2021. The increase was mainly attributable to an increased number of contracts being won and worked on.

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

	Less than one year	Greater than one year	As of January 31,		% Change
			2022	2021	
Platform revenue	\$ 616,227	\$ 614,860	\$ 1,231,087	\$ 759,184	62%
Xtract revenue	1,705,688	582,983	2,288,671	59,711	3,733%
Total backlog	\$ 2,321,915	\$ 1,197,843	\$ 3,519,758	\$ 818,895	330%

The Company recorded Platform backlog of \$1,231,087 as of January 31, 2022, as compared with \$759,184 as of January 31, 2021, representing an increase of 62% or \$471,903. The increase is mainly attributable to several new subscription 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 Platform backlog as at January 31, 2022 excludes an additional \$1.2 million in signed agreements that are pending successful pilots.

The Company recorded Xtract backlog of \$2,288,671 as of January 31, 2022, as compared with \$59,711 as of January 31, 2021, representing an increase of 3,733% or \$2,228,960. The increase is mainly attributable to the recently awarded contracts Xtract has secured through its ongoing business development efforts.

Sales and marketing

Sales and marketing costs were \$606,180 for the three month period ended January 31, 2022, as compared with \$399,128 for the same period ended January 31, 2021, representing an increase of 52% or \$207,052. Sales and marketing costs were \$926,710 for the six month period ended January 31, 2022 as

compared with \$851,507 for the same period ended January 31, 2021, representing an increase of 9% or \$75,203. The increase in these costs during the period was primarily attributable to the Company's growing effort in sales and marketing activities and higher number of marketing campaigns. We expect sales and marketing expenses 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 \$879,521 for the three month period ended January 31, 2022 as compared with \$589,267 for the same period ended January 31, 2021, representing an increase of 49% or \$290,254. R&D costs were \$433,675 for the six month period ended January 31, 2022 as compared with \$808,091 for the same period ended January 31, 2021, representing a decrease of 46% or \$374,416. The change in R&D expenses was primarily attributable to the non-dilutive funding received from various grants during the current and prior year periods.

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 January 31,			Six months ended January 31,		
	2022	2021	% Change	2022	2021	% Change
R&D costs before grants	\$ 1,664,695	\$ 1,713,152	(3%)	\$ 3,585,530	\$ 3,385,015	6%
Raytheon ITB program funding	(785,174)	(132,900)	491%	(2,553,000)	(478,700)	433%
Supercluster funding	-	(798,711)	(100%)	(410,530)	(1,118,711)	(63%)
R&D allocation of Covid-19 relief funding	-	(192,274)	(100%)	(188,326)	(979,513)	(81%)
	(785,174)	(1,123,885)	(30%)	(3,151,855)	(2,576,924)	22%
R&D costs net of grants	\$ 879,521	\$ 589,267	49%	\$ 433,675	\$ 808,091	(46%)

R&D costs before grants remained fairly flat during the three month period ending January 31, 2022 compared to the same period ended January 31, 2021, decreasing by 3% or \$48,457. R&D costs before grants also remained fairly flat during the six months period ending January 31, 2022 compared with the same period ended January 31, 2021, increasing by \$200,515 or 6%. The Company continues to invest in R&D activities to refine and improve our Platform solutions.

COVID-19 relief, Supercluster and ITB funding of \$3,151,855 was recorded as an offset to R&D costs during the six month period ended January 31, 2022 as compared with \$2,576,924 for the six month period ending January 31, 2021. The increase was primarily attributable to the additional ITB funding secured by the Company during the six month period ended January 31, 2022. The COVID-19 relief and Supercluster funding officially concluded as of October 31, 2021. The Company will continue to pursue non-dilutive funding opportunities.

General and administration

General and administrative costs were \$543,225 for the three month period ended January 31, 2022 as compared with \$373,343 for the same period ended January 31, 2021, representing an increase of 46% or \$169,882. The increase was primarily attributable to the cessation of COVID-19 relief funding on October 31, 2021. General and administrative costs were \$893,881 for the six month period ended January 31, 2022 as compared with \$1,006,201 for the same period ended January 31, 2021, representing a decrease of \$112,320 or 11%. The reduction in these costs during the period was primarily attributable to the cessation of several office leases and management's ongoing effort to cut non-strategic discretionary expenditures. The Company is continually looking for opportunities to reduce non-strategic expenses. We expect general and administrative expenses will remain steady or decrease slightly in the upcoming periods.

Personnel costs

Personnel costs, excluding those costs associated with research and development activities, were \$1,137,340 for the three month period ended January 31, 2022 as compared with \$1,100,105 for the same period ended January 31, 2021, representing an increase of 3% or \$37,235. Personnel costs, excluding those costs associated with research and development activities, were \$2,141,642 for the six month period ended January 31, 2022 as compared with \$2,263,317 for the same period ended January 31, 2021, representing a decrease of 5% or \$121,675.

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 12% and 27% for the three and six month periods ending January 31, 2022 respectively as compared with the same periods ended January 31, 2021. 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 \$nil and \$86,355 was recorded as an offset to personnel costs during the three and six month periods ending January 31, 2022 respectively as compared with \$187,249 and \$778,659 for the same three and six month periods ending January 31, 2021. The COVID-19 relief funding concluded on October 31, 2021. The Company will continue to pursue non-dilutive funding opportunities in the future.

Professional fees

Professional fees were \$349,224 for the three month period ended January 31, 2022 as compared with \$211,068 for the same period ended January 31, 2021, representing an increase of 65% or \$138,156. The increase was primarily attributable to the prospectus filing.

Professional fees were \$543,888 for the six month period ended January 31, 2022 as compared with \$588,151 for the same period ended January 31, 2021, representing a decrease of 8% or \$44,263. The decrease was primarily due to the Company's ongoing efforts to reduce non-strategic expenditures.

Hardware

Hardware expenses were \$177,306 and \$201,503 for the three and six month periods ended January 31, 2022, as compared to \$nil for the same periods ended January 31, 2021. The increase in hardware expense was attributable to the associated costs of our Platform sales during the three and six month periods ended January 31, 2022.

Amortization

Amortization costs were \$201,475 for the three month period ended January 31, 2022, unchanged from the same period in 2021. Amortization costs were \$402,950 for the six month period ended January 31, 2022, as compared with \$429,867 for the same period ended January 31, 2021, representing a slight decrease of \$26,917 or 6%. The decrease in amortization expense relates to the amortization of specific government contracts obtained in the Xtract acquisition for the period ended January 31, 2021.

Depreciation

Depreciation expense was \$193,412 for the three month period ended January 31, 2022, as compared with \$241,347 for the same period ended January 31, 2021, representing a decrease of 20% or \$47,935. Depreciation expense was \$387,556 for the six month period ended January 31, 2022, as compared with \$485,795 for the same period ended January 31, 2021, representing a decrease of 20% or \$98,239. 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 \$147,832 for the three month period ended January 31, 2022, as compared with \$311,232 for the same period ended January 31, 2021, representing a decrease of 53% or \$163,400. Share-based compensation was \$205,514 for the six month period ended January 31, 2022, as compared with \$705,582 for the same period ended January 31, 2021, representing a decrease of 71% or \$500,068. The decrease was attributable to a decrease in the number of and fair value of stock options issued outstanding during the six months period ended January 31, 2022.

Loss on inventory write-down

During the three and six month periods ended January 31, 2022, the Company wrote down \$78,913 worth of obsolete inventory that it no longer has the ability to sell. No inventory was written down during the three and six month periods ended January 31, 2021. Management continuously reviews the inventory it holds for signs of impairment or obsolescence.

Unrealized loss on investments

Unrealized gain on investment was \$43,751 for the three month period ended January 31, 2022, as compared with the unrealized loss of \$117,650 for the same period ended January 31, 2021, representing an increase of 137% or \$161,401. Unrealized gain on investment was \$145,834 for the six month period ended January 31, 2022, as compared with the unrealized loss of \$143,450 for the same period ended January 31, 2021, representing an increase of 202% or \$289,284. The increase is mainly attributable to the increase in fair value of the Company's investment in Gemina Labs during the three and six month periods ended January 31, 2022.

Interest income

Interest income was \$10,534 for the three month period ended January 31, 2022 as compared with \$57,286 for the same period ended January 31, 2021, representing a decrease of 82% or \$46,752. Interest income was \$12,716 for the six month period ended January 31, 2022 as compared with \$93,012 for the same period ended January 31, 2021, representing a decrease of 86% or \$80,296. The decrease was due to a reduction in the Company's cash balance and a decrease in market interest rates.

Net loss per share

On a per weighted average share bases, net loss per share was \$0.02 and \$0.03 for the three and six month periods ended January 31, 2022, respectively, as compared with \$0.02 and \$0.04 for the comparative periods in 2021, respectively. The decrease of \$0.01 or 25% in net loss per share for the six month ended January 31, 2022 was primarily attributable to the increase in revenue and non-dilutive funding from Raytheon. There was no meaningful change in the number of shares outstanding.

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

	Quarter Ended							
	Jan 31, 2022	Oct 31, 2021	Jul 31, 2021	Apr 30, 2021	Jan 31, 2021	Oct 31, 2020	Jul 31, 2020	Apr 30, 2020
Revenue	\$ 1,177	\$ 709	\$ 266	\$ 153	\$ 287	\$ 376	\$ 385	\$ 1,168
Expenses								
Sales and marketing	606	320	336	284	399	452	571	671
Research and development	880	(446)	964	985	589	219	802	1,918
General and administration	543	351	357	24	374	633	733	389
Personnel costs	1,137	1,004	851	1,248	1,100	1,163	2,005	1,162
Professional fees	349	195	186	87	211	377	558	585
Hardware	177	24	-	28	-	-	-	194
Amortization	202	201	202	201	202	228	283	282
Depreciation	193	194	244	251	241	245	359	342
Share-based compensation	148	58	208	266	311	394	268	789
Loss on inventory write-down	79	-	-	-	-	-	246	-
Loss on retirement of assets	-	-	-	-	-	-	171	-
Loss from operations	3,137	1,192	3,082	3,221	3,140	3,335	5,611	5,164
Proportionate share of loss on investment	-	-	-	-	-	-	151	191
Unrealized loss (gain) on fair value investment	(44)	(102)	3,686	149	118	26	1,018	-
Other income - Interest	(11)	(2)	124	(56)	(57)	(36)	(35)	(136)
Loss before income taxes	3,083	1,088	6,892	3,314	3,201	3,325	6,745	5,219
Current tax recovery	-	-	-	(110)	(60)	-	(333)	-
Loss and comprehensive loss	\$ 3,083	\$ 1,088	\$ 6,892	\$ 3,204	\$ 3,141	\$ 3,325	\$ 6,412	\$ 5,219
Basic and diluted loss per share	\$ (0.02)	\$ (0.01)	\$ (0.05)	\$ (0.02)	\$ (0.02)	\$ (0.02)	\$ (0.05)	\$ (0.03)
Working capital	\$ 9,473	\$ 12,129	\$ 12,841	\$ 19,175	\$ 21,745	\$ 24,523	\$ 27,335	\$ 27,182
Total assets	\$ 45,146	\$ 48,087	\$ 49,398	\$ 56,234	\$ 59,708	\$ 63,188	\$ 66,010	\$ 70,734
Non-current liabilities	\$ 515	\$ 597	\$ 677	\$ 740	\$ 855	\$ 947	\$ 595	\$ 683

Quarterly Results Trend Analysis

The quarterly expenditure trend across the previous eight fiscal quarters above reflects the evolution of the Company's newly revamped strategy to accelerate revenue growth. The Company's primary objective remains the further development and commercialization of an integrated platform-based technology solution, using various sensor technologies. In fiscal 2020, the Company invested extensively in research and development to enhance our Platform solutions. Beginning in fiscal 2021, the Company refined its strategy and began cutting non-strategic expenses to focus its spending on activities leading to near-term revenue or setting the foundation for mid to long-term revenue growth. Throughout fiscal 2021, the Company continued to enhance our Platform solutions and began growing our sales pipeline despite the challenges posed by the COVID-19 global pandemic. In the first half of fiscal 2022, the Company began to see the results of its enhanced marketing and sales efforts through increased revenue and sales commitments.

The Company has no discontinued operations.

Liquidity and Capital Resources

As at January 31, 2022, the Company had working capital of \$9,473,243 which included cash of \$6,411,540 available to meet current liabilities of \$1,507,019. 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 \$515,305, related to the long-term portion of the capitalized lease liabilities in accordance with IFRS 16.

Selected Financial Data – Summary of Results for the six-month periods ended January 31

	2022	2021	% Change
Cash beginning of period	\$ 9,652,493	\$ 22,407,251	(57%)
Cash used in operating activities	(3,251,213)	(7,367,507)	(56%)
Cash used in investing activities	(38,781)	(493,965)	(92%)
Cash received from (used in) financing activities	49,041	(288,319)	(117%)
Change in cash for the period	(3,240,953)	(8,149,791)	(60%)
Cash end of period	\$ 6,411,540	\$ 14,257,460	(55%)

During the six month period ended January 31, 2022, the Company had negative cash flow from operations, investing and financing activities of \$3.2 million, compared with \$8.1 million for the same period ended January 31, 2021.

The cash flow used in operating activities was \$3.3 million for the six month period ended January 31, 2022 as compared with \$7.4 million for the same period ended January 31 2021, representing a decrease of \$4.1 million or 56%. The decrease in negative cash flow from operating activities can be attributed primarily to a reduction in the loss for the six month period of \$2.3 million and a decrease in non-cash operating working capital of \$2.7 million. This was partially offset by an increase of \$0.9 million in non-cash operating expenses.

Cash flow used in investing activities was \$0.04 million for the six month period ended January 31, 2022 as compared with \$0.5 million for the same period ended January 31, 2021, representing a decrease of \$0.5 million or 92%. The decrease in negative cash flow from investing activities can be attributed primarily to reduced fixed asset purchases during the six month period ended January 31, 2022.

Cash flow from financing activities was \$0.05 million for the six month period ended January 31, 2022 as compared to cash flow used in financing activities of \$0.3 million for the same period ended January 31, 2021, representing a change of \$0.3 million or 117%. 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-January 31, 2022	Proceeds unspent as at January 31, 2022
Product Development	\$29,108,000	\$17,505,000	\$11,603,000
Reserved for Potential Acquisitions of Complementary Technology	\$6,900,000	\$14,000,000	(\$7,100,000)
Sales and Marketing	\$8,786,000	\$9,868,000	(\$1,082,000)
Production and Operations	\$8,795,000	\$16,365,000	(\$7,570,000)
General and Administration	\$9,770,000	\$12,985,000	(\$3,215,000)
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	\$74,168,000	\$2,857,000

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 January 31, 2022, the Company had cash of \$6,411,540 to settle current liabilities of \$1,507,019. 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, trade receivable and grant funding from the Canadian Government and accounts receivable under the Canadian Industrial and Technological Benefits ("ITB") program and are 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 January 31, 2022, 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 period ended January 31, 2022 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 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 include 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 six month period ended January 31, 2022 was \$589,544 (2021 - \$1,021,526). In addition, share-based compensation expense relating to key management for the six month period ended January 31, 2022 was \$163,206 (2021 - \$376,788).

As at January 31, 2022, there is no outstanding amount (2021 - \$139,722) 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 six month period ended January 31, 2022.

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 January 31, 2022, 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 six month period ended January 31, 2022 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 151,682,372 common shares issued and outstanding. The Company also has stock options outstanding to purchase an additional 9,798,151 common shares with exercise prices ranging from \$0.43 to \$2.48 per share.