# NEXOPTIC TECHNOLOGY CORP.

## MANAGEMENT'S DISCUSSION AND ANALYSIS

## FOR THE PERIOD ENDED MARCH 31, 2019


500 – 666 Burrard Street

Vancouver, BC

V6C 3P6

Tel: 604-669-7330

*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 three months ended March 31, 2019. The discussion below should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements for the three months ended March 31, 2019 and audited consolidated financial statements for the years ended December 31, 2018 and 2017. 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 May 30, 2019.*

*The Company is listed on the TSX Venture Exchange ("TSX-V") under the symbol "NXO" and OTCQX 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 www.sedar.com and the Company's website at www.nexoptic.com.*

## BACKGROUND AND CORE BUSINESS

NexOptic Technology Corp. and its subsidiaries (collectively, the "Company" or "NexOptic") is a technology company developing innovative optical and lens technologies. NexOptic was incorporated under the Company Act (British Columbia) on October 11, 2007. The Company maintains its registered office at 2080 – 777 Hornby Street, Vancouver, British Columbia, Canada V6Z 1S4. The Company's principal place of business is Suite 500 - 666 Burrard Street, Vancouver, BC V6C 3P6.

The Company is developing technologies relating to imagery and light concentration for lenses as well as artificial intelligence ("AI") for image capture systems. The Company's core, patented and patent pending technologies, referred to and trademarked as Blade Optics™, are focused on AI for imagery as well as novel approaches to collecting and concentrating an electromagnetic wave, such as visible light, and, if required by the application, maintaining the original image at high levels of quality and compactness. Some of the lens designs involve flat surfaces, and intention of the technologies are for significant consolidation in the length of lens stacks found in traditional light capture systems found in most of today's imaging systems. Further, Blade Optics™ offers potential for improvements to quality, clarity, and resolution of for a multitude of applications in multiple imaging verticals. The Company's applications utilize both pre- and post-optical imaging solution improvements which include novel geometrical lens designs as well as artificial intelligence algorithms.

To validate one of its earliest engineered lens designs, NexOptic built a proof-of-concept telescope prototype ("POC") collaboratively with Ruda Cardinal Inc. ("Ruda") of Tucson, Arizona. Ruda, a leader in the field of optical engineering, specializes in providing creative solutions to unique and complicated optical challenges for NASA, a select group of Fortune 500 companies and others. The POC was built with a lens stack depth to aperture ratio of nearly 1:1 which is significantly (up to eight times) thinner than comparable conventional telescopes on the market today. The 5-inch-aperture prototype telescope includes a Blade Optics™ lens engineered with flat surfaces.

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

### NexOptic's Mobile Device Lens Stack (Smartphones)

On August 9, 2018, NexOptic published independent test results, as provided to it by Optikos Corporation of Wakefield, Massachusetts ("Optikos") on its smartphone lens assembly ("Lens"). NexOptic's optical engineers interpreted the data, as provided to them by Optikos, to show that NexOptic's Lens assembly had an overall angular resolution of greater than thirty-five percent (35%) relative to the current top-rated smartphone lens. Optikos, a world leader in the fields of optical and electro-optical metrology, provides optically-based product design and development, standard and custom metrology products, and IQ Lab™ testing services to a range of commercial, government, and consumer products organizations globally.

NexOptic's smartphone Lens is scalable from small to large configurations, demonstrating the potential to be used in a variety of optical applications. The Lens, as tested, had engineered specifications chosen to demonstrate the capabilities of the lens for long range viewing in the rapidly growing, smartphone, telephoto marketplace. It was engineered with an aperture of 4.8mm, an effective focal length of 11.5mm and horizontal full field of view of 25 degrees. The design is housed in roughly a 6 to 7mm depth, the typical depth of many of today's smartphones. For comparison, the Company's final designs are expected to have approximately 3.5 times more light-gathering area than a leading smartphone long-range lens with a 2.5mm aperture thereby creating the potential to capture higher quality images at long ranges with these iconic consumer devices. Additionally, the engineered system can have a much better diffraction limit than a smaller aperture system, providing the potential for greatly improved angular resolution. All design specification numbers are approximate, and subject to change. Additional details on the information related to the Optikos' tests can be found in NexOptic's August 9, 2018 news release.

Off-the-shelf sensor configuration and rudimentary image processing features were used for these tests. NexOptic's desktop demonstration Lens was built to prove the engineering and showcase the technology on a preliminary basis. NexOptic's path to a smartphone-based unit is continuing and includes discussions and feedback from some of the world's leading makers of smartphones.

**DoubleTake™, NexOptic's Binoculars Reimagined Wins Multiple Prestigious Awards**

On May 28, 2019, NexOptic reported that production initiatives on DoubleTake™ had commenced and that the Company's Chairman had just completed site visits with key manufacturing partners and component suppliers. DoubleTake™ is designed to be rugged, water-resistant, and lightweight, and is expected to appeal to the growing premium sport optics consumer market. DoubleTake™ has received multiple awards thus far in 2019 and continues to garner media attention including the coveted DigitalTrends "Top Tech of CES 2019" award for photography, the GearJunkie "Best in Show" Winter Gear 2019 award and the 2019 Gold Award for Advanced Image Capture in the Consumer Goods category by the prestigious Edison Awards™.

DoubleTake™ is engineered with a sophisticated dual lens system that is capable of high-resolution image and 4K video capture. The dual lenses will offer the user the ability to switch instantly from 2.5X optical magnification to 10X optical magnification. Thereafter the system will allow for 40X or greater digital zoom (beyond the 10X optical zoom). For a device of its size, the resolution is anticipated to be unprecedented. Furthermore, the system will provide advanced image stabilization, high-resolution panning, superior low-light performance, an equivalent focal length greater than 500mm in a compact form factor, a large 52mm diagonal aperture that will capture far more light, a 5" high-definition, built-in LCD display, and a Bluetooth and Wi-Fi enabled system will allow for sharing. With the innovations it has already achieved, the Company feels that it has the potential to alter and influence the entire sports optics and binocular marketplaces.

Some additional product features include:

- Live stream images visible anywhere in the world
- Full remote control and viewfinder from phone
- Route and image location mapping with GPS waypoints
- Date, time, weather, moon phase, wind condition records
- Image notes
- One-touch sharing to social media
- Cloud storage
- Filter and retrieve images via any major datapoint

The Company anticipates DoubleTake™ being available to consumers later in 2019 and also anticipates creating other sport optic products for consumers including PocketPro™ a more compacted version of DoubleTake™ and others.

The Company maintains 100% ownership and control of its proposed sports product lineup.

**Advanced Low Light Imaging Solution: ALLIS™**

On May 8th, 2019, the Company reported that it had made significant advancements to its cutting-edge Artificial Intelligence imaging solution, brand named: ALLIS™. NexOptic also reported that it was in advanced discussions with several companies representing a variety of imaging markets that could greatly benefit from ALLIS™.

ALLIS™ provides immediate solutions to problems that have plagued the imaging industry for decades. NexOptic's engineered AI drastically reduces image noise common to all imaging systems while improving performance in low light conditions. This is accomplished with NexOptic's expanding suite of patent-pending, deep learning algorithms.

Some of the key benefits of ALLIS™ include:

- Superior low-light performance
- Dramatic reduction in image noise
- Improved downstream applications (computational imaging, facial recognition)
- Enhanced long-range image stabilization
- Major reduction in file sizes

ALLIS™ is engineered to perform in a variety of lighting conditions, enabling more compact optics with less expensive electronics. ALLIS™ also greatly reduces file sizes for compressed media and lowers bandwidth usage during data transmission. NexOptic's AI improves imaging quality not just for the human eye, but for other companies' applications, such as facial recognition or object classification, and could become a critical component of the AI infrastructure of tomorrow.

The Company is strengthening its AI team and has increased its capacity to develop leading solutions with the recent commissioning of its AI lab in Edmonton. The region is home to top AI companies, such as Google's Deepmind. NexOptic is in advanced discussions with several companies representing a variety of imaging markets that could greatly benefit from ALLIS™.

**Patents and Patent Strategy**

Patent protection directed to its core optical technologies is important to NexOptic. The Company has two granted patents from the United States Patent and Trademark Office, ("USPTO") filed by Spectrum Optix directed to its original Blade Optics™ lens technology (Patent Nos. US 9759900 and US 10228549 entitled FLAT WEDGE-SHAPED LENS AND IMAGE PROCESSING METHOD). The Company has filed and continues to file new applications on its other novel lens and image processing designs and has several pending US and PCT applications related thereto. Recent provisional patent applications filed with the USPTO utilize a variety of lens stack designs, all of which differ geometrically from NexOptic's original patents granted by the USPTO.

The Company has filed for patent protection to its original Blade Optics™ lens technology in key international markets and has patents pending in China, Hong Kong, Japan and Europe and has granted patents in Canada and South Korea.

The Company also has patent applications pending related to its DoubleTake Lens and AI networks for photography and anticipates making additional patent filings specific to both hardware and computational designs in the future.

Risks associated with patentability and other aspects of the patenting process can be found in the Risk Factors section of this document.

**Commercial Viability Potential**

NexOptic lenses, and artificial intelligence technologies, present an opportunity to be successfully engineered into multiple additional imaging verticals and industries. NexOptic continues to examine multiple opportunities for the Company to become commercially viable in the near term and continues to hold advanced dialogues with third parties. The Company plans to introduce its first product to consumers in 2019.

**OUTLOOK**

The Company's continued focus is the advancement and pursuit of commercialization of its innovative imaging technologies.

**OUTSTANDING SHARE DATA**

At the date of this report, the Company has

- 128,263,979 issued and outstanding common shares;
- 10,672,000 outstanding stock options with a weighted average exercise price of $0.97; and
- 10,171,037 (6,704,960 warrants and 3,466,077 Conditional Warrants) warrants with a weighted average exercise price of $1.46.

**SELECTED FINANCIAL INFORMATION**

**Summary of Quarterly results**

| | March 31, 2019 | December 31, 2018 | September 30, 2018 | June 30, 2018 |
|---|---|---|---|---|
| Interest income | $ 15,428 | $ 14,046 | $ 21,348 | $ 22,211 |
| Net loss for the period | (4,143,363) | (2,997,421) | (3,000,418) | (3,353,932) |
| Comprehensive loss for the period | (4,143,391) | (2,996,958) | (3,001,100) | (3,353,896) |
| Basic and diluted loss per share | (0.03) | (0.02) | (0.02) | (0.03) |

| | March 31, 2018 | December 31, 2017 | September 30, 2017 | June 30, 2017 |
|---|---|---|---|---|
| Interest income | $ 23,160 | $ 20,028 | $ 7,039 | $ 2,229 |
| Net loss for the period | (2,935,250) | (3,834,219) | (519,017) | (3,966,072) |
| Comprehensive loss for the period | (2,935,189) | (3,834,779) | (517,723) | (3,966,101) |
| Basic and diluted loss per share | (0.02) | (0.03) | (0.01) | (0.06) |

The peaks in the net loss for the three months ended March 31, 2019, June 30, 2018 and June 30, 2017 are partly attributable to non-cash expenses for share-based payments expense of $1,144,642, $682,757 and $3,484,730 respectively. The significant increase in the quarterly net loss from December 31, 2017 relative to previous quarters reflects the consolidation of the financial results of Spectrum effective November 3, 2017, and is expected to reflect a new level of corporate activity in research and development going forward, as well as a non-cash share-based payments expense of $1,419,990. The Company recognizes a non-cash charge of approximately $1,397,000 each quarter since March 31, 2018 for amortization of intangible assets.

**Results of Operations for the three-month period ended March 31, 2019 compared to 2018**

The comprehensive loss for the three-month period ended March 31, 2019 was $4,143,391 (2018 – $2,935,189). Overall, activity increased from the prior year as the results of Spectrum have been consolidated effective November 3, 2017. Significant changes to the comprehensive loss are explained as follows:

*Research and development costs*

| **Research and Development** | **2019** | **2018** |
|---|---|---|
| Amortization of intangible assets | $ 1,397,206 | $ 1,397,206 |
| Depreciation of equipment | 5,085 | 7,857 |
| Consulting fees | 53,435 | 104,636 |
| Engineering and design | 298,546 | 384,080 |
| Management fees | 85,000 | 85,000 |
| Professional fees | 41,020 | 60,018 |
| Salaries | 82,000 | 47,083 |
| Share-based payments | 410,343 | - |
| Supplies | 73,002 | 27,183 |
| Travel | 37,876 | 12,321 |
| | $ (2,483,513) | $ (2,125,384) |

Research and development expenses of $2,483,513 (2018 - $2,125,384) include significant investment into the design and development of the sport optics and cell phone lens projects as well as research and development of its AI as the Company invests in its core technologies.

- Engineering and design of $298,546 (2018 - $384,080) decreased as the Company focused its working relationships with key partners to refine its DoubleTake™ design. In the current period, the Company worked to identify key opportunities and direct expenditures to leverage research and testing work done in 2018.
- Consulting fees of $53,435 (2018 - $104,636) decreased as the Company transitioned a number of key research and development consultants to employees in 2018. Additionally, the Company narrowed its efforts to the development of key technologies to a commercial path.
- Management fees include amounts paid to Darcy Daugela, former Executive Chairman and current VP of Technology Development, who manages and oversees the Company's operations including research facility in Edmonton, Alberta.
- Professional fees include amounts paid for legal work on the Company's patent portfolio.
- Salaries of $82,000 (2018 - $47,083) increased as a number of key research and development consultants became employees in 2018.
- Supplies expenditures of $73,002 (2018 - $27,183) increased due to the purchase of technical hardware to test and trial design schematics of its DoubleTake™ and mobile lens products.

- Share-based payments of $410,343 (2018 - $Nil) relates to the valuation of stock options granted to research and development employees and consultants and vested in the period. Options were granted to individuals whose corresponding compensation expense, as applicable, is included in research and development expenses.

*General and administrative costs*

| General and Administrative | 2019 | 2018 |
|---|---|---|
| Consulting fees | $ 149,782 | $ 97,686 |
| Depreciation of right-of-use assets | 30,509 | - |
| Insurance | 7,217 | 7,720 |
| Investor relations | 237,966 | 235,281 |
| Management fees | 57,000 | 57,000 |
| Office and administration | 94,683 | 87,200 |
| Professional fees | 13,169 | 19,198 |
| Salaries | 126,075 | 76,442 |
| Share-based payments | 734,299 | - |
| Shareholder communications and filings | 31,158 | 36,871 |
| Sales and marketing | 79,266 | 88,006 |
| Travel | 112,014 | 127,622 |
| | $ (1,673,138) | $ (833,026) |

- Consulting fees includes compensation to the CFO and accounting staff. In the current period, the Company incurred additional costs paid to consultants to make strategic introductions with potential partners in the development and commercialization of the Company's technologies.

- Depreciation of right-of-use assets of $30,509 (2018 - $Nil) relates to amortization of lease liabilities upon adoption of IFRS 16 as detailed in *Changes in Accounting Policies* below.

- Investor relations expenses of $237,966 (2018 - $235,281) includes expenditures for its market maker, news releases, public relations and investor outreach services. Additionally, the Company incurred $79,266 (2018 - $88,066) 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.

- Management fees of $57,000 (2018 - $57,000) reflect amounts paid to John Daugela, former CEO and current VP of Business Development.

- Salaries for general and administrative personnel has increased to $126,075 (2018 - $76,442). The increase is attributable to the addition of staff to support the product marketing of DoubleTake™ and research and development staff in Edmonton.

- Share-based payments expense of $734,299 (2018 - $Nil) relates to the valuation of stock options granted to general and administrative employees and consultants and vested in the period. Options were granted to individuals whose corresponding compensation expense, as applicable, is included in general and administrative expenses.

**LIQUIDITY AND CAPITAL RESOURCES**

Cash has decreased by $1,610,696 to $1,093,460 at March 31, 2019 from a balance of $2,704,156 as at December 31, 2018. The Company had working capital of $714,711 as at March 31, 2019.

Overall cash utilization for operating activities remain consistent from 2018 to 2019. In the three months ended March 31, 2019, the Company expended $1,579,698 in operating activities as compared to $1,665,356 in 2018.

Financing activities consumed $30,998 in the three months ended March 31, 2019 following the adoption of IFRS 16 to reflect the treatment of lease payments. In the prior period, the Company generated the funds of $96,250 from the exercise of warrants.

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 according to the agreement with Spectrum over the short term and for working capital. Additional funds will be required to satisfy the investment in the Spectrum agreement, and to maintain general working capital. The contractual commitments of the Company are not significant, and the Company may sustain operations by reducing overhead and delaying investment.

The Company has lease liabilities (undiscounted) and lease commitments for short term leases on office spaces totaling $150,927 ending July 2020.

## OFF STATEMENT OF FINANCIAL POSITION ARRANGEMENTS

At March 31, 2019, 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, former Chairman, former Chief Executive Officer and directors of the Company. The remuneration of the key management personnel is as follows:

| For the three months ended March 31 | | 2019 | | 2018 |
|---|---|---|---|---|
| **Payments to key management personnel:** | | | | |
| Consulting fees (G&A) – paid to a company in which the CFO has a significant investment | $ | 39,711 | $ | 21,225 |
| Management fees (G&A) – John Daugela, and a company owned by Darcy and John Daugela | | 57,000 | | 57,000 |
| Management fees (R&D) – Darcy Daugela | | 85,000 | | 85,000 |
| Salaries and short-term benefits (G&A) – Paul McKenzie | | 45,000 | | 45,000 |
| Share-based payments to officers – general and administrative | | 86,388 | | - |
| Share-based payments to directors – general and administrative | | 431,940 | | - |

During the three months ended March 31, 2019, the Company was charged legal fees, included in professional fees, of $8,060 (2018 - $4,134) by S. Paul Simpson Law Corp., a law firm of which an officer of the Company is an employee.

As at March 31, 2019, the Company had balances outstanding with related parties of $27,308 (December 31, 2018 - $82,126) included in accounts payable. All balances are unsecured, non-interest-bearing, have no fixed repayment terms and are due on demand.

## CHANGES IN ACCOUNTING POLICIES

The accounting policies applied in the preparation of the condensed consolidated interim financial statements are disclosed in Note 3 of the Company's consolidated financial statements for the year ended December 31, 2018, except for the new standard adopted described below.

**New standard adopted**

*IFRS 16, Leases*

The Company adopted IFRS 16 - Leases ("IFRS 16") on January 1, 2019. The objective of the new standard is to eliminate the classification of leases as either operating or financing leases for a lessee and report all leases on the statement of financial position. The only exemption to this will be for leases that are one year or less in duration or for leases of assets with low values. Under IFRS 16 a lessee is required to recognize a right-of-use asset, representing its right to use the underlying asset, and a lease liability, representing its obligations to make lease payments. IFRS 16 also changes the nature of expenses relating to leases, as lease expenses previously recognized for operating leases are replaced with depreciation expense on capitalized right-of-use assets and finance or interest expense for the corresponding lease liabilities associated with the capitalized right-of-use leased assets.

The Company adopted IFRS 16 using the modified retrospective approach and did not restate comparative amounts for the year prior to first adoption. For all leases, the lease liability was measured at January 1, 2019 as the present value of any future minimum lease payments discounted using the appropriate incremental borrowing rate. The associated right of use assets was measured at the amount equal to the lease liability on January 1, 2019.

The following leases accounting policies have been applied as of January 1, 2019 on adoption of IFRS 16:

At inception of a contract, we assess whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. We assess whether the contract involves the use of an identified asset, whether we have the right to obtain substantially all of the economic benefits from use of the asset during the term of the arrangement and if we have the right to direct the use of the asset.

As a lessee, we recognize a right-of-use asset, and a lease liability at the commencement date of a lease. The right-of-use asset is initially measured at cost, which is comprised of the initial amount of the lease liability adjusted for any payments made at or before the commencement date, plus any decommissioning and restoration costs, less any lease incentives received.

The right-of-use asset is subsequently depreciated from the commencement date to the earlier of the end of the lease term, or the end of the useful life of the asset. In addition, the right-of-use asset may be reduced due to impairment losses, if any, and adjusted for certain measurements of the lease liability.

A lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by the interest rate implicit in the lease, or if that rate cannot be readily determined, the incremental borrowing rate. Lease payments included in the measurement of the lease liability are comprised of:

- fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee;
- exercise prices of purchase options if we are reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease.

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, or if there is a change in our estimate or assessment of the expected amount payable under a residual value guarantee, purchase, extension or termination option. Variable lease payments not included in the initial measurement of the lease liability are charged directly to profit.

As part of the initial application of IFRS 16, we have elected 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 charged directly to profit on a straight-line basis over the lease term.

Impact of transition to IFRS 16:

Effective January 1, 2019, the Company adopted IFRS 16 using the modified retrospective approach and accordingly the information presented for 2018 has not been restated. The cumulative effect of initial application is recognized in deficit at January 1, 2019. Comparative amounts for 2018 remains as previously reported under IAS 17 and related interpretations.

On initial application, the Company has elected to record right-of-use assets based on the corresponding lease liabilities. Lease liabilities have been measured by discounting future lease payments at the incremental borrowing rate at January 1, 2019. The incremental borrowing rate applied was 8.95% per annum and represents the Company's best estimate of the rate of interest that it would expect to pay to borrow, on a collateralized basis, over a similar term, an amount equal to the lease payments in the current economic environment.

As of the initial date of application of IFRS 16, the Company has three office leases outstanding. The remaining non-cancelable periods of the leases were 6 months, 12 months, and 19 months respectively. The Company has elected to apply the practical expedient to account for leases for which the lease term ends within 12 months of the date of initial application as short-term leases.

The application of IFRS 16 to leases, previously classified as operating leases under IAS 17, resulted in the recognition of right-of-use assets of $157,699 and lease liabilities with no net impact on deficit:

| **Reconciliation of lease liabilities** | | January 1, 2019 |
|---|---|---|
| Off-balance lease obligations as of December 31, 2018 | $ | 196,925 |
| Current leases with a term of 12 months or less (short-term leases) | | (30,000) |
| Gross lease liabilities as of January 1, 2019 | | 166,925 |
| Discounting | | (9,226) |
| Lease liabilities on application of IFRS 16 at January 1, 2019 | $ | 157,699 |

## 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.

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. As at March 31, 2019, the Company had cash equivalents of $786,470 (December 31, 2018 - $2,273,645) in term deposits. 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. 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 March 31, 2019, the Company had a working capital of $714,711 (December 31, 2018 - $2,544,491). All the Company's financial liabilities have contractual maturities of less than 30 days and are subject to normal trade terms.

*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 assets exposed to interest rate risk consist 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 several 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 reduce its foreign currency risk as needed by substituting Canadian vendors as required. Foreign currency risk is considered moderate relative to the overall financial operating plan.

**RISK FACTORS**

The principal activity of the Company is the investment in and development of its core technologies (the "Technology"), which relates to a high efficiency optical concept, including the use of flat lenses as well as novel artificial intelligence for image capture systems.

*Competition*

The lens industry is highly competitive with several well-established market participants. Competition in this industry occurs on many fronts, including developing and bringing new products to market before others, developing new technologies to improve existing products, developing new products to provide the same benefits as existing products at less cost, developing new products to provide benefits superior to those of existing products, and acquiring or licensing complementary or novel technologies from other companies or individuals. The Company 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 products that are similar to those offered by the Company, while not necessarily being direct competitors currently, or may make technological advances that reduce their cost of production so that they may engage in price competition.

*Development Risk*

Substantial corporate resources are being expended on the development of the Technology. The Technology remains in the research and development stages and has not yet been commercialized. There can be no guarantee that the Technology will achieve the objectives which the Company believes are necessary for it to result in a successful product in the market. In addition, the Technology is in early stages of development and there can be no guarantee that technical milestones can be achieved. There are significant risks, expenses, delays, and difficulties frequently encountered in establishing new products in the technology 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 products 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 completed 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 the Technology. 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 would 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 could limit the Company's potential 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*

The Company is a research and development company with no history of production or sale. There is no assurance that it will seek or achieve commercial production of any product or the sale of any product. There is no assurance that the Company will meet proposed commercial production timelines or will be able to achieve commercial production within financial targets.

The Company has not previously produced a consumer product on a commercial scale and has no manufacturing facility. The Company may in the future be dependent on third party manufacturers for the manufacture of a product, 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. Contract manufacturing organizations 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. If the Company were unable to promote, market and monetize the Technology and secure relationships with industry professionals and 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 a consumer product 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 products. The development of the Technology 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 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 products that satisfy evolving industry requirements.

The lens industry is 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 product development or modification is costly, involves significant research, development, time, and expense, and may not necessarily result in the successful commercialization of any new products.

*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. 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 under-capitalization, 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 lens 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 business leverages suppliers and partners in foreign jurisdictions. 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.

*Substantial Control by Insiders*

A Company shareholder beneficially own approximately 32% of the Company's shares. As a result, the shareholder will be able to influence or control matters requiring approval by the Company's shareholders, including the election of directors and the approval of mergers, acquisitions, or other extraordinary transactions. They may also have interests that differ from those of investors and may vote in a manner that is adverse to investors' interests. This concentration of ownership may have the effect of deterring, delaying, or preventing a change of control of the Company, could deprive the Company's shareholders of an opportunity to receive a premium for their Company Shares as part of a sale of the Company, and might ultimately affect the market price of the Company Shares.

*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 particular 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 years 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 precious metal markets and a lack of market liquidity. A similar slowdown in the financial markets or other economic conditions, including but not limited to, inflation, fuel and energy costs, 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 energy, 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 factors could have a material adverse effect on the Company's financial condition and results of 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 www.sedar.com and the Company's website www.nextopic.com.