



PATRIOT ONE TECHNOLOGIES INC.

Management's Discussion and Analysis

For the years ended July 31, 2020 and 2019

Basis of Presentation

The following Management's Discussion and Analysis ("MD&A") is prepared as of October 14, 2020 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 audited consolidated financial statements for the year ended July 31, 2020 which are prepared in accordance with International Financial Reporting Standards ("IFRS"). The policies applied in the audited consolidated financial statements are based on IFRS policies effective as of October 14, 2020, the date the Board of Directors approved the consolidated 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, 2020, 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 "0PL" 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 British Columbia Securities Commission.

As at July 31, 2020, 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, 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 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 year ended July 31, 2020

The following is a summary of the key business highlights for the Company for the year ended July 31, 2020:

- In September 2019, we acquired artificial intelligence company Xtract, a highly talented team of AI experts, as part of an ongoing strategic initiative to bring together leading-edge technologies and services to enhance our PATSCAN platform.
- In the third quarter of 2020, the Company recorded its first revenue related to the deployment of the PATSCAN Platform through the Innovation Solutions Canada (“ISC”), formerly known as the Build in Canada Innovation Program (“BCIP”).
- In May 2020, the Company announced that it was selected by Canada’s Digital Technology Supercluster for participation in a funding program for up to \$4.5 million in co-investment capital. This important investment will advance the development and deployment of the Company’s PATSCAN health and safety modules to detect dangers before they become a threat to our communities.
- In the fourth quarter of 2020, the Company launched its first commercial release of its video-based sensor technology solutions being the PATSCAN VRS-W, VRS-HS and VRS-T solutions, which dually serve end-user needs of weapons-related threat detection and the threat to public health and businesses posed by the COVID-19 pandemic.
- Subsequent to the year end, the Company launched a second commercial release of its first covert sensor technology being the PATSCAN MSG 1.0, which identifies on-body concealed weapons utilizing its unique passive sensor array.

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 “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 Patriot Threat Detection and Xtract business units. Patriot Threat Detection develops and commercializes a platform of multi-sensor threat detection technologies, while Xtract develops and commercializes artificial intelligence solutions for customers.

COVID-19 Impact to Operations

The COVID-19 pandemic has caused material changes to the global economic, political and consumer landscape. The Company is not alone in experiencing significant impacts on its near-term business planning and has taken significant and extraordinary measures to limit the impact of the COVID-19 pandemic on its stakeholders.

The COVID-19 pandemic and prolonged lockdowns pose a significant risk to the Company and could impact its financial operations and revenue outlook should restrictions and regulations to contain the pandemic continue for an extended time period. The Company acted quickly to protect the well-being of its employees and customers by temporarily closing its offices and delaying the physical installation of its platforms during the year ended July 31, 2020. The Company has continued to make progress on the PATSCAN platform and fully maintained operations through a carefully constructed work continuity plan which allows employees to remain collaborative. The Company has and will continue to benefit from various COVID-19 relief programs that governments have put in place to offset adverse effects to businesses.

During the year ended July 31, 2020, the Company was forced to curtail certain field trials, deployments, testing, data gathering and business development and sales activities due to government imposed travel restrictions and the health risks that travelling during a time of significant uncertainty and risk would entail. While the curtailment of these face to face, on-site activities cause delays in our near-term financial performance, the Company believes that the lack of travel and face to face interaction has had some beneficial impacts in enabling the Company in its planning, strategizing and developing of a robust and thorough series of plans and actions for the months and years to come. Due to the circumstantial limitations the COVID-19 pandemic has created for the Company's near-term plans, management has taken extensive steps and measures to control costs and recalibrate near-term spending decisions in light of the general business restrictions and the effect those restrictions have had, and are continuing to have, on our current and prospective reseller partners, and ultimately, the end-user customers. These cost control activities will endure as long as the near-term challenges presented by the pandemic persist. As of the date of this MD&A, the Company continues to experience significant uncertainty in near-term planning as it relates to sales and implementation activities.

Although the COVID-19 lockdowns have had an adverse effect on fulfilling sales commitments and the speed and efficiency of development activities for the Company, COVID-19 has also presented a key opportunity for the Company to use its existing capabilities to provide solutions to assist other businesses safely re-open. The Company has identified, and is continuing to identify, significant near, mid, and long-term opportunities to service public and private sectors with technology solutions to mitigate the risks of this pandemic, and other possible threats to business continuity and public health.

Some of these opportunities include using artificial intelligence techniques to accurately detect elevated body temperatures with the use of thermal camera technologies, individuals not wearing masks where required, a lack of adequate social distancing being maintained, and other novel opportunities, including but not limited to the identification of high-contact surfaces in a public setting which would benefit from being identified to be cleaned or disinfected more frequently than the whole facility, thereby, using front-line personnel in the most efficient and effective manner. These solutions will be sold as additional features or modules to the existing PATSCAN platform. During the year, the Company was selected to receive up to \$4.5 million in co-investment capital from the Canadian Digital Technology Supercluster COVID-19 Program for development of many of these technologies, which was announced by way of press release on May 21, 2020.

Outlook and Overall Performance

Patriot Threat Detection Operating Segment

During the fiscal year, the Company continued to invest in research and development, infrastructure, products, and people to prepare for the commercialization of its products.

The Company has been engaged in a continuous and extensive process of evaluating various sensor forms, formats, technological approaches, third-party hardware and software, open source technologies, publicly available data sets, leading research and publications to continually enhance the dynamism and utility of the PATSCAN Platform. Sensor technologies and technological approaches can take many forms and formats, and the utility of the information and insight provided from the sensor technologies can be used by many stakeholders in a plethora of forms and formats. The Company has benefited and will continue to benefit from the extensive and invaluable feedback and insight garnered from early adopter clientele and reseller partners as new beta solutions are tested and evaluated in real world settings.

The Company views the PATSCAN Platform as a flexible, non-obtrusive, dynamic, cost effective, and leading-edge technological solution to provide enhanced situational awareness to a variety of stakeholders. Optimal configuration will be bespoke, and coordinated through site visits and pre-deployment planning, handled primarily by a qualified and approved reseller, and further supported by the Company's engineering and customer support teams to ensure end-user satisfaction of the highest degree.

The Company will continue to evaluate complementary and auxiliary technologies that could enhance and augment the PATSCAN Platform and provide further capabilities to end-users in meeting the objective of reducing active threats.

In May 2020, the Company successfully launched its first commercial offerings, which includes the weapons detection solution, VRS-W (weapons), the health and safety threat detection solutions, VRS-HS (health & safety), and VRS-T (thermal), which are video-based sensor solutions, along with the PATSCAN platform software, supporting the artificial intelligence solutions in the field. The VRS-W can alert authorized personnel to the presence of guns and knives. The PATSCAN VRS-HS module has been designed for deployment across multiple digital video cameras on any video management system for detection of compliance or absence of facial masks. The PATSCAN VRS-T module detects thermal elevated body temperature and can be deployed on a single thermal camera at entrances to any facility for the identification of elevated body temperatures, which might indicate a fever-related to a virus or contagion.

The Company believes that pandemic response solutions, including VRS-HS and VRS-T along with additional solution technologies currently under development are a logical and effective area of focus for the business, that they align with customer needs and with our corporate mission.

In August 2020, the Company commercially launched the PATSCAN MSG 1.0, being its first commercialized multi-sensor gateway solution for covert threat detection of concealed weapons into secured private or public spaces, utilizing its unique passive sensor array. PATSCAN MSG 1.0 sensors can be installed at schools, stadiums, concert halls, shopping centers and other entryways into private, public or secured buildings.

Xtract Operating Segment

In September 2019, the Company acquired artificial intelligence 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 our PATSCAN platform. Xtract's development and deployment of artificial intelligence 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, 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.

Critical to the development and enhancement of our sensor technologies and the associated underlying platform software has been the direct involvement and contribution by the Xtract team in the data science and associated algorithmic development of the threat classification produced by the solution offerings. Leveraging data from various sensors in real time, the Company continues to fuse these sensor data streams into a comprehensive, holistic threat analysis assessment, the accuracy of which will supersede that of any of the sensors alone. The Company believes that these data science techniques, and the ongoing effort being expended in this regard, are key to the ongoing optimization in both improving the accuracy of the threat detection notifications whilst minimizing to the greatest degree possible the false positive rates generated by the system. These efforts will continue with the ingestion of more data from internal optimization efforts, the performance and functionality of the solutions in demo and pilot installation in real-world settings, and most importantly, based on the fully functional systems being utilized in real-world environments.

Market Opportunity

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 the 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 safety and are hence setting up systems to prevent unauthorized access, further driving the demand for physical security solutions.

The video analytics market size was valued at \$4.10 billion in 2019, and is projected to reach \$20.80 billion by 2027, growing at a CAGR of 22.7% 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 which will benefit from constant updates and improvements via the cloud.

The Company has identified key market segments that are well suited for the Company's suite of threat detection technologies. The Company intends to market its products across a wide swath of industries, including but not limited to:

- Education and associated campus facilities
- Healthcare
- Public transportation
- Stadiums, concert arenas and nightclubs
- Hospitality and recreation
- Private sector offices, factories, and other facilities
- Public sector office buildings, court buildings and other secure facilities
- Retail locations
- Various law enforcement and detention facilities

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.

During the year ended July 31, 2020, the Company continued the strategic roll-out of its technologies with a select group of resellers and early-adopter customers, aiming to identify and understand the optimal deployment scenarios. The current deployments, trials and real world tests are creating the environment and conditions for the Company to deploy its platform technologies at scale, and the early contingent of reseller partners are benefiting from, and providing, significant support in these endeavors.

The Company is currently expanding its reseller base, covering larger geographical territories and a wider representation of industries, 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 a certain subset of the addressable market. In fiscal 2021, we will engage in selected opportunities for collaboration, innovation, and business development relationships to accelerate our growth and expand our presence globally. We are 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 is in the process of instituting a wide array of sales programs and pricing schemes in close coordination with early-adopter reseller and end-user customers to ensure that our solutions remain competitive and directly address customer needs.

Annual Financial Performance

Selected Financial Data - Summary of Annual Results for the years ended July 31

	2020	2019	% Change
Revenue	\$ 2,071,244	\$ -	n/a
Expenses			
Advertising and marketing	1,445,389	1,788,717	-19%
Amortization	1,097,733	28,825	3,708%
Hardware	194,097	-	n/a
Business development	957,703	1,759,998	-46%
Conferences and trade shows	1,411,855	1,269,720	11%
Depreciation	1,256,736	467,163	169%
General and administration	2,190,577	1,888,951	16%
Licensing	66,555	429,245	-84%
Personnel costs	5,393,093	2,838,672	90%
Professional fees	3,435,032	1,263,672	172%
Research and development	5,410,663	2,772,645	95%
Share-based compensation	2,186,546	3,080,807	-29%
Loss on inventory write-down	245,531	-	n/a
Loss on retirement of assets	171,199	-	n/a
	25,462,709	17,588,415	45%
Loss from operations	23,391,465	17,588,415	33%
Proportionate share of loss on investment	1,531,817	825,565	86%
Loss on investment upon fair value recognition	1,017,627	-	n/a
Interest income	(481,702)	(862,013)	-44%
Loss before income taxes	25,459,207	17,551,967	45%
Current tax recovery	(332,812)	-	n/a
Deferred tax recovery	-	(120,000)	n/a
Loss and comprehensive loss for the year	\$ 25,126,395	\$ 17,431,967	44%
Weighted average number of shares	148,674,284	130,719,916	
Basic and diluted loss per share	\$ 0.17	\$ 0.13	31%

Overall Annual Results

Overall loss and comprehensive loss for the year ended July 31, 2020 was \$25,126,395 compared with \$17,431,967, an increase of \$7,694,428 or 44% over the prior year. The increase in loss for the year ending July 31, 2020 as compared to the prior year is attributable to the increased expenditures being made on a wider portfolio of products under commercial development, the non-recurring costs associated with acquiring Xtract, and the associated personnel resources to support the commercialization efforts of the technology portfolio.

Increases in these costs were partially offset for the year ended July 31, 2020 due to COVID-19 related restrictions, specifically regarding the temporary limitations placed on travel for customer installations and on site testing, along with certain sales and business development activities.

Revenue

The Company earned revenue of \$2,071,244 during the year ended July 31, 2020 compared with no revenue in the prior year. This revenue consists of \$725,525 from the sale of the PATSCAN platform through the Patriot Threat Detection operating segment, and \$1,345,719 from the fulfillment of contracts, through the Xtract operating segment.

As of July 31, 2020, the Company has \$308,547 of deferred revenue recorded relating to the early adopter sales of the PATSCAN offerings, as compared with \$nil deferred revenue in the prior year. Xtract has collected \$119,742 for work it has not yet performed which has been also recorded as deferred revenue as of July 31, 2020.

During May 2020, the Company released its first series of technology solutions being the VRS-W, VRS-T, and VRS-HS, which affix as video-based sensor solutions to the PATSCAN platform.

Advertising and marketing

Advertising and marketing costs were \$1,445,389 for the year ended July 31, 2020 as compared with \$1,788,717 in the prior year, a decrease of 19% or \$343,328. The reduction in these costs during the year was primarily due to the Company refocusing its marketing strategy due to the COVID-19 pandemic and the cancellation or postponement of conference and trade show events from March 2020 throughout the end of the fiscal year, leading to a corresponding reduction in complementary advertising and marketing costs.

Amortization

Amortization costs were \$1,097,733 for the year ended July 31, 2020 as compared with \$28,825 in the prior year, an increase of \$1,068,908 or 3,708%. The increase relates to the amortization of various intellectual property including the Quasar license and intellectual property obtained in the EhEye acquisition.

Hardware

Hardware costs of \$194,097 were incurred in the year ended July 31, 2020 as compared to nil hardware costs incurred in the previous year. These hardware costs relate to platforms sold to Innovative Solutions Canada during the year. The Company expects hardware costs to increase as it ramps up PATSCAN platform sales.

Business development

Business development costs were \$802,295 for the year end July 31, 2020 as compared with \$1,759,998 in the prior year, a reduction of \$957,703 or 46%. The reduction in these costs during the year was primarily due to significant non-recurring expenditures in the previous year associated with increasing the awareness, visibility and understanding of the PATSCAN platform through a concerted effort to engage with a wider base of key partners, resellers, legislators and security industry experts to enhance, support and augment the Company's market position. Further, COVID-19 impacted travel for reseller onboarding, training and early-stage support on initial installs and client trials during this fiscal year.

Conferences and trade shows

Conference and trade shows costs were \$1,411,855 for the year ended July 31, 2020 as compared with \$1,269,720 in the prior year, an increase of \$142,135, or 11%. The Company had planned to attend an increased number of conferences and trade shows during the year to provide visibility to the Company within the security and investment community.

From August 1, 2019 to March 1, 2020 the Company had attended an increased number of trade shows and was projecting a significant increase in these expenditures for the year. The COVID-19 pandemic caused cancellations of many trade shows occurring from March 1, 2020 onwards which offset some of these earlier costs.

Depreciation

Depreciation was \$1,256,736 for the year ended July 31, 2020 as compared with \$467,163 in the prior year, an increase of \$789,573 or 169%. The increase was predominantly attributable to adopting IFRS 16 in the current year which involves recognizing leases as assets on the balance sheet and depreciating them over time. Depreciation of lease assets totaled \$526,524 during the year. The balance of the increase was due to widening the scope of the Company's development streams which required an increase in asset purchases related to research and development.

General and administration

General and administrative costs were \$2,190,577 for the year ended July 31, 2020 as compared with \$1,888,951 in the prior year, an increase of \$301,626 or 16%. The main cause of the increase was the increased occupancy and administrative costs associated with Xtract which was acquired during the year. The Company is continually looking for opportunities to reduce non-strategic expenses and to operate more efficiently.

Licensing

Licensing costs were \$66,555 for the year ended July 31, 2020 as compared with \$429,245 in the prior year, a decrease of \$362,690 or 84%. The decrease primarily relates to non-recurring technology licensing fees incurred in the previous year.

Personnel costs

Personnel costs, excluding those costs associated with research and development were \$5,393,093 for the year ended July 31, 2020 as compared with \$2,838,672 in the prior year, an increase of \$2,554,421 or 90%. The increase relates to the continued investments in sales, marketing, operations, finance, and corporate administration necessary to advance into commercial operations. The Company expects that the existing personnel structure is sufficient to meet its current operating objectives.

Professional fees

Professional fees were \$3,435,032 for the year ended July 31, 2020 as compared with \$1,263,672 in the prior year, an increase of \$2,172,360 or 172%. The increase primarily relates to non-recurring transaction costs associated with fees and costs associated with the acquisition of Xtract of approximately \$1,500,000. The balance of the increase relates to an increase in the Company's use of external counsel and SR&ED tax consultants.

Research and development

Research and development costs were \$5,410,663 for the year ended July 31, 2020 as compared with \$2,772,645 in the prior year, an increase of \$2,638,549 or 95%. The increase in research and development costs is predominantly attributable to the widening the scope of development streams to focus on a larger number of sensor technology solutions, to increase the scope of its technology portfolio. Further, Xtract which was acquired early in the fiscal year, performs substantial research and development work to fulfil its third-party contracts.

Research and development costs are presented net of non-dilutive funding from Raytheon Canada Ltd. When research and development costs are normalized by removing this offsetting funding, they increased by 74% or \$2,879,318 during the year ending July 31, 2020 as compared with the prior year.

Non-dilutive funding of \$1,381,300 was recorded as an offset to research and development costs during the fiscal period ending July 31, 2020 compared with \$1,140,000 in prior fiscal year ending July 31, 2019. The Company has found these funding sources to be highly beneficial and will continue to pursue these funding opportunities in the future.

Share-based compensation

Share-based compensation decreased by 29% or \$894,261 during the year ending July 31, 2020 to \$2,186,546 as compared with \$3,080,807 in the prior year. The decrease was due to a large number of option issuances during the previous year with immediate vesting resulting in the expense being recognized up front. All options granted during the current year were issued with a vesting period and will be expensed over time in accordance with the Company's stated accounting policy.

Loss on inventory write-down

During the year, the Company wrote down \$245,531 worth of obsolete inventory that it no longer has the ability to sell. No inventory was written down in the previous year. Management continuously reviews the inventory it holds for signs of impairment or obsolescence.

Loss on retirement assets

During the year, the Company wrote down \$171,199 worth of obsolete assets that are no longer used. No property or equipment were written down in the previous year. Management continuously reviews the assets it holds for indications of impairment or obsolescence.

Loss on investment in Sotech

As at July 31, 2020, the Company owns a 49% interest in Sotech Secure, LLC ("Sotech"), a Delaware Limited Liability Company with NanoBio Detection Systems LLC ("NanoBio") owning the remaining 51% interest. The Company has experienced challenges with its joint venture partner and has determined that it no longer holds significant influence or joint control over Sotech. Accordingly, the Company has discontinued the use of the equity method during the fourth quarter of 2020.

On September 14, 2020, the Company entered into a membership interest purchase agreement with NanoBio to sell its 49% interest in Sotech for USD \$3,000,000 with an estimated closing date of October 31, 2020. Management expects that the proposed transaction will close as planned; however, there is no guarantee that transaction will proceed as expected. The Company has recognized a total loss of \$2,549,444 on the investment during the year ended July 31, 2020. This represents a combination of the proportionate share of loss while being accounted for using the equity method of \$1,531,817 and a fair value write-down of the investment of \$1,017,627 to its fair value of \$4,021,200 (USD \$3,000,000).

Interest income

Interest income decreased by 44% or \$380,311 during the year ending July 31, 2020 to \$481,702 as compared with \$862,013 in the previous year due to a decrease in the Company's cash balance compared to prior year.

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

	Quarter Ended							
	Jul, 31 2020	Apr 30, 2020	Jan 31, 2020	Oct 31, 2019	Jul 31, 2019	Apr. 30, 2019	Jan 31, 2019	Oct 31, 2018
Revenue	\$ 385	\$ 1,168	\$ 402	\$ 117	\$ -	\$ -	\$ -	\$ -
Expenses								
Advertising and marketing	266	232	319	628	52	412	656	669
Amortization	283	282	282	251	29	-	-	-
Hardware	194	-	-	-	-	-	-	-
Business development	237	263	200	258	285	715	265	495
Conferences and trade shows	68	176	649	519	700	309	182	79
Depreciation	359	342	293	263	166	119	120	62
General and administration	733	389	376	693	528	645	321	395
Licensing	6	31	24	5	2	347	35	45
Personnel costs	2,005	1,162	1,285	941	915	773	661	489
Professional fees	558	585	398	1,894	470	151	394	248
Research and development	602	2,081	1,571	1,157	639	385	834	915
Share-based compensation	268	789	670	459	1,156	175	389	1,361
Loss on inventory write-down	246	-	-	-	-	-	-	-
Loss on retirement of assets	171	-	-	-	-	-	-	-
Loss from operations	5,611	5,164	5,665	6,951	4,942	4,031	3,857	4,758
Proportionate share of loss on investment	151	191	629	561	432	394	-	-
Loss on investment upon fair value recognition	1,018	-	-	-	-	-	-	-
Other income - Interest	(35)	(136)	(107)	(204)	(302)	(278)	(126)	(156)
Loss before income taxes	6,745	5,219	6,187	7,308	5,072	4,147	3,731	4,602
Current tax recovery	(333)	-	-	-	-	-	-	-
Deferred tax recovery	-	-	-	-	(120)	-	-	-
Loss and comprehensive loss	\$ 6,412	\$ 5,219	\$ 6,187	\$ 7,308	\$ 4,952	\$ 4,147	\$ 3,731	\$ 4,602
Basic and diluted loss per share	\$ (0.05)	\$ (0.03)	\$ (0.04)	\$ (0.05)	\$ (0.03)	\$ (0.03)	\$ (0.03)	\$ (0.04)
Working capital	\$ 27,335	\$ 27,182	\$ 31,908	\$ 37,170	\$ 51,899	\$ 62,866	\$ 70,036	\$ 31,388
Total assets	\$ 66,010	\$ 70,734	\$ 75,141	\$ 83,088	\$ 69,340	\$ 72,304	\$ 76,761	\$ 33,410
Non-current liabilities	\$ 595	\$ 683	\$ 635	\$ 703	\$ -	\$ -	\$ -	\$ -

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 solution strategy, along with the acquisition of Eh-Eye in late Q2 fiscal 2019, and the acquisition of Xtract in the middle of Q1 fiscal 2020. The Company's primary objective remains the generalized function of an integrated platform-based technology solution, using various sensor technologies. The general trend of increased expenditures across the various cost categories reflects the investments being made throughout the organization to achieve this goal, as well as the organizational capacity to support commercialization at scale.

The Company has no discontinued operations.

Fourth Quarter Results

Revenue

During the three months ended July 31, 2020, the Company experienced a significant interruption to the ongoing sales, business development and associated implementation activities, specifically related to the ability to physically interact with resellers and end-users in regards to the installation, calibration and performance validation needs of early adopter, pilot and commercial sales of the PATSCAN solution technologies. Accordingly, the Company was unable to realize revenue during the quarter through the PATSCAN Threat Detection operating segment.

Revenue recognized during the three months ended July 31, 2020 was \$394,895, relating solely to the Xtract operating segment, for which there was no comparable amount in the prior period, as Xtract was acquired during the current fiscal year.

Loss and Comprehensive Loss

During the three months ended July 31, 2020, the Company was able to pause and rationalize some near-term spending and planned investments in response to the delays, deferrals and general restrictions caused by the COVID-19 pandemic, and focus on recalibrating near-term spending and strategic priorities in response to the profound effect the pandemic has had on the economic environment in general, and specifically on investments and procurement decisions by interested resellers and end-users. The Company will be continuing to assess the cost profile and near-term strategic priorities on a continuous basis.

Liquidity and Capital Resources

As at July 31, 2020, the Company had working capital of \$27,334,679, which included cash of \$22,407,251 available to meet current liabilities of \$3,195,201. 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 \$595,211, related to the long-term portion of the capitalized lease liability in accordance with IFRS 16.

Selected Financial Data – Summary of Annual Results for the years ended July 31

	2020	2019	% Change
Cash beginning of year	\$ 50,637,942	\$ 17,576,735	188%
Cash used in operating activities	(17,567,734)	(14,359,530)	22%
Cash provided by (used in) investing activities	(10,964,359)	2,655,607	-513%
Cash provided by financing activities	301,402	44,765,130	-99%
Change in cash for the year	(28,230,691)	33,061,207	-185%
Cash end of year	\$ 22,407,251	\$ 50,637,942	-56%

During the year ended July 31, 2020, the Company had negative cash flow from operations, investing and financing activities of \$28,230,691, compared with positive cash flow from operations, investing and financing activities of \$33,061,207 in the prior year.

The cash flow used in operating activities was \$17,567,734 for the year ended July 31, 2020. The \$17,567,734 utilized in operating activities resulted from the loss and comprehensive loss of \$25,126,395 offset by \$7,603,372 of non-cash adjustments to loss and comprehensive loss, less \$44,711 of cash used in non-cash operating working capital. Cash flows used in operating activities were \$14,359,530 for the

year ended July 31, 2019. The \$14,359,530 utilized in operating activities resulted from the loss and comprehensive loss of \$17,341,967 offset by \$4,282,360 in non-cash adjustments to loss and comprehensive loss, less \$1,209,923 of cash used in non-cash operating working capital.

The cash flow used in investing activities was \$10,964,359 for the year ended July 31, 2020. The cash used in investing activities primarily related to the cash payments and funding of the Sotech investment and the cash consideration to acquire Xtract, net of cash received. Included in net cash flows used in operating activities were approximately \$1,500,000 of non-recurring acquisition related professional fees and associated transaction costs, which were expended and classified with general and administrative expenses on the consolidated statement of loss and comprehensive loss for the year ended July 31, 2020. Cash flow from investing activities was \$2,655,607 for the year ended July 31, 2019. The cash provided primarily related to the redemption of guaranteed cash investment securities offset by cash payments and funding of the Sotech investment and the acquisition of intangible distribution rights.

Cash flows from financing activities was \$301,402 for the year ended July 31, 2020, primarily relating to the proceeds from the issue of share capital, net of share issue costs as compared to \$44,765,130 for the year ended July 31, 2019, which solely comprises proceeds on issue of share capital, net of share issue costs.

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 our 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- July 31, 2020	Proceeds unspent as at July 31, 2020
Product Development	\$29,108,000	\$14,314,000	\$14,794,000
Reserved for Potential Acquisitions of Complementary Technology	\$6,900,000	\$14,000,000	(\$7,100,000)
Sales and Marketing	\$8,786,000	\$7,469,000	\$1,317,000
Production and Operations	\$8,795,000	\$9,861,000	(\$1,066,000)
General and Administration	\$9,770,000	\$9,298,000	\$472,000
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	\$58,388,000	\$18,637,000

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, the advancement of funds to Sotech, 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 were based on the expectations of Patriot's 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 and its investment in Sotech.

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 in order 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, but that further funding or net income from operating activities will be required to meet long-term requirements. As at July 31, 2020, the Company had cash of \$22,407,251 to settle current liabilities of \$3,195,201. All 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 amounts receivable. 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. The Company's accounts receivable consists of sales tax refundable from the Canada Revenue Agency and accounts receivable under the Canadian Industrial and Technical Benefits 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. Substantially all of the Company's assets, liabilities and operations are denominated in Canadian dollars. As at July 31, 2020 and 2019, 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 audited consolidated financial statements for the year ended July 31, 2020.

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 period. 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, 2019, as outlined below.

Accounting standards adopted:

IFRS 16 Leases

The Company has adopted IFRS 16 with an initial adoption date of August 1, 2019. The Company utilized the modified retrospective method to adopt the new standard and therefore, the comparative information has not been restated and continues to be reported under IAS 17, Leases and related interpretations.

IFRS 16 specifies how leases will be recognized, measured, presented and disclosed and it provides a single lessee model, requiring lessees to recognize right-of-use assets and lease liabilities for all major leases. The impact of the transition to IFRS 16 is shown in Note 13 of the Company's financial statements for the year ended July 31, 2020. The Company's accounting policy under IFRS 16 is as follows:

At the inception of a contract, the Company assesses whether a contract is, or contains, a lease based on whether the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured based on the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to restore the underlying asset, less any lease incentives received. The assets are depreciated over the lease term using the straight-line method. The lease term includes periods covered by an option to extend if the Company is reasonably certain to exercise that option. In addition, the right-of-use asset can be periodically reduced for impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of future lease payments discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate. The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, or if the Company changes its assessment of whether it will exercise a purchase, extension or termination option. When the lease liability is remeasured, a corresponding adjustment is made to the carrying amount of the right of use asset.

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

IFRIC 23 – Uncertainties over income tax

IFRIC 23 clarifies the application of recognition and measurement requirements in IAS 12, Income taxes, when there is uncertainty over income tax treatments. It specifically addresses whether an entity considers each tax treatment independently or collectively, the assumptions an entity makes about the examination of tax treatments by taxation authorities, how an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, and how an entity considers changes in facts and circumstances. IFRIC 23 became effective for fiscal years beginning on or after January 1, 2019, with earlier application permitted. The Company has adopted this interpretation as August 31, 2019 and has assessed no significant impact as a result of the adoption of this interpretation.

New accounting standards issued but not yet in effect:

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

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, 2022. Earlier application is permitted. The extent of the impact of adoption of this amendment has not yet been determined. There is currently a proposal outstanding that would defer the effective date until January 1, 2023.

Amendments to IFRS 3 – Definition of a Business

The IASB has issued *Definition of a Business* (Amendments to IFRS 3) to clarify the definition of a business for the purpose of determining whether a transaction should be accounted for as an asset acquisition or a business combination. The amendments:

- (i) Clarify the minimum attributes that the acquired assets and activities must have to be considered a business;
- (ii) Remove the assessment of whether market participants can acquire the business and replace missing inputs or processes to enable them to continue to produce outputs;
- (iii) Narrow the definition of a business and the definition of outputs; and
- (iv) Add an optional concentration test that allows a simplified assessment of whether an acquired set of activities and assets is not a business.

This amendment is effective for annual periods beginning on or after January 1, 2020. 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 and consist of members of the Board of Directors and corporate officers. Key management compensation related to officers and directors of the Company or to companies controlled by officers and directors of the Company are outlined below.

During the year ended July 31, 2020 management fees of \$40,000 (2019 - \$264,000) were incurred with a private company controlled by Martin Cronin, chief executive officer and director of the Company. In

addition, Mr. Cronin earned additional management fees of \$450,000 (2019 - \$Nil) and share-based compensation of \$42,473 (2019 - \$Nil).

During the year ended July 31, 2020, management fees of \$245,718 (2019 - \$201,900) and share-based compensation of \$53,645 (2019 - \$Nil) were incurred with a private company controlled by Mike Barnsley, the former chief financial officer and corporate secretary of the Company.

During the year ended July 31, 2020, management fees of \$121,283 (2019 - \$Nil) and share-based compensation of \$118,444 (2019 - \$Nil) were incurred with Dietmar Wennemer, president and chief operating officer of the Company.

During the year ended July 31, 2020, management fees of \$15,000 (2019 - \$180,000) were incurred with a private company controlled by a Jeffery Tindale, while he served as a director. Mr. Tindale resigned from his position as a director on September 9, 2019.

During the year ended July 31, 2020, director fees of \$95,000 (2019 - \$52,083), consulting and administrative fees of \$132,000 (2019 - \$82,750) and share-based compensation of \$22,910 (2019 - \$Nil) were incurred with a private company controlled by Peter van der Gracht, an independent director and current Chairman of the Board of Directors.

During the year ended July 31, 2020, director fees of \$22,757 (2019 - \$80,109) were incurred with Scott Shepherd, during his time spent as independent director and the Chairman of the Board of Directors. Mr. Shepherd resigned from his position as director and Chairman of the Board of Directors on November 5, 2019.

During the year ended July 31, 2020, director fees of \$81,250 (2019 - \$59,583) were incurred with John Gillies, an independent director.

During the year ended July 31, 2020, director fees of \$71,250 (2019 - \$9,484), consulting fees of \$18,000 (2019 - \$3,397) and share-based compensation of \$132,800 (2019 - \$136,950) were incurred with Victoria Calvert, an independent director.

During the year ended July 31, 2020, director fees of \$40,833 (2019 - \$Nil), consulting fees of \$21,000 (2019-\$Nil) and share-based compensation of \$132,736 (2019 - \$Nil) were incurred with Bill Maginas, an independent director. Mr. Maginas joined the board of directors in January 2020.

During the year ended July 31, 2020 director fees of \$35,938 (2019 - \$Nil) and share-based compensation of \$119,314 (2019 - \$Nil) were incurred with Lea Ray, an independent director. Ms. Ray joined the board of directors in February 2020.

Subsequent Event

Subsequent to July 31, 2020, the Company granted 355,000 stock options to certain officers and employees of the Company with exercise prices ranging from \$0.69 to \$0.97 per share. Each of these options was granted for a term of five years with a vesting period of three years.

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 July 31, 2020, 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 the Chief Executive Officer and Chief Financial Officer 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 year ended July 31, 2020 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 Annual Information Form (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 150,728,622 common shares issued and outstanding. In addition, there are 30,959,050 warrants which may be converted to one common share each at prices ranging from \$1.00 to \$3.25. The Company also has stock options outstanding to purchase an additional 10,128,631 common shares at the exercise process ranging from \$0.185 to \$2.48 per share.