KRAKEN ROBOTICS INC.
MANAGEMENT DISCUSSION AND ANALYSIS
FOR THE THREE AND SIX MONTH PERIOD ENDED JUNE 30, 2019

This Management Discussion and Analysis ("MD&A") of Kraken Robotics Inc. (the "Company" or "Kraken") provides analysis of the Company's financial results for the three and six month period ended June 30, 2019 and should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements and the notes thereto for the three and six month period ended June 30, 2019, which are available on SEDAR at www.sedar.com. This MD&A is current as at August 28, 2019, the date of preparation.

The June 30, 2019 condensed consolidated interim financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") applicable to the preparation of interim financial statements. The Company has adopted IFRS 16 with a date of initial application of January 1, 2019. Except as noted under "Use of Estimates" and "New and Revised IFRS Accounting Pronouncements", these financial statements were prepared using the same accounting policies and methods of computation, and are subject to the same use of estimates and judgments, as the Company's consolidated financial statements for the year ended December 31, 2018. These condensed consolidated interim financial statements do not include all disclosures required by International Financial Reporting Standards ("IFRS") for annual consolidated financial statements and accordingly should be read in conjunction with the Company's audited consolidated financial statements for the year ended December 31, 2018 prepared in accordance with IFRS as issued by the International Accounting Standards Board ("IASB"). All amounts are expressed in Canadian dollars, unless otherwise stated.

Forward-Looking Statements

Certain statements contained in the following MD&A constitute forward-looking statements. Such forward-looking statements involve a number of known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements.

NATURE OF BUSINESS

Kraken Robotics Inc. (formerly Kraken Sonar Inc.) was incorporated on May 14, 2008 under the Business Corporations Act, British Columbia, is a publicly traded company, and its registered office is at 100 King Street West, #1600, Toronto, Ontario, M5X 1G5.

The Company's principal business is the design, manufacture and sale of software centric sensors, batteries, and underwater robotic systems.

Company Overview

Kraken Robotics Inc. (PNG: TSX-V) is a marine technology company supplying advanced sonar and optical sensors, batteries, and underwater robotics equipment for military and commercial applications. The Company is recognized as world leading innovators of Synthetic Aperture Sonar (SAS) - a revolutionary underwater imaging technology that dramatically improves seabed surveys by providing ultra-high resolution imagery at superior coverage rates. Both military and commercial markets are showing encouraging growth as they are now incorporating unmanned vehicles and intelligent sensors in their procurement plans and budgets.

AQUAPIX® MINSAS SENSOR FOR UNDERWATER VEHICLES

The AquaPix® MINSAS (Miniature Interferometric Synthetic Aperture Sonar) sensor is based upon Kraken's core Synthetic Aperture Sonar technology. The MINSAS compact receiver array length of only 60cm provides high-resolution 3cm x 3cm imagery at ranges up to 120m per side. The lightweight array is integrated into a modular payload section of less than eight-

inch diameter, which can be easily mobilized in customers' Unmanned Underwater Vehicles (UUVs) of all sizes. The MINSAS payload section also includes Kraken's latest generation Real Time SAS Processor, the RTSAS MK-II. The RTSAS enables real-time, onboard processing of SAS imagery and bathymetry at full resolution and allows operators to leverage Kraken's suite of post-processing tools, including the newly developed SASView 3D sonar visualization and control software. The MINSAS plus RTSAS provides operators with an area coverage rate of higher than 3km^2 per hour at full SAS resolution, enabling highly efficient survey operations.

Notable activities during the quarter related to MINSAS include:

- Delivered Aquapix® MINSAS 120 sensors to Ocean Infinity for integration on their Hugin AUVs.
- After successful tests in 2018 of the AquaPix® MINSAS 60 sensor on a two-man portable AUV, in June 2019 the Company was selected by the US Office of the Secretary of Defense, Comparative Test Office, to participate in a Foreign Comparative Testing (FCT) program. This FCT is in support of a US Navy Program of Record managed by the Naval Sea Systems Command, EOD Program Office. The FCT is designed to test selected foreign technologies as evaluated by US military operators, with a view to future procurement. The contract value is $0.9 million. Under this contract, Kraken will integrate its AquaPix® MINSAS sensor on a man-portable Autonomous Underwater Vehicle (AUV) owned by the U.S. Navy. Man-portable AUVs make up the largest deployment of all AUV classes world-wide. The U.S. Navy and its allies continue to invest in man-portable AUVs, which today utilize a range of sonar technologies. Kraken's AquaPix® MINSAS synthetic aperture sonar sensor is currently offered in the MINSAS 60, 120, 180, and 240 configurations and has been traditionally integrated to medium- and large-size AUVs and towfish. As part of this FCT contract, Kraken will optimize the MINSAS 60 sensor making it better suited for small, man-portable AUVs while offering a significant increase in capability and performance for man-portable platforms.

SEAVISION® 3D LASER SYSTEM FOR UNDERWATER VEHICLES

Kraken Robotik GmbH ("KRG"), a wholly-owned subsidiary of the Company, commenced operations in January 2017 in Bremen, Germany. Its focus is the development of 3D imaging sensors, machine learning, and artificial intelligence (AI) algorithms for underwater robotic platforms.

KRG, with support from Kraken engineers in Canada, has developed the SeaVision® 3D laser system. SeaVision® is the world's first RGB underwater laser imaging system that offers the resolution, range and scan rate to deliver dense full colour 3D point cloud images of subsea infrastructure with millimetre accuracy, in real time. The ability to generate accurate 3D reconstruction of underwater infrastructure is an important requirement for commercial, military and ocean research applications. The initial system is designed for deployment on underwater robotic platforms such as Remotely Operated Vehicles (ROVs) and AUVs. Kraken has seen significant interest in SeaVision® from customers across many industries from defense to oil and gas, to renewable energy and nuclear. The Company is currently building SeaVision inventory for shipment for customer trials and demos. Recent updates and developments with SeaVision include:

- Kraken's SeaVision® underwater 3D laser imaging system had been pre-qualified for the Build in Canada Innovation Program (BCIP). Kraken's test partner will be Parks Canada which will test SeaVision® on marine archaeology projects. The BCIP program has been rolled into the government's new IDEaS (Innovation for Defense Excellence and Security) innovation funding programs. Kraken expects this contract of up to $0.5 million to be finalized and funded in the second half of 2019 under the IDEaS program.
- KRG continued work on two development initiatives for evaluation of SeaVision® sensors and AI control software for AUV. The two projects, ARIM and RoboVaaS, are collaborative research activities funded by the German Federal Ministry for Economic Affairs and Energy as part of the MarTERA Horizon 2020 initiative of the European Commission. Both projects will use Kraken's innovative SeaVision® sensor for monitoring and inspection services and autonomous vehicle control. The funding started in June 2018 and continues over a period of 36 months. The funds received are recognized as grants which offset expenses, and are not included in revenue.
- Kraken continued to quote for various customer trials and development initiatives with offshore oil and gas companies in Canada, the U.S, and Europe for subsea asset inspection applications and announced trial activity and a contract award subsequent to the end of Q2 (see Subsequent events section).

KATFISH™ TOWED UNDERWATER VEHICLE

Kraken has developed the Kraken Active Towed Fish (KATFISH™) for high speed, high resolution seabed mapping. The system enables real-time seabed imagery, bathymetry and advanced 3D digital terrain models of the seabed – optimized for both manned and unmanned surface vessels. Coupled with Kraken's revolutionary AquaPix® MINSAS, it is especially well-suited for both military and commercial seabed surveys. Kraken's KATFISH™ product offering lists for US$1.5 million (Commercial Off The Shelf: COTS) to US$2.5 million (Military Standard: MIL-STD).

In the commercial seabed survey market, KATFISH™ offers offshore energy companies the advantage of comprehensive, high-resolution surveys of existing infrastructure, such as pipelines and subsea stations, completed in at least half the time as more conventional methods. KATFISH™ operates at speeds up to 10 knots, versus the slow moving 1-2 knots of ROV or the medium 3-4 knots of the passively stable sonar systems, thus reducing operating time and cost.

In the defence market, there is a growing global requirement for modernization of mine countermeasure (MCM) solutions. The previous generation of single-role mine hunting vessels designed and built between the 1970's - 1990's are now being withdrawn from service. This leaves a growing requirement for high resolution, high speed seabed imaging platforms.

The ability of the KATFISH™ platform to generate centimetre-scale sonar resolution in all three dimensions can provide significant improvement in the detection, classification and identification of small seabed objects for both military and commercial seabed survey missions.

Kraken has high expectations for the KATFISH™ which provides high performance underwater mapping and mine hunting capabilities from a towed platform for both the military and commercial markets. The Company has partnered as a supplier to several large defense contractors who are involved in various multi-unit bids, several of which are expecting contract award in 2019 and 2020.

Recent updates and developments with KATFISH™ include:

- In April, Kraken was awarded a financial contribution of $1 million from the Government of Newfoundland and Labrador, under the Innovation and Business Development Funding (IBDF) program. The funding will be used for the initial phase of the OceanVision™ project that Kraken is moving ahead with as part of the Ocean Supercluster initiative. The IBDF award will help fund the production of a KATFISH™ system, and Kraken's autonomous launch and recovery system (including Kraken's new Tentacle™ winch). The award also funds the first of three at-sea demonstration campaigns that will be completed throughout the proposed OceanVision™ project.
- In June, Kraken received a $2.1 million purchase order from ThayerMahan Inc., for a KATFISH™180 system. ThayerMahan Inc. is a US-based company specializing in the design, integration, and operation of autonomous maritime systems for government, industry, and academic customers. Delivery occurred in Q3. ThayerMahan will deploy Kraken's KATFISH 180 as part of its SeaScout® expeditionary system for seabed mapping and intelligence. This is the first order resulting from a strategic alliance entered between the two companies in February 2018.
- Subsequent to quarter end, in July, ThayerMahan and the National Oceanographic and Atmospheric Administration (NOAA) conducted joint operations using Kraken's KATFISH™ sonar system. This follows a Cooperative Research and Development Agreement (CRADA) signed between Kraken and NOAAas well as Kraken's strategic partnership signed with ThayerMahan, both in 2018. The demonstration was onboard NOAA's ship Okeanos Explorer and was very successful.

THUNDERFISH® AUTONOMOUS UNDERWATER VEHICLE (AUV)

Kraken continues its ThunderFish® AUV development program. The ThunderFish® AUV is a technical upgrade of Fraunhofer's DeDave AUV, however it is still a prototype. Kraken will pay Fraunhofer a royalty based on a percentage of each sale with minimum commitments starting in 2022. Kraken is exclusively licensing Fraunhofer software and hardware IP and technology for large AUVs. In 2017, the Company took delivery of the 6000m rated DeDave AUV which Kraken rebranded ThunderFish® Alpha AUV. This AUV is designed for deep sea military, commercial and scientific applications for use as a

sensor and robotics technology demonstration platform to support ongoing development of the Company's underwater sensor and robotics programs.

Kraken has established a long-term technical co-operation program with Fraunhofer for technologies that can be deployed in Kraken's ThunderFish® AUV program. While Kraken intends to grant research and development projects to Fraunhofer of €300,000 per year for a period of three more years (2019-2021), these projects will be awarded to Fraunhofer as various statement of works are agreed upon and purchase orders issued. These projects will be expensed as incurred. In March 2019, Kraken issued a purchase order to Fraunhofer for ~ €163,000 for R&D work for Kraken.

In March 2019, Kraken was awarded a $1 million contract for ThunderFish® 300, a shallow water version of its AUV that had been pre-qualified under the Canada's Build in Canada Innovation Program (BCIP). Kraken continued development and sea trials on the ThunderFish ® 300 during Q2 and delivery to DRDC in Halifax occurred in Q3, 2019.

AUTONOMOUS LAUNCH AND RECOVERY SYSTEMS (ALARS)

Launch and recovery of equipment offshore is one of the most dangerous phases of any ROV or AUV operation. Through the hiring of former Rolls Royce Marine employees in 2016, Kraken's Handling Systems Division has an experienced LARS engineering team with a proven track record. This group has spent more than two years in R&D mode, working on both an intelligent winch system (TENTACLE™ and an autonomous LARS system that can launch AUVS from vessels, host facilities and docking stations. Kraken expects its winch and ALARS products will range in price from $250,000 to $1 million. This group's capabilities are integral to various customer opportunities that Kraken is involved in or pursuing.

Kraken has successfully demonstrated its Tentacle™ Intelligent Winch as part of a fully integrated SeaScout® service offering with ThayerMahan Inc. at the US Navy's ANTX event in Rhode Island in 2018, and with NOAA in July 2019 as well as numerous trials in Canada that included Canadian Hydrographic Services (CHS). Further development of the winch and ALARS has continued in 2019 and significant effort was made to prepare for a successful sea trial in June 2019 for a large Navy bid. Kraken expects completion of its first complete ALARS system in the second half of 2019.

KRAKEN POWER GMBH

Kraken owns a 75% interest in Kraken Power GmbH. Kraken Power GmbH designs and manufactures unique pressure tolerant thrusters, drives, batteries, battery management systems, and electronics. These are specialized deep-sea components for AUVs and ROVs. Kraken Power's unique pressure tolerant gel encapsulation technology for lithium polymer batteries provides an attractively priced, eco-friendly and superior alternative to oil compensated batteries currently used for subsea battery applications. Kraken Power's technology and products enable a significant reduction in bill of material costs for our ThunderFish® AUV.

In Q3, 2018, Kraken announced a $9 million deep-sea battery contract announced with Ocean Infinity. Ocean Infinity noted that by using Kraken's battery technology, "we can increase our energy capacity by over 50% in the same physical form factor as our existing conventional batteries. From an operational perspective this gives us considerable flexibility to optimise mission plans, increase area coverage, manage weather impact and ultimately increase value for our customers."

During Q2, 2019, Kraken Power GmbH continued to ramp their capacity and headcount to meet demand for Ocean Infinity and other upcoming customers. At the end of Q1, Kraken Power shipped the first battery system to Ocean Infinity for integration onto Ocean Infinity's 6000-meter rated Hugin AUV. This integration work continued in Q2 but was hampered by the ability to access the customer vehicles given the limited AUV downtime given their current customer work. In addition, Kraken Power does not own its own 6000-meter rated pressure test tank and is reliant on the availability of 3rd party test facilities. This has created certain delays. Kraken is currently evaluating the purchase of its own pressure test tank capabilities to reduce reliance on external test facilities. Kraken Power has worked diligently on improving production efficiencies and making design for manufacturability improvements. All materials for the Ocean Infinity battery order have

been ordered and are either on-site at Kraken Power or will be delivered to Kraken Power by the end of Q3. Kraken Power expects battery deliveries for Ocean Infinity's initial purchase order to continue to ramp in Q3 and be completed in Q4.

In April 2019, Kraken announced a $0.6 million battery contract, for a large military customer. Delivery on that order occurred at the end of Q2. Should integration go as expected, Kraken expects a larger follow on order, in the second half of 2019.

ACOUSTIC SIGNAL PROCESSING GROUP (ASPG)

Kraken's Acoustic Signal Processing Group (ASPG) was established in mid 2018 and its employees have 80+ years of combined experience in sonar systems development and integration. Their core competency is implementation of digital signal processing and user interface software for Anti-Submarine Warfare (ASW) sonar applications. This work frequently involves integration with embedded processing platforms for shipboard or shore-based analysis systems. The group can process and display data from fixed and mobile underwater as well as airborne systems to take advantage of machine automation, active and passive array technology improvements, hardware and software upgrades of submarine, surface and airborne ASW systems.

The ASPG continues to work towards completion of a $1 million, 1-year sonar signal processing software contract from an international defense contractor. Kraken has been receiving milestone payments which are recorded as deferred revenue, until project completion which is expected in second half of 2019. Kraken expects to be awarded follow on business with this customer and is pursuing other customer opportunities as well.

ROBOTICS AS A SERVICE (RaaS)

Kraken believes that certain customers would prefer to hire the company to provide product output (i.e. imaging and bathymetry data) to them using the Kraken's own equipment, rather than the customer buying the equipment and having to own and operate and maintain the equipment. This is the genesis of Kraken's RaaS offering. Kraken expects RaaS to become a growing part of its revenue mix over time. Kraken will provide RaaS services to customers using Kraken's KATFISH™ towed underwater vehicles and ThunderFish® AUV and innovative sensors like the SeaVision® 3D laser system.

While RaaS revenue in 2018 was less than 5% of revenue, Kraken is bidding on opportunities involving both shallow and deeper water surveys with both KATFFISH*™* and ThunderFish® as well as our SeaVision® 3D laser system. Kraken believes its relationship with Ocean Infinity Limited could result in a significant uptick in RaaS revenue, in time, in partnership with companies like Ocean Infinity. In addition, the Company OceanVision*™* project proposal to the Ocean Supercluster is focused on the development of a RaaS offering for underwater seabed imagery and mapping. With OceanVision*™* being conditionally approved for funding at the end of June 2019, the Company expects a significant step forward for its RaaS service capabilities.

OCEAN SUPERCLUSTER

At the end of June 2019, Kraken announced it had been conditionally approved by the Ocean Supercluster to move forward with its OceanVision™ project. This follows more than a year of effort by Kraken to position this project as an attractive proposal for the Ocean Supercluster. In November 2018, the Ocean Supercluster announced that it had finalized its funding agreement with the Government of Canada for $153 million, to be matched by industry, for a total funding pool of over $300 million.

OceanVision™ is a three-year, $20 million project focused on the development of new marine technologies and products to enable an underwater robotics data acquisition and data analytics as a service business. This will be a turnkey service solution for ultra-high definition seafloor imaging, mapping and analytics, including simultaneous acquisition of ocean environmental and marine habitat data. It will result in an end-to-end digitalization solution offering advanced sensors, robots and data analytics as a turnkey service solution for seafloor imaging and mapping. Rapid high-throughput data

analytics will make it possible to significantly reduce the cost of obtaining high resolution seafloor imaging and mapping allowing end-users to make more informed operational decisions in real-time.

The new technologies Kraken will develop within the scope of the OceanVision™ project are currently unavailable in a fully matured and tightly integrated offering in the commercial industry. The combination of a hovering-capable AUV with the potential for subsea residency, and a cutting-edge suite of acoustic and optical sensors, is a powerful package. As Kraken is the manufacturer of all the major vehicle components (i.e., sensors, batteries, propulsion system and software), it is expected that Kraken's robotics platforms and services can be provided at a much lower overall cost than competing systems.

The Ocean Supercluster itself will provide an investment up to a maximum of $5.9 million to the OceanVision™ project. This is subject to, among other things, finalizing additional project funding from industry stakeholders, strategic partners and government agencies. With these additional project stakeholders (beyond the Ocean SuperCluster), Kraken believes the project could grow beyond $20 million as additional stakeholders, technologies and products are added to the project scope. Kraken is targeting to finalize the contracting process with all project participants by the end of Q3 2019. Kraken is excited to work with significant industry stakeholders including for example, Petroleum Research Newfoundland and Labrador (PRNL), the Nunavut Fisheries Association (NFA), Ocean Choice International (OCI), Clearwater Seafoods.

FINANCIAL CONTRIBUTIONS AWARDED

At June 30, 2019, Kraken had $1,597,048 remaining in grant funding to drawn down against research and development activities. Major components of this remaining funding are as follows:

In May 2018, the Company's German subsidiary, Kraken Robotik GmbH was awarded over $900,000 in contracts for two development initiatives for evaluation of SeaVision® sensors and AI control for software for autonomous underwater vehicles. The two projects are called ARIM and RoboVaaS and are collaborative research activities funded by the German Federal Ministry for Economic Affairs and Energy as part of the MarTERA Horizon 2020 initiative of the European Commission.

In December 2018, the Company was awarded a $565,000 contract with Public Works and Procurement Canada under the Defence Innovation Research Program (DIRP). Kraken will develop a low frequency, ultra-wideband Synthetic Aperture Sonar (SAS) for use in underwater operational environments.

In March 2019, the Company was awarded a $1 million financial contribution from the Government of Newfoundland and Labrador under the Innovation and Business Development Funding (IBDF) program. The funding will be used for the initial phase of the OceanVision™ project that Kraken plans to pursue as part of the Ocean Supercluster initiative.

RESULTS OF OPERATIONS

Selected Annual Information

Statement of Comprehensive Loss	**Year Ended December 31, 2018 ($)**	**Year Ended December 31, 2017 ($)**	**Year Ended December 31, 2016 ($)**
Total Revenues	6,707,956	3,533,605	2,267,818
Cost of Sales	3,902,538	1,936,463	1,017,992
Loss from operating activities	(3,982,668)	(3,006,573)	(1,403,388)
Net loss	(2,852,389)	(2,397,229)	(1,420,175)
Basic and diluted loss per share	(0.03)	(0.03)	(0.02)

Statement of Financial Position	Year Ended December 31, 2018 ($)	Year Ended December 31, 2017 ($)	Year Ended December 31, 2016 ($)
Total Assets	14,028,465	5,258,148	2,188,578
Total Current Assets	9,738,966	3,458,421	1,771,898
Total Current Liabilities	4,815,590	4,722,736	1,416,353
Total Liabilities	5,731,030	4,722,736	1,416,353
Total Shareholders' Equity (Deficiency)	8,297,435	535,412	772,225

The Company incurred a loss of $2,852,389 for the year ended December 31, 2018, as compared with a loss of $2,397,229 for the year ended December 31, 2017. Share-based payments of $342,600 (2018 - $275,600) were recorded upon the grant of incentive stock options pursuant to the Company's incentive stock option plan.

During 2018, the Company continued to ramp-up its business activities, which included increasing its minority interest in Kraken Power from 19.99% to a majority control position of 75%. Administrative expenses increased 62% with those of the prior year at $4,396,838 (2017 - $2,722,486). Research and Development costs, net of related government assistance increased 23% over the prior year at $2,369,455 (2017 - $1,923,738).

No cash dividends have been declared or paid since the date of incorporation and the Company has no present intention of paying dividends on its common shares. The Company anticipates that all available funds will be used to finance the growth of its business.

Summary of Quarterly Information

Selected financial information for each of the eight most recently completed quarters are as follows:

	Revenue ($)	Operating expenses ($)	Share-based payments ($)	Net income (loss) ($)	Comprehensive (loss) $	Basic and diluted income (loss) per share ($)
Q2 2019	1,337,495	2,486,264	8,200	(1,988,914)	(1,944,881)	(0.01)
Q1 2019	1,369,385	1,444,856	74,800	(862,450)	(733,412)	(0.01)
Q4 2018	1,406,974	1,724,071	141,100	(567,534)	(457,407)	(0.00)
Q3 2018	1,574,335	2,115,154	90,100	(1,466,369)	(1,482,352)	(0.01)
Q2 2018	3,726,647	1,509,146	85,300	638,441	647,759	0.01
Q1 2018	-	1,097,115	26,100	(1,456,927)	(1,628,340)	(0.02)
Q4 2017	1,539,526	1,220,445	144,900	(673,135)	(732,957)	(0.01)
Q3 2017	1,585,664	1,018,855	18,100	109,712	(42,860)	(0.00)

Comparative balance sheet information for 2019 and 2018 is presented below:

	Total Assets ($)	Total Current Assets ($)	Total Current Liabilities ($)	Total Liabilities ($)
Q2 2019	20,090,135	13,892,388	8,867,266	11,164,027
Q1 2019	18,726,179	12,266,678	5,718,495	8,000,358
Q4 2018	14,028,465	9,738,966	4,815,590	5,731,030
Q3 2018	9,401,124	5,299,390	5,790,272	7,114,072
Q2 2018	8,097,893	6,401,801	5,920,830	5,920,830
Q1 2018	5,693,665	3,939,755	6,540,189	6,540,189
Q4 2017	5,258,148	3,458,421	4,722,736	4,722,736
Q3 2017	5,032,126	3,070,138	3,955,656	3,955,656

Three Months Ended June 30, 2019

The Company recorded revenues of $1,337,495 (2018 - $3,726,647) from product sales and services, a decrease of $1,194,576 in the same period of the prior year. Product revenue totaled $1,085,453 (2018 - $3,684,979) and Service revenue totaled $252,042 (2018 - $41,668). The Company's revenue can fluctuate significantly on a quarterly basis mainly due to the timing of orders and lead times on parts purchases. The Company had deferred revenues of $6,497,469 (2018 - $1,841,962). The deferred revenues represent customer advances on product orders.

Cost of sales were lower than that of the prior year at $708,837 (2018 - $1,416,742). The Company realized gross profit of $628,658 (2018 – $2,309,905). Gross margin for the quarter was 47%, as compared to 62% gross margins in the year ago quarter. Our product gross margins generally range from 45%-75% while overall gross margin percentages are lower as labor costs get allocated to cost of sales.

The Company recorded a comprehensive loss of $1,944,881 for the three months ended June 30, 2019, as compared to a comprehensive income of $647,759 for the same period of prior year. An amount of $44,033 (2018 - $9,318) is attributable to cumulative translation adjustment arising from the translation of the German subsidiaries' financial statements into Canadian dollar presentation currency of the parent company.

Administrative expenses increased by $448,521 in the quarter to $1,213,241 (2018 - $764,720) due to an increase in headcount and various administrative expenses such as facilities and public company costs. Administrative expenses included travel related costs of $205,812 (2018 - $86,690), public company costs/transfer agency services fees of $77,994 (2018 - $72,828), and accounting and legal costs $57,945 (2018 - $64,045). During the quarter the Company realized a foreign exchange loss of $77,639 (2018 - $62,023 foreign exchange loss).

Depreciation costs related to the adoption of IFRS 16 on leases and the intangible assets acquired with Kraken Power GmbH also contributed to the expense increase during the quarter. Depreciation expense during the quarter was $483,825 versus $60,440 in the prior year.

Research and development costs ("R&D") costs were higher than those of the same quarter in the prior year, totaling $789,198 (2018 - $683,986), as a result of the timing of expenditures on various R&D programs and reduced government assistance which was netted against R&D.

Government assistance totaled $237,295 (2018 - $320,238) during the quarter of which $106,925 was applied against Costs of Sales and $130,370 was applied to R&D expenses.

Share-based compensation of $8,200 was recorded, representing the fair value of the options that vested during the three months ended June 30, 2019. During the same period of the prior year, the Company recorded stock-based compensation of $85,300.

Six Months Ended June 30, 2019

The Company recorded revenues of $2,706,880 (2018 - $3,726,647) from product sales and services, marking a decrease of $1,019,767 over the same period of the prior fiscal year. The Company's revenue can fluctuate significantly on a quarterly basis mainly due to the timing of orders and lead times on parts purchases. The Company had deferred revenues of $6,497,469 (2018 - $1,841,962) which relate to customer advances on orders.

Cost of sales reflects the recognition of product based on shipments in the quarter as well as the allocation of wages of employees primarily engaged in production activities and was lower from that of the prior year at $1,489,465 (2018 - $1,650,889). Gross margins for the first two quarters were $1,217,415 or 45% (2018 – gross margin $2,075,758 or 56%).

The Company recorded a loss of $2,851,364 and comprehensive loss of $2,678,293 for the six months ended June 30, 2018, as compared to a loss of $818,486 and comprehensive loss of $980,581 for the same period of prior year. An amount of $173,071 (2018 - $162,095) is attributable to cumulative translation adjustment arising from the translation of the German subsidiaries' financial statements into Canadian dollar presentation currency of the parent company.

Administrative expenses for the 6 months increased by $721,894 to $2,183,188 (2018 - $1,461,294) due to both an increase in headcount and various administrative expenses such as rent and public company costs. Other notable items in the Administrative expense category include travel related costs of $369,903 (2018 - $219,582), rent of $158,046 (2018 -

$176,348), and transfer agency services/public company fees of $111,588 (2018 - $136,486). During the six months, the Company realized a foreign exchange loss of $81,767 (2018 - $141,233).

Depreciation costs related to the adoption of IFRS 16 on leases and the intangible assets acquired with Kraken Power GmbH also attributed to the expense increase during the quarter. Depreciation expenses incurred during the six-month period totaled $966,810 compared to $120,331 in the same period prior year.

Research and development costs decreased versus those of the prior year, totaling $999,421 (2017 - $1,345,443) resulting from the timing of expenditures on various R&D programs. Government assistance totaled $1,106,250 (2018 - $530,456) during the period of which $193,300 was applied against Costs of Sales and $912,950 was applied to R&D expenses.

Share-based compensation of $83,000 was recorded, representing the fair value of the options that vested during the six months ended June 30, 2019. During the same period of the prior year, the Company recorded stock-based compensation of $111,400.

LIQUIDITY AND CAPITAL RESOURCES

At June 30, 2019, the Company had working capital of $5,025,122 (December 31, 2018 – $4,923,376). Cash and cash equivalents as at June 30, 2019 was $5,398,244, as compared with $4,929,865 at December 31, 2018.

During the six months ended June 30, 2019, the Company received proceeds of $3,241,433 (2018 - $333,262) upon the exercise of 8,877,775 share purchase warrants.

During the six months ended June 30, 2019, the Company experienced cash outflows of $1,528,862 (2018 – $1,406,044) from operating activities. Cash proceeds from Investing activities of $1,190,343 were used versus $341,015 used in 2018. Financing activities realized inflows of $3,154,356 (2018 – $4,087,426) and included proceeds of $3,241,433 received upon warrant exercises.

Overall, cash increased by $435,152 as compared to an increase of $2,340,367 during the prior year.

RISKS AND UNCERTAINTIES

The Company is a relatively new company with limited operating history and, in addition to facing all of the competitive risks in the underwater sonar and robotics sector it will face all the risks inherent in developing a business including: access to capital, ability to attract and retain qualified employees, ability to attract and maintain customers and the ability to put in place appropriate operating and control procedures.

Industry specific risks include, but are not limited to:

- *Competitive risk* – the sonar industry in which the Company operates is highly competitive. The competitors of the Company range from small single product companies to diversified corporations in the military, sonar and marine imaging industry. Some of the competitors of the Company may have more extensive or more specialized engineering, manufacturing, and marketing capabilities;
- *Technology risk* – The future success of the Company will depend on its ability to develop new technologies that achieve market acceptance. The sonar market is characterized by rapidly-changing technologies and evolving industry standards;
- *Protection of Intellectual Property*: The Company may be unable to adequately protect its intellectual property rights, which could affect its ability to compete. Protecting the Company's intellectual property rights is critical to its ability to compete and succeed as a company. The Company currently has trademark registrations and relies on a combination of copyright, trademark, and trade secret laws, confidentiality procedures, contractual provisions and other measures to protect its proprietary information. However, all of these measures afford only limited protection;
- *Outside suppliers*: The Company's operations depend on component availability and the manufacture and delivery by key suppliers of certain products and services. Further, the Company's operations are dependent on the timely delivery of materials by outside suppliers. The Company cannot be sure that materials, components, and subsystems will be available in the quantities required, if at all;

- *Government contracts*: The Company will depend, in part, on government contracts, which may only be partially funded, subject to termination, heavily regulated, and audited. The termination of one or more of these contracts could have a negative impact on the operations of the Company; and
- *Competitive bidding*: The Company will derive significant revenue from contracts awarded through a competitive bidding process, which can impose substantial costs upon it, and the Company could fail to maintain its current and projected revenue if it fails to compete effectively.

An investment in the Company's common shares is highly speculative and subject to a number of risks and uncertainties. Only those persons who can bear the risk of the entire loss of their investment should participate. An investor should carefully consider the risks described above and the other information filed with the Canadian securities regulators before investing in the Company's common shares. The risks described above are not the only ones faced. Additional risks that the Company currently believes are immaterial may become important factors that affect the Company's business. If any of these risks occur, or if others occur, the Company's business, operating results and financial condition could be seriously harmed and investors may lose all of their investment.

CAPITAL MANAGEMENT

The Company's objectives when managing its capital are to maintain a financial position suitable for supporting its operations and growth strategies, to provide an adequate return to shareholders and to meet its current obligations.

The Company's capital structure consists of shareholders' equity. The Company makes adjustments to the capital structure depending on economic conditions, its financial position and performance. In order to maintain or adjust the capital structure, the Company may issue new shares, buyback shares or pay dividends, issue new debt and sell assets to reduce debt.

FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

As at June 30, 2019, the Company's risk exposures and the impact of the Company's financial instruments are summarized below:

Credit Risk:

The carrying amount of financial assets represents the maximum credit exposure. The maximum exposure to credit risk at the reporting date was:

	June 30, 2019	December 31, 2018
Cash and cash equivalents	$ 5,398,244	$ 4,929,865
Trade and other receivables	2,263,025	1,733,363
Share subscriptions receivable	76,833	76,833
Prepayments	446,645	169,069
	$ 8,184,747	$ 6,909,130

The Company manages credit risk by holding the majority of its cash with high quality financial institutions in Canada, where management believes the risk of loss to be low. As at June 30, 2019, the Company had in cash equivalents $1,750,000 in Guaranteed Investment Certificates, bearing interest of 2.3% per annum, with a 30-day non-cashable period, and 12-month maturity.

Liquidity Risk:

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions. As at June 30, 2019, the Company had a cash and cash equivalents balance of $5,398,244 (December 31, 2018- $4,929,865), to settle current liabilities of $8,867,266 (December 31, 2018 - $4,815,590), of which deferred revenue of $6,497,469 (December 31, 2018 - $2,920,812) represents the majority of the balance.

Market Risk:

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

(a) Interest rate risk

At June 30, 2019, the Company has cash balances of $5,398,244 and has drawn $Nil against its line of credit. The operating line bears interest at the bank's prime rate of 2%, payable monthly. The Company's subsidiary, Kraken Power, has a €400,000 loan with a German regional economic development organization due March 31, 2023. The loan currently bears interest at 8.5% and is unsecured.

(b) Foreign currency risk

The Company's exposure to foreign currency risk is limited to sales in USD, GDP and EUR, certain purchases of inventory in USD, GBP and EUR, and its note receivable. The Company does not use any form of hedging against fluctuations in foreign exchange.

Fair Value:

During the six months ended June 30, 2019, there were no transfers between level 1, level 2 and level 3 classified assets and liabilities. The fair values of the Company's financial instruments are considered to approximate the carrying amounts.

The following table provides the disclosures of the fair value and the level in the hierarchy:

June 30, 2019	Level 1	Level 2	Level 3
Financial assets classified as loans and receivables:			
Cash	$ 5,398,244	$ -	$ -
Trade and other receivables	-	2,263,025	-
Investment tax credits recoverable	-	338,219	-
Share subscription receivables	-	76,833	-
Financial liabilities at amortized cost:			
Trade and other payables	-	2,138,867	-
Long-term note payable		368,203	-

OFF-BALANCE SHEET ARRANGEMENTS

Kraken has $1,597,048 in previously awarded funding to draw upon from government agencies. This amount is not recorded in our financial statements until the claims are submitted and as such is an off-balance sheet asset at the end of Q2, 2019

USE OF ESTIMATES AND JUDGMENTS

The preparation of financial statements in conformity with IFRS requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results may differ from those estimates. Estimates are reviewed on an ongoing basis based on historical experience and other factors that are considered to be relevant under the circumstances. Revisions to estimates on the resulting effects of the carrying amounts of the Company's assets and liabilities are accounted for prospectively.

All of the Company's significant accounting policies and estimates and judgments are included in Notes 3 and 4 of its audited consolidated financial statements for the year ended December 31, 2018.

SUBSEQUENT EVENTS

Subsequent to June 30, 2019, the Company:

(a) Conducted joint technology demonstrations with NOAA and ThayerMahan for both the KATFISH™ sonar sensor and SeaVision® laser scanner.

(b) Was awarded $1.8 million of project funding from Husky Energy and the Province of Newfoundland and Labrador for the development of a laser chain inspection sensor based on the Company's SeaVision® laser scanner.

(c) Was awarded a $0.5 million contract from Geomar for SeaVision 3D laser scanners®

(d) Renewed our Royal Bank of Canada Credit Facilities increasing our revolving demand facility from $0.25 million to $1 million

ADOPTION OF NEW ACCOUNTING PRONOUNCEMENTS

IFRS 16, Leases:

The Company has adopted the following new accounting policies upon implementation of IFRS 16 on January 1, 2019:

Right-of-use assets
The Company recognizes right-of-use assets at the commencement date of the lease (i.e. the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any re-measurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct cost incurred, and lease payments made at or before the commencement date less any lease incentives received. The right-of-use assets are depreciated on a straight-line basis over its lease term. Right-of-use assets are subject to evaluation of potential impairment.

Lease liabilities
At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payment include fixed payments (including in-substance fixed payments). The lease payments also include the exercise price of purchase options, if any, reasonably certain to be exercised by the Company and payments of penalties for terminating a lease, if the lease term reflects the Company exercising the option to terminate. The variable lease payment that do not depend on an index or a rate are recognized as expense in the period on which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is re-measured if there is a modification, a change in the lease term or a change in the in-substance fixed lease payments.

Short-term leases and leases of low-value assets
The Company applies the short-term lease recognition exemption to its short-term leases of properties (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). It also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered of low value (i.e., below $5,000). Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term.

IFRIC 23, Uncertainty over Income Tax Treatments:

The Interpretation provides guidance on the accounting for current and deferred tax labilities and assets in circumstances in which there is uncertainty over income tax treatments. It requires an entity to contemplate whether uncertain tax

treatments should be considered separately, or together as a group, based on which approach provides better predictions of the resolution. Probability will be determined whether the tax authorities will accept the uncertain tax treatment, and if it is not probable that the uncertain tax treatment will be accepted, they will measure the tax uncertainty based on the most likely amount or expected value, depending on whichever method better predicts the resolution of the uncertainty. There was no impact to the financial statement as a result of adopting this interpretation effective January 1, 2019.

FUTURE ACCOUNTING STANDARDS AND INTERPRETATIONS

Certain new accounting standards and interpretations have been published that are not mandatory for the current reporting period. These standards have been assessed to not have a significant impact on the Company's financial statements.

FUTURE ACCOUNTING PRONOUNCEMENTS

A number of new standards, and amendments to standards and interpretations under IFRS, are not yet effective and have not been applied in preparing these consolidated financial statements.

OUTSTANDING SHARE DATA AS AT AUGUST 28, 2019:

(a) Authorized and issued share capital:

Class	Par Value	Authorized	Issued Number
Common	No par value	Unlimited	146,019,262

(b) Summary of options outstanding:

Security	Number	Number Exercisable	Exercise Price	Expiry Date
Options	600,000	600,000	0.15	October 12, 2019
Options	300,000	300,000	0.15	December 1, 2019
Options	2,000,000	2,000,000	0.21	June 1, 2020
Options	350,000	233,333	0.17	September 20, 2020
Options	300,000	200,000	0.18	October 4, 2020
Options	1,653,502	1,031,835	0.18	December 18, 2020
Options	450,000	337,500	0.185	February 20, 2021
Options	200,000	66,667	0.21	June 21, 2021
Options	1,000,000	333,333	0.26	July 18, 2021
Options	500,000	166,667	0.70	March 5, 2022
	7,353,502	5,269,335		

(c) Summary of warrants outstanding:

Security	Number	Exercise Price	Expiry Date
Warrants	550,000	0.60	December 20, 2020

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

Disclosure controls and procedures ("DC&P") are intended to provide reasonable assurance that material information is gathered and reported to senior management to permit timely decisions regarding public disclosure. Internal controls over financial reporting ("ICFR") are intended to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with IFRS accounting principles.

TSX Venture-listed companies are not required to provide representations in their annual and interim filings relating to the establishment and maintenance of DC&P and ICFR, as defined in Multinational Instrument MI 52-109. In particular, the CEO and CFO certifying officers do not make any representations relating to the establishment and maintenance of (a) controls and other procedures designed to provide reasonable assurance that information required to be disclosed by the issuer in its annual filings, interim filings or other reports filed or submitted under securities legislation is recorded, processed, summarized and reported within the time periods specified in securities legislation, and (b) processes to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with the issuer's GAAP.

OTHER INFORMATION

Additional information regarding the Company is available on SEDAR at www.sedar.com and on the Company's website at www.krakenrobotics.com.