

# **NEXOPTIC TECHNOLOGY CORP.**

# MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE PERIOD ENDED JUNE 30, 2022

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Set out below is a review of the activities, results of operations and financial condition of NexOptic Technology Corp. ("NXO", "NexOptic", or the "Company") and its subsidiaries for the six months ended June 30, 2022. The discussion below should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements for the six months ended June 30, 2022 and audited consolidated financial statements for the years ended December 31, 2021 and 2020. Those consolidated financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. All dollar figures included in the following Management Discussion and Analysis ("MD&A") are quoted in Canadian dollars unless otherwise indicated. This MD&A has been prepared as at August 29, 2022.

The Company is listed on the TSX Venture Exchange ("TSX-V") under the symbol "NXO" and OTCQB under the symbol "NXOPF" in addition to trading in multiple listings in Germany under the symbol "E3O1".

Additional information related to the Company is available on SEDAR at <a href="www.sedar.com">www.sedar.com</a> and the Company's website at <a href="www.nexoptic.com">www.nexoptic.com</a>.

# **BACKGROUND AND CORE BUSINESS**

NexOptic Technology Corp. and its subsidiaries (collectively, the "Company" or "NexOptic") is a technology company developing award-winning artificial intelligence ("Al") and award-winning imaging products which enhance how images are either captured, processed and/or experienced. NexOptic was incorporated under the Company Act (British Columbia) on October 11, 2007. The Company maintains its registered and place of business office at 1500 – 409 Granville Street, Vancouver, British Columbia, Canada V6C 1T2.

NexOptic's primary focus is its patent pending artificial intelligence for imaging called "Aliis™", an acronym for, "All Light Intelligent Imaging Solutions." Several of the world's largest and more influential semiconductor companies have invited NexOptic into their esteemed partnership programs and continue to strongly support Aliis™ and NexOptic. These include the Arm Al Partner Program, the NVIDIA Jetson Ecosystem and Qualcomm's Advantage Network.

The reason for the growing interest is that Aliis™ delivers superior performance in even the most challenging of lighting conditions for both still imaging and video by learning a camera profile and optimally enhancing, pixel by pixel its quality and its resolution in a fraction of a second, using edge processing. The result is superior resolution and sharpness, dramatic reductions to image noise and motion-blur, noticeable enhancements to long-range image stabilization by enabling faster shutter speeds, and significantly reduced file and bandwidth requirements for storage or streaming applications. Aliis™ also improves downstream applications such as computational imaging, facial recognition, and object detection, and as a result has broad market applicability for Al-leveraged security, autonomous vehicles, and other Al applications.

In all instances (NVIDIA, Qualcomm and Arm), each original equipment manufacturer ("OEM") retains control over the choice to license Aliis™ directly from NexOptic with optimized versions of Aliis™, this significantly reduces their integration costs and allows them immediate Aliis™ access.

Risks associated with the investment and development of the AI imaging technologies can be found in the Risk Factors section of this document.

# Artificial Intelligence & All Light Intelligent Imaging Solutions: Aliis™

Artificial intelligence (AI) allows machines to learn from experience, intercept new inputs, and perform human-like tasks. Technologies such as machine learning and natural language processing (NLP) are used to train computers to perform specific tasks by processing large amounts of data. Al is gaining momentum as it can add intelligence to existing products. Al systems offer faster response, tailored approach, accurate information, and fewer redundancies—all of which are key factors to achieve higher efficiency in an organization. Computer vision is concerned with the automatic extraction, analysis, and understanding of useful information from a single image or a sequence of images. It involves the development of a theoretical and algorithmic basis to achieve automatic visual understanding. Humans use their eyes and brains to see and visually sense the world around them. Computer vision aims to give a similar capability to a machine or computer.

# NexOptic Launches NexCompress™

In April of 2022 NexOptic revealed its patent pending NexCompress™, a video compression enhancement solution, offering significant bandwidth and storage savings for video storage and streaming applications. In May the Company published results of inhouse benchmark testing. Part of NexOptic's in-house analysis was applying NexCompress™ directly to dozens of 10-minute-long video sequences shot in a variety of lighting environments, including low-light. A 20% reduction in bandwidth was achieved for video sequences shot in "normal" video use-cases. Additionally, in

"extreme" use-cases where videos contain a lot of image noise, up to a 60% reduction in bandwidth was achieved. In all cases, image quality was either preserved, or improved upon.

# **NexOptic Introduces AVM**

On December 21, 2021, NexOptic announced its latest innovation and the newest part of its ALIIS program: "AVM" (the Aliis Video Module). AVM is a revolutionary new video module that significantly improves efficiency and performance of high frame rate, high resolution video for both livestream and stored data. AVM enables much faster processing times and remarkably higher image quality for real time video enhancement on the edge, cloud, or anywhere in between. Immediate use-cases include applications where absolute efficiency and/or performance is critical; it can also be highly effective in low-power video pipelines. AVM can save companies money and energy all while delivering higher resolution videos. NexOptic also reported that it had filed two patents for AVM covering its model architecture and model training, and its integration and deployment into larger imaging systems.

# NexOptic Options its Rare Earth Asset to Selten Metal Corp.

On November 29, 2021, NexOptic reported that it had entered a Letter of Intent ("LOI") with Selten Metal Corp. ("Selten") of Vancouver, British Columbia. Selten can earn a 100% interest in NexOptic's wholly-owned THOR Heavy & Light Rare Earth Element Project (the "THOR Project"). The THOR Rare Earth Project is located in Southern Nevada. The Company views this as an opportunity to benefit from an otherwise unutilized mineral property that offers great upside potential without diverting NexOptic's focus and finances away from developing, protecting and marketing artificial intelligence software. NexOptic has kept its shareholders up to date on material aspects of the transaction through a series of news releases, the most recent being March 18, 2022. The Company relayed that Selten Metal Corp had entered into a letter agreement with Railtown Capital Corp. (TSXV: RLT.P) ("Railtown"), a Capital Pool Company, whereby Railtown will acquire all of the issued and outstanding securities of Selten on a one for one basis, which transaction will form Railtown's qualifying transaction pursuant to the policies of the TSX Venture Exchange and result in Selten, as reverse takeover acquiror, becoming listed on the TSX Venture Exchange (subject to approval).

Pursuant to the LOI, NexOptic and Selten intend to negotiate a definitive agreement for an option in favour of Selten to acquire up to a 100% interest in the THOR Project (the "Option"). In order to acquire an initial 75% interest in and to the THOR Project (the "Initial Option"), Selten must (a) make a cash payment of \$1,100,000 to NexOptic on the execution of the definitive option agreement, (b) upon the date of any listing of Selten, or its successor, on a recognized stock exchange in Canada (the "Listing Date"), issue to NexOptic such number of common shares in its capital as will represent 9.5% of the issued and outstanding Selten shares post issuance, (c) issue to NexOptic an additional 500,000 shares on the date which is 12 months following the Listing Date, and (d) issue to NexOptic a further additional 500,000 shares on the date which is 24 months following the Listing Date. If a Listing Date does not occur within 24 months of the date of the definitive option agreement, the Option will terminate.

Upon the exercise of the Initial Option, Selten will be granted the further option to acquire the remaining 25% interest in the Thor Project (the "Second Option"), by issuing to NexOptic an additional number of Selten shares in its capital equal to 9.5% of the issued and outstanding Selten shares post-issuance, which issuance will be made within 48 months following the Listing Date, at the discretion of Selten. In the event Selten fails to exercise the Second Option as provided above, Selten and NexOptic will form a joint venture on the THOR Project with the initial participating interests being 75% and 25% respectively and Selten acting as the initial operator.

The definitive option agreement will provide for NexOptic to have the right to nominate one (1) director to the board of Selten. The THOR Project is subject to a 2% net smelter returns royalty held by a private entity, of which each 1% may be purchased by NexOptic at any time for \$500,000, such that the entire royalty may be acquired for \$1,000,000.

Overseen by Selten Metal, the 43-101 report on the THOR property is nearing completion. Beyond 43-101 expenditures, Selten Metal has spent in excess of \$100,000 on work programs to advance the property. The recent work programs, combined with the 43-101 report, are necessary steps to bring the THOR project into qualifying transaction status in advance of listing on a Canadian stock exchange. Further, Selten Metal recently paid the annual claim maintenance (Bureau of Land Management) fees of approximately \$USD 50,000. An extension on the terms of the agreement between Selten Metal and NexOptic is being extended by 12 months while Selten works to complete its listing on a Canadian stock exchange.

# NexOptic Launches Neural Embedding Al for Imaging ("Neural Embedding")

On September 2, 2021, NexOptic announced the launch of its Neural Embedding AI for Imaging for processing ondevice(s) in real-time and transforming images and videos into compact machine representations ready for use by downstream storage and processing. Immediate use-cases include applications where centrally storing, transmitting, or processing large amounts of image and video data is unfeasible but strongly desired. For example, Neural Embedding can assist in video analytics where cameras produce enormous amounts of video data. NexOptic's Neural Embedding can distill the incoming video data prior to storage and processing, thereby reducing the total amount of computation required to accomplish the task and saving time, energy, and infrastructure costs. Using this highly advanced AI architecture, Aliis™ can address two significant barriers to intelligent imaging adoption, computation, and training.

# Relationship with Qualcomm Expanded

On September 14, 2021, NexOptic announced it had entered an expanded collaboration with Qualcomm that opened NexOptic up to deeper integration into Qualcomm's newest Snapdragon chipsets than was possible on other Snapdragon platforms. This opens unique opportunities for NexOptic's image signal processing topologies to leverage a combination of hardware and software. Previously NexOptic had integrated Aliis™ onto Qualcomm's 2019 Snapdragon chipsets and delivered real time video enhancement at 720p 30FPS. Because of new advancements to NexOptic's Aliis™ algorithms as well as performance gains in Qualcomm's Al accelerator chips, faster processing abilities at higher resolutions for real time video enhancement are being achieved. This project is allowing OEMs and ODMs to see first-hand the power of Aliis™ and provide them access to a high-quality reference implementation that can be adapted into multiple standard and unique applications and use cases.

#### **NexOptic Partners with NTek Device of South Korea**

On October 13, 2021, NexOptic outlined a commercial partnership with NTek Device ("NTek") of South Korea. NTek Device is an indispensable partner to a vast array of clients in mobile cameras, surveillance cameras, and automotive cameras.

The commercial partnership has NexOptic joining the likes of some of the most respected and influential imaging solution companies as chosen by NTek for their quality and reliability in the image enhancement sector for CMOS image sensor ("CIS") based solutions. NTek is partnered with virtually all Korean camera image development firms and module manufacturers. It is a leading semiconductor supplier to the mobile, video security, and automotive industries as well as a provider of embedded solutions for internet and data communication equipment throughout the Asia Pacific region and beyond. NTek has significant product distribution centres in Korea and Hong Kong and partnership distribution networks in Shenzhen, China and Taipei, Taiwan. Its voluminous list of customers includes Partron and Powerlogics, as well as Korean leaders in video security with global reach. It delivers CIS hardware and software to its vast customer network which includes Hanhwa Techwin, IDIS, CPRO, and Truen in addition to key automobile imaging companies like Thinkware, Finedigital, and NC&. NTek customer firms in the CIS sector include Sony, Samsung, Omnivision, Onsemi, Hynix, Galaxycore, Lexar, Harvetek and others. NTek provides customized solutions to client firms by cross-checking available CIS products; this is part of what makes NTek so successful and why they've been able to sustain a robust 20% growth rate year over year.

# FlexWATCH of South Korea Begins Incorporating Aliis™ Via NVIDIA Jetson

On October 29, 2021, NexOptic reported that FlexWATCH of South Korea began an integration of ALIIS™ into its product line-up and that NexOptic and FlexWATCH engineers had already completed integrating ALIIS™ into FlexWATCH's AI Bridge product which incorporates NVIDIA's Jetson Platform. NexOptic being an NVIDIA Preferred Partner made this a very seamless process. Founded in 1997 with an intention to "link the world as one," FlexWATCH has an impressive pool of engineers dedicated to creating the absolute best in security surveillance for its customer base stretching into 40 countries. FlexWATCH is delivering its 3rd generation of security products and solutions based on their and their networks technologies. They are the only Korean company to focus solely on TCP/IP based security products and they continue to align themselves with the most sophisticated imaging solution providers in the world.

#### 100X Better Object Detection Achieved

On September 22, 2021, NexOptic announced that by incorporating Aliis™ into certain applications designed for object detection, results could be improved by a factor of 100 as was verified by testing using a third-party algorithm. During the benchmarking, Aliis™ increased the number of license plates detected in low light environments more than tenfold and increased the number of correctly recognized license plate numbers by a factor of 100.

# Further Commercial Viability Potential of Aliis™

NexOptic's AI presents an opportunity to be successfully applied to imaging verticals and industries. Imaging and AI both remain rapidly growing industries. With integration into several high volume, globally recognized chipsets now complete, and with anticipated continued joint marketing initiatives by NexOptic's chipset partners, the opportunity for additional commercial transactions including with leading global OEM customers continues to increase. NexOptic is discussing opportunities with third parties. Advanced dialogues with these third parties, including with other leading semiconductor companies and a variety of OEM's, continue.

#### **Patent Focus**

NexOptic is taking constructive steps to continuously build a patent estate around Aliis™ and remains patent pending on multiple fronts with ongoing processes for even more patent applications surrounding Aliis™ ongoing.

On October 1, 2021, NexOptic reported that the United State Patent and Trademark Office (USPTO) had issued Patent No. 11,132,771 titled "Bright Spot Removal Using a Neural Network" to NexOptic. This patent is the second patent expanding family of IP covering the Company's AI technologies. These patents provide key intellectual property protection for NexOptic's disruptive AI for all levels of imaging including but not limited to, video and data compression.

In the 3<sup>rd</sup> quarter 2020, NexOptic became patent pending on a new AI that transforms Image Signal Processors ("ISP") technology. Engineered into Aliis™, the neural ISP technology is now available to OEM customers through NexOptic's aforementioned strategic partnerships. Image signal processors are a traditional technology that manipulate images from raw data into the precise and coherent imagery viewers are accustomed to seeing. They are increasingly also being used for new application paths in robotics, smart cities, industrial automation, automotive, healthcare and beyond.

#### **OUTLOOK**

The Company is reviewing offers to finance by means of either equity or debt and continues its efforts to be successful in what continues to be a recovering COVID-19 pandemic economy through the commercialization of its technologies including downstream applications for Aliis™. The Company feels that its Al and other offerings hold potential to positively impact specific segments of current and future global economies.

# **OUTSTANDING SHARE DATA**

At the date of this report, the Company has

- 147,431,150 issued and outstanding common shares;
  - 17,865,000 outstanding stock options with a weighted average exercise price of \$0.48; and
  - 1.500.000 restricted share units outstanding.

#### SELECTED FINANCIAL INFORMATION

#### **Summary of Quarterly results**

	June 30, 2022	March 31, 2022	December 31, 2021	September 30, 2021
Interest income Net loss for the period Comprehensive loss for the period Basic and diluted loss per share	\$ (896,004) (893,808) (0.01)	\$ (1,081,491) (1,081,009) (0.01)	\$ (1,322,266) (1,312,631) (0.01)	\$ (825,284) (834,999) (0.01)
	June 30, 2021	March 31, 2021	December 31, 2020	September 30, 2020
Interest income Net loss for the period Comprehensive loss for the period Basic and diluted loss per share	\$ (543,049) (545,426) (0.00)	\$ (602,927) (602,766) (0.00)	\$ 4 (626,034) (626,431) (0.00)	\$ 44 (839,071) (839,117) (0.01)

The Company's primary focus over the quarters presented is the development of is Aliis<sup>™</sup> property portfolio. Of the loss of \$1,801,491 in the three months ended March 31, 2022, \$483,902 was related to non-cash share-based payments expense. The increase in net loss for the period December 31, 2021 relates to the Red Hill property costs of \$180,947 and non-cash expenses for share-based payments expense of \$602,816.

#### Results of Operations for the three-month period ended June 30, 2022 compared to 2021

The comprehensive loss for the three-month period ended June 30, 2022 was \$893,808 (2021 – \$545,426). Significant changes to the results of operations are explained as follows:

# Research and development costs

Research and Development	F-	For the three months ended June 30,					For the six months ended June 30,			
		2022		2021		2022		2021		
Engineering and design	\$		\$	_	\$	82,674	\$	85		
Professional fees		674		49,908		23,509		95,578		
Tax credits and recoveries		(19, 163)		(17,854)		(38,091)		(17,854)		
Salaries and benefits		82,144		74,976		170,198		143,866		
Share-based payments		114,968		60,333		263,199		135,319		
Supplies and resources		3,600		3,600		8,845		23,840		
Travel		<u> </u>		<u> </u>		3,864		1,962		
	\$	(182,223)	\$	(170,963)	\$	(514,198)	\$	(383,797)		

Research and development expenses of \$182,223 (2021 – \$170,963) relates to the development of its AI as the Company invests in its core technologies.

- Professional fees include amounts paid for legal work on the Company's patent portfolio. The Company has worked in the current period to expand its patent portfolio with respect to its Al technology.
- Share-based payments expense of \$114,968 (2021 \$60,333) is recorded relative to the vesting of stock options valued using the Black-Scholes methodology and vesting of restricted share units.
- Supplies and resources of \$3,600 (2021 \$3,600) are purchases of technological resources for the Al development team.
- Tax credits and recoveries in the period relate to amounts received under a technology licensing agreement.

# General and administrative costs

	For the three months ended June 30,					For the six months ended June 30,				
General and Administrative		2022		2021		2022		2021		
Consulting fees	\$	102,395	\$	123,461	\$	213,722	\$	273,249		
Insurance		18,000		9,330		36,000		18,830		
Investor relations		36,180		55,002		78,185		139,057		
Office and administration		24,426		26,115		53,357		52,412		
Professional fees		15,000		29,352		26,765		47,770		
Property costs		194		-		46,330		-		
Salaries		53,179		51,179		108,700		104,749		
Share-based payments		276,012		46,973		556,404		109,356		
Shareholder communications and filings		14,724		13,108		40,332		48,541		
Sales and marketing		13,467		15,620		25,567		73,360		
Travel		5,490		635	_	7,707	-	2,591		
	\$	(599,067)	\$	(370,775)	\$(	1,193,069)	\$	(869,915)		

- Consulting fees includes compensation to the CFO and accounting staff as well as fees paid to a director and
  consultants to make strategic introductions with potential partners in the development and commercialization
  of the Company's technologies.
- Investor relations expenses of \$36,180 (2021 \$55,002) includes expenditures for its market maker, news releases, public relations and investor outreach services. Additionally, the Company incurred \$13,467 (2021 \$15,620) for sales and marketing costs, which includes brand awareness expenditures for the Company's

technologies to potential partner and/or end user companies and consumers. The Company has spent less on its corporate marketing in the current period.

• Share-based payments expense of \$276,012 (2021 - \$46,973) is recorded relative to the vesting of stock options valued using the Black-Scholes methodology.

#### Business development costs

Business development costs for the three months ended June 30, 2022 of \$113,553 (2021 - \$67,084) relate to the Company's satellite operations in South Korea. The team in South Korea has been established for the purpose of developing commercial sales opportunities for the Company. Expenditures include costs of sales staff and related overhead.

# Results of Operations for the six-month period ended June 30, 2022 compared to 2021

#### Research and development costs

Research and development expenses of \$514,198 (2021 – \$382,797) relates to the development of its AI as the Company invests in its core technologies.

- Engineering and design of \$82,674 (2021 \$85) includes costs to the Company under the Qualcomm agreement in the current period.
- Professional fees include amounts paid for legal work on the Company's patent portfolio. The Company has
  worked in the current period to expand its patent portfolio with respect to its AI technology.
- Salaries of \$170,198 (2021 \$143,866) increased due to an increase to the AI team and due to temporary salary reductions implemented in the second quarter of 2020 to manage ongoing costs.
- Share-based payments expense of \$263,199 (2021 \$135,320) is recorded relative to the vesting of stock options valued using the Black-Scholes methodology.
- Supplies and resources of \$8,845 (2021 \$23,840) are purchases of technological resources for the Al development team.
- Tax credits and recoveries in the period relate to amounts received under a technology licensing agreement.

# General and administrative costs

- Consulting fees includes compensation to the CFO and accounting staff as well as fees paid to a director and consultants to make strategic introductions with potential partners in the development and commercialization of the Company's technologies. The increase reflects an increase in support provided by the Chairman.
- Investor relations expenses of \$78,185 (2021 \$139,057) includes expenditures for its market maker, news releases, public relations and investor outreach services. Additionally, the Company incurred \$25,567 (2021 \$73,360) for sales and marketing costs, which includes brand awareness expenditures for the Company's technologies to potential partner and/or end user companies and consumers. The Company has spent less on its corporate marketing in the current period.
- Salaries for general and administrative personnel has increased to \$108,700 (2021 \$104,749). The
  compensation is paid to the CEO and support staff.
- Share-based payments expense of \$556,404 (2021 \$109,356) is recorded relative to the vesting of stock options valued using the Black-Scholes methodology.

# Business development costs

Business development costs for the six months ended June 30, 2021 of \$237,640 (2021 - \$123,114) relate to the Company's satellite operations in South Korea. The team in South Korea has been established for the purpose of developing commercial sales opportunities for the Company. Expenditures include costs of sales staff and related overhead.

#### Non-recurring items

In the six months ended June 30, 2022, the Company recognized a recovery on accrued severance of \$nil (2021 - \$209,129) pursuant to the Settlement Agreements

#### LIQUIDITY AND CAPITAL RESOURCES

Cash has decreased, on a net basis, by \$317,092 to \$19,935 at June 30, 2022 from a balance of \$337,027 as at December 31, 2021. The Company had a working capital of deficiency of \$1,633,576 as at June 30, 2022.

Overall cash utilization for operating activities decreased from 2021 to 2022. In the six months ended June 30, 2022, the Company expended \$316,985 in operating activities as compared to \$1,062,514 in 2021. The overall decrease in expenditures is a result of lower financial capacity in the current period.

There were no investing or financing activities for the period ended June 30, 2022 and 2021.

The Company has incurred losses since inception and the ability of the Company to continue as a going-concern depends upon its ability to develop profitable operations and to continue to raise adequate financing.

Management is actively targeting sources of additional financing through financial transactions that would assure continuation of the Company's operations. There can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favorable. If adequate financing is not available when required, the Company may be required to delay, scale back or eliminate expenditures and/or investments and may be unable to continue in operation. The Company may seek such additional financing through debt or equity offerings, but there can be no assurance that such financing will be available on terms acceptable to the Company or at all. Any equity offering will result in dilution to the ownership interests of the Company's shareholders and may result in dilution to the value of such interests.

Management will apply funds from the private placements for investment in its strategic priorities, being substantially Aliis™, and for working capital. The contractual commitments of the Company are not significant, and the Company may sustain operations by reducing overhead and delaying investment.

#### OFF STATEMENT OF FINANCIAL POSITION ARRANGEMENTS

At June 30, 2022, the Company had no material off statement of financial position arrangements such as guarantee contracts, contingent interest in assets transferred to an entity, derivative instruments obligations or any obligations that trigger financing, liquidity, market, or credit risk to the Company.

#### PROPOSED TRANSACTIONS

The Company does not have any proposed transactions in process other than as discussed elsewhere in this document.

# **RELATED PARTY TRANSACTIONS**

Key management personnel comprise the Chief Executive Officer, Chief Financial Officer, Chairman, and directors of the Company. The remuneration of the key management personnel is as follows:

For the six months ended June 30	2022	2021
Payments to key management personnel:		
Consulting fees (G&A) – paid to a company in which the CFO has a significant investment	\$ 30,250	\$ 35,834
Consulting fees (G&A) – paid to a company controlled by a director	104,776	160,810
Salaries and short-term benefits (G&A) – Paul McKenzie	90,000	90,000
Share-based payments to officers – general and administrative	227,875	16,005
Share-based payments to directors – general and administrative	266,406	16,005

During the six months ended June 30, 2022, the Company was charged legal fees, included in professional fees, of \$5,651 (2021 - \$16,815) by S. Paul Simpson Law Corp., a law firm of which an officer of the Company is an employee.

As at June 30, 2022, the Company had balances outstanding with related parties of \$617,468 (December 31, 2021 - \$204,867) included in accounts payable. These balances are unsecured, non-interest-bearing, have no fixed repayment terms and are due on demand.

#### Control Group Settlement Agreements

Effective May 15, 2020, the Company entered into indemnity and settlement agreements ("Settlement Agreements") which provide for the severance liability to be settled over a 36-month period and to be offset, on a monthly basis, by proceeds from sales of the Company's securities as held by 3DB. 3DB is restricted under the Support Agreement to dispose of the lesser of 25,000 shares or 10% of the aggregate trading valued on the TSX-V on the prior trading day, subject to certain conditions. The severance liability is non-interest bearing and is secured by promissory notes. In the year ended December 31, 2021, the severance liability was discharged by the former employees and the underlying promissory notes released.

# FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

#### **Financial instruments**

Cash and cash equivalents, accounts receivable and accounts payable and accrued liabilities are carried at amortized cost. The Company considers that the carrying amount of these financial assets and liabilities measured at amortized cost to approximate their fair value due to the short-term nature of the financial instruments. The loan payable is carried at amortized cost and carried at the settlement value.

Fair value estimates of financial instruments are made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective in nature, involving uncertainties and matters of significant judgment, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values.

#### Financial risk factors

#### Credit risk

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets, including cash and cash equivalents and receivables. The Company limits exposure to credit risk on liquid financial assets through maintaining its cash and cash equivalents with high-credit quality financial institutions. The Company considers the risk of financial loss on cash and cash equivalents to be remote. The Company's receivables consist materially of GST input tax credits recoverable from the government of Canada and some third-party receivables which are anticipated to be recoverable. The Company considers credit risk with respect to these amounts to be low.

# Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they become due. The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at June 30, 2022, the Company had a working capital of deficiency of \$1,633,576 (December 31, 2021 – deficiency of \$586,286). 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's loans payable have an Initial Term Date of December 31, 2022 with the possibility of extending to December 31, 2025.

#### 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 commodity and equity prices. The Company does not have a practice of trading derivatives.

# a) Interest rate risk

The Company's financial asset exposed to interest rate risk consists of cash. The Company's current policy is to invest excess cash in investment-grade short-term deposit certificates issued by its banking institutions. The Company periodically monitors the investments it makes and is satisfied with the credit ratings of its banks. Management believes the interest rate risk is low given the current low global interest rate environment.

#### b) Foreign currency risk

The Company's has engaged a number of vendors in the pursuit of research and development activities in the US. As such, the Company is exposed to some foreign currency risk. Fluctuations in the exchange rate between the Canadian dollar and US dollar may have an adverse effect on the Company's business and costs to proceed with preferred vendors. The Company may mitigate its foreign currency risk by substituting Canadian vendors for certain services. Foreign currency risk is considered low relative to the overall financial operating plan.

#### **RISK FACTORS**

The principal activity of the Company for the immediate future is the continued investment in and development of its core technologies (the "Technology"), which relates to AI for image correction, image enhancement and file size compression. This can be applied to both still and video images through the removal of image noise.

#### COVID-19

Since January 2020, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", has resulted in governments worldwide enacting emergency measures to combat the spread of the virus. These measures, which include in some instances the closing non-essential businesses, travel bans, self-imposed quarantine periods and physical distancing, continue to cause significant material disruptions to businesses globally resulting in an economic slowdown. Global equity markets remain volatility and unpredictable. The duration and overall lasting impact of the COVID-19 outbreak is currently unknown, as is the efficacy of government and central bank interventions. It is not possible to reliably estimate the length and severity what these developments will have on the financial results and condition of NexOptic in future periods.

#### Competition

The AI imaging industry is highly competitive with several well-established market participants. Competition in this industry occurs on many fronts, including developing and bringing new technologies to market before others, developing new technologies to improve existing offerings, developing new means in which to provide the same benefits as existing products at less cost, developing new products to provide benefits superior to those of existing offerings, and acquiring or licensing complementary or novel technologies from other companies or individuals. NexOptic may be unable to contend successfully with current or future competitors which include major technology companies, many of which are large, well-established companies with access to financial, technical, and marketing resources significantly greater than the Company and substantially greater experience in developing, licensing, and manufacturing products, conducting research and development activities, and obtaining regulatory approvals. The Company's competitors may develop or acquire new or improved technologies that are similar to those offered by the Company, while not necessarily being direct competitors currently.

# Development Risk

Substantial corporate resources are being expended on the development of the Company's technologies. The capabilities of Aliis<sup>TM</sup> is continuously being upgraded and is not currently commercialized. There can be no guarantee that the Technology will achieve the objectives which the Company believes are necessary for it to result in successful offerings to the marketplace. There are significant risks, expenses, delays, and difficulties frequently encountered in establishing new technologies to industry, which is characterized by an increasing number of market entrants, intense competition, and high failure rate. Further, there is always the risk in product development that the software will fail to function as intended or that the market for such products will not develop as anticipated or when anticipated. There is often a lengthy time between the time of technology conceptualization to technology commercialization, and there can be no assurances that development of new technologies will be commercialized at all, on time or within budget. Failure to successfully commercialize the Technology may materially and adversely affect the Company's financial condition and results of operations.

# Limited Protection of Patents and Proprietary Rights

The Company's success will depend in part on its ability to protect its proprietary rights and technologies, including, but not limited to its Al. The Company will rely on a combination of contractual arrangements, licenses, patents, trade secrets, and know-how to protect its proprietary technology and rights and the Company's failure to protect its intellectual property rights may result in the loss of valuable technologies and undermine its competitive position. However, not all these measures may apply or may afford only limited protection. In addition, the laws of some foreign countries do not protect proprietary technology rights to the same extent as do the laws of Canada and the United States. A failure of the Company to adequately protect its proprietary rights may adversely affect the business of the Company.

Filing, prosecuting and defending patents on the Company's intellectual property throughout the world could be prohibitively expensive. The laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States or federal and provincial laws in Canada. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. Proceedings to enforce the Company's patent rights in foreign jurisdictions could result in substantial cost and divert its efforts and attention from other aspects of its business. The Company may have limited remedies if patents are infringed in certain jurisdictions or if it is compelled to grant a license to a third-party, which could materially diminish the value of those patents. This potentially could limit the Company's total revenue opportunities.

Unpatented trade secrets, improvements, confidential know-how and continuing technological innovation may be important to the Company's scientific and commercial success. Although the Company will attempt to, and will continue to attempt to, protect proprietary information through reliance on trade secret laws and the use of confidentiality agreements with collaborators, contract manufacturers, licensees, clinical investigators, employees and consultants and other appropriate means, these measures may not effectively prevent disclosure of or access to proprietary information, and, in any event, others may develop independently, or obtain access to, the same or similar information.

Despite the Company's efforts to protect its proprietary rights, there can be no assurance that the Technology will not be infringed upon, that the Company would have adequate remedies for any such infringement or adequate funds to act against those infringing the Technology, or that its trade secrets will not otherwise become known or independently developed by its competitors. There can also be no assurance that any patents now or hereafter issued to, licensed by, or applied for by the Company will be upheld, if challenged, or that the protections afforded thereby will not be circumvented by others. There can be no assurance that the Company's competitors will not independently develop technologies that are substantially equivalent or superior to the Technology.

#### Infringement of Intellectual Property Rights

While the Company believes that its intellectual property does not infringe upon the proprietary rights of third parties, its commercial success depends, in part, upon the Company not infringing intellectual property rights of others. Several of the Company's competitors and other third parties have been issued or may have filed patent applications or may obtain additional patents and proprietary rights for technologies similar to those utilized by the Company. Some of these patents may grant very broad protection to the owners of the patents.

The Company may become subject to claims by third parties that its technology infringes their intellectual property rights due to the growth of products in its target markets, the overlap in functionality of those products and the prevalence of products.

Litigation may be necessary to determine the scope, enforceability, and validity of third-party proprietary rights or to establish the Company's proprietary rights. Some of its competitors have, or are affiliated with companies having, substantially greater resources than the Company and these competitors may be able to sustain the costs of complex intellectual property litigation to a greater degree and for a longer period than the Company.

Regardless of their merit, any such claims could be time consuming to evaluate and defend, result in costly litigation, divert management's attention and focus away from the business, subject the Company to significant liabilities and equitable remedies, including injunctions, require the Company to enter into costly royalty or licensing agreements and require the Issuer to modify or stop using infringing technology.

# No Assurance of Commercial Production

Though its Al offerings are advanced and patent pending, the Company simultaneously remains a research and development company with no history of production or sale. There is no assurance that the Company will meet proposed commercial delivery timelines or will be able to achieve commercial success.

The Company has not previously delivered a consumer product on a commercial scale and has no manufacturing facility. The Company may find itself dependent on affiliations with one or more semiconductor companies who may in turn alter their platforms in such a manner that Aliis™ is no longer relevant to their offerings. Individual semiconductor companies may also unexpectedly lose market share and/or industry relevance. In the case of DoubleTake™, the Company could in the future become dependent on third party manufacturers for its manufacture, or product components, as well as on third parties for a supply chain. The Company currently has no plans to build internal commercial scale manufacturing capabilities or to manufacture its own semiconductors. Contract manufacturing organizations for DoubleTake™ may need to increase the scale of production and may or may not be able to scale production. It could be expensive and take a significant amount of time to arrange for alternative suppliers. The Company may be unable to enter into agreements for commercial supply with third-party manufacturers or may be unable to do so on unacceptable terms. Any significant disruption in the Company's supplier relationships could harm the Company's business.

# Slow Acceptance of the Company's Technology

The marketplace might be slow to accept or understand the significance of the Company's Technology due to its unique nature and the competitive landscape. Market confusion may slow sales and acceptance of the Company's potential products and AI. If the Company were unable to promote, market and monetize the Technology and secure relationships with OEM partners or product manufacturers, the Company's business and financial condition would be adversely affected.

#### Sales and Distribution

The Company does not currently have any proven market for sales or completed distribution agreements. The successful commercialization of its technologies will be reliant on the Company's ability to identify, execute and maintain a successful mechanism to market.

#### Experimental Field

The Company is engaged in the research and development of the Technology with the goal of commercializing viable software offerings and consumer products. The need to keep its Technology offerings relevant will require extensive experimental effort and can require significant investment. Customers may be hesitant to implement any new technologies developed without extensive and time-consuming testing.

#### Technological Advancements

The markets for the Company's Technology are characterized by rapidly changing technology and evolving industry standards, which could result in software of product obsolescence or short product life cycles. Accordingly, the Company's success will be dependent upon its ability to anticipate technological changes in the industries it serves and to successfully identify, obtain, develop, and market new offerings that satisfy evolving industry requirements.

The lens and AI for imaging industries are subject to significant technological advancements, changing industry standards, market trends, customer preferences and competitive pressures, which can, among other things, necessitate revisions in pricing strategies, price reductions, and reduced profit margins.

The success of the Company will depend on its ability to secure technological superiority in its services and maintain such superiority in the face of new technologies. No assurance can be given that further modification of product offerings of the Company will not be required to meet demands or to remain competitive. The future success of the Company will be influenced by its ability to continue to adapt its products. Although the Company has committed resources to improve its products, there can be no assurance that these efforts will increase profits.

#### Risk of Obsolescence

New developments in technology may negatively affect the development or sale of some or all of the Company's products or make its products obsolete. The inability of the Company to enhance existing products in a timely manner or to develop and introduce new products that incorporate new technologies, conform to increasingly regulatory requirements, and achieve market acceptance in a timely manner could negatively impact the Company's competitive position. New developments or modifications can be costly, involve significant research, development, time, and expense, and may not necessarily result in the successful commercialization of any new commercial offerings.

# Additional Funding Requirements

The Company will require additional financing to implement its business plan. The Company may raise additional funds through gap financing, debt financing, and/or subsequent equity financing. The Company may also borrow funds from a financial institution(s) using the assets of the Company as security for said loan(s). The Company may also obtain additional financing through certain government subsidies or tax incentives available in certain geographic areas, if available, at the Company's discretion. Failure to obtain such additional capital on terms acceptable to the Company could restrict its ability to implement its growth plans. Further, a shortage of funds may prevent or delay the Company from getting its products to the marketplace, achieving profitability, or enabling the Company to pay distributions to its shareholders. There is no assurance that the Company will have adequate capital to conduct its business or satisfy its financial obligations.

The ability of the Company to arrange financing in the future will depend in part upon the prevailing capital market conditions as well as the business performance of the Company. There can be no assurance that the Company will be successful in its efforts to arrange additional financing, if needed, on terms satisfactory to the Company or at all. If additional financing is raised by the issuance of shares from the treasury of the Company, control of the Company may change, and shareholders may suffer additional dilution. There can be no assurance that the Company will generate cash flow from operations necessary to support the continuing operations of the Company. Limited Operating History

The Company has incurred losses since inception and is expected to continue to incur losses. As such, the Company will be subject to all the business risks and uncertainties associated with any new business enterprise, including undercapitalization, cash shortages, limitations with respect to personnel, financial and other resources, and lack of revenues. The Company's ability to reach and then sustain profitability depends on several factors, including the growth rate of the developmental optics industry, the continued market acceptance of the Technology and the competitiveness of the

Company. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of its success must be considered in light of its early stage of operations.

# Lack of Operating Cash Flow

The Company currently has no source of operating cash flow, which is expected to continue for the near future. The Company's failure to achieve profitability and positive operating cash flows could have a material adverse effect on its financial condition and results of operations.

# Exposure to Foreign Currency Exchange Rates

The Company's consumer product division leverages suppliers and partners in foreign jurisdictions and its potential future OEM partnerships for its software are not geographically centralized. The Company's business may expand internationally and as a result, a significant portion of its revenues, expenses, current assets and current liabilities may be preliminary denominated in foreign currencies, while its financial statements are expressed in Canadian dollars. A decrease in the value of such foreign currencies relative to the U.S. dollar could result in losses in revenues from currency exchange rate fluctuations. To date, the Company has not hedged against risks associated with foreign exchange rate exposure. The Company cannot be sure that any hedging techniques it may implement in the future will be successful or that its business, financial condition, and results of operations will not be materially adversely affected by exchange rate fluctuations.

# Market for Securities and Volatility of Share Price

There can be no assurance that an active trading market in the Company's securities will be established or sustained. The market price for the Company's securities could be subject to wide fluctuations. Factors such as announcements of quarterly variations in operating results, as well as market conditions in the industry, may have a significant adverse impact on the market price of the securities of the Company. The stock market has from time to time experienced extreme price and volume fluctuations, which have often been unrelated to the operating performance of companies.

#### Dependence on Management and Key Personnel

The Company's management will make all decisions with respect to the Company's assets, including investment decisions and the day-to-day operations of the Company. As a result, the success of the Company for the foreseeable future will depend largely upon the ability of its management team, employees and consultants. The loss of any key individual could have a material adverse effect on the Company. If the Company lost the services of one or more of its executive officers or key employees and consultants, it would need to devote substantial resources to finding replacements, and until replacements were found, the Company would be operating without the skills or leadership of such personnel, any of which could have a significant adverse effect on the Company's business. The Company currently does not carry "key-man" life insurance policies covering any of these officers or consultants.

The future success of the Company depends in significant part on the contributions of its executive officers and scientific and technical personnel. The loss of the services of one or more key individuals may significantly delay or prevent achievement of scientific or business objectives. Competition for qualified and experienced personnel in the technology field is generally intense, and the Company will rely heavily on its ability to attract and retain qualified personnel in order to successfully implement its scientific and business objectives. The failure to attract or retain key executives and personnel could impact the Company's operations, including failure to achieve targets and advancement of the Technology.

# Expansion and Growth

As the Company's development and commercialization plans and strategies develop, the Company expects that it will need to expand the size of its employee base for managerial, operational, sales, marketing, financial and other resources. Future growth would impose significant added responsibilities on members of management, including the need to identify, recruit, maintain, motivate and integrate additional employees. In addition, the Company's management may have to divert a disproportionate amount of its attention away from the Company's day-to-day activities and devote a substantial amount of time to managing these growth activities. The Company's future financial performance and its ability to commercialize its Technology and its ability to compete effectively will depend, in part, on the Company's ability to effectively manage any future growth.

# Adverse General Economic Conditions

The unprecedented events in global financial markets in the past several months have had a profound impact on the global economy. Some of the key impacts of the financial market turmoil included contraction in credit markets resulting in a widening of credit risk, devaluations, high volatility in global equity, commodity, foreign exchange and consumer

demand and unpredictable market liquidity. Similar disturbances in the financial markets or other economic conditions, including but not limited to, inflation, deflation, decreased consumer demand, lack of available credit, the state of the financial markets, interest rates and tax rates, may adversely affect the Company's operations. Specifically, a global credit/liquidity crisis could impact the cost and availability of financing and overall liquidity. Volatile commodity and consumables prices and currency exchange rates could impact costs and the devaluation and volatility of global stock markets could impact the valuation of the Company's equity and other securities. These and other factors could have a combined material adverse effect on the Company's financial condition and results of its operations.

#### Conflicts of Interest

Some of the directors and officers of the Company will be engaged in, and will continue to engage in, other business activities on their own behalf and on behalf of other companies (including technology companies) and, because of these and other activities, such directors and officers of the Company may become subject to conflicts of interest. The BCBCA provides that if a director has a material interest in a contract or proposed contract or agreement that is material to the issuer, the director shall disclose his interest in such contract or agreement and shall refrain from voting on any matter in respect of such contract or agreement, subject to and in accordance with the BCBCA. To the extent that conflicts of interest arise, such conflicts will be resolved in accordance with the provisions of the BCBCA. To the proposed management of the Company's knowledge, as at the date hereof there are no existing or potential material conflicts of interest between the Company and a proposed director or officer of the Company except as otherwise disclosed herein.

# Partnerships and Collaborations

The Company may seek third-party collaborators for development and commercialization of potential future products and projects. The Company is not currently party to any such arrangement. The Company's ability to generate revenues from these arrangements will depend on its collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaboration agreements may not lead to development or commercialization of the Technology in the most efficient manner or at all.

#### Dividends

To date, the Issuer has not paid any dividends on their outstanding shares. Any decision to pay dividends on the shares of the Company will be made by its board of directors based on the Company's earnings, financial requirements, and other conditions.

# Uninsured Risks

The Company may become subject to liability for hazards that cannot be insured against or against which it may elect not to be so insured because of high premium costs. Furthermore, the Company may incur a liability to third parties (in excess of any insurance coverage) arising from any damage or injury caused by the Company's operations.

#### INFORMATION REGARDING FORWARD LOOKING STATEMENTS

Certain statements contained in this Management Discussion and Analysis constitute "forward-looking statements." These statements relate to future events or the Company's future performance, business prospects or opportunities. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified using words such as "seek", "anticipate", "plan", "continue", "estimate", "expect", "may", "project", "predict", "potential", "targeting", "intend", "could", "might", "should", "believe" and similar expressions. Information concerning the interpretation of drill results, mineral resource and reserve estimates and capital cost estimates may also be deemed as forward-looking statements as such information constitutes a prediction of what mineralization might be found to be present and how much capital will be required if a project is developed. These statements involve known and unknown risks, uncertainties, and other factors that may cause actual results or events to differ materially from those anticipated in such forward-looking statements. The Company believes that the expectations reflected in those forward-looking statements are reasonable, but no assurance can be given that these expectations will prove to be correct and such forward looking statements included in this Management Discussion and Analysis should not be relied upon. These statements speak only as of the date of this Management Discussion and Analysis. Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by forward-looking statements contained in this Management Discussion and Analysis. Such statements are based on several assumptions that may prove to be incorrect, including, but not limited to, assumptions about:

- general business and economic conditions;
- the potential applications of the Company's technologies;
- the timing and expenditures required to develop such technologies, including development of any future prototype vertical;

- the ability of the Company to procure patent or other intellectual property protection for its technologies and to license or enforce such patents, if any;
- the ability to attract and retain skilled staff;
- foreign currency and exchange rates;
- market competition; and
- tax benefits and tax rates.

These forward-looking statements involve risks and uncertainties relating to, among other things, risks related to international operations, actual results of current exploration activities, conclusions of economic evaluations, changes in project parameters as plans continue to be refined, as well as those factors discussed in the section "Risk Factors". Factors that could cause actual results to differ materially include, but are not limited to, the risk factors discussed in the section. The Company cautions that the foregoing list of important factors is not exhaustive. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The Company does not undertake to update any forward-looking statements that are incorporated by reference herein, except in accordance with applicable securities laws.

#### **ADDITIONAL INFORMATION**

Additional information regarding the Company can be found at <a href="https://www.sedar.com">www.sedar.com</a> and the Company's website www.nexoptic.com.