ACCELEWARE LTD.
MANAGEMENT'S DISCUSSION AND ANALYSIS
FOR THE THREE AND TWELVE MONTHS ENDED DECEMBER 31, 2018

This management’s discussion and analysis of financial condition and results of operations (“MD&A”) should be read together with Acceleware Ltd.’s (“Acceleware” or the “Company”) audited annual financial statements and the accompanying notes for the year ended December 31, 2018 (the “Financial Statements”) which were prepared in accordance with International Financial Reporting Standards (“IFRS”). Additional information relating to the Company is available on the System for Electronic Document Analysis and Retrieval (“SEDAR”) at www.sedar.com under Acceleware Ltd.

This MD&A is presented as of April 30, 2019. All financial information contained herein is expressed in Canadian dollars unless otherwise indicated.

Forward Looking Statements

Certain statements contained in this MD&A constitute forward-looking statements. These statements relate to future events or the Company’s future performance. All statements other than statements of historical fact may be forward-looking statements. Forward-looking statements are often, but not always, identified by the use of words such as “seek”, “anticipate”, “plan”, “continue”, “estimate”, “expect”, “may”, “will”, “project”, “predict”, “potential”, “targeting”, “intend”, “could”, “might”, “should”, “believes” and similar expressions. 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 these 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 MD&A should not be unduly relied upon by investors. These statements speak only as of the date of this MD&A and are expressly qualified, in their entirety, by this cautionary statement.

In particular, this MD&A may contain forward-looking statements, pertaining to the following:

- the expectation of Acceleware’s ability to continue operating as a going concern, fund its operations through the sale of its products and services, and access external financing when required;
- the expectation of software revenue growth in the oil and gas sector through innovative licensing arrangements;
- potential benefits of the Company’s software to customers, including cost savings and increases to cash flow and productivity;
- the future growth prospects for radio frequency (“RF”) heating technology for heavy oil and oil sands based on technical and economic feasibility analyses and testing performed to date;
- the patentability of concepts developed through RF heating research and development (“R&D”) efforts;
- the expectation that the positive economic and technical analyses and testing to date will be reinforced by future results of subsequent testing of the RF technology;
- advantages to using Acceleware’s products and technology;
- the demand for new products currently under development at the Company;
- ease and efficiency of implementing Acceleware’s products; and
- supply and demand for Acceleware’s primary software products.

With respect to forward-looking statements contained in this MD&A, the Company has assumed, among other things:

- that the future revenue and resulting cash flow expected by the Company’s management (“Management”) and ability to attract new financing will be sufficient to fund future operations - this assumption being subject to the risk and uncertainty that the Company may not generate enough cash flow from operating activities to meet its capital requirements and that the Company may not be able to secure additional capital resources from external sources to fund any shortfall. Operating cash flow may be negatively affected by general economic conditions, increased competition,
increased equipment or labour costs, and adverse movements in foreign currencies. Should the Company experience a cash flow shortfall from operating activities, Management’s contingency plan may not be sufficient to reverse the shortfall;

- that the world price of oil will continue to improve over the next 12 to 24 months, and that improvement will result in increased demand for the Company’s products and technology;
- that the preliminary analyses coupled with lab and field testing that the Company has performed to date regarding the technical and economic feasibility of RF heating technology for heavy oil and oil sands will be confirmed in future commercial-scale testing and in commercial products;
- that the Company will receive all regulatory approvals required to carry out the commercial-scale testing of its RF heating technology;
- that the RF heating concepts developed by the Company are unique, novel and non-infringing of intellectual property owned by others;
- that it will be able to increase sales of its software products and services by focusing on innovative licensing arrangements and continuously improving its products – which is subject to the risks that sales in core vertical markets may be negatively affected by general economic conditions, that the Company’s R&D efforts may be unable to develop continuous improvements; and
- that it will be able to withstand the impact of increasing competition.

The Company’s actual results could differ materially from those anticipated in these forward-looking statements as a result of the risk factors set forth below and elsewhere in this MD&A.

Investors should not place undue reliance on forward-looking statements as the plans, intentions or expectations upon which they are based might not occur. Forward-looking statements include statements with respect to the timing and amount of estimated future revenue and sales and the Company’s ability to protect and commercially exploit its intellectual property. Readers are cautioned that the foregoing lists of factors are not exhaustive. The forward-looking statements contained in this MD&A are expressly qualified by this cautionary statement. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, unless required by law.
Company Overview

Acceleware is an innovator of clean-tech oil and gas technologies comprised of two business units: RF Heating enhanced oil recovery and Advanced Scientific Software.

RF XL is Acceleware’s patented and patent-pending RF heating technology, designed to improve the extraction of heavy oil and bitumen, with the possibility of saving significant production costs. When applied, RF XL has the potential to reduce both capital and operating costs, while offering significant environmental benefits, including immediate greenhouse gas (“GHG”) emission reductions, a substantial decrease in land use, the elimination of external water, no requirement for solvents, and no tailings ponds. As an electrically-driven process, the Company believes that RF XL technology can provide a clear pathway to zero-GHG production of heavy oil and oil sands and provide optimal alignment with industry and government goals to recognize innovation as part of the solution in the oil and gas industry’s overall emission reduction plans.*

Acceleware's Software segment helps customers meet their oil and gas exploration needs with seismic imaging software that provides the most accurate and advanced imaging available for oil exploration in complex geological zones and formations, and their electronic product development needs with state-of-the-art electro-magnetic (EM) simulation software. For further information about the Company, please visit www.acceleware.com.

Acceleware was founded in 2004 to build software solutions that targeted the graphics processing unit as a compute platform. The first product was an accelerated finite difference time domain (“FDTD”) solution for the EM simulation industry. AxFDTD™ continues to be sold to many Fortune 500 companies such as GE, Apple, Samsung, LG, Blackberry, Foxconn, Nikon, Renault, Mitsubishi, Merck, Boeing and Lockheed Martin. With AxFDTD, Acceleware was a pioneer in the GPU computing revolution.

Recognizing an opportunity in the similarity between electromagnetic FDTD and certain seismic imaging algorithms, Acceleware entered the seismic imaging market in 2008. The Company’s first product was a GPU accelerated Kirchhoff Time Migration solution, followed closely by CPU and GPU enabled Reverse Time Migration (“RTM”) library, AxRTM™ in 2009. In 2013, Acceleware introduced AxWave™, a forward modelling variant of AxRTM which allows customers to accurately model seismic acquisition and perform data characterization. In late 2014, Acceleware added AxFWI™ a revolutionary modular full waveform inversion (“FWI”) application to its seismic imaging suite. AxFWI allows geophysicists to create high quality subsurface velocity models in dramatically less time than before. Acceleware accesses the oil and gas geoscience software market through a combination of channel and direct sales. The Company provides channel partners with software solutions as an add-on or replacement to an existing seismic data processing platform to increase the functionality of and/or the speed of partners’ software. The Company’s current seismic independent software vendor (“ISV”) partners include Tsunami Development, Paradigm Geophysical, Shearwater GeoServices and GeoTomo LLC.

Seismic forward modelling in complex subsurface geology using AxWave

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In 2010, Acceleware began investigating the technology to use RF energy for in-situ heating of heavy oil and bitumen. In the ensuing eight years, Acceleware has vigorously developed RF heating technology with two patents granted, 12 additional patent applications pending, and a further 10 patent applications under development. Acceleware has also developed leading edge RF heating simulation software. RF heating for oil production is not a new concept, however trials to date have shown limited success. Acceleware believes that the limitations experienced to date can be overcome with new technology. Acceleware’s RF heating research and development effort has focused on reducing the capital cost of the technology, making the technology more flexible for use in a variety of resource plays, and improving the scalability of the technology to very long horizontal wells commonly used in Alberta’s oil sands and elsewhere. The Company believes that RF heating has the potential to reduce capital and operating cost for heavy oil and oil sands extraction, as well as reduce the environmental footprint by dramatically reducing the use of water and limiting the greenhouse gas emissions associated with current extraction techniques. RF heating also has the potential to significantly reduce land use in the oil sands, and does not involve the injection of chemicals into the reservoir. Acceleware’s unique expertise with RF heating technology has also resulted in service revenue both locally and abroad. Acceleware’s RF heating technology broadly falls into two versions. Modular RF is a technology mainly aimed at deeper, vertical wells where efficiencies are gained through the innovative approach to downhole RF power generation. The second version, RF XL targets long horizontal wells common to in-situ oil sands production. In the course of the Company’s RF heating development and services business, the Company developed sophisticated simulation software tools based on AxFDTD coupled to third party reservoir simulation software. In late 2013, Acceleware commercialized and introduced these simulation tools as AxHEAT™ a product aimed at oil and gas companies investigating the effectiveness of RF heating in increasing the efficiency of heavy oil and oil sands production.*

RF heating can be used in a variety of vertical and horizontal well arrangements.

![Diagram of RF heating arrangements](image)

Beyond oil and gas, Acceleware’s traditional market has been electromagnetic simulation software, and the Company continues to provide products to this industry. With AxFDTD, most of the major mobile telephone manufacturers in the world are using Acceleware’s electromagnetic design solutions to design their products more rapidly. Acceleware’s fourth-generation software acceleration solutions that support multi-board GPU solutions can accelerate entire industrial simulation and processing applications by over 35 times.

![Diagram of software integration](image)

The EM solutions developed by Acceleware can be easily integrated by software developers, saving them the expense and time of migrating their applications to high performance multi-core platforms. Acceleware improves the overall
experience for end users of these applications by providing greater computing speed without end users having to learn new skills or change their work processes.

In the EM market, software developers partner with Acceleware to increase the speed of their software. Some of the Company’s current software partners include SPEAG, Synopsys, ZMT Zurich MedTech and Keysight Technologies. Acceleware reaches the EM market through a combination of partner channels and direct sales. AxFDTD will continue for the traditional markets and is an enabling technology for AxHEAT.

Acceleware was founded in February 2004 by a group of graduate students and professors from the University of Calgary’s Electrical Engineering department and became a public company on the TSX Venture Exchange in January 2006 through a reverse takeover of a capital pool company, Poseidon Capital Corp. The Company is headquartered in Calgary, Alberta. On December 31, 2018, Acceleware had 13 employees and long-term contractors including: 2 in administration; 3 in sales, marketing and product management; and 8 in research and development and engineering.

Overall Performance

During the year ended December 31, 2018 revenue increased dramatically compared to the previous year, rising 227% to $4,317,361 from $1,320,067. A principal reason for the increase was the execution of a consulting services agreement with a Canadian affiliate of Advanced Micro Devices, Inc. Under the terms of the agreement Acceleware will receive US$2.51 million in exchange for custom software development human resources and consulting services. During the year ended December 31, 2018, the Company’s custom software team transitioned to become employees of AMD, and the Company completed substantially all of the consulting services contemplated under the agreement. On a segmented basis, the Company’s high-performance computing segment revenue rose 290% in 2018 to $4,274,877 from $1,095,414 recorded in 2017, primarily due to the AMD agreement. The Company’s RF heating segment revenue fell 81% in 2018, to $42,484 from $224,653 recorded in 2017, the decrease is a result of $250,000 in deferred revenue not recognized in 2018 related to the RF XL commercial-scale test project funding agreement with an oil sands producer.

As a result of the increase in revenue, the Company narrowed its total comprehensive loss considerably for the year ended December 31, 2018 to $98,622, a significant decrease compared to a total comprehensive loss of $2,749,731 for the year ended December 31, 2017. The lower total comprehensive income for the year ended December 31, 2018 is due to the above noted increase in revenue coupled with a more moderate increase in total expenses in 2018.

On a segmented basis, the high-performance computing segment recorded income from operations of $2,958,992 in 2018, compared to a loss from operations of $254,028 in 2017 due to higher revenue. Loss from operations attributed to the RF heating segment rose 32% to $3,123,178 in 2018 from $2,370,393 in 2017 due to lower revenue and higher general and administrative (“G&A”) and R&D expense.

During the year ended December 31, 2018, Acceleware invested in RF heating R&D. Activities included engineering, design and prototyping work related to the Company’s planned commercial-scale test of RF XL, and preparing additional patent applications. Specifically, for the RF XL test, the Company completed the design and commenced manufacturing and testing of a prototype RF generator with partner GE, completed design concepts for the drilling and completion of the RF XL and production wells, and completed the front-end engineering and design of surface facilities. During 2018, Acceleware’s scientists and engineers filed five new patent applications and were granted two patents in the U.S. The Company also took steps to solidify the financing for the test. The Company completed contribution agreements with both Sustainable Development Technology Canada (SDTC) and Emissions Reduction Alberta (ERA) providing a total of $10 million in non-repayable grants for the test. The Company secured investment from a major Calgary-based oil sands producer (the "Producer") for the commercial-scale RF XL pilot test. The Producer will provide funding of up to $2 million toward the RF XL pilot under the terms of a project funding agreement with Acceleware. These agreements complement the commercial-scale test agreement with Prosper Petroleum Ltd. announced in July, 2018. The consulting agreement with AMD, the project financing agreement, and the contribution agreements with SDTC and ERA together with cash on hand and capital raised through the exercise of warrants and options, bring the total financing for the commercial-scale test to an excess of $16 million. Acceleware estimates the cost to complete the RF XL pilot will range from $16 million to $20 million. Acceleware has appointed
GMP Securities L.P. ("GMP FirstEnergy") as exclusive financial advisor to assist in the full funding of the RF XL pilot program. GMP FirstEnergy provided advice on the completion of the project funding agreement. *

Schematic of Commercial-Scale Test of RF XL in Oil Sands

At December 31, 2018, Acceleware had $2,051,577 (December 31, 2017 - $403,501) in working capital, including $3,225,126 (December 31, 2017 - $781,315) in cash and cash equivalents, and $189,012 (December 31, 2017 - $183,373) in combined short-term and long-term debt in the form of finance leases. The increase in cash (and consequently working capital) is a result of the AMD agreement noted above and project funding or the RF XL field test.

The Company actively manages its cash flow and investment in new products to match its cash requirements to cash generated from operations, external funding, and capital raising activities. In order to maximize cash generated from operations, the Company plans to continue to focus on high gross margin software products; to minimize operating expenses where possible; and to limit capital expenditure. As the Company continues to develop its RF heating technology, new research and development investments will be financed through a combination of internal cash flow from the high-performance computing business, project funding agreements, and external financing. Management believes that successful execution of its business plan will result in sufficient cash flow and new financing to fund projected operational and investment requirements. However, no assurances can be given that the Company will be able to achieve all or part of the objectives discussed above, or that sufficient financing from outside sources will be available. Further, if the Company’s operations are unable to generate cash flow levels at or above current projections, the Company may not have sufficient funds to meet its obligations over the next twelve months. Should such events occur, Management is committed to implementing all or a portion of its contingency plan. This plan has been developed and designed to provide additional cash flow, and includes, but is not limited to, deferring certain additional product development initiatives, reducing sales, marketing and general and administrative expenses, and seeking

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outside financing. The failure of the Company to achieve one or all of the above items may have a material adverse impact on the Company’s financial position, results of financial performance and cash flows.*

**Recent Highlights and Events**

**November 13, 2018** – Acceleware announced the participation of a major Calgary-based oil sands producer (the "Producer") in the commercial-scale RF XL pilot test of its radio frequency heating system. The Producer will provide funding of up to $2 million toward the RF XL pilot under the terms of a project funding agreement with Acceleware. In exchange for the funding, the Producer will be able to provide input into pilot designs and test specifications prior to completion, and will receive, along with the other pilot participants, exclusive access to the full set of detailed technical data and test results for one year following completion of the pilot. Acceleware has granted the Producer prioritized rights to host a subsequent test of Acceleware's RF XL technology, preferred pricing on pre-commercial products, and preferred access to RF XL products over operators who do not participate in the pilot.

**October 22, 2018** – Acceleware announced it had signed a consulting agreement (the "Agreement") with a Canadian affiliate of AMD. Over a four-month time span, Acceleware will receive cash compensation of US$2.51 million from AMD in exchange for custom software engineering resources and consulting services. As part of the Agreement, the Company's custom software development team will transition to become AMD employees. Acceleware will also provide consulting services to AMD.

**September 27, 2018** – Acceleware announced the completion of contribution agreements with both SDTC and ERA. As a result of the agreements, Acceleware can access up to a total of $10 million in non-repayable, joint funding from SDTC and ERA to complete a commercial-scale RF XL pilot of Acceleware's radio frequency heating technology at Prosper’s Rigel property in northeast Alberta. Acceleware estimated the cost to complete the RF XL pilot will range between $16 to $20 million. As of December 31, 2018, $1,596,656 was received under the agreements, with a further $3,085,330 received subsequent to year-end.

**July 17, 2018** - Acceleware announced that it has entered into a commercial test agreement (the with Prosper Petroleum Ltd. ("Prosper") to perform a commercial-scale test (the "Test") of Acceleware's RF XL radio frequency heating technology. The Test will commence immediately at Prosper's Rigel property in northeast Alberta, where Prosper is developing a project in the Athabasca Oil Sands. SDTC and ERA have committed up to $10 million in non-repayable funding for the Test, as previously announced by Acceleware on November 3, 2017. The funding will become available upon execution of contribution agreements with SDTC and ERA. With the support of Prosper, Acceleware begun raising remaining capital to further support the test. Discussions with other potential consortium members for the project are on-going, with the goal of generating additional financial, technical and operating support.

**June 11, 2018** – Acceleware announced that the Company had formed a six-person RF heating Acceleware Advisory Board (AAB). The AAB brings together a group of nine heavy oil and oil sands leaders with extensive operational, technical, and commercialization experience. This group will provide guidance to Acceleware throughout the RF technology testing and commercialization process. Acceleware formed the AAB to ensure that RF XL and Modular RF meet key functional and economic demands of heavy oil and oil sands operators.

The AAB consists of:

Cal Coulter: Mr. Coulter has 40 years of experience in the oil and gas industry and has held positions in production, facilities, gas processing, drilling, completions, exploration and operations in thermal operations. The last 11 years were as the Director of Subsurface Technology for Suncor where he led the development of SAGD enhancement technologies and all novel in situ bitumen recovery technologies.

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**Chad Robinson:** As Managing Director of Resource Merchant Capital, Mr. Robinson has over 18 years of accounting, finance and private equity experience, focused in the oilfield sector. From 2006 to 2015, Chad was the CFO of Pacesetter Directional Drilling and helped to grow it into Canada’s largest premier private directional drilling company.

**Don Verdonck:** Mr. Verdonck is retired from a 40-year career in the oil and gas business, most recently as VP Thermal at Athabasca Oil Corporation. Don’s experience spans executive level management, as well as operational and facilities management, and he currently serves on two private oil and gas boards.

**Heath Williamson:** Mr. Williamson is the General Manager, Thermal & EOR at BlackPearl Resources and is responsible for advancing the full cycle development of BlackPearl’s Thermal & EOR heavy oil assets. Heath also serves on the Board of Directors of the Canadian Heavy Oil Association.

**Jeff Reading:** Mr. Reading is the President of Actions Matter. He has more than 35 years of experience in the environmental field and has supported the commercialization of more than 20 startup companies. Jeff provides leadership for the Electricity Global Business Unit Innovation Team at ATCO, is the Chair for the Green Learning Canada Foundation (GLCF), co-founder and Board member of the Alberta Council for Environmental Education (ACEE), an advisor with Carbon Talks Canada and sits on the Alberta CleanTech Industry Association (ACTia) Board of Directors.

**John Howard:** Mr. Howard brings 38 years of experience in the energy sector with a focus on conventional and thermal heavy oil production. In May, 2017 he retired as Vice President, Production East, Canadian Natural Resources Ltd. (CNRL). Prior to his role with CNRL, John co-founded and was Executive Vice President of Verdant Energy Ltd, a renewable energy company providing waste-to-energy solutions. John was also Vice President, Operations with Numac Energy Ltd., and Technical Superintendent at Shell Canada’s Peace River Complex.

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**June 11, 2018** – Acceleware announced that GE Global Research had completed the design phase of Acceleware’s prototype silicon carbide (SiC) RF Generator. GE will now commence assembly of the generator to be used in the commercial-scale test. Acceleware expects to receive an initial generator module in 2018 and will begin lab testing at that time. The full prototype RF XL generator system is planned for completion by GE in Q2 2019.

**April 11, 2018** – Acceleware announced that the US Patent and Trademark Office had granted Patent No. 9,938,809 relating to RF heating of heavy oil and oil sands reservoirs. The patent is a key part of Acceleware’s growing base of intellectual property and covers the core elements of its Modular RF technology, as well as claims relating to its RF XL technology. Modular RF is targeted for commercial availability in 2022, while RF XL is expected to be available in 2020.

**Strategic Update**

**RF Heating**

In 2010, Acceleware began investigating the technology to use RF energy for in-situ heating of heavy oil and bitumen. In the ensuing nine years, Acceleware has been granted two patents has filed a further 12 patent applications for RF heating technology, and has developed leading edge simulation software. Ten additional patent applications for RF heating are currently underway as the Company expands its portfolio of intellectual property in line with product development. RF heating for oil production is not a new concept, however, trials to date have shown limited success. Acceleware believes that the limitations experienced to date can be overcome with its proprietary technology. Acceleware’s RF heating research and development effort has focused on reducing the capital cost of the technology, making the technology more flexible for use in a variety of resource plays, and improving the scalability of the technology to very long horizontal wells commonly used in Alberta’s oil sands and elsewhere. The Company believes that RF heating has the potential to reduce capital and operating cost for heavy oil and oil sands extraction, as well as reduce the environmental footprint by dramatically reducing the use of water and limiting the greenhouse gas emissions associated with current extraction techniques. Acceleware’s unique expertise with RF heating technology
has also resulted in service revenue both locally and abroad. In the course of the Company’s RF heating development and services business, the Company developed sophisticated simulation software tools based on AxFDTD coupled to third party reservoir simulation software. In late 2013, Acceleware commercialized and introduced these simulation tools as AxHEAT™, a product aimed at oil and gas companies investigating the effectiveness of RF heating in increasing the efficiency of heavy oil and oil sands production.

In each of the last four years up to 2017, the Company received funding from NRC-IRAP to partially finance its RF heating technology development. Acceleware’s RF heating R&D program is focused on removing certain known technical limitations preventing the widespread adoption of this technology in enhanced oil recovery. In 2015, the Company conducted successful laboratory testing of critical components of the technology. In 2016, the Company commenced testing in larger scale field experiments, with additional components, to more closely replicate a commercial system, and completed the first phase of those tests in 2017. The Company began preparation for a commercial-scale (2 megawatts and approximately 1000m horizontal well) field test in 2018 at Prosper’s Rigel oil sands property new Fort McKay in north-eastern Alberta. Acceleware has been awarded a $10 million non-repayable contribution to complete a commercial-scale field test of its RF XL technology. The funding will be provided by SDTC and ERA in accordance with their mandates to bring clean technologies to market that are economically viable and reduce GHG emissions. Acceleware has raised a further $2 million in funding for the test from a major Canadian oil sands producer. The Company is in the process of finalizing a partnership with one or more additional oil sands producers to provide additional financial and technical support for this commercial-scale field test in an oil sands reservoir. In 2018, the Company has completed development of key components that will be utilized in the commercial-scale test. Acceleware, with partner GE, has completed the preliminary design of the prototype RF generator that will be used in the test, and has begun the manufacture and test activities. Acceleware has completed design concepts for drilling and completing RF XL wells, and has completed front-end engineering and design of the surface facilities that will be used during the test. In 2019, Acceleware and Prosper expect to receive regulatory approval to move forward with the test. Acceleware continues to invest in intellectual property protection and has several new patent applications in development, including the investigation of applications for RF heating beyond oil sands and heavy oil production.

Software for Geoscience

In 2018, the Company focused on selling seismic imaging software to the oil and gas exploration market, and this will continue for 2019. The Company continues to develop its latest release of AxRTM with TTI, which the Company believes is a state-of-the-art RTM seismic imaging product. Complimenting AxRTM is AxWave, a finite-difference forward modelling package. These GPU accelerated and CPU optimized seismic solutions, with dense packaging and improved economics in power and cooling, provide a multi-fold performance increase that reduces lengthy processing times and enables expedited drilling decisions for the oil and gas industry. During late 2014, the Company derived its first revenue from AxFWI, Acceleware’s new modular full waveform inversion software application. Full waveform inversion allows geophysicists to dramatically improve subsurface models with less manual processing. In 2019, the Company is continuing the development of its suite of seismic products, as well as adding features, functionality and performance to AxRTM, AxWave and AxFWI. A key objective for 2019 is to find innovative ways to license software products to oil and gas producers, seismic service companies and software providers.

The Company currently sells product and services solutions into the oil and gas market and will continue to develop improvements to its products and intensify its marketing and business development activities in this market. The Company sells its seismic imaging solutions through four resellers. The Company’s key Seismic ISVs are Emerson (Paradigm), Tsunami Development, Shearwater GeoServices, and GeoTomo LLC. Acceleware has also seen significant opportunities for sales directly to end-users in this market, particularly when customers seek customized solutions.

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**Electromagnetic software products**

While the Company is focusing on oil and gas, it continues to sell and develop its EM FDTD solution. In the EM market, software is sold to end users primarily through ISVs that have integrated Acceleware’s solution into their software packages. Acceleware currently works with some of the world’s largest companies in the electronics market, which consists of mobile phone manufacturers, industrial electronics firms, and government organizations. ISVs are an important sales channel for Acceleware, and work with the Company’s sales force by selling on Acceleware’s behalf, co-selling with Acceleware’s sales people, or referring potential customers to Acceleware. Currently, Acceleware’s CAE ISV partners include SPEAG, ZMT Zurich MedTech AG, Keysight Technologies, Synopsis, Inc., and Crosslight Software Inc.

To drive future sales growth, Acceleware will work to add new ISV partnerships. Beyond expanding the Company’s potential customer base, new ISV partnerships also provide Acceleware with additional reselling agents who are strongly incented to cross-sell Acceleware’s products alongside their software solutions.

In addition to adding ISV partners, Acceleware is working to deliver new products and solutions to address the needs of a larger proportion of the installed base of its ISV partners. The Company is continuously improving its software acceleration products and expects to continue to release improved products with significant increases in performance every year.

Going forward, Acceleware will continue to focus on oil and gas, with RF heating, AxRTM, AxWave, AxFWI, AxHEAT and as the main strategic revenue and investment technologies. Innovations and improvements to the FDTD solution will continue for the traditional markets and be an enabling technology for AxHEAT in the energy market. Increased sales and marketing efforts for these new and competitive technologies will also be a Company priority.

**Selected Annual Information**

The audited financial statements and the accompanying notes for the year ended December 31, 2018 (the “Financial Statements”) are incorporated by reference herein and form an integral part of this MD&A. The Financial Statements can be found on www.sedar.com. All financial information is reported in Canadian dollars unless otherwise noted.

The following table shows selected financial information from Acceleware’s audited annual financial statements for the years ended December 31, 2018, December 31, 2017, and December 31, 2016.

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<tr>
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<tr>
<td>Total revenue</td>
<td>$4,317,361</td>
<td>$1,320,067</td>
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<td>Total comprehensive loss</td>
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<td>Loss per share (basic and diluted)</td>
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<td>($0.030)</td>
<td>($0.028)</td>
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<tr>
<td>Total assets</td>
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<td>$2,704,277</td>
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<td>Long-term debt (in the form of finance leases)¹</td>
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<td>Dividends</td>
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¹Includes current portion of finance leases, excludes convertible debentures

Acceleware’s recognized revenues have increased in 2018, compared to the previous two years, as a result of significant revenue from the AMD agreement. Total comprehensive income increased significantly in 2018 compared to both 2017 and 2016 due to the increase in revenue. With the work under the AMD agreement completed in 2018, the Company is now planning for more modest revenue and increased R&D spending in 2019. However, the Company expects its revenue and total comprehensive income to increase in future years as it completes the commercialization

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of its RF heating technology. Total assets increased from $2,704,277 as at December 31, 2016 to $6,167,689 as at December 31, 2018 due to increased cash and cash equivalents, contract assets, and trade and other receivables resulting from increased revenue in 2018 and government assistance for R&D.*

Results of Operations

Revenue

During the year ended December 31, 2018, the Company reported total revenues of $4,317,361 a 250% increase compared to $1,320,067 for the year ended December 31, 2017. The increase is a result of work completed under a consulting services agreement with a Canadian affiliate of Advanced Micro Devices, Inc. Revenue recorded in 2018 was $1,040,513 absent revenue associated with the AMD agreement.

RF heating revenue fell 81% in 2018 to $42,484 compared to $224,653 in 2017, the decrease is a result of lower consulting services. The Company received $300,000 in payments from an oil sands producer under a project funding agreement related to the commercial-scale test of RF XL technology. The Company deferred recognition of $250,000 of the payments associated with services performance obligations. The project funding agreement with the oil sands producer included a one-year license for AxHEAT, resulting in $41,000 in RF software revenue in 2018. The company earned $20,700 in RF software revenue relating to AxHeat licenses in 2017.

High-performance computing (“HPC”) segment revenue rose 290% in 2018 to $4,274,877 from $1,095,414 in 2017 due to higher services revenue associated with the AMD agreement. HPC Software revenue declined 60% to $70,156 in 2018 from $173,898 in 2017 as a result of reduced demand for seismic imaging software, consistent with the general slowdown in the industry. HPC maintenance revenue remained relatively flat at $617,294 in 2018, compared to $616,869 in 2017. HPC services revenue climbed 1.078% to $3,587,427 in 2018 from $304,647 in 2017, as a result of the AMD agreement. HPC services revenue was $310,579 in 2018 excluding AMD.

* this paragraph contains forward looking information. Please refer to “Forward Looking Statements” and “Risk Factors and Uncertainties” for a discussion of the risks and uncertainties related to such information
The Company most often sells software licenses bundled with post-contract support for maintenance, customer support, and bug-fixing. The Company recognizes software revenue on approximately 82% of perpetual and fixed-term software licenses sales immediately and amortizes the remaining 18% of those sales (deferred revenue) into maintenance revenue over the post-contract support period, often one year. As at December 31, 2018, revenue of $153,911 (December 31, 2017 - $150,085) is deferred and will be recognized over a period of twelve months or less.

**Expenses**

Expenses rose 7% during the year ended December 31, 2018 rising to $4,481,547 from $3,944,488 for the year ended December 31, 2017.

<table>
<thead>
<tr>
<th>Total expenses</th>
<th>Year ended December 31, 2018</th>
<th>Year ended December 31, 2017</th>
<th>Percentage change 2018/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of revenue</td>
<td>$67,669</td>
<td>$220,151</td>
<td>-69%</td>
</tr>
<tr>
<td>General and administrative</td>
<td>2,393,999</td>
<td>1,948,445</td>
<td>23%</td>
</tr>
<tr>
<td>Research and development</td>
<td>2,019,879</td>
<td>1,775,892</td>
<td>14%</td>
</tr>
<tr>
<td></td>
<td>$4,481,547</td>
<td>$3,944,488</td>
<td>14%</td>
</tr>
</tbody>
</table>

Cost of revenue for the company fell 69% in 2018 to $67,669 from $220,151 in 2017, due to decreased labour associated with consulting and custom software projects. Cost of revenue for RF heating increased 573% for the year ended December 31, 2018 to $14,001 from $2,080 in the year ended December 31, 2017. The increase is due to higher consulting labour and external software expenses in 2018 compared to 2017. Cost of revenue for high-performance computing decreased 75% in 2018 to $53,668 from $218,071 in 2017 as a result of fewer staff dedicated to custom software projects.

G&A expense include all salaries (excluding salaries for consulting and research and development personnel) and related expenses (including benefits and payroll taxes); sales and marketing activities; facility costs; share-based compensation; and professional fees. For the Company as a whole, G&A expense increased 23% in 2018 to $2,393,999 from $1,948,445 mainly due to higher share-based payments for stock options, higher salaries, and higher legal fees associated with patent applications and agreements. Share based payments allocated to G&A increased to $433,057 in 2018 from $364,600 in 2017. Share-based payment expense has increased in 2018 due to a larger number of options granted, a shorter vesting period, and a higher stock price at the time of grant compared to 2017. Professional fees including legal fees increased to $404,995 in 2018 compared to $271,353 in 2017. G&A salaries rose to $989,810 from $796,469 in 2018.

For the year ended December 31, 2018, R&D expenditures rose 14% to $2,019,879 from $1,775,892 for the year ended December 31, 2017, primarily due to costs associated with the commercial-scale test of RF XL, partially offset by significantly increased government assistance in RF heating R&D. In addition, the Company recorded $210,032 (2017 - $224,771) in net refundable Alberta SR&ED tax credits as a reduction in R&D expense.

Expenses for the RF heating segment increased 22% to $3,165,662 in 2018 from $2,595,046 in 2017 as a result of higher G&A and R&D expenses. G&A expenses for RF heating rose 26% to $1,653,590 in 2018 from $1,312,824 in 2017 (salaries, legal fees for patents and agreements, and share-based payments). R&D investment in RF heating increased 17% to $1,498,071 in 2018 compared to $1,280,142. The increase is a result of significant increase in spending associated with the Company’s commercial-scale test of RF XL, offset by a significant increase in government funding from SDTC and ERA. Government assistance for RF heating recognised was $1,774,902 in 2018 compared to $148,390 in 2017. RF heating R&D net of government assistance was $3,794,781 in 2018 compared to $1,924,282 in 2017. The increase in RF R&D investment net of assistance was due to increased fees paid to consultants and contractors ($2,317,186 in 2018 compared to $253,363 in 2017) for design services for a prototype RF generator, drilling and completion well designs, and surface facility engineering for the field test of RF XL.
Expenses for the HPC segment fell 2% to $1,315,885 in 2018 from $1,349,442 in 2017 as a result of higher investment in R&D and G&A expenses associated with stock options. As technical staff rotated from custom software development to development of the Company’s proprietary software products, R&D increased, while cost of revenue decreased in 2018 compared to 2017.

### High-performance computing expenses

<table>
<thead>
<tr>
<th></th>
<th>Year ended December 31, 2018</th>
<th>Year ended December 31, 2017</th>
<th>Percentage change 2018/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs of revenue</td>
<td>$53,668</td>
<td>$218,071</td>
<td>-75%</td>
</tr>
<tr>
<td>General and administrative</td>
<td>740,409</td>
<td>635,621</td>
<td>16%</td>
</tr>
<tr>
<td>Research and development</td>
<td>521,808</td>
<td>495,750</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>$1,315,885</td>
<td>$1,349,442</td>
<td>-2%</td>
</tr>
</tbody>
</table>

**Foreign exchange**

In 2018, the Company recognized a $75,153 foreign exchange gain compared to a $30,074 loss on foreign exchange compared in 2017. Foreign exchange gains or losses typically occur when the exchange rate changes between the time revenue is recognized and when the resulting receivable is collected.

**Finance expense and Gain on derivative instruments**

In 2018, the Company recorded finance expense of $10,319 compared to $153,074 in 2017. The principal components of finance expense in 2017 relate to the Company’s convertible debentures which were issued in December, 2016 and converted in November of 2017. As a result of the conversion, the Company recorded $nil accrued interest in 2018 (2017 - $85,502) and $nil in accretion in 2018 (2017 - $65,645). Also related to the convertible debentures the Company recorded no gain on derivative instruments in 2018 (2017 - $51,766) associated with the derivative liabilities embedded in the debentures.

**Total comprehensive loss**

The Company had total comprehensive loss for the year ended December 31, 2018 of $98,622, a significant decrease compared to a total comprehensive loss of $2,749,731 for the year ended December 31, 2017. The lower total comprehensive loss for the year ended December 31, 2018 is due to the above noted increase in revenue coupled with a more moderate increase in expenses in 2018.
Summary of Quarterly Results

The following table highlights revenue, cash used in operating activities, total comprehensive income (loss) before tax and earnings (loss) per share for the eight most recently completed quarters ended December 31, 2018.

<table>
<thead>
<tr>
<th>Year 2018</th>
<th>Year 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q4</td>
<td>Q3</td>
</tr>
<tr>
<td>Revenue</td>
<td>$3,533,026</td>
</tr>
<tr>
<td>Cash generated (used) in operating activities</td>
<td>2,807,350</td>
</tr>
<tr>
<td>Total comprehensive income (loss) for the period</td>
<td>2,437,958</td>
</tr>
<tr>
<td>Earnings (loss) per share basic and diluted</td>
<td>$0.024</td>
</tr>
</tbody>
</table>

Compared to the same quarter a year earlier, Acceleware showed a significant increase in revenue during the three months ended December 31, 2018 (“Q4 2018”), mainly due to the AMD consulting agreement. Due to the higher revenue, lower cost of revenue, and lower R&D, the Company recorded total comprehensive income in Q4 2018 as compared to total comprehensive loss in the three months ended December 31, 2017 (“Q4 2017”). In addition, cash generated in operating activities increased significantly in Q4 2018 compared to cash used in Q4 2017. Revenue, comprehensive income and cash generated in operations all improved in Q4 2018 compared to the three months ended September 30, 2018 (“Q3 2018”).

Results of Operations – Fourth Quarter

Overall Performance

During Q4 2018, Acceleware had a total comprehensive income of $2,437,958, compared to a total comprehensive loss of $745,937 for Q4 2017. The difference is a result of an 1200% increase in revenue, combined with a 10% increase in expenses.

Total comprehensive income of $2,437,958 in Q4 2018 was also higher than the loss of $1,051,292 recorded in Q3 2018 due to 1238% higher revenue, and 10% lower expenses, led particularly by lower R&D.

Revenue

<table>
<thead>
<tr>
<th>Revenue</th>
<th>Three months ended Dec 31, 2018</th>
<th>Three months ended Dec 31, 2017</th>
<th>Three months ended Sept 30, 2018</th>
<th>% change Q4 2018 over Q4 2017</th>
<th>% change Q4 2018 over Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software</td>
<td>$93,639</td>
<td>$77,916</td>
<td>$5,496</td>
<td>20%</td>
<td>1604%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>162,539</td>
<td>142,926</td>
<td>145,203</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Services</td>
<td>3,276,848</td>
<td>50,848</td>
<td>113,279</td>
<td>634%</td>
<td>2793%</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$3,533,026</td>
<td>$271,690</td>
<td>$263,978</td>
<td>1200%</td>
<td>1238%</td>
</tr>
</tbody>
</table>

During Q4 2018, the Company recognized revenue of $3,533,026 representing a 1200% increase over the $271,690 recognized during Q4 2017, due to revenue associated with the AMD agreement. Revenue rose 1238% compared to the $263,978 recognized in Q3 2018 for the same reason. Revenue excluding the AMD agreement was $256,178, slightly lower than both Q4 2017 and Q3 2018.
RF heating revenue for Q4 2018 was $42,484 a significant increase over both Q4 2017 and Q3 2018 due to revenue associated with the AxHEAT software license delivered as part of the RF heating project funding agreement with a major oil sands producer.

HPC software revenue fell 32% to $52,639 for Q4 2018 compared to $77,916 for Q4 2017 on lower seismic imaging software sales. HPC software revenue increased 1209% to $52,639 in Q4 2018 compared to $5,496 in Q3 2018 in higher AxFDTD revenue. HPC maintenance revenue increased by 13% to $161,055 for Q4 2018 compared to $142,926 for Q4 2017 and 11% when compared to the $145,203 recorded in Q3 2018 due to increased seismic software maintenance. HPC services revenue significantly to $3,276,848 in Q4 2018 compared to $46,895 recognized in Q4 2017 and the $113,279 recorded in Q3 2018 both due to revenue associated with the AMD agreement which was the only software consulting revenue in Q4 2018.

Expenses

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Three months ended Dec 31, 2018</th>
<th>Three months ended Dec 31, 2017</th>
<th>Three months ended Sept 30, 2018</th>
<th>% change Q4 2018 over Q4 2017</th>
<th>% change Q4 2018 over Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$ 15,450</td>
<td>$ 59,894</td>
<td>$ 22,282</td>
<td>-74%</td>
<td>-31%</td>
</tr>
<tr>
<td>General &amp; administrative</td>
<td>881,644</td>
<td>534,314</td>
<td>445,965</td>
<td>65%</td>
<td>98%</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>277,768</td>
<td>471,957</td>
<td>838,559</td>
<td>-41%</td>
<td>-67%</td>
</tr>
<tr>
<td>$ 1,174,862</td>
<td>$ 1,066,165</td>
<td>$ 1,306,806</td>
<td>10%</td>
<td>-10%</td>
<td></td>
</tr>
</tbody>
</table>
Expenses rose 10% during Q4 2018 to $1,174,862 from $1,066,165 for Q4 2017 primarily due higher G&A expenses and despite lower RF heating R&D expenses caused by higher government assistance. Expenses fell 10% during Q4 2018 to $1,174,862 from $1,306,806 for Q4 2017 due to lower R&D expense caused by higher government assistance.

<table>
<thead>
<tr>
<th>RF heating expenses</th>
<th>Three months ended Dec 31, 2018</th>
<th>Three months ended Dec 31, 2017</th>
<th>Three months ended Sept 30, 2018</th>
<th>% change Q4 2018 over Q4 2017</th>
<th>% change Q4 2018 over Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$14,001</td>
<td>$-</td>
<td>$-</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>General &amp; administrative</td>
<td>673,234</td>
<td>357,441</td>
<td>298,704</td>
<td>88%</td>
<td>125%</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>241,673</td>
<td>332,889</td>
<td>714,626</td>
<td>-7%</td>
<td>-66%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$928,908</strong></td>
<td><strong>$690,330</strong></td>
<td><strong>$1,013,330</strong></td>
<td><strong>35%</strong></td>
<td><strong>-8%</strong></td>
</tr>
</tbody>
</table>

RF heating cost of revenue increased to $14,001 in Q4 2018 compared to $nil in Q3 2017 and Q3 2018 due to labour and external software costs associated with the RF XL project funding agreement.

During Q4 2018, G&A expenses allocated to RF heating rose 88% to $673,234 from $357,441 recorded in Q4 2017. The increase is as a result of higher costs associated with salaries, legal fees (patents and agreements) and higher share-based payments for stock options. G&A expenses rose 125% in Q4 2018 compared to the $357,441 recorded in Q3 2018, for the same reasons.

In Q4 2018, the Company recorded $1,770,402 in government assistance from SDTC and ERA for the RF XL commercial-scale test project. Government assistance was $18,000 in Q4, 2017. R&D expenditures net of government assistance allocated to RF heating increased 473% to $2,012,075 in Q4 2018 from $350,889 in Q4 2017 due to increased investment in design and development services associated with the RF XL test.

<table>
<thead>
<tr>
<th>High-performance computing expenses</th>
<th>Three months ended Dec 31, 2018</th>
<th>Three months ended Dec 31, 2017</th>
<th>Three months ended Sept 30, 2018</th>
<th>% change Q4 2018 over Q4 2017</th>
<th>% change Q4 2018 over Q3 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of revenue</td>
<td>$1,449</td>
<td>$59,894</td>
<td>$22,282</td>
<td>-98%</td>
<td>-93%</td>
</tr>
<tr>
<td>General &amp; administrative</td>
<td>208,410</td>
<td>176,873</td>
<td>147,261</td>
<td>18%</td>
<td>42%</td>
</tr>
<tr>
<td>Research &amp; development</td>
<td>36,095</td>
<td>139,067</td>
<td>123,933</td>
<td>-74%</td>
<td>-71%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$245,954</strong></td>
<td><strong>$375,834</strong></td>
<td><strong>$293,476</strong></td>
<td><strong>-35%</strong></td>
<td><strong>-16%</strong></td>
</tr>
</tbody>
</table>

HPC cost of revenue for Q4 2018 fell 98% to $1,449 from $59,894 in Q4 2017 and decreased 93% from $22,282 in Q3 2018. The decrease year over year and compared to the most recent completed quarter is a result of the lower direct costs associated with custom software development projects.

HPC G&A expenses rose 18% to $208,410 in Q4 2018 compared to the $176,873 recorded in Q4 2017, due to increased salaries and share-based payments for employee stock options. G&A expenses were 42% higher in Q4 2018 at $208,410 compared to $147,261 in Q3 2018 due to higher salary and other payroll expenses.

In Q4 2018, R&D expenditures allocated to HPC fell 74% to $36,095 from $139,067 for Q4 2017 due to fewer technical staff available to work on software development in Q4 2018. HPC R&D declined 71% in Q4 2018 compared to the $123,933 recorded in Q3 2018 for the same reason.

**Foreign exchange**

In Q4 2018, the Company recognized a $81,967 gain on foreign exchange compared to a loss of $10,149 in Q4 2017 and a foreign exchange loss of $5,197 in Q3 2018. Foreign exchange gains or losses typically occur when the exchange rate changes between the time revenue is recognized and when the resulting receivable is collected.
**Finance expense and Gain on derivative instruments**

In Q4 2018, the Company recorded finance expense of $2,192 compared to $28,831 in Q4 2017, and $3,267 in Q3 2018. The principal components of finance expense in Q4 2017 relate to the Company’s convertible debentures which were issued in December, 2016 and converted in November, 2017. The Company recorded no accrued interest in either Q4 2018 or Q3 2018 (Q4 2017 - $16,127) and no accretion in either Q4 2018 or Q3 2018 (Q4 2017 - $9,321) on the debentures. Also related to the convertible debentures the Company recorded no gain on derivative instruments in either Q4 2018 or Q3 2018 (Q4 2017 - $81,564) associated with the derivative liabilities embedded in the debentures.

**Total comprehensive income (loss)**

Total comprehensive income increased in Q4 2018 to $2,437,958 compared to total comprehensive loss of ($745,937) in Q4 2017 and to total comprehensive loss of ($1,051,292) in Q3 2018. The increase in income over both Q4 2017 and Q3 2018 is a result of the AMD agreement revenue and the SDTC and ERA government assistance for R&D recorded in Q4 2018.

**Liquidity and Capital Resources**

At December 31, 2018, Acceleware had $2,051,577 (December 31, 2017 - $403,501) in working capital, including $3,225,126 (December 31, 2017 - $781,315) in cash and cash equivalents, and $189,012 (December 31, 2017 - $183,373) in combined short-term and long-term debt in the form of finance leases. The increase in cash (and consequently working capital) is a result of the AMD agreement noted above and project funding or the RF XL field test.

The Company actively manages its cash flow and investment in new products to match its cash requirements to cash generated from operations, external funding, and capital raising activities. In order to maximize cash generated from operations, the Company plans to continue to focus on high gross margin software products; to minimize operating expenses where possible; and to limit capital expenditure. As the Company continues to develop its RF heating technology, new research and development investments will be financed through a combination of internal cash flow from the high-performance computing business, project funding agreements, and external financing. Management believes that successful execution of its business plan will result in sufficient cash flow and new financing to fund projected operational and investment requirements. However, no assurances can be given that the Company will be able to achieve all or part of the objectives discussed above, or that sufficient financing from outside sources will be available. Further, if the Company’s operations are unable to generate cash flow levels at or above current projections, the Company may not have sufficient funds to meet its obligations over the next twelve months. Should such events occur, Management is committed to implementing all or a portion of its contingency plan. This plan has been developed and designed to provide additional cash flow, and includes, but is not limited to, deferring certain additional product development initiatives, reducing sales, marketing and general and administrative expenses, and seeking outside financing. The failure of the Company to achieve one or all of the above items may have a material adverse impact on the Company’s financial position, results of financial performance and cash flows.*

Cash flows generated in operations totaled $1,402,152 for the year ended December 31, 2018, compared to cash used of $2,021,117 for the year ended December 31, 2017. The change is a result of increased income before income tax, stemming from the AMD agreement revenue. Cash generated in operations before changes in non-cash working capital increased to $873,365 in 2018 from cash used of $2,045,386 in 2017.

As at December 31, 2018, the Company had current liabilities of $3,533,026 compared to current liabilities of $844,359 as at December 31, 2017. The increase in current liabilities is principally due to higher payables mostly

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* this paragraph contains forward looking information. Please refer to “Forward Looking Statements” and “Risk Factors and Uncertainties” for a discussion of the risks and uncertainties related to such information
associated with RF heating R&D, higher accrued liabilities and deferred government assistance for funding received in advance of milestone work completed on the RF XL field test.

**Trade and Other Receivables**

Trade and other receivables as at December 31, 2018 rose to $1,397,786, compared to $203,621 as at December 31, 2017. The increase is a result of amounts receivable from SDTC and ERA for government assistance for R&D. The Company maintains close contact with its customers to mitigate risk in the collection of receivables.

**Contract assets**

Work in process represents the work expended to date on contracts with performance obligations that are measured at a point in time and when the performance obligation has not yet been delivered to the customer. It is measured at cost and includes all expenditures related directly to the specific performance obligations. Work in process was $20,442 at December 31, 2018 ($nil at December 31, 2017) a result of the RF XL project funding agreement. Unbilled revenue represents work done on performance obligations the have been delivered to the customer but not yet billed. Unbilled revenue was $1,061,910 at December 31, 2018 ($nil at December 31, 2017).

**Alberta SR&ED Tax Credits**

The Company has recorded $227,311 (December 31, 2017 - $224,771) in receivables as at December 31, 2018. The increase is a result of higher R&D expenditures relating to software.

**Investing Activities**

For the year ended December 31, 2018, $nil in cash was invested in property and equipment compared to $18,888 for the year ended December 31, 2017. At December 31, 2018, $183,810 (2017 - $182,691) book value of investment in property and equipment relates to equipment under finance lease.

**Financing Activities**

During the year ended December 31, 2018, 1,084,283 stock options (2017 - 973,500) were exercised for proceeds of $59,781 (2017 - $86,134), 4,651,396 warrants (2017 - 147,500) were exercised for proceeds of $1,062,172 (2017 - $32,450).

During the year ended December 31, 2018, $85,013 (2017 - $175,608) in new computer equipment finance leases were signed.

**Income Tax**

The Company follows the liability method with respect to accounting for income taxes. Deferred tax assets and liabilities are determined based on differences between the carrying amount and the tax basis of assets and liabilities (temporary differences). Deferred tax assets and liabilities are measured using the substantively enacted tax rates that will be in effect when these differences are expected to reverse. Deferred tax assets, if any, are recognized only to the extent that, in the opinion of Management, it is probable that the assets will be realized.

With the exception of the refundable Alberta SR&ED tax credits, as at December 31, 2018, the potential tax benefits of Acceleware’s available tax pools have not been recognized in the Company’s account due to uncertainty surrounding the realization of such benefits.

**Risks Factors and Uncertainties**

Management defines risk as the probability of a future event that could negatively affect the financial condition and/or results of operations of the Company. The following section describes specific and general risks that could affect the
Company. As it is difficult to predict whether any risk will be realized or its related consequences will occur, the actual effect of any risk on the business could be materially different from that anticipated. The following descriptions of risk do not include all possible risks as there may be other risks of which Management is currently unaware.

**Liquidity Risk**
The Company actively manages its cash flow and investment in new products to match its cash requirements to cash generated from operations, external funding, and capital raising activities. In order to maximize cash generated from operations, the Company plans to continue to focus on high gross margin software products; to minimize operating expenses where possible; and to limit capital expenditure. As the Company continues to develop its RF heating technology, new research and development investments will be financed through a combination of internal cash flow from the high-performance computing business, project funding agreements, and external financing. Management believes that successful execution of its business plan will result in sufficient cash flow and new financing to fund projected operational and investment requirements. However, no assurances can be given that the Company will be able to achieve all or part of the objectives discussed above, or that sufficient financing from outside sources will be available. Further, if the Company’s operations are unable to generate cash flow levels at or above current projections, the Company may not have sufficient funds to meet its obligations over the next twelve months. Should such events occur, Management is committed to implementing all or a portion of its contingency plan. This plan has been developed and designed to provide additional cash flow, and includes, but is not limited to, deferring certain additional product development initiatives, reducing sales, marketing and general and administrative expenses, and seeking outside financing. The failure of the Company to achieve one or all of the above items may have a material adverse impact on the Company’s financial position, results of financial performance and cash flows. *

**Dependence on Market Growth**
The overall market for oil and gas HPC software has experienced three years of stagnant or negative growth, preceded by several years of growth. There can be no assurance that the market for the Company's existing software products will resume growth in the near future nor that the Company will be successful in establishing new markets for its software products and services. The Company’s RF heating commercialization strategy is wholly dependent on the ability of the Company to take market share from existing in-situ heavy oil production techniques, or to grow the existing market by increasing the amount of reserves that become economic to produce. If the various markets in which the Company's software products and services compete fail to grow, or grow more slowly than the Company currently anticipates, or if the Company is unable to establish new markets for its products and services or the Company’s products and services do not gain market acceptance, the Company's business, operating results and financial condition could be materially adversely affected.

**Requirement for Additional Financing**
Management of Acceleware may seek additional funding to support ongoing losses, particularly losses associated with the development and commercialization of its RF heating technology, until Acceleware reaches a level of revenue which will sustain its operations on an internal basis. The rate of growth in the market for Acceleware’s products and services and Acceleware's success in gaining market share, have been less than Acceleware anticipated. Acceleware cannot be assured that additional funding will be available, or if available, that it will be available on acceptable terms. If adequate funds are not available, Acceleware may have to reduce substantially or eliminate expenditures for research and development, testing, production and marketing of its products and services. There can be no assurance that the Company will be able to raise additional capital if its capital resources are exhausted. The ability to arrange additional financing in the future will depend, in part, upon the prevailing capital market conditions as well as the business and performance of Acceleware. There can be no assurance that Acceleware will be successful in arranging additional financing or that such additional financing will be available on satisfactory terms.

**Reliance on Limited Number of Customers**
The Company derives a significant component of its revenues from three major customers. In aggregate, these three customers generated approximately 86% of total revenues for the year ended December 31, 2018. The Company is actively seeking other customers to mitigate the Company’s revenue reliance on these existing major customers.

* this paragraph contains forward looking information. Please refer to “Forward Looking Statements” and “Risk Factors and Uncertainties” for a discussion of the risks and uncertainties related to such information
Should these customers not continue to purchase and resell the Company’s products and the Company is unable to attract new channel partners, revenue and the sustainability of the Company would be materially affected in future periods.

**Competition**
The market for oil and gas seismic and other HPC high-performance computing is competitive. Acceleware also has competition in the emerging RF heating market. Acceleware has experienced and will continue to experience intense competition from other organizations with more established sales and marketing presence, superior technical support services and greater financial resources. The Company's competitors may announce new products, services or enhancements that better meet the needs of customers or changing industry standards. As the market for the Company's products and services continues to develop, additional competitors may enter the market and competition may intensify. Increased competition may cause price reductions, reduced profitability and loss of market share, any of which could have an adverse effect on the Company's business, results of operations and financial condition.

**Failure to Manage Growth Successfully**
In the event that the Company's business grows rapidly, the growth may place a strain on managerial and financial resources. Such expansion may result in substantial growth in the number of its employees, the scope of its operating and financial systems and the geographic area of its operations, resulting in increased responsibility for both existing and new management personnel. The Company's future growth will depend upon a number of factors, including the ability to:

- Acquire and train sales and marketing staff to expand Acceleware’s presence in the evolving marketplace for the Company's products and services, and keep staff informed regarding the technical features, issues and key selling points of the Company's products and services;
- Attract and retain qualified technical personnel to continue to develop reliable and scalable solutions and services that respond to evolving customer needs and technological developments;
- Maintain high quality customer service and support as sales increase; and
- Expand the Company's internal management while maintaining appropriate financial controls over operations and providing support to other functional areas within the Company.

The Company's inability to achieve any of these objectives could harm the Company's business, financial condition and operating results and prospects.

**Lengthy Sales Cycle – Channel Partner Distributors**
The Company's channel partner (distributors) integration/sales cycle, beginning with an interested channel partner that technically integrates with the Company and culminating in a commercial agreement with the channel partner, is expected to range from six to twelve months and may be significantly longer. Once the integration period with the channel partner is completed, the actual “sales” cycle to the channel partner’s customers is relatively short - a matter of weeks or a few months. The lengthy integration cycle with the channel partner and the limited access to the channel partner’s customers (arising from how the channel partner distributes products and services) limits the Company's ability to forecast the timing and amount of specific sales in a particular quarter and will likely continue to cause significant fluctuations in its quarterly operating results. Because of these fluctuations, Management believes that neither the Company’s past performance nor period-to-period comparisons of its operating results are, or may be, a good indication of its future performance. If the Company's operating results for a particular period fail to meet investor expectations that are based on the Company's past performance or on period-to-period comparisons of the Company's operating results, the Company's share price could decline. This cycle is also subject to a number of significant delays over which Company will have little or no control. The Company augments its channel partner strategy with direct sales activities to partially mitigate the channel partner risk.

**Failure to Adapt to Technological Change and New Product Development**
The hardware development industry is characterized by rapid technological change and the frequent introduction of new products. Accordingly, Management believes that the future success of the Company depends upon its ability to enhance current products and services or develop and introduce new products and services. The Company's inability, for technological or other reasons, to develop and introduce products or services in a timely manner in response to
changing market conditions or customer requirements could have a material adverse effect on the Company's business, results of operations and financial condition. The ability of the Company to compete successfully will depend in large measure on its ability to maintain a technically competent research and development staff and to adapt to technological changes and advances in the industry, including providing for the continued compatibility of its products and services with evolving computer hardware and software platforms and operating environments. There can be no assurance that the Company will be successful in these efforts.

**Risk Associated with International Operations**
Management of the Company believes that its continued growth and profitability will require additional expansion of its sales in foreign markets. This expansion has required, and will continue to require, significant management attention and financial resources and could adversely affect the Company's operating margins. In order to increase international sales in subsequent periods, the Company may establish additional foreign operations, hire additional personnel and recruit international resellers. To the extent that the Company is unable to expand international sales in a timely and cost-effective manner, the Company's business, results of operations and financial condition could be materially adversely affected. In addition, even with the possible recruitment of additional personnel and international resellers, there can be no assurance that the Company will be successful in maintaining or increasing international market demand for the Company's products and services.

**Risk Associated with Currency Fluctuations**
Most of the Company's revenue is realized in foreign currencies as a result of international sales. Fluctuations in the exchange rate between the Canadian dollar and other currencies, particularly the U.S. dollar, may have a material adverse effect on the Company's results of operations, financial condition and any business prospects. The Company currently has no hedge in place on its foreign currency exposure.

**Risk Associated with a Change in the Company's Pricing Model**
The competitive market in which the Company conducts business may require the Company to change its pricing model. If the Company's competitors offer deep discounts on certain products or services in an effort to recapture or gain market share or to sell other products, the Company may be required to lower prices or offer other favourable terms to compete successfully. Any such changes would likely result in a reduction in profitability and could adversely affect the Company's operating results.

**Dependence on Key Personnel**
The success of the Company is largely dependent on the performance of its key employees and directors. Failure to retain key employees and directors and to attract and retain additional key employees with necessary skills could have a material adverse impact upon the Company's growth and profitability. Competition for highly skilled management, technical and other employees is intense. There can be no assurance that the Company will be successful in attracting and retaining such personnel and the departure or death of any of the members of the Company's executive team and key directors could have a material adverse effect on the Company's business, results of operations and financial condition.

**Risks of Acquisitions Negatively Affecting the Company**
In the future, the Company may engage in selective acquisitions of products or businesses that Management of the Company believes would be complementary to its existing products. There is a risk that the Company will not be able to identify suitable acquisition candidates available for sale at reasonable prices, complete any acquisition, or successfully integrate any acquired product or business into the Company's operations. Acquisitions may involve a number of other risks, including: diversion of Management's attention; disruption to the Company's ongoing business; failure to retain key acquired personnel; difficulties in integrating acquired operations, technologies, products or personnel; unanticipated expenses, events or circumstances; assumption of disclosed and undisclosed liabilities; and inappropriate valuation of the acquired in-process research and development, or the entire acquired business.

If the Company does not successfully address these risks or any other problems encountered in connection with an acquisition, the acquisition could have a material adverse effect on the Company's business, results of operations and financial condition. In addition, if the Company proceeds with an acquisition paid by cash, it may diminish the Company's liquidity and capital resources, or shares may be issued which could cause significant dilution to existing shareholders.
**Intellectual Property Risks**

Because much of the Company's potential success and value lies in its ownership and use of intellectual property, its failure to protect its intellectual property may negatively affect its business and value. The Company's ability to compete effectively is largely dependent upon the maintenance and protection of its intellectual property. The Company relies primarily on trade secret, trademark and copyright law, and when appropriate patent protection, as well as confidentiality procedures and licensing arrangements, to establish and protect its rights to its technology. The Company typically enters into confidentiality or license agreements with its employees, consultants, customers, strategic partners and vendors in an effort to control access to and distribution of its products, documentation and other proprietary information. Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use the Company's proprietary technology without authorization.

Policing unauthorized use of the Company's intellectual property is difficult. The steps that the Company takes may not prevent misappropriation of its intellectual property, and the agreements the Company enters into may be difficult to enforce. In addition, effective intellectual property protection may be unavailable or limited in some jurisdictions outside Canada and the United States. Litigation may be necessary in the future to enforce or protect the Company's intellectual property rights or to determine the validity and scope of the proprietary rights of others. That litigation could cause the Company to incur substantial costs and divert resources away from the Company's daily business, which in turn could materially hinder its business. The Company may be subject to damaging and disruptive intellectual property litigation.

The Company may be subject to intellectual property litigation that could:

- Be time-consuming and expensive;
- Divert attention and resources away from the Company's daily business;
- Impede or prevent delivery of the Company's products and services; and
- Require the Company to pay significant royalties, licensing fees and damages.

Although the Company is not aware that its products or services infringe or violate the intellectual property rights of third parties and although the Company has not been served notice of any potential infringement or violation, the Company may be subject to infringement claims in the future. Since patent applications are kept confidential for a period of time after filing, applications may have been filed that, if issued as patents, could relate to the Company's products or services. Parties making claims of infringement may be able to obtain injunctive or other equitable relief that could effectively block the Company's ability to provide its products and services in Canada, the United States and other jurisdictions and could cause the Company to pay substantial damages. In the event of a successful claim of infringement, the Company and its customers may need to obtain one or more licenses from third parties, which may not be available at a reasonable cost, if at all. The defense of any lawsuit could result in time-consuming and expensive litigation, regardless of the merits of such claims, as well as resulting damages, license fees, royalty payments and restrictions on the Company's ability to provide its products or services, any of which could harm its business.

The Company is not aware that any of its products infringe the proprietary rights of third parties. There can be no assurance, however, that third parties will not claim such infringement by the Company or its licensees with respect to current or future products. The Company expects that software product developers will increasingly be subject to such claims as the number of products and competitors in the Company's industry segment grows and the functionality of products in different industry segments overlaps. Any such claims, with or without merit, could be time-consuming, result in costly litigation, cause product shipment delays or require the Company to enter into royalty or licensing agreements which, if required, may not be available on terms acceptable to the Company. Any of the foregoing could have a materially adverse effect on the Company's business, results of operations and financial condition.

**Risk of Defects in the Company's Products**

Products as complex as those offered by the Company frequently contain errors or defects, especially when first introduced or when new versions or updates are released. Despite product testing, Acceleware has in the past released
products with defects, discovered software errors in certain of its new versions after introduction, and experienced delays or lost revenue during the period required to correct these errors. Acceleware regularly introduces new releases and periodically introduces new versions of its software. Known errors which the Company considers minor may be considered serious by its customers. There can be no assurance that, despite testing by the Company and by its customers, defects and errors will not be found in existing products or in new products, releases, versions or enhancements after the commencement of commercial shipments. Undetected errors and performance problems may be discovered in the future. Any such defects and errors could result in litigation, adverse customer reactions, negative publicity regarding the Company and its products, harm to the Company's reputation, loss of or delay in market acceptance or required product changes, any of which could have a material adverse effect upon the Company's business, results of operations and financial condition.

**Risks of Security Breaches to the Company's Network (Cyber Security)**

An experienced programmer may attempt on occasion to penetrate the Company's network security and could misappropriate the Company’s or its customers’ proprietary information or cause interruptions in the Company's operations. Acceleware’s operations as proprietary software developers, and developers of leading edge RF heating technology could increase the risk of a cyber attack from industrial competitors, cyber criminals and government actors. Acceleware has implemented various means to limit such an occurrence but may be required to expend significant capital and resources to protect against or to alleviate problems caused by such hackers in the future. Additionally, the Company may not have a timely remedy for any attack on the Company’s network security. Such purposeful security breaches could have a material adverse effect on the Company's business, results of operations and financial condition. Risks include the untimely disclosure of proprietary data prior to its adequate protection through patent, trade secret or copyright. Should the Company’s customer data be compromised, it could expose the Company to a material risk of loss or litigation, reputational damage and possible liability. In addition to deliberate security breaches, the inadvertent transmission of computer viruses could expose the Company to a material risk of loss or litigation, reputational damage and possible liability.

In offering certain payment services for some products and services, the Company could become increasingly reliant on encryption and authentication technology licensed from third parties to provide the security and authentication necessary to effect secure transmission of confidential information, such as customer credit card numbers. Advances in computer capabilities, discoveries in the field of cryptography and other discoveries, events, or developments could lead to a compromise or breach of the algorithms or licensed encryption authentication technology that the Company uses to protect such confidential information. If such a compromise or breach of the Company's licensed encryption authentication technology occurs, it could have a material adverse effect on the Company's business, its reputation, results of operations and financial condition. The Company may be required to expend significant capital and resources to protect against the threat of such security, encryption and authentication technology breaches or to alleviate problems caused by such breaches.

Acceleware’s Management is responsible for assessing and overseeing risks associated with cyber security and determining, with its IT staff, what measures are appropriate to protect against these risks. The Company holds insurance against cyber security incidents, however the coverage may be inadequate to fully cover every cyber security risk.

**Reliance on Third Party Licenses**

The Company anticipates relying on certain software that Acceleware licenses from third parties, including a software program that is integrated with internally developed software and used in Acceleware’s products to perform key functions. There can be no assurance that these third-party licenses will continue to be available to the Company on commercially reasonable terms. The loss of, or inability to maintain, any of these licenses, could result in delays or reductions in product and service deployment until equivalent software can be developed, identified, licensed and integrated, which could materially adversely affect the Company's business, results of operations and financial condition.

**Technological Change, New Products and Standards**

To remain competitive, Acceleware must continue to enhance and improve the current line of products. The technology industry is characterized by rapid technological change, changes in user and customer requirements and preferences, frequent new product and service introductions embodying new technologies and the emergence of new
industry standards and practices that could render Acceleware's existing products and systems obsolete. Acceleware's products embody complex technology and may not always be compatible with current and evolving technical standards and products developed by others. Failure or delays by Acceleware to meet or comply with the requisite and evolving industry or user standards could have a material adverse effect on Acceleware's business, results of operations and financial condition. Acceleware's ability to anticipate changes in technology, technical standards and products will be a significant factor in its ability to compete. There can be no assurance that Acceleware will be successful in identifying, developing, manufacturing and marketing products that will respond to technological change or evolving standards. Acceleware's business may be adversely affected if it incurs delays in developing new products or enhancements or if such products or enhancements do not gain market acceptance. In addition, there can be no assurance that products or technologies developed by others will not render Acceleware's products or technologies non-competitive or obsolete.

**Reliance on One Primary Hardware Technology**

The current collaboration with NVIDIA Corp. (“NVIDIA”) is viewed as an important contributor to the timely execution of the current business plan. NVIDIA hardware is the primary platform for the Company’s software solutions. If Management is unable to maintain a positive relationship with NVIDIA, the Company will make appropriate adjustments in the execution of its business plan. The Company continues to evaluate other hardware alternatives. However, should NVIDIA fail to supply these components to the Company’s customers in a manner that meets those customers’ quality, quantity, cost or time requirements, and if the Company were unable to modify its solutions to run on hardware from alternate suppliers of these components in a timely manner or on acceptable terms, this could adversely affect the Company’s ability to sell products.

**Conflicts of Interest**

Certain of the directors and officers of the Company are or may become directors or officers of, or have significant shareholdings in, other companies and, to the extent that such other companies may participate in ventures in which the Company may participate, the directors and officers of the Company may have a conflict of interest in negotiating and concluding terms respecting the extent of such participation. In the event that any such conflict of interest arises, a director who has such a conflict will disclose the conflict to a meeting of the directors of the Company and will abstain from voting for or against the approval of such participation or such terms. In accordance with applicable laws, the directors of the Company are required to act honestly, in good faith and in the best interests of the Company. In determining whether or not the Company will participate in a particular program and the interest therein to be acquired by it, the directors will primarily consider the potential benefits to the Company, the degree of risk to which the Company may be exposed and its financial position at that time.

**Price Volatility of Publicly Traded Securities**

In recent years, the securities markets in the United States and Canada have experienced a high level of price and volume volatility, and the market prices of securities of many companies have experienced wide fluctuations which have not necessarily been related to the operating performance, underlying asset values or prospects of such companies. There can be no assurance that continual fluctuations in price will not occur. It may be anticipated that any quoted market price for the Common Shares will be subject to market trends generally, notwithstanding any potential success of the Company in creating revenues, cash flows or earnings. The value of the Company's securities will be affected by such volatility.

**Earnings and Dividend Record**

The Company has no earnings or dividend record. To date, the Company has paid no dividends on its Common Shares and does not anticipate doing so in the foreseeable future.

**Transactions with Related Parties**

For the year ended December 31, 2018, the Company incurred expenses in the amount of $249,500 (2017 - $238,750) with a company controlled by an officer of the Company as fees for duties performed in managing operations and is included in research and development. Of the total, $172,719 was included in accounts payable and accrued liabilities as at December 31, 2018 (December 31, 2017 - $162,669). These fees were incurred in the normal course of operations and in the opinion of Management represent fair value for services rendered.
For the year ended December 31, 2018, the Company incurred expenses in the amount of $119,279 (2017 - $40,714) with a company controlled by a director of the Company for legal fees and is included in general and administrative. Of the total, $2,179 was included in accounts payable and accrued liabilities as at December 31, 2018 (December 31, 2017 - $14,280). These fees were incurred in the normal course of operations and in the opinion of Management represent fair value for services rendered.

For the year ended December 31, 2018, the Company incurred expenses in the amount of $16,550 (2017 - $12,975) with a company controlled by the spouse of an officer of the Company for writing services and is included in general and administrative. Of the total, $2,415 was included in accounts payable and accrued liabilities as at December 31, 2018 (December 31, 2017 - $3,623). These fees were incurred in the normal course of operations and in the opinion of Management represent fair value for services rendered.

Key management includes the Company’s directors and members of the executive management team. Compensation awarded to key management included:

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and short-term employee benefits</td>
<td>$961,527</td>
<td>$904,197</td>
</tr>
<tr>
<td>Share-based payments</td>
<td>309,894</td>
<td>383,683</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,271,421</strong></td>
<td><strong>$1,287,880</strong></td>
</tr>
</tbody>
</table>

Commitments

On February 29, 2012, Acceleware entered into a premise lease agreement to lease 5,244 square feet of office space commencing August 1, 2012 and ending July 31, 2018, a period of five years. A rent inducement of $103,420 was received and included in accounts payable and accrued liabilities. The inducement was amortized over the term of the lease and recorded as a reduction to rent expense. At December 31, 2018, $nil of the rent inducement remains (December 31, 2017 - $nil). Effective August 1, 2017 the lease was renegotiated and extended to July 31, 2020.

In addition to the basic monthly rents, the Company must pay a proportionate share of property taxes, operating costs, utilities and additional services. The minimum annual basic rent commitments are as follows:

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>91,770</td>
<td>53,533</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$145,303</td>
<td></td>
</tr>
</tbody>
</table>

The Company has certain computer equipment under financial lease expiring in 2019 through 2021. The leases carry a weighted average annual interest rate of 5.1%. Estimated lease payments are as follows:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>$</td>
<td>$74,316</td>
</tr>
<tr>
<td>2019</td>
<td>99,834</td>
<td>69,496</td>
</tr>
<tr>
<td>2020</td>
<td>72,133</td>
<td>41,074</td>
</tr>
<tr>
<td>2021</td>
<td>26,730</td>
<td>12,786</td>
</tr>
<tr>
<td>Minimum lease payments</td>
<td>198,697</td>
<td>197,672</td>
</tr>
</tbody>
</table>

Less: interest portion at a rate of 5.1% (2017 – 5.5%)

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>(2017 – 5.5%)</td>
<td>9,685</td>
<td>14,299</td>
</tr>
<tr>
<td>Net minimum lease payments</td>
<td>189,012</td>
<td>183,373</td>
</tr>
</tbody>
</table>

Less: current portion

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>$93,352</td>
<td>66,521</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$95,660</strong></td>
<td><strong>$116,852</strong></td>
</tr>
</tbody>
</table>
The equipment under finance lease has been recognized in property and equipment at the present value of minimum future lease payments. Interest charges on leased equipment during the year were approximately $9,369 (2017 – $5,169). Other than interest, no costs were incurred relating to this lease. The lease is secured by the assets under lease. At year end, the net book value of equipment pledged as security for finance leases is $183,810 (2017 – $182,691) which is included in computer hardware.

Critical Accounting Estimates

General
The preparation of the Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. The estimates are based on historical experience and on various other assumptions that are believed to be reasonable under the circumstances. The ongoing evaluation of these estimates forms the basis for making judgements about the carrying values of assets and liabilities and the reported amount of revenues and expenses in cases where they are not readily ascertainable from other sources. Actual amounts may differ from these estimates under different assumptions or conditions.

The Company’s significant accounting policies are fully described in Note 4 to the Financial Statements. Certain accounting policies are particularly important to the reporting of financial position and results of operations, and require the application of judgement by Management. An accounting policy is deemed to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made. Different Management estimates that reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could have a material impact on the Financial Statements. Management believes the following critical accounting policies reflect the more significant estimates and assumptions used in the preparation of Financial Statements.

Going Concern Assumption
The Financial Statements have been prepared on a going concern basis, which assumes that the Company will be able to realize its assets and discharge its liabilities in the normal course of business. The Company’s ability to continue as a going concern is dependent upon its ability to generate sufficient cash flow to meet its obligations as they come due, to obtain additional financing as may be required, and ultimately to achieve successful operations. However, no assurance can be given at this time as to whether the Company will achieve any of these conditions. If the Company were to change its assumption regarding the ability to continue as a going concern for a reasonable period of time, adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities would likely be necessary and potentially material.

Revenue Recognition
The Company’s revenue recognition requirements pertaining to determining performance obligations and transaction prices for all types of contracts with customers are very complex and are affected by interpretations of those contracts and the applicable standards and certain judgements. One of the critical judgements made is the assessment of the probability of collecting the related accounts receivable balance on a customer-by-customer basis. As a result, the timing or amount of revenue recognition may have been different if different assessments of the probability of collection had been made at the time that the transactions were recorded in revenue.

Allowance for Doubtful Accounts
The Company evaluates the collectability of trade receivables based on a combination of factors. The Company regularly analyzes significant customer accounts. When and if the Company becomes aware of a specific customer’s inability to meet its financial obligations, such as in the case of bankruptcy filings or deterioration in the customer’s operating results or financial position, a specific bad debt reserve is recorded to reduce the related receivable to the amount that is reasonably believed to be collectible. Reserves for bad debts on all other customer balances are based on a variety of factors, including the length of time that the receivables are past due, the financial health of the customer, macroeconomic considerations and historical experience. As of December 31, 2018, the Company has provided for an allowance for doubtful accounts of $4,150 (and December 31, 2017 - $2,699).
Recent Accounting Pronouncements Issued and not yet Effective

Certain new standards, interpretations, amendments and improvements to existing standards were issued by the IASB or the International Financial Reporting Interpretations Committee (“IFRIC”) that are mandatory for accounting periods beginning after January 1, 2019 or later periods. The standards affected are as follows:

On January 13, 2018, the IASB issued a new Leases Standard, IFRS 16, which supersedes IAS 17 Leases. The new standard will be mandatorily effective for fiscal years beginning on or after January 1, 2019. A company assesses whether to apply the requirements in IFRS 16 by identifying whether a contract is (or contains) a lease. IFRS 16 defines a lease and includes application guidance to help companies make this assessment. The definition applies to both parties to a contract, i.e., the customer (‘lessee’) and the supplier (‘lessor’). Most significantly, IFRS 16 changes significantly how a company accounts for leases that were off balance sheet under IAS 17, other than short-term leases (leases of 12 months or less) and leases of low-value assets (such as personal computers and office furniture). Applying IFRS 16, in essence for all leases, a company is required to:

i. recognize lease assets and lease liabilities in the balance sheet, initially measured at the present value of unavoidable future lease payments;

ii. recognize depreciation of lease assets and interest on lease liabilities in the income statement over the lease term; and

iii. separate the total amount of cash paid into a principal portion (presented within financing activities) and interest (typically presented within either operating or financing activities) in the cash flow statement.

The Company is analyzing the new standard to determine its impact on the Company’s financial statements.

Financial Instruments and Other Instruments

The Company’s only financial instruments are the monetary assets and liabilities appearing on its statement of financial position.
Disclosure of Outstanding Share Data

As of the date of this MD&A, Acceleware had the following common shares, options and warrants outstanding:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Shares</td>
<td>104,551,670</td>
</tr>
<tr>
<td>Stock Options</td>
<td>9,476,824</td>
</tr>
<tr>
<td>Warrants</td>
<td>1,840,644</td>
</tr>
</tbody>
</table>

Additional Disclosure for Venture Issuers Without Significant Revenue

Additional disclosure concerning the Company’s research and development expenses and general and administrative expenses is provided in the audited financial statements for December 31, 2018 that are available on www.sedar.com and as noted below.

<table>
<thead>
<tr>
<th>Sales, General and Administration</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$ 1,002,020</td>
<td>$ 796,469</td>
</tr>
<tr>
<td>Marketing</td>
<td>154,087</td>
<td>162,254</td>
</tr>
<tr>
<td>Travel</td>
<td>45,628</td>
<td>24,111</td>
</tr>
<tr>
<td>Share-based payments</td>
<td>433,057</td>
<td>364,600</td>
</tr>
<tr>
<td>Rent, supplies and public company fees</td>
<td>302,184</td>
<td>288,943</td>
</tr>
<tr>
<td>Amortization</td>
<td>47,796</td>
<td>38,016</td>
</tr>
<tr>
<td>Professional fees</td>
<td>404,995</td>
<td>271,353</td>
</tr>
<tr>
<td>Bad debt expense</td>
<td>4,232</td>
<td>2,699</td>
</tr>
<tr>
<td>Total</td>
<td>$ 2,393,999</td>
<td>$ 1,948,445</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research and Development</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$ 1,281,289</td>
<td>$ 1,473,549</td>
</tr>
<tr>
<td>Consulting</td>
<td>2,317,186</td>
<td>253,363</td>
</tr>
<tr>
<td>R&amp;D lab supplies and other</td>
<td>79,475</td>
<td>145,406</td>
</tr>
<tr>
<td>Share-based payments</td>
<td>191,302</td>
<td>158,123</td>
</tr>
<tr>
<td>Rent and overhead allocations</td>
<td>87,765</td>
<td>78,146</td>
</tr>
<tr>
<td>Amortization</td>
<td>47,796</td>
<td>38,016</td>
</tr>
<tr>
<td>Alberta SR&amp;ED tax credits</td>
<td>(210,032)</td>
<td>(222,321)</td>
</tr>
<tr>
<td>SDTC, ERA, NRC-IRAP and NSERC funding</td>
<td>(1,774,902)</td>
<td>(148,390)</td>
</tr>
<tr>
<td>Total</td>
<td>$ 2,019,879</td>
<td>$ 1,775,892</td>
</tr>
</tbody>
</table>