Minerva Intelligence Inc.

Management Discussion and Analysis
of
Financial Position and Results of Operations
for the Year ended December 31, 2020

This report is dated April 23, 2021.
(The "Report Date")

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Introduction

The following information should be read in conjunction with the consolidated financial statements of Minerva Intelligence Inc. (the "Company") for the years ended December 31, 2020 and 2019.

The consolidated financial statements are prepared in accordance with International Financial Reporting Standards ("IFRS").

Note 3 to the consolidated financial statements of the Company at December 31, 2020 describes the Company's significant accounting policies, as well as new accounting pronouncements not yet effective. During the year ended December 31, 2020, the Company's critical accounting estimates and significant accounting policies have remained substantially unchanged.

All amounts presented in this document are stated in Canadian dollars, except where otherwise noted.

Forward Looking Statements

This Management's Discussion and Analysis ("MD&A") is intended to supplement and complement the consolidated financial statements for the year ended December 31, 2020 and 2019 and the notes thereto (the "Financial Statements"). Readers are encouraged to review these Financial Statements in conjunction with a review of this MD&A. Certain notes to the Financial Statements are specifically referred to herein, and such notes are incorporated by reference herein. Forward-looking statements are subject to known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those implied by the forward-looking statements. These forward-looking statements are based on, but not limited to, material assumptions including: Company performance; the ability of the Company to successfully execute on its growth and new business strategies, including attracting new clients; the demand for its products continuing to increase; stable currency valuations; a sufficiently stable and healthy global economic environment; and other expectations, intentions and plans contained in this MD&A that are not historical fact. When used in this MD&A, the words "plan," "expect," "believe," and similar expressions generally identify forward-looking statements. These statements reflect current expectations. They are subject to a number of risks and uncertainties, including, but not limited to, changes in technology and general market conditions. In light of the many risks and uncertainties, readers should understand that the Company cannot offer assurance that the forward-looking statements contained in this analysis will be realized. **Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date the statements were made, and readers are advised to consider such forward-looking statements in light of the risks as set forth below.**

Corporate Overview and Description of the Business

Minerva Intelligence Inc. (formerly Two Owls Ventures Corp.) (the "Company" or "Minerva") was incorporated on August 16, 2017 pursuant to the *Business Corporations Act* of British Columbia and was classified as a Capital Pool Company as defined in the TSX Venture Exchange ("TSX-V") Policy 2.4. On March 14, 2018, the Company completed its Initial Public Offering ("IPO") and on March 26, 2018, the Company's shares commenced trading on the TSX-V.

Minerva Intelligence (Canada) Ltd. (formerly Minerva Intelligence Inc.) ("Minerva Canada") was incorporated on May 17, 2017 pursuant to the Business Corporations Act of Ontario. On April 23, 2019, Minerva Canada continued its jurisdiction of incorporation from Ontario to British Columbia, to become subject to the B.C. *Business Corporations Act* ("BCBCA").

Minerva Intelligence Gmbh was incorporated on September 24, 2019 as the German subsidiary of the Company.

The head office of the Company is located at Suite 301, 850 West Hastings Street, Vancouver, British Columbia V6C 1E1. The registered office of the Company is located at 2900 - 595 Burrard Street, Vancouver, B.C. V7X 1J5.

Acquisition of Minerva Intelligence (Canada) Ltd.

On May 23, 2019 the Company closed its arm's length Qualifying Transaction ("QT"), by acquiring all of the issued and outstanding shares of Minerva Canada, from the former holders thereof, in exchange for shares of the Company. The reader is referred to the December 31, 2019 and 2020 audited financial statements for a full discussion of the transaction.

As a result of the QT, the former shareholders of Minerva Canada owned in excess of 50% of the outstanding shares of the amalgamated entity. For accounting purposes Minerva Canada is considered to be the accounting acquirer and therefore, the corporate merger has been accounted for as a reverse takeover. For financial reporting purposes, the Company is considered a continuation of Minerva Canada, the legal subsidiary, except with regard to authorized and issued share capital which is that of the Company, the legal parent. Consequently, certain comparative amounts in this document and the consolidated financial statements prior to May 23, 2019 are those of Minerva Canada only.

Description of the Business

Minerva aims to bring the benefits of artificial intelligence technology to industries dependent on reasoning with complex technical and scientific data by building proprietary evidence-based decision-making software. We are knowledge engineers using artificial intelligence ("AI") and standards to describe, reason, explain and provide actionable and auditable advice for our customers. Minerva's AI combines machine intelligence with human intelligence to reach conclusions faster than possible with humans alone, but with the explanations needed to trust the results. The Company is currently pursuing two industries: Geology and Natural hazards.

Minerva's proprietary AI platform (the "Software") consists of the AI software acquired from Georeference Online Ltd. ("Georeference"), as enhanced and re-engineered by Minerva to take advantage of recent developments in various related software technologies. The Software combines human domain expertise (e.g., mineral exploration or natural hazard models) with information from public and private databases in a cognitive computer reasoning system to carry out complex tasks faster and more thoroughly than can be done by human beings. Knowledge engineering, logic programming and reasoning with uncertainty are key elements of Minerva's Software. Minerva has also developed in-house expertise in complementary areas, such as Geographic Information Systems (GIS), database schema design, taxonomy development for knowledge representation, and has assembled a team of software and earth science professionals knowledgeable in the technologies it uses.

Minerva's Software has been developed to function in multiple diverse problem domains. In each domain in which it is deployed, a key element of its effective operation is the domain knowledge base and models deployed alongside the available voluminous and otherwise unwieldy data to which such knowledge base and models are applied.

Minerva initially applied its technology to minerals exploration due to its extensive knowledge-base in economic geology; however, the Software is applicable to other industries with complex problem domains, such as environmental protection, geohazards, land use planning, insurance and healthcare.

Minerva believes that there will be significant growth in Artificial Intelligence Software-as-a-Service (AI-SaaS) over the next decade. Due to relatively limited and unique datasets and scarce AI talent, it is unlikely that a large number of enterprises will build their own proprietary software. Instead, AI service providers, such as Minerva, will emerge with the necessary AI expertise and domain specific knowledge base to provide value-added AI services.

Principal Products

The principal existing products have been structured within two industry specific product suites: TERRA Mining AI Suite and GAIA Natural Hazard AI Suite. Non industry specific products are promoted as Cross-Industry applications. In addition to the software suites, Minerva also provides consulting services to aid customers.

Cross – Industry

Reasoner

The Reasoner is the crux of Minerva's product offering, it is a cognitive AI system which integrates human knowledge with large datasets to create predictions. The Reasoner is proprietary to Minerva and is continuously undergoing refinement and expansion of capabilities. Predictions from the Reasoner are explainable and auditable, a unique advantage over many AI applications. As detailed further in the "Intellectual Property" section below, Minerva applied for two patents to protect the core technology and processes underpinning Minerva's core technology.

SOLACE

SOLACE standardizes disconnected data to ensure interoperability. SOLACE enables organizations to create and curate standards and design self-improving workflows to align current and future datasets. Controlled vocabularies are built and validated by Minerva's ACE software, and project data is aligned and transformed with Minerva's DBConverter. With each alignment, the system learns common misspellings, alternative labels, and legacy codes making each sequential alignment quicker.

SOLACE was developed internally as a workflow for taking unstandardized, disorganized data and harmonizing that data into a form that we could use within the Reasoner. When approached by clients who only desired this data cleaning service, we bundled the workflow and necessary tools into one cohesive workflow product.

ACE

The Aristotelian Class Editor (ACE) is an open access taxonomy creation tool provided by Minerva. Providing ACE for free creates inroads with customers who are interested in knowledge engineering, semantics and standard terminology.

Knowledge Capture

Minerva's Knowledge Capture tool allows experts to input knowledge in the form of conceptual models which are used in Minerva's Reasoner. Recent work has advanced the breadth of information that can be represented using Knowledge Capture.

TERRA Mining AI Suite

TERRA represents a collection of AI products addressing challenges in mineral exploration and mining.

Target

While a significant amount of capital has been spent on collecting exploration data over the years, it has led to databases that are too vast and complex for geologists to effectively evaluate. At the same time there is not enough data characterizing existing mineral deposits for machine learning techniques to be broadly successful. Mineral deposits are rare and complex with many different attributes.

Minerva's Target system is powered by Minerva's Reasoner, the core AI technology developed by Minerva. Target addresses both discovery difficulty and data volume problems. Minerva optimizes mineral deposit discovery by leveraging the computational efficiency along with proven legacy technologies such as geological modelling. This optimum combination of AI technologies allows Minerva to find the best locations at which to conduct exploration, and the Reasoner allows us to explain why each location was identified, and to provide advice on what additional exploration information to look for at such locations.

The principal market for Minerva's Target system lies with mineral exploration companies and institutions, both governmental and non-governmental, that promote mineral exploration, such as geological surveys, government bodies and major mining companies.

The latest version of the Target system was tested during 2020, producing maps for a number of client companies. Minerva intends to apply its Target system as a software service for enhancing the success rate of mineral exploration.

DRIVER

DRIVER is a tool for interpreting drilling data for entire suites of multi-element assays in dozens of different directions and then comparing the results for significance against known mineral deposit zonation characteristics. This approach facilitates the identification of alteration and mineralization zones that may relate to economic mineralization, which are very difficult and time-consuming to identify any other way. Interrogation of multi-element data and evaluation of their high and low zones can refine an exploration hypothesis and focus the drilling decision process. It can also provide critical information about associated deleterious elements and their spatial relationship to ore. During the course of 2020 DRIVER research and development brought new advancements to the tool and Minerva was able to service multiple client projects.

Many mineral deposits models, such as the Porphyry Cu model, have element zonation patterns that are well-documented and characteristic of the model, but require a multi-element approach to identify. DRIVER uses a combination of geostatistical methods and spatial statistics to create hundreds of realizations of any input drilling data set. It then searches all these realizations for zones of high and/or low values which match documented zonation around known deposits, which therefore may be useful exploration vectors for the user to investigate. DRIVER provides a user-friendly interface for human evaluation of the relationships between the different zones flagged by DRIVER as potentially important.

LEO Pro

LEO Pro (Language Extender and Organizer) is a semantics-based system for managing digital knowledge assets. The LEO system provides users with rapid, intelligent discovery of documents by indexing these documents against a standards-based taxonomy and a document repository. This platform addresses the need within mining companies to achieve interoperability between their exploration, mining, metallurgical and environmental remediation knowledge assets, which is achievable only through implementation of semantic standards, the latter being a field within which Minerva has specialist expertise.

LEO is a scaled-down version of LEO Pro which addresses the knowledge-management needs of mineral exploration companies which are not engaged in mining, and hence do not invest heavily in mining, metallurgical and environmental assets. LEO is a system for the management of digital knowledge and includes pre-loaded geoscience taxonomies, a customizable automatic tagging system, and a front-end search function that allows users to interrogate their document repository.

Both platforms allow companies to use related semantics-based AI systems, such as those provided by Minerva, to greater effect.

GAIA Natural Hazard AI Suite

GAIA represents a collection of products addressing the need to identify hazard and risk associated with natural events such as landslides, floods, wildfires and earthquakes. GAIA's landslide application is market ready, with projects completed for areas of Western Canada and Italy. Minerva intends to debut a new flood-based GAIA application this year and initial work has been conducted for a GAIA wildfire application. Minerva is also extending GAIA to provide risk management measures in products for the insurance industry. The GAIA suite is currently being marketed to land planners, emergency managers and insurance related markets.

GAIA for landslides

GAIA for landslides produces interactive hazard maps for a variety of different landslide types over an area of interest. Access to the maps is available for a monthly cost based on number of users. This SaaS model is in addition to a project set up fee. The system is powered by Minerva’s Reasoner which integrates large datasets to identify locations that are most at risk of slope failure. Over the past year this application has become extremely sophisticated, automatically generating new maps every day based on rainfall and temperature data and forecasts. Landslide runout modelling is conducted automatically for the most dangerous areas, this allows users to identify which locations might be impacted by the potential landslide.

GAIA for Landslides has been deployed in a study area covering over 30 000 square kilometers around the Vancouver, Squamish, and Whistler areas of British Columbia, Canada. This application can be seen by visiting (https://www.minervageohazards.com/). As mentioned below in the Awards section of this document, GAIA for landslides has also been deployed in the Veneto region of Italy. The system is currently being expanded to integrate risk assessment more directly which will make the product more appealing to the insurance industry.

GAIA for floods

GAIA for floods is an application currently under development to display high resolution real-time flash flood risk in urban centers. The app is designed to target the emerging Canadian residential flood insurance market. The pricing model will be the same as that of GAIA for landslides. The risk assessments are based on established methods, enhanced by expert-based cognitive AI (the Minerva Reasoner) to help users interpret the results. Development began in Q4, 2019, with a detailed review of the available methods, competitors and target markets, and a functional prototype is expected to be completed this year.

The prototype application covers the entire extent of North Vancouver, British Columbia, Canada, and uses 24 and 48-hour rainfall forecasts as inputs to a numerical model that predicts water depth and velocity (flood hazard). The hazard data is then intersected with asset-level information to estimate which buildings are most at risk. The results will be completely auditable, thereby enabling users to drill down to understand the score assigned to each asset. The floods model is also being used to validate risk-assessment methods using the Minerva Reasoner, which will be transferable to other natural hazards, such as landslide, wildfire and earthquake.

GAIA for wildfires

Minerva’s Reasoner is well suited to predict wildfire susceptibility, hazard and risk. Over the past year Minerva has initiated development of this capability which is being demonstrated to prospective clients in order to assess the market potential of the technology.

Awards

In August, 2020, Minerva was honored to have been named one of the five most promising companies in mining technologies by StartUs Insights, a European data science company monitoring start-ups, technologies & industry trends.

On October 30, 2019, the Company announced that Minerva had won the *INSPIRE Helsinki 2019 Data Challenge*. Minerva's *"Landslide Application for Veneto, Italy"*, entered under the "Let's make the most out of INSPIRE" category, was the overall winner of the Challenge.
Minerva's winning entry can be viewed at: www.italy.minervageohazards.com

INSPIRE is a European Union Directive that creates a standardized spatial data infrastructure for the purposes of EU environmental policies. Each year an INSPIRE Conference is held to provide a forum for stakeholders from government, academia and industry, with the conference being held on October 22-24th 2019 in Helsinki, Finland. The conference highlights innovative practical uses of spatial data in such domains as the sea, weather and cities.

The legislated standardization of mapping data within the EU pertains to 34 spatial themes with many themes having multiple specified "code lists" of words which are permitted for use. Many of these "code lists" are complex and hierarchical. All future spatial data provided by public agencies in Europe will be INSPIRE-compliant.

Standardized vocabularies incorporate complex hierarchies which require sophisticated semantic reasoning to yield useful results when the maps are used to achieve various industrial and social objectives. Three of the more complex taxonomies embedded in the INSPIRE standards relate to geology, with which Minerva is already very familiar, and to land use and land cover, which Minerva has already begun embedding into its taxonomic reasoning system.

Minerva is well positioned to compete in this market because its technology is tightly-aligned, for auditing and explainability purposes, while adhering to data and terminology standards. Minerva is working with a number of the INSPIRE committees responsible for creating the standards for the data and is contributing to its improvement by identifying problems in the standards when the data is of insufficient quality for use with Minerva's technology.

Future Applications

Minerva's Proprietary AI software is applicable to a wide range of problem domains and industries. Far too many for Minerva to pursue on its own. In this regard, Minerva is actively identifying partners and developing relationships with external organizations who could benefit from using Minerva's tools such as SOLACE, Knowledge capture and the Reasoner while building applications in a variety of industries. Minerva sees this opportunity to license its tools for the development of new applications as a potentially much larger market than Mining and mineral exploration and natural hazards are on their own.

This strategy will allow Minerva's unique cognitive AI tools to see their full potential in a wide array of applications and markets. While management indents to pursue this strategy, there is no assurance that additional products will be developed and marketed through the means of software licensing.

Operations

Minerva conducts its operations using a combination of full and part-time employees, supplemented by independent contractors where additional part-time, short term, or specialized services are required. As of March 2021, the Company had 19 employees. In addition, certain individuals or companies are regular consultants to the Company, providing services as required.

The R & D development team is based at the Company's principal operating office in Vancouver, British Columbia. The Minerva team has adapted to working throughout a pandemic and many staff members are working remotely, despite this the Company continues to foster a collaborative and social work environment through online and in office environments. This has been accomplished by establishing a COVID-19 protocol limiting the number of staff within the office and ensuring social distancing is maintained.

Potential impact of the Pandemic on Corporate Operations and Activities

On March 11, 2020, the World Health Organization categorized COVID-19 as a pandemic. The potential economic effects within the Company's environment and in the global markets, possible disruption in supply chains, and measures being introduced at various levels of government to curtail the spread of the virus (such as travel restrictions, closures of non-essential municipal and private operations, imposition of quarantines and social distancing) could have a material impact on the entity's operations. However, the Company has experienced or implemented a number of specific items to mitigate the effects wherever possible.

At the time of the announcement, the Company was actively engaged in marketing its products at various trade shows, and with following up on leads generated at those events. The Company had received favourable results which had generated a number of leads, expressions of interest and orders. However, as a result of uncertainty, many customers advised that they were reducing costs, not pursuing projects or deferring any discussions or expenditures to a future date. It appears that the major effect of the pandemic was to defer client sales for a period of six months or so, however this estimate is constantly under review.

The Company continued in its marketing efforts, utilizing videoconferencing as a means of reaching out to clients. Certain marketing initiatives, such as marketing to the INSPIRE related European market have been curtailed by the travel bans in effect. During the year, the Company experienced significant interest in its products as clients adapted their business strategies. Management believes that its marketing efforts have created renewed interest in the Company and its products.

The Company also implemented a number of operational changes. The majority of employees continue to work from home, and a temporary four-day work week was in effect from March to July, 2020 to reduce employee costs by approximately 20%. Staffing continues to be reviewed with replacements or additions to staff being on a case-by-case basis as needs arise. The Company continues to work to reduce costs and has implemented cost control and reduction procedures wherever possible, subject to the needs of our clients and allowing for our scheduled product development updates.

Marketing Plans and Strategies

The Company's products are being marketed to pre-qualified leads around the world. The Business Development team is actively reaching out to promising candidates for Minerva's various software applications, identified using Minerva's existing database of industry contacts, as well as those identified via industry events, publications, and intelligence initiatives.

Minerva's efforts include direct digital marketing and advertising, conference attendance, trade publications, media engagement, and active communication with various media outlets. The Company continues to expand its network and establish mutually beneficial strategic relationships which will also allow Minerva to expand by future acquisition and/or partnership opportunities, including new technologies that may complement its business. The Company has also established a subsidiary office in Germany to assist with its marketing efforts in Europe.

Intellectual Property

In accordance with industry practice, Minerva protects its proprietary rights through a combination of copyright, trade-mark, trade secret laws and contractual provisions. The source code for its Software is protected under Canadian and applicable international copyright laws. Minerva licenses its Software pursuant to agreements that impose restrictions on customers' ability to use the technology, such as prohibiting reverse engineering, limiting the use of software copies and restricting access and use of source code. Minerva also seeks to avoid disclosure of intellectual property and proprietary information by requiring employees and consultants to execute non-disclosure and assignment of intellectual property agreements. Such agreements require employees and consultants to assign to Minerva all intellectual property developed in the course of their employment or engagement. Minerva utilizes non-disclosure agreements to govern interaction with business partners and prospective business partners and other relationships where disclosure of proprietary information may be necessary. The Company has applied for two patents on its intellectual property related to diagnosticity.

Changes in Operations and Activities during the Year

On July 7, 2020, the Company announced the release of the Sea to Sky Landslide Map to the general public. The GAIA Sea to Sky Landslide Map is an interactive webmap showing landslide susceptibility for BC's Sea to Sky region. The map uses cutting-edge AI technology to assess where a landslide might occur so that consulting geologists, homeowners, insurance underwriters, and other interested users can take appropriate steps to manage the hazard. Minerva's GAIA uses the Company's proprietary cognitive AI technology to provide unique insights by (a) quickly identifying hazard zones by analyzing multiple publicly available datasets (b) visualizing multiple hazards simultaneously including debris flow, slides in soil, and slides in rock (c), assessing current, 24-hour and 48-hour hazard forecasts based on weather conditions, and (d) expressing the attributes and the scoring system used to produce the hazard assessment in plain language. The Sea to Sky Landslide Map is available free to the public for a promotional period before moving to a subscription model. Users can access the maps at https://www.minervageohazards.com/.

On August 31, 2020 the Company provided a corporate update related to the Company's commercialization strategy:

- The Company executed on its previously disclosed go-to-market strategy that included delivering solutions for commercial use and the launch of Minerva's GAIA mapping suite. These approaches have resulted in revenue-producing contracts, successful commercialization of several products, and the impending debut of others.
- During the second and third quarters, Minerva put the finishing touches on its DRIVER product, which uses proprietary software to search for deep insights into multielement drilling data. The positive reaction it is generating, combined with advanced discussions with a number of potential partners, leads the Company to believe that DRIVER will soon generate multiple sales.
- Minerva also recently increased the global visibility of its TERRA Mining AI suite, which provides solutions for every stage of the exploration and mining process, by partnering with technology resellers to establish local footprints in key regions. Through partnerships, the Company now has an active sales force in the Australian and New Zealand markets, while the Company's reseller agreement with Trigteq offers the ability to market in local language to China, Russia, and Mongolia.
- Minerva's LEO software has debuted as the Company's first fully SaaS (software as a service) product and has begun to build a strong client base. The Company is currently in the process of having LEO included in mining-focused SaaS platforms, including Oren (a new mining software marketplace run by IBM and Shell) and Axora, a similar platform with deep ties to major mining interests.
- SOLACE, Minerva's software/service solution for standardizing and harmonizing data, has been built out into a standalone product, with the data maintenance solution now available as a SaaS product. This aspect

of SOLACE is also being incorporated into the mining software platforms noted above. The SOLACE software continues to be a lynchpin for other TERRA solution offerings.

- From inception to August 31st, Minerva's Natural Hazards section was awarded what was at the time its largest-ever contract to-date. The contract, awarded with domain-expert partner Ebbwater Consulting, will see the Company provide a National Flood Hazard Data Layer for Natural Resources Canada.
- Q2 2020 saw the debut of GAIA Sea to Sky Hazard Map to the general public. Users can now create an account and freely navigate the webmap. Debuting the map in this fashion has allowed Minerva to identify users and their needs and tailor the map accordingly. Marketing efforts based on the insights acquired have led to discussions for collaboration with governmental agencies and international engineering firms, which are proceeding apace.
- Minerva's other landslide map currently in production, for the Veneto Region in Italy, has also been signing up users. Minerva's rainfall flood mapping application, GAIA Flood, is set to debut in the near future.
- The Company's approach to flood mapping has led to conversations with insurance providers, insurtech companies, engineering firms, and flood mitigation specialists around the world. Minerva is currently in discussions for collaboration on a multihazard map incorporating client proprietary data and the Company's unique cognitive AI technology to create a revolutionary new hazard prediction product, with commercial appeal across multiple sectors.
- In August, Minerva was honored to have been named one of the five most promising companies in mining technologies by StartUs Insights, a European data science company monitoring start-ups, technologies & industry trends.

On September 9, 2020 the Company announced a new partnership with Prospector (prospectorportal.com), a search engine for the mining industry. Minerva and Prospector intend to develop new interactive maps that will offer Prospector subscribers a user-friendly way to explore properties by geography, commodity, or deposit type. Prospector is an AI-enabled technology platform built to modernize the way investors and researchers search for and access information about mining. Prospector draws data from various public exchanges such as TMX Datalinx, which operates the Toronto Stock Exchange, and represents 48% of publicly traded mining projects globally. The interactive maps Minerva intends to produce aim to attract mineral exploration investment to the areas identified by Prospector by providing easy-to-use webmaps of mineral exploration targets in the respective regions. The target maps being developed by Minerva will help users save time and bridge gaps in knowledge by providing both explanations of how targets were identified, and by providing advice on which missing data have the largest impact on the prospectivity of each target. This advice assists explorers to prioritize further work on any targets of interest. These target maps will be embedded within the Prospector platform and subscribers will access them through either relevant search results or direct browsing.

On September 16, 2020 the Company announced the signing of its first commercial subscription contract for LEO, the Company's web-based document management software built for the mining and exploration industries, with Orogen Royalties Inc. (TSX.V:OGN) ("Orogen"). LEO helps organizations manage and find their mining and exploration files by using OCR to digitize files, then indexing, auto-tagging and geotagging the unstructured documents using geology and mining vocabularies optimised for combined researcher and AI applications. LEO then provides search functions in a context designed to enhance multi-disciplinary use of these documents across the organization. Using LEO, an organization can finally add their legacy files to their current data library and put them to work, allowing the entire library to be searched and reasoned with by geologists in optimal preparation for downstream AI applications.

On September 30, 2020 the Company announced the signing of a contract with a Canadian intermediate mining company. The new contract is for Minerva's DRIVER product, which provides deep insights into previously untapped geometallurgical data. Minerva can deliver such insights by using the DRIVER software to identify multi-element zones in drilling data which are too time consuming and complicated to identify by conventional means. DRIVER then can associate these zones with relevant lithologies and structures and express this knowledge of identified exploration vectors extracted from the client's exploration data in a form that enables computer reasoning. Minerva's cognitive reasoning platform then extends its AI work by comparing the identified vectors to hundreds of past and present mines throughout the world, short-listing those most similar to the client's targets, which can then serve as reliable, explainable models upon which geologists can build their drilling strategies.

On October 6, 2020 the Company and its previously disclosed partner Prospector announced that they will be launching an Interactive Map of Mining Projects in Mexico. This is the first product release by Prospector that utilizes Minerva's TARGET technology and is an expansion on the previously announced partnership. Prospector and Minerva believe the new mapping software will have far-reaching impact in the mining industry and, potentially, the investment space at large. Minerva and Prospector intend to develop a new interactive map that offers Prospector subscribers a user-friendly way to explore properties in Mexico by geography, commodity, or deposit type. While Mexico is the first region that the partnership will focus on, the companies plan to expand coverage to other countries as well as offer a predictive "Prospector Target" function that will more accurately project deposits of focus minerals. Prospector is an AI-enabled technology platform built to modernize the way investors and researchers search for and access information about mining. Prospector draws data from various public exchanges such as TMX Datalinx, which operates the Toronto Stock Exchange and represents 48% of publicly traded mining projects globally. Minerva's interactive map, called the Mexico Mineral Targets Map, aims to drive mineral exploration investments to Mexico by providing easy-to-use maps of mineral exploration targets for up to 90 mineral deposit models for the Sinaloa, Chihuahua, and Sonora regions. Minerva's mineral target maps help explorers save time and bridge gaps in knowledge by providing both explanations of how targets were identified, and by providing advice on which missing data have the largest impact on the prospectivity of each target. This advice assists explorers to prioritize further work on any targets of interest. These target maps, created with Minerva's TARGET AI powered software, will be embedded within the Prospector platform and subscribers will access them through either relevant search results or direct browsing. Results from the project are expected to be available on the Prospector platform in late 2020.

On November 23, 2020 the Company announced that Freeport Resources Inc. ("Freeport") had signed a contract with Minerva Intelligence Inc. for Driver, Minerva's cutting-edge AI software for evaluation of multielement drilling data. Freeport had acquired Quidum Resources, which, through its wholly owned subsidiary Highlands Pacific Resources Ltd., controls the Star Mountains project in Papua New Guinea. Freeport will be applying Minerva's technology to the Star Mountains project in order to enhance its next phases of surface and subsurface exploration of the extensive property, which is located close to the Ok Tedi mine.

Subsequent to the year end, on February 17, 2021, Minerva announced the appointment of Mr. Jason Petralia as an adviser to the company. Mr. Petralia will spearhead a new initiative aimed at leveraging Minerva's cognitive AI-powered reasoning tools. Mr. Petralia is a technology innovation pioneer, investor and adviser, having led product initiatives in a number of spaces including commerce, health care, fitness, games, e-sports, education, usability, analytics and data capture, productivity, entertainment, and more, ranging from Fortune 500 companies to emerging start-ups. Recently Mr. Petralia was senior vice-president of content at Skillz Inc. Minerva will be tapping Mr. Petralia's skills in building out its multidisciplinary initiatives related to its unique instance-matching capabilities that allow for dynamic preference weighting. Minerva expects to launch a demonstration product in Q2 2021.

On February 19, 2021, the Company announced the successful implementation of its Target software for Giga Metals Corporation ("Giga") in conjunction with the recent release of its Parnaiba basin project results. Giga enlisted Minerva's cognitive artificial-intelligence-powered prospect-generation software Target to identify and evaluate new prospective exploration targets. Giga, after validating the results produced by Minerva's Target software, made the decision to acquire exploration permits covering significant new regional sediment-hosted copper anomalies along the southern perimeter of the Parnaiba sedimentary basin in southern Piaui, Nordeste, Brazil.

Using Minerva's Target software, Giga was able to sift through, organize and evaluate large data sets that were subsequently used to analyze the validity of the prospective exploration region. Target's mapping technology was able to determine, based on existing comprehensive data sets, that the project in Brazil had a high likelihood of success and, as a result, Giga should pursue investment in the region. The final result of the analysis was a list of AI-produced target areas throughout Brazil that are completely auditable and explainable, and, most importantly, actionable by Giga.

On April 1, 2021, the Company announced that Mr. Jason Petralia had joined the board of directors of the company. Mr. Petralia replaced long-time board member Kevin Thomas.

Results of Operations

Results for the year ended December 31, 2020

During the year ended December 31, 2020, the Company recorded revenue of $340,584 (2019: $184,600). In 2019, the revenue was primarily due to a major government contract that was entirely completed in Q1 2019. During 2020 the Company continued to compete for, win and complete government contracts, and also successfully bid on and completed contracts for various mining companies. In the opinion of management, certain of these contracts may result in ongoing projects.

Expenses from operations were $3,329,438 (2019: $3,163,980), and the comprehensive loss for the year was $2,773,797 (2019: $4,089,998).

Certain operating expenses during the period are higher due to the effect of being a public company for the full year in 2020. In 2019, following the completion of the QT, the Company was a public company for approximately seven months.

The most significant elements of the Company's expenses are:

- Advertising and promotion of $225,134 (2019: $152,271) reflect increased amounts being spent on the promotion of the Company and investor relations activities for a full year as a public company compared to the shorter period as a public company in 2019;
- Amortization of $179,610 (2019: $160,143) reflects the growth of assets and related amortization of leasehold improvements, computer equipment and furniture acquired, the amortization of intangible assets, and the amortization of the right of use asset;
- Consulting – Corporate development of $26,198 (2019: $169,880) was due to the use in 2019 of outside advisors during the process of structuring, funding, and completing the going public process. The 2020 expense reflected reduced advisory activities in the area of corporate development;
- Consulting – Product development of $272,450 (2019: $374,968) reflects the Company's products reaching a marketable stage of development, and shows the use of outside consultants in specific areas to develop specific products and product inputs where that capability was not in-house. In late 2019 and early 2020 most of the consultants were eliminated, or were replaced by employees as the Company moved to normalize its operations, resulting in the expense being reflected in salaries. Certain projects, however, required additional temporary resources that reasonably would not be brought in-house on a permanent basis;
- Director's fees of $106,500 (2019: $62,000) are paid to independent directors. During 2020 fees were reduced between March and July as a result of cost controls implemented, however fees were generally higher as the fees were paid during the entire year;
- General and administrative expenses of $112,419 (2019: $181,416) reflect the operations of the Company, and include the cost of diverse items such as insurance, internet and telephone and other general office expenses.

Expenses were reduced this year as cost reductions were in effect and certain expenses were eliminated or moved to salary;

- Outsourced services expense of $89,647 (2019: $64,578) consists of the cost of third-party service providers which were contracted and directly related to a specific project based on their expertise;
- Professional fees were $113,724 (2019: $256,618) consisting of legal, accounting, tax and other professional advisory expenses. Expenses were reduced due to the lower levels of corporate structuring and filings in 2020. Most, but not all of the costs of going public and being public in 2019 were recorded as part of the acquisition and are included in Listing Expense below;
- Salaries and wages of $2,009,586 (2019: $1,454,928) reflect the increase in the number of employees and their seniority in 2020 compared to the previous year, as well as the conversion of consulting positions to employees. While this represents the single largest expense of the Company, management is of the opinion that staffing levels are low for a Company of our size and stage of development;
- Share-based compensation of $55,106 (2019: $41,564) results from the timing of the grant and vesting of options, including previously issued options, and reflect the number of options, vesting terms and the market price of the Company's shares among other factors;
- Software application subscriptions of $97,346 (2019: $80,180) reflect the cost and timing of renewals of licensed software and software services used by the Company in the development of products, consulting services and its operations;
- Transfer agent and filing fees of $16,818 (2019: $14,025) are incurred as a result of administering a public Company, holding annual general meetings and making appropriate regulatory filings;
- Travel of $24,900 (2019: $139,409) reflects the impact of reduced meetings with clients, potential funders and strategic partners, and the cancellation of trade shows which the Company was to attend to promote the products. The majority of the 2020 travel expense related to Q1 attendance at conferences prior to the imposition of travel bans;
- A foreign exchange gain of $189,495 was recorded in 2020 (2019: a loss of $295,991). In early 2020, the Company converted the majority of its US dollar holdings to Canadian dollars to lock in positive exchange rates. The exchange rate for the US dollar relative to the Canadian dollar had previously peaked at the time of the preparation of the December 31, 2018 financials of the Company and declined throughout 2019 resulting in the 2019 loss. Future results will be subject to fluctuation based on balances held and converted to Canadian funds;
- Interest expense of $4,358 (2019: $2,334) was incurred with respect to the lease liability;
- Interest income of $29,920 (2019; $44,393) was recorded due to investments in US and Canadian dollar denominated term deposits; and
- A Listing Expense of $856,686 was recorded in 2019 as a result of the cost of going public and the net expense of the acquired assets. No similar expense was incurred in 2020.

Quarterly Summary

The following table summarizes selected financial information of the Company for the periods available.

	Fiscal 2020			
	12/31/2020	**9/30/2020**	**6/30/2020**	**3/31/2020**
	Q4	**Q3**	**Q2**	**Q1**
	(Unaudited)	**(Unaudited)**	**(Unaudited)**	**(Unaudited)**
	$	$	$	$
Revenue	138,600	148,984	-	53,000
Operating expenses	(888,616)	(776,376)	(746,529)	(917,917)
Other items	(132)	1,291	(37,569)	251,467
Net Income (Loss)	(750,148)	(626,101)	(784,098)	(613,450)
Current Assets	1,482,200	2,091,190	2,617,808	3,396,915
Total Assets	1,866,288	2,501,956	3,072,241	3,896,658
Total Liabilities	364,517	252,139	200,949	285,353
Shareholders' Equity	1,501,771	2,249,817	2,871,292	3,611,305

	Fiscal 2019			
	12/31/2019	**9/30/2019**	**6/30/2019**	**3/31/2019**
	Q4	**Q3**	**Q2**	**Q1**
	(Unaudited)	**(Unaudited)**	**(Unaudited)**	**(Unaudited)**
	$	$	$	$
Revenue	12,000	-	32,000	140,600
Operating expenses	(1,025,875)	(708,255)	(728,381)	(701,469)
Other items	(58,180)	67,775	(972,017)	(148,196)
Net Income (Loss)	(1,072,055)	(640,480)	(1,668,398)	(709,065)
Current Assets	4,106,287	4,886,906	5,439,535	6,017,256
Total Assets	4,648,231	5,418,532	6,008,873	6,619,372
Total Liabilities	427,769	286,715	233,437	284,358
Shareholders' Equity	4,220,462	5,418,532	5,775,436	6,335,014

The results for Q4, 2020 were comparable to the previous three quarters with respect to expenses. Revenue for Q4 was $138,600 which was consistent with but slightly lower than Q3 at $148,984. However, both Q3 and Q4 revenues represented a material change from the results of the previous quarters and years.

Selected Annual Information

	Year ended December 31, 2020 (Audited) $	2019 (Audited) $	2018 (Audited) $
Revenue	340,584	184,600	27,750
Operating expenses	(3,329,438)	(3,163,980)	(1,491,342)
Other items	215,057	(1,110,618)	337,054
Net income (loss)	(2,773,797)	(4,089,998)	(1,126,538)
Current assets	1,482,200	4,106,287	6,684,578
Total assets	1,866,288	4,648,231	7,139,270
Total liabilities	724,198	427,769	110,343
Shareholders equity	1,501,771	4,220,462	7,028,927

Financing Activities

During the year ended December 31, 2020, there were no share issuances.

During the year ended December 31, 2019, the Company completed an amalgamation and a private placement which resulted in the following share transactions:

- 6,200,000 outstanding common shares were consolidated on a two-for-one basis, resulting in 3,100,000 shares outstanding;
- 38,575,005 post-consolidated common shares were issued in exchange for all of the outstanding shares of Minerva Canada at a price of $0.255 per common share;
- 1,000,000 post-consolidated common shares were issued at a price of $0.255 as a finder's fee; and
- 2,000,000 common shares were issued pursuant to a non-brokered private placement at $0.075 per share to raise $150,000. The CEO of the Company was the sole subscriber to the placement. No finder's fees were paid in connection with this placement.

As of December 31, 2019, and 2020, the Company has 44,675,005 shares issued and outstanding. A total of 5,745,003 common shares were subject to escrow restrictions (2019: 9,575,003). All escrowed shares will be released from escrow as to 10% on completion of the QT (released), and an additional 15% every six months thereafter over 36 months.

Subsequent to the year end, on January 19, 2021, the Company announced a non-brokered private placement of 966,700 units at a price of $0.15 per unit for gross proceeds of $145,005. Each unit comprised one common share of the Company and one common share purchase warrant of the Company, with each warrant being exercisable at a price of $0.20 per share for a period of 24 months, expiring on June 18, 2021. The private placement closed on February 18, 2021.

On February 17, 2021, the Company announced a non-brokered private placement of 1.2 million units at a price of $0.15 per unit, for gross proceeds of $180,000. Each unit comprises one common share of the Company and one common share purchase warrant of the Company, exercisable at a price of $0.20 per share for a period of 24 months from the closing date of the offering. The private placement closed on March 24, 2021.

Liquidity and Capital Resources

The Company's aggregate operating, investing and financing activities for the year ended December 31, 2020 resulted in a cash decrease of $2,588,788 (2019: $2,647,609). As at December 31, 2020, the Company's cash balance was $1,359,511 (December 31, 2019: $3,948,299), and the Company had working capital of $1,122,519 (December 31, 2019: $3,731,254).

During the year ended December 31, 2020, the Company paid $17,310 to acquire equipment (2019: $67,917). $220 was received related to the sale of redundant furniture (2019: $nil).

During the year ended December 31, 2019 the Company capitalized $179,479 as a right of use asset with respect to its leased premises. An adjustment was made in the period of $4,664 to reflect a revised estimate.

No other material capital expenditures were incurred.

Transactions with Related Parties

Related parties include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of executive and non-executive members of the Company's Board of Directors and corporate officers. The remuneration of key management personnel during the years ended December 31, 2020 and 2019 was as follows:

	Year ended December 31,			
	2020		2019	
Director's fees	$	106,500	$	62,000
Salaries and wages		598,313		375,307
Professional fees & Consulting		67,200		329,908
Share-based compensation		39,035		34,721
	$	811,048	$	801,936

Certain 2019 related party consultants became salaried employees during 2020.

As at December 31, 2020 accounts receivable included $nil (2019 - $24,842) owing from the Chief Executive Officer for tax installments made on his behalf.

Amounts due to related parties at December 31, 2020 are unsecured and interest free. As at December 31, 2020 accounts payable and accrued liabilities include $6,000 (2019 - $6,000) owing to the Chief Software Architect of the Company, and 10,500 (2019 - $10,500) owing to directors for December director's fees.

Off Balance Sheet Arrangements

To the best of management's knowledge, there are no off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company.

Critical Accounting Estimates

The preparation of the consolidated financial statements requires management to make judgments and estimates and form assumptions that affect the reported amounts of assets and liabilities at the date of the consolidated financial statements and reported amounts of expenses and gains or losses during the reporting period. On an ongoing basis, management evaluates its judgments and estimates in relation to assets, liabilities, revenue and expenses, gains and losses. Management uses historical experience and various other factors it believes to be reasonable under the given circumstances as the basis for its judgments and estimates. Actual outcomes may differ from these estimates under different assumptions and conditions.

Estimates and assumptions that have the most significant effect on the amounts recognized in the consolidated financial statements include:

Share-based Payment Transactions related to Equities

The Company measures the cost of equity-settled transactions with employees by reference to the fair value of the equity instruments at the date at which they are granted. Estimating fair value for share-based payment transactions requires determining the most appropriate valuation model, which is dependent on the terms and conditions of the grant. This estimate also requires determining the most appropriate inputs to the valuation model including the expected life of the stock option, volatility and dividend yield and making assumptions about them.

Deferred tax assets

Deferred tax assets, including those arising from un-utilized tax losses, require management to assess the likelihood that the Company will generate sufficient taxable earnings in future periods in order to utilize recognized deferred tax assets. Assumptions about the generation of future taxable profits depend on management's estimates of future cash flows. In addition, future changes in tax laws could limit the ability of the Company to obtain tax deductions in future periods. To the extent that future cash flows and taxable income differ significantly from estimates, the ability of the Company to realize the net deferred tax assets recorded at the reporting date could be impacted.

Economic recoverability and probability of future economic benefits of intangible assets and amortization

Management has determined that intangible asset costs incurred which were capitalized may have future economic benefits and may be economically recoverable. Management uses several criteria in its assessments of economic recoverability and probability of future economic benefits including anticipated cash flows and estimated economic life. The amortization expense related to intangible assets will be determined using estimates relating to the useful life of the intangible assets.

Determination of functional currency

The functional currency of the Company is the currency of the primary economic environment in which it operates. Determination of the functional currency may involve certain judgments to determine the primary economic environment. The functional currency may change if there is a change in events and conditions which determine the primary economic environment. The functional currency of the Company and its principal operating subsidiary is the Canadian dollar. The functional currency of the German subsidiary is the Euro.

Changes in Accounting Policies

The accounting policies applied in the consolidated financial statements are the same as and unchanged from those applied in the Company's annual audited financial statements for the year ended December 31, 2020. The reader is referred to those notes for a detailed discussion of the Company's accounting policies.

Financial Instruments

The Company is exposed to various financial risks resulting from its operations. The Company's management manages financial risks. The Company has not entered into financial instruments agreements, including derivative financial instruments for speculative purposes. The Company's main financial risk exposures and its financial policies are as follows:

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Company's cash and accounts receivable are exposed to credit risk, with the carrying values being the Company's maximum exposure. The Company's cash consists of deposit accounts with chartered banks. The Company's accounts receivable consists of contract payments due from governments and companies, with the carrying amounts also being the Company's maximum exposure. Management believes the Company's exposure to credit risk is not significant.

Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting obligations associated with financial liabilities. The Company's accounts payable and accrued liabilities are all current and due within 90 days of the consolidated statement of financial position date. The Company seeks to ensure that it has sufficient capital to meet short term financial obligations after taking into account its operating obligations and cash on hand.

Market risk

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

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company maintains certain cash balances in term deposits which renew periodically, and which rates reflect the market at the time of renewal. Management believes that the interest rate risk on these investments is nominal. The Company is not exposed to any other significant interest rate risk aside from the term deposits noted. Cash is comprised of bank balances as of December 31, 2020 and 2019.

Foreign exchange risk

Foreign exchange risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Company is exposed to foreign exchange risk as it engages in transactions in other foreign currencies, from time to time. As at December 31, 2020, the Company held US cash of $26,617 (December 31, 2019: $2,868,640), converted to CAD at a rate of 1.2741 (2019: 1.3016). A 10% change in the foreign exchange rate would have an impact on profit or loss of $2,662 (2019: $286,864).

Price risk

Equity price risk is defined as the potential adverse impact on the Company's earnings due to movements in individual equity prices or general movements in the level of the stock market. The Company does not have any financial instruments which are exposed to this risk.

Outstanding Share Data

As at December 31, 2020, and the date of this MD&A the following table summarizes the outstanding share capital of the Company:

	December 31, 2020	**Report Date**
Common Shares	44,675,005	46,841,705
Stock Options	3,900,000	3,900,000
Warrants	-	2,166,700
Total, Fully Diluted	**48,575,005**	**52,908,405**

Subsequent to the year end, on January 19, 2021, the Company announced a non-brokered private placement of 966,700 units at a price of $0.15 per unit for gross proceeds of $145,005. Each unit comprised one common share of the Company and one common share purchase warrant of the Company, with each warrant being exercisable at a price of $0.20 per share for a period of 24 months, expiring on June 18, 2021. The private placement closed on February 18, 2021.

On February 17, 2021, the Company announced a non-brokered private placement of 1.2 million units at a price of $0.15 per unit, for gross proceeds of $180,000. Each unit comprises one common share of the Company and one common share purchase warrant of the Company, exercisable at a price of $0.20 per share for a period of 24 months from the closing date of the offering. The private placement closed on March 24, 2021.

During 2019, 217,500 options exercisable at $0.20 were cancelled as a result of the QT. During 2020 an additional 309,125 options expired or were cancelled. A further 200,000 agent's options were outstanding and exercisable at $0.20 per share until March 26, 2020. These options expired unexercised. During the year ended December 31, 2020, the Company granted 1,321,625 stock options. 240,000 stock options are exercisable at varying prices from $0.10 to $0.30 per share over a period of three years. 1,081,625 stock options are exercisable at a price of $0.07 per share, in varying terms within the next 24 months. Effective December 31, 2020 certain options were repriced with new strike prices for out-of-the-money options of $0.20 and $0.30 from the previous $0.30 and $0.50 prices. The repricing was approved at the Company's previous Annual General Meeting.

Risks and Uncertainties

An investment in the Company's shares should be considered highly speculative due to the nature of the Company's business and the present stage of its development. In evaluating the Company and its business, the Reader should carefully consider the following risk factors in addition to the other information contained in this management discussion and analysis. These risk factors are not a definitive list of all risk factors associated with the Company. It is believed that these are the factors that could cause actual results to be different from expected and historical results. Investors should not rely upon forward-looking statements as a prediction of future results.

Effect of COVID-19 on Business operations

On March 11, 2020, the World Health Organization categorized COVID-19 as a pandemic. The potential economic effects within the entity's environment and in the global markets, possible disruption in supply chains, and measures being introduced at various levels of government to curtail the spread of the virus (such as travel restrictions, closures of non-essential municipal and private operations, imposition of quarantines and social distancing) could have a material impact on the entity's operations. The ongoing impact of this outbreak and related containment measures on the Company's operations cannot be reliably estimated at the date this report was prepared.

Business Model

The industry in which the Company operates is characterized by rapidly-changing Internet media, evolving industry conditions and standards, and changing user and client demands. Any evaluation of the Company's business and its prospects must be considered in light of these factors and the risks and uncertainties often encountered by companies in an evolving industry.

Some of these risks and uncertainties relate to the Company's ability to maintain and expand client relationships and respond effectively to competition and potential negative effects of competition on profit margins. If the Company is unable to address these risks, its business, results of operations and prospects could suffer.

Significant future capital requirements, future financing risk and dilution

No assurances can be provided that the Company's financial resources will be sufficient for its future needs. Revenues from current operations are insufficient to meet the Company's expected capital requirements. As such, the Company may be required to undertake future financings which may be in the form of a sale of equity or debt secured by assets. No assurances can be made that the Company will be able to complete any financing arrangements or that the Company will be able to obtain the capital that it requires. In addition, the Company cannot provide any assurances that any future financings will be obtained on terms that are commercially favourable to the Company.

Any such sale of Company shares, or other securities will lead to further dilution of the equity ownership of existing shareholders. Additionally, options and warrants or other conversion rights issued or granted by the Company may adversely affect future equity offerings, and the exercise of those options and warrants may have an adverse effect on the value of the Company shares. If any such options, warrants or conversion rights are exercised at a price below the then current market price, if any, then (i) the market price of the Company shares could decrease, and (ii) shareholders may experience dilution of his or her investment. The issuance of Company shares in the future will result in a reduction of the book value and market price of the then outstanding Company shares. If any such additional Company shares are issued such issuances will result in a reduction in the proportionate ownership and voting power of all current shareholders. Further, such issuance may result in a change of control of the Company.

A prolonged decline in the price of the Company shares could result in a reduction in the liquidity of the Company shares and a reduction in the Company's ability to raise capital. As a significant portion of the Company's operations will probably be financed through the sale of equity securities a decline in the price of the Company shares could be especially detrimental to liquidity.

Technological Change

The Company operates in business segments that are entirely dependent on technology. As such, technological change will impact the ability of the Company to expand and grow its business and will also affect the costs and expenses incurred by the Company, including capital requirements. The artificial intelligence market continues to experience rapid technological change. There is a risk that new technologies and standards may render the Company's software applications obsolete. The Company may be required to invest significant capital in new technology and software development to remain competitive. Failure to do so may adversely affect demand for the Company's products and services.

Share price volatility and liquidity

There is a limited market for the Company's shares, and the trading price may increase or decrease in response to a number of events and factors, both known and unknown. In addition, the market price of the Company shares will be affected by many variables not directly related to the Company's success and will therefore not be within the

Company's control, including other developments that affect the market for all software and/or AI sector securities, the breadth of the public market for the common shares, and the attractiveness of alternative investments. The effect of these and other factors could cause the Company's share price to be volatile in the future.

The market price for the Company shares may also be affected by the Company's ability to meet or exceed expectations of analysts or investors. Any failure to meet these expectations, even if minor, may have a material adverse effect on the market price of the Company shares.

Regulatory requirements

The Company may be affected in varying degrees by government policies and regulations. Changes in government, regulations and policies and practices, beyond the control of the Company, could have an adverse impact on its future cash flows, earnings, results of operations and financial condition.

Limited Operating History

Minerva is in the early stage of development and has a limited history of operations in the AI sector. The Company will be subject to many risks common to start-up enterprises and its viability must be viewed against the background of the risks, expenses and problems frequently encountered by companies in the early stages of development in new and rapidly evolving markets such as the AI industry. This includes under-capitalization, cash shortages, limitations with respect to personnel, lack of revenues and financial and other resources. There is no assurance that the Company will develop its business profitably, and the likelihood of success of the Company must be considered in light of its early stage of operations. There is no assurance that the Company will be successful in achieving a return on shareholders' investment.

Management of Growth

The Company may be subject to growth-related risks including pressure on its internal systems and controls. The Company's ability to manage its growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Company to deal with this growth could have a material adverse impact on its business, operations and prospects. While management believes that the Company has made the necessary investments in infrastructure to process anticipated volume increases in the short term, the Company anticipates it may experience growth in the number of its employees and the scope of its operating and financial systems, resulting in increased responsibilities for the Company's personnel, the hiring of additional personnel and, in general, higher levels of operating expenses. In order to manage its current operations and any future growth effectively, the Company will also need to continue to implement and improve its operational, financial and management information systems and to hire, train, motivate, manage and retain its employees. There can be no assurance that the Company will be able to manage such growth effectively, that its management, personnel or systems will be adequate to support the Company's operations or that the Company will be able to achieve the increased levels of revenue commensurate with the levels of operating expenses associated with this growth.

Negative cash flow and absence of profits

Minerva has not earned any profits to date and there is no assurance that it will earn any profits in the future, or that profitability, if achieved, will be sustained. The success of the Company will ultimately depend on its ability to generate revenues from operations. There is no assurance that any future revenues will be sufficient to generate the required funds to develop the Company's business.

Protection of intellectual property rights

The future success of the Company's business will be dependent upon the intellectual property rights surrounding certain technology held by Minerva, including trade secrets, know-how and technological innovation. The Company's failure to protect its intellectual property could harm its ability to compete effectively. The Company is highly dependent on its ability to protect its proprietary technology. It intends to protect its rights vigorously; however, there can be no assurance that these measures will, in all cases, be successful. Enforcement of its intellectual property rights may be difficult. Also, competitors could independently develop technologies that are perceived to be substantially equivalent or superior to the Company's technologies. The Company may be subject to claims of intellectual property infringement. Other companies may claim that Minerva infringes their intellectual property, which could materially increase costs and materially harm the Company's ability to generate future revenue and profits. Although the Company does not believe that its products infringe on the rights of third parties, third parties may assert infringement claims against it in the future. Although most of Minerva's technology is proprietary in nature, it does rely to a limited extent on third party software.

Reliance on computer systems

The Company's information technology and internal infrastructure is susceptible to damage from computer viruses, unauthorized access, natural disasters, terrorism, war and telecommunication and electrical failures. Significant disruption to the availability of information technology and internal infrastructure could cause delays in research and development work. The Company would incur liability and development of products would be delayed if any disruption or security breach were to result in a loss of, or damage to, the Company's data. Additionally, the Company may rely on cloud service providers. Any outages or changes related to these cloud services and service providers may cause disruption to development and services at the Company.

Reliance on customers and financial markets

The Company's sales to date have been to certain government agencies and departments, and to companies in the mining industry. The sales to government have been as a result of the Company successfully entering into competitive bidding situations, often with partner companies. The sales to mining companies have been as a result of marketing efforts to such companies in a rising mining market where the companies are able to access funding for their exploration and development programs. There is no assurance that the Company will continue to be successful in competing for government contracts, or that mining company clients will continue with their exploration and development programs should market conditions become adverse.

Product liability exposure

The Company faces an inherent business risk of exposure to product liability and other claims in the event that the development or use of its technology or prospective products is alleged to have resulted in adverse effects. While the Company has taken, and will continue to take, what it believes are appropriate precautions, there can be no assurance that it will avoid significant liability exposure. A product liability claim could have a material adverse effect on the Company's business, financial condition and results of operations.

Management experience and dependence on key personnel and employees

The Company's success is currently largely dependent on the performance of the Company's directors and officers. The experience of these individuals is a factor which will contribute to the Company's continued success and growth. The Company will initially be relying on its board members and executive officers, as well as independent consultants and advisors, for most aspects of its business. The amount of time and expertise expended on the Company's affairs by each of the Company's management team and the Company's directors will vary according to the Company's needs. The loss of any of these individuals could have a material detrimental impact on the Company's business.

The Company does not intend to acquire any key man insurance policies and there is, therefore, a risk that the death or departure of any key member of management, a director, or employee or consultant, could have a material adverse effect on the Company's business, operations and financial condition. Investors who are not prepared to rely on the Company's management team should not invest in the Company's securities. The management of the Company has limited history of past performance in managing a software and AI company, and the past performances of management in other positions are no indication of their ability to successfully manage the Company. If the experience of management is inadequate or unsuitable to manage the Company, the operations of the Company may be adversely affected.

Competition

The Company will face competition from other companies, some of which can be expected to have longer operating histories and more financial resources and experience than the Company. Increased competition by larger and better financed competitors could materially and adversely affect the business, financial condition and results of operations of the Company. There are other entities investing in the AI technology space and the Company expects this sector to grow. These companies may have an advantage and may have developed a more efficient operational or investment model. The Company may not have sufficient resources to continue on a competitive basis which could materially and adversely affect the business, financial condition and results of operations of the Company. To remain competitive, the Company will continue to invest in software development. Should competitors introduce new services/software embodying new technologies, the Company's technology may become obsolete and require substantial resources to compete successfully in the market for software and technology services.

Exchange Rate

The reporting and functional currency of the Company is the Canadian Dollar. A significant portion of the Company's anticipated future revenues and expenses may be in foreign currencies, such as the United States Dollar or the Euro. Future fluctuations in the value of the Canadian Dollar relative to these currencies will likely have a material impact on the Company's overall financial results. Appreciation of the Canadian dollar will potentially affect revenues and expenses.

Conflicts of interest

Certain of the Company's directors and officers are, and may continue to be, involved in the AI industry through their direct and indirect participation in corporations, partnerships or joint ventures which are potential competitors of the Company. Situations may arise in connection with potential acquisitions or opportunities where the other interests of these directors and officers may conflict with the Company's interests. Directors and officers of the Company with conflicts of interest will be subject to and must follow the procedures set out in applicable corporate and securities legislation, regulations, rules and policies.

Employee recruitment

Recruiting and retaining qualified personnel is critical to the success of the Company. The number of persons skilled in software development (and AI in particular) and marketing is limited and competition for such persons is intense. As the Company's business activity grows, the Company will require additional key executive, technical, operational, and administrative personnel. There can be no assurance that the Company will be successful in attracting, training and retaining qualified personnel. If the Company is not successful in attracting and training qualified personnel, the efficiency of its operations could be affected, which could have a material adverse effect on the Company's results of operations and profitability.

Uninsured or uninsurable risks

The Company insures its operations in accordance with technology industry practice. However, given the novelty of the proposed business, such insurance may not be available, uneconomical for the Company, or the nature or level may be insufficient to provide adequate insurance cover. The Company may become subject to liability for hazards against which the Company cannot insure or against which the Company may elect not to insure because of high premium costs or for other reasons. The payment of any such liabilities would reduce or eliminate the funds available for operations. Payments of liabilities for which the Company does not carry insurance may have a material adverse effect on the Company's results of operations and financial position.

Litigation

The Company may become party to litigation from time to time in the ordinary course of business which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company such a decision could adversely affect the Company's ability to continue operating and the market price for the common shares and could use significant resources. Even if the Company is involved in litigation and wins, litigation can redirect significant resources. Litigation may also create a negative perception of the Company's brand.

OUR APPLICATIONS