

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

FOR THE THREE AND TWELVE MONTHS ENDED DECEMBER 31, 2016

## MANAGEMENT'S DISCUSSION AND ANALYSIS

This Management's Discussion and Analysis ("MD&A") has been prepared by management, in accordance with the requirements of National Instrument 51-102 *Continuous Disclosure Obligations* as of April 28, 2017 and should be read in conjunction with the condensed interim consolidated financial statements and related notes of LED Medical Diagnostics Inc. ("LED" or the "Company") as at and for the three ended December 31, 2016 (prepared in accordance with International Financial Reporting Standards or "IFRS"). All amounts are presented in United States dollars unless otherwise noted. All referenced materials as well as additional disclosures, including the Company's Annual Information Form ("AIF"), are available on SEDAR at <u>www.sedar.com</u>.

#### DISCLAIMER FOR FORWARD-LOOKING STATEMENTS

The following Management's Discussion and Analysis contains statements, which, to the extent that they are not recitations of historical fact, may constitute forward-looking information under applicable Canadian securities legislation. Such forward-looking statements or information includes financial and other projections as well as statements regarding the Company's future plans, objectives, performance, revenue, growth, profits, operating expenses or the Company's underlying assumptions and the Company's intention to expand its technology beyond dental applications including "costs of production", "capital expenditures", "costs and timing of the development of new products", "hedging practices", "currency exchange rate fluctuations", "requirements for additional capital", "government regulation of medical device operations" and "insurance coverage". Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "would", "could", "might" or "will be taken", "occur" or "be achieved" or the negative connotation thereof. Persons reading this Management's Discussion and Analysis are cautioned that such statements or information are only predictions, and that the Company's actual future results or performance may be materially different. Factors that could cause actual events or results to differ materially from those suggested by these forwardlooking statements include, but are not limited to: economic conditions; dilution; limited history of profits and operations; operational risk: distributor risks: working capital: potential conflicts of interest: speculative investment: intellectual property risks; disruptions in production; reliance on key personnel; seasonality; management's estimates; development of new customers and products risks; stock price volatility risk; sales and marketing risk; competitors and competition risk; regulatory requirements; reliance on few suppliers; reliance on subcontractors; operating cost and quarterly results fluctuations; fluctuations in exchange rates; product liability and medical malpractice claims; access to credit and additional financing; taxation; market acceptance of the Company's products and services; customer and industry analyst perception of the Company and its technology vision and future prospects; technological change, new products and standards; risks related to acquisitions and international expansion; reliance on large customers; concentration of sales; international operations and sales; management of growth and expansion; dependence upon key personnel and hiring; the Company not adequately protecting its intellectual property; risks related to product defects and product liability; reliance on third party suppliers; future working capital investments in accounts receivable and inventory; credit terms from suppliers; and including, but not limited to, other factors described in the Company's reports filed on SEDAR, including its financial statements and this Management's Discussion and Analysis. In drawing a conclusion or making a forecast or projection set out in the forward-looking information, the Company takes into account the following material factors and assumptions in addition to the above factors: the Company's ability to execute on its business plan; the acceptance of the Company's products and services by its customers; the timing of execution of outstanding or potential customer contracts by the Company; the sales opportunities available to the Company; the Company's subjective assessment of the likelihood of success of a sales lead or opportunity; the Company's historic ability to generate sales leads or opportunities; and that sales will be completed at or above the Company's estimated margins. This list is not exhaustive of the factors that may affect the Company's forward-looking information. These and other factors should be considered carefully and readers should not place undue reliance on such forward-looking information. All forward-looking statements made in this Management's Discussion and Analysis is gualified by this cautionary statement and there can be no assurance those actual results or developments anticipated by the Company will be realized. The Company disclaims any intention or obligation to update or revise forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.

For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## OVERVIEW

LED was incorporated under the BCBCA on July 17, 2002 as 651192 B.C. Ltd. and changed its name to LED Medical Diagnostics Inc. on November 6, 2003. LED's head office is located at 800 – 580 Hornby Street, Unit 810, Vancouver, B.C. V6C 3B6. LED's registered and records office is located at 2500 – 700 West Georgia Street, Vancouver, B.C. V7Y 1B3. The Company is listed on the TSX Venture Exchange (TSX-V) under the trading symbol LMD.

As of the date of this report, LED has four wholly-owned operating subsidiaries, LED Dental (US) Ltd., which was incorporated under the laws of Washington state, LED Dental Inc., which was incorporated under the BCBCA, Essentia Genetics Corp., which was incorporated under the BCBCA on January 14, 2014 and the recently acquired Apteryx Inc, which was incorporated under the laws of Ohio state.

## **General Development of the Business**

Headquartered in Vancouver, B.C., LED was founded in 2003. LED's first product, the VELscope®, has experienced wide spread adoption in the North American markets and now has an international presence as well. The company has further developed its portfolio into one that has positioned it to be a premier provider of dental imaging technology and services. Since establishing a market for the VELscope® LED has taken significant and progressive steps towards its goal of becoming a global leader in developing advanced, affordable technology targeted to dental and medical healthcare providers for the detection, diagnosis, and treatment of disease.

## Description of the Business

LED provides dentists and oral health care specialists with a growing portfolio of advanced diagnostic dental imaging products and software. Since its inception, LED has grown from a research and development, pre-commercial product development company to its current status as a premier dental imaging services and technology company. The Company's portfolio includes its dental imaging products and the VELscope® device. The VELscope® has provided a broad customer base and general platform for the company to launch its follow-on dental imaging product portfolio around. LED believes that the success of the VELscope® to date has proven that the Company is a strong research and development corporation.

LED markets its products, in conjunction with its distribution and general goodwill partners, directly to dental practitioners. Such direct marketing includes direct mail/e-mail, advertising in industry journals, multiple unrelated offsite locations, and personal visits. In limited cases, direct marketing activities are oriented towards convincing dental practitioners to attend an education seminar or trade show event in which LED is a participant. LED believes that because of evolutions to its VELscope® device that it has the potential to expand usage of the product to international markets in the near and mid-terms. LED has also recently had multiple successes in establishing indirect partnerships with organizations and networks that provide goodwill marketing for the Company and its products at offsite locations. This is a cost-effective strategy that the company will look to continue in the future.

The Company launched its digital imaging product portfolio in April 2014 which provides dentists and oral health specialists with advanced diagnostic imaging products and software. The core of the product line is the TUXEDO Intraoral sensor and the RAYSCAN  $\alpha$  digital extra oral imaging machine, which comes in panoramic, cephalometric and Cone Beam Computed Technology (CBCT), varieties. Market penetration of CBCT machines continues to rapidly expand through the general dentist market and all the dental specialties, allowing practitioners to visualize the third dimension to better diagnose, treatment plan and treat their patients. The Company also offers a portfolio of digital imaging software and intraoral cameras to round out the digital portfolio and offer practitioners the ability to convert their practice from film to a digital imaging workflow.

LED believes that the success of the VELscope® to date has proven that LED is a strong research and development company. Since the VELscope® was launched in 2006, LED has commercialized the VELscope® Vantage, and, in 2011, the VELscope®Vx. The VELscope®Vx is portable, rechargeable, and significantly more affordable than previous models. Its increased functionality and lower production costs improve LED's prospects as it expands into more countries and other healthcare markets.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

The Company believes that the VELscope® tissue fluorescence visualization technology is backed by more clinical studies than any other oral adjunctive examination device, based on searches conducted by LED of the PubMed database developed and maintained by the National Center for Biotechnology Information at the U.S. National Library of Medicine located at the National Institutes of Health ("NIH"). The NIH, part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting and supporting medical research in the US. The technology for the VELscope® system was developed by LED in partnership with the British Columbia Cancer Agency ("BCCA").

In 2006, VELscope® received U.S. FDA and Health Canada clearances. LED received FDA 510(k) clearance for these claims in April 2007. FDA 510(k) clearance is a premarket notification required for manufacturers of medical devices. The clearances were pertinent to the VELscope®'s use of tissue fluorescence visualization technology which aids in the early visualization of mucosal diseases and enhances effective oral mucosal examinations.

The first-generation VELscope® device was introduced in 2006. Since then, LED has sold over 13,000 devices, which have been used to conduct over 25 million oral soft tissue exams worldwide.

## **Products and Intellectual Property**

LED's focus is on obtaining products and technologies and aggregating a comprehensive imaging product portfolio in which intellectual property and barrier to entry are a center focus. The Company plans to optimize current relationships with VELscope® sales channels via non-exclusive distributors in North America and add complimentary imaging products to build out a robust portfolio and diversify revenue streams.

The Company has developed a specialized digital imaging distribution division that in addition to the VELscope® Vx, offers digital imaging products for use by various types of health practitioners. A partnership with Ray Co. Ltd., has enabled the Company to market, sell, install and train RAYSCAN digital imaging technology. The RAYSCAN  $\alpha$  - Expert is a multi-function digital extra oral imaging system with 3D cone beam computed tomography (CBCT), panoramic and cephalometric capabilities. Furthermore, the Company has partnered with 3Shape to distribute intra-oral scanners for digital impressions for a broad portfolio of dental and orthodontic applications.

The Company's VELscope®Vx, released in early 2011, is comprised of fluorescence technology which aids in the early visualization of mucosal diseases and enhances effective oral mucosal examinations. The patented VELscope® technology platform was developed in collaboration with the BCCA and MD Anderson Cancer Center, with funding provided in part by the NIH. It is based on the direct visualization of tissue fluorescence and the changes in fluorescence that occurs when abnormalities are present. The VELscope® Vx hand piece emits a safe blue light into the oral cavity, which excites the tissue from the surface of the epithelium through to the basement membrane (where premalignant changes typically start) and into the stroma beneath, causing it to fluoresce. The clinician is then able to immediately view the fluorescence response to help detect abnormal tissue. The VELscope® has peer-reviewed clinical studies that support its use in helping discover occult oral disease.

VELscope helps clinicians establish a more robust oral disease and oral cancer screening protocol with immediate benefits for the patient, clinician and practice. When used as an adjunctive aid in combination with traditional oral cancer examination procedures, VELscope®Vx facilitates the early discovery and visualization of all kinds of mucosal abnormalities as well as ones that may be, or may lead to oral cancer. In one or two minutes, with no rinses or stains required, a VELscope® examination helps oral healthcare professionals assure their patients that a high level of care for oral mucosal screening has been utilized. Adding to the VELscope®'s value as an adjunctive device is its ability to aid in the visualization of a wide spectrum of oral trauma and disease. A recent study at the University of Washington demonstrated that the VELscope® system is a powerful tool for the discovery of mucosal abnormalities such as viral, fungal and bacterial infections, inflammation from a variety of causes (including lichen planus and other lichenoid reactions), squamous papillomas and salivary gland tumors. VELscope®Vx combines minimal per-patient costs with more effective oral mucosal examinations.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

LED expects that expanding its proprietary visualization technology beyond dental applications will provide gynecologists, gastroenterologists, ear nose and throat specialists, dermatologists and family practitioners with costeffective tools to aid in the detection of oral cancer and other oral mucosal abnormalities. LED has sought patent protection for its projects by filing one or more patent applications for each aspect of a device, system or method, that LED believes is both patentable and that justifies the costs of patent protection. LED intends to protect future developments in the same manner. LED maintains certain of its intellectual property as trade secrets. LED also has pursued and intends to pursue trademark, copyright and other intellectual property protection as it believes is warranted.

One of LED's most profound commitments is to help reduce the mortality of oral cancer. The services of LED and its partners are directed toward developing a professional outreach program with key university–based oral pathology, oral surgery, and oral medicine leaders worldwide to assist healthcare providers as the need arises. LED is positioned to facilitate the dissemination of new findings that address early detection based on fluorescence and other technologies. Currently over 50% of US dental colleges own at least one VELscope®.

## FORWARD-LOOKING COMPANY OBJECTIVES

The Company's objectives are continued growth and profitability through traditional sales/marketing activities, strategic partnerships and M & A opportunities to:

- Expand market-share to become the leading provider of open-architecture, next-generation dental imaging hardware and cloud software services to the North American dental market
- Improve market penetration and grow our referral base by focusing on the expanding market of Dental Service Organizations (large group practices) and dental specialty practices
- Add revenue streams, utilizing our expanded customer base as a key target market by leveraging sales, marketing, product and distribution synergies from Feb 2017 Apteryx acquisition

## SIGNIFICANT EVENTS

- On January 26, 2016, the Company announced the successful results of a clinical research study "Fluorescence Visualization-Guided Surgery for Early Stage Oral Cancer", published in the Journal of American Medical Association – Otolaryngology – Head and Neck Surgery. The study showed a significant reduction in the rate of local recurrence of early-stage squamous cell carcinoma and high-grade precancerous lesions in patients where VELscope tissue fluorescene visualization was used to assist in the surgical margin.
- On March 29, 2016, the Company announced FDA approval of LED's New Tuxedo Digital Intraoral Radiography System to be marketed and sold in the United Sates. The Tuxedo imaging platform consists of an advanced intraoral sensor and LED's image management software.
- On May 12, 2016, the Company announced the launch of the TUXEDOTM Intraoral Sensor, a new highdefinition digital radiography system with a five-year, deductible-free warranty program. As the latest dental imaging product from LED Dental, the TUXEDO Intraoral Sensor not only delivers crystal clear digital intraoral radiographs, but also breaks away from the industry norm of additional monthly support fees and expensive warranty deductible costs.
- On May 19, 2016, the Company announced that it has retained Bristol Capital Ltd. as its investor relations
  advisor. Bristol has been retained to assist LED Medical in achieving greater visibility amongst current and
  prospective investors through the dissemination and communication of corporate materials, conference calls
  and road show activity.
- On June 20, 2016, the Company announced that its wholly owned subsidiary, LED Dental Inc., has signed an
  exclusive distribution agreement with Biocare Health Supply Ltd. for the sale and distribution of its awardwinning VELscope Vx system in China and Hong Kong.



- On July 12, 2016, the Company announced that its VELscope® Vx Enhanced Oral Assessment System with iPod touch integration has received the Cellerant "Best of Class" Technology Award (formerly the Pride "Best of Class| Technology Award). The VELscope Vx has once again been designated as the leading device for the "oral screening" category, receiving the award for a sixth consecutive year - a distinction shared by only one other product among this year's winners.
- On August 11, 2016, the Company announced the results of a successful pilot oral mucosal screening
  programs in Greater Vancouver in conjunction with London Drugs. The screenings incorporate the use of LED
  Medical Diagnostics' VELscope® Vx Enhanced Oral Assessment System, a device utilized as an adjunct to
  the comprehensive oral examination, that enhances the ability of clinicians to visualize oral mucosal
  abnormalities that many not be apparent to the naked eye, including oral cancer, pre-malignant dysplasia and
  infections.
- On September 28, 2016, the Company announced launch of the RAYSCAN Alpha Plus, a next-generation
  extraoral imaging system that is the latest innovation from former Samsung Electronics subsidiary RAY
  Company ("RAY").Building upon the award-winning RAYSCAN Alpha platform, the RAYSCAN Alpha Plus
  continues RAY Company's dedication to delivering high-quality imaging technologies combined with
  innovative features that break new ground in the industry.
- On November 14, 2016, the Company announced the launch of the VELscope Vx Enhanced Oral Assessment System in China. The VELscope Vx is now available in China through Prospect Dentech making the expansion of its technology to a key emerging market in one of the world's largest economies.
- On November 17, 2016, the Company announced the results of a study entitled "Accuracy of Autofluorescence in Diagnosing Oral Squamous Cell Carcinoma and Oral Potentially Malignant Disorders: A Comparative Study with Aero-Digestive Lesions" was published on Nature.com. This study supports the role of Tissue Autofluorescence in Screening for Oral Cancer.

## **Financial Highlights**

- Net revenue for the three months ended December 31, 2016 was \$1,865,430, which is a decrease 67% from the three months ended December 31, 2015. This revenue decrease was due to cash constraints that prevented the Company from purchasing inventory and taking advantage of the high selling season in Q4.
- The net loss before tax for the three months ended December 31, 2016 was \$1,383,130 compared to the net loss before taxes for the three months ended December 31, 2015 of \$1,122,544. The increase of operating loss is mainly attributable to lower revenue levels and deferred salary recognition for management.
- Cash flow used in operations was \$2,449,563 during the twelve months ended December 31, 2016 compared to cash flow used in operations of \$5,078,306 during the twelve months ended December 31, 2015. There were inflows from financing for the twelve months ended December 31, 2016 of \$1,457,079 as compared to \$4,930,524 of cash inflows from the financing activities for the twelve months ended December 31, 2015.
- The Company had cash of \$874,567 and Net Working Capital deficit of \$2,109,442 as of December 31, 2016. Net Working Capital is defined as total current assets less total current liabilities.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## SELECTED QUARTERLY INFORMATION

The information in the tables below has been derived from the Company's unaudited interim condensed consolidated financial statements. The Company's quarterly operating results have varied substantially in the past and may vary substantially in the future. Accordingly, the information below is not necessarily indicative of results for any future quarter.

(in USD '000's)	December 31, 2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015	September 30, 2015	June 30, 2015	March 31, 2015
Cash	\$ 874	\$ 341	\$ 364	\$ 1,185	\$ 1,987	\$ 1,175	\$ 1,458	\$ 1,109
Working Capital	(2,109)	(2,857)	(1,999)	(1,045)	745	430	1,440	2,292
Total Assets	2,669	2,857	3,307	7,178	9,913	4,165	4,789	5,051
Long-term financial liabilities	2,047	(80)	77	85	87	87	86	61
Shareholders' equity/(deficiency)	(3,887)	(2,598)	(1,744)	(702)	1,147	741	2,060	2,958

Being in the dental supply industry and due to the timing of trade shows and client spending patterns, the Company's business is seasonal in nature, with the fourth quarter typically representing the largest portion of annual sales and annual net earnings. Management expects such seasonality to continue.

(in US\$ '000's, except earnings oer share)	December 31,2016	September 30, 2016	June 30, 2016	March 31, 2016	December 31, 2015	September, 30 2015	June 30, 2015	March 31, 2015 restated
Revenues	\$1,865	\$2,489	3,661	2,153	5,641	1,783	3,269	2,442
Cost of goods sold	1,610	1,872	2,590	1,617	4,045	1,453	2,249	1,814
Gross margin	255	617	1,071	536	1,596	330	1,020	628
Expenses:								
Sales and marketing	776	988	1,436	1,555	1,875	1,188	1,581	1,351
Research and development	26	37	20	50	43	32	65	50
Administration	608	423	502	617	508	417	492	666
Operating Income	-1,155	-831	-887	-1,686	-830	-1,307	-1,118	-1,441
Other expenses (income)	228	-24	196	366	293	55	88	48
Income tax expense	0	0	0	0	0	0	-4	-
Net (loss) income	-1,383	-855	-1,083	-2,052	-1,123	-1,362	-1,202	-1,489
Net loss per share (basic and diluted)	-0.01	-0.01	-0.01	-0.02	-0.01	-0.01	-0.01	-0.02

The Company 's net loss is primarily due to the continued investment into our sales and marketing infrastructure. See Financial Results section below for further discussion on the selected quarterly income statement information.

## FINANCIAL RESULTS FOR THE THREE MONTHS ENDED DECEMBER 31, 2016

The following analysis of the results of operations for the three months ended December 31, 2016 includes comparisons to the three months ended September 30, 2016 and December 31, 2015.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

#### Revenue

-

Revenue is derived from the sale of the Company's VELscope® product, related consumable products which are disposal components for singular use of the VELscope® product and our diverse digital imaging product line. Revenue is expressed net of sales and early payment discounts. The company is subject to seasonality of sales and the late summer months tend to be slower within the industry.

	Three months ended:		
	December 31, 2016	September 30, 2016	December 31, 2015
Total revenue	\$1,865,430	\$ 2,488,725	\$ 5,640,365

Revenue decreased 25% when comparing three months ended December 31, 2016 to September 30, 2016 and 67% compared to the three months ended December 31, 2015 due to cash flow constraints.

In each respective period, revenue from customers which amounted to 10% or more of the Company's revenue, accounted for the following percentages of the Company's total revenue:

	Three months ended:					
	December 31, 201	1 <b>6</b> S	September 30,	2016	December 31	, 2015
	\$ (	)	\$	0	\$	0
Percentage of revenue	0%	, 0		0%		0%

## Gross Margin<sup>1</sup>

The Company experienced the following gross margin for the periods outlined:

		Three months ended:		
	December 31, 2016	September 30,2016	December 31, 2015	
Revenue	\$ 1,865,430	\$ 2,488,725	\$ 5,640,365	
Cost of sales	1,610,643	1,871,511	4,044,657	
Gross margin	254,787	617,214	1,595,708	
Percentage of revenue	14%	25%	28%	

The Company earned gross margin for the three months ended December 31, 2016 of 14%, a decrease from the Company's gross margin for the three months ended September 30, 2016. The decrease in Q4 is due to a \$560K inventory adjustment at year end relating obsolete inventory and system issues. Some of the adjustment related to transactions that occurred in prior quarters in 2016.

<sup>&</sup>lt;sup>1</sup> Gross margin is a non-IFRS measure that does not have a standard meaning and may not be comparable to a similar measure disclosed by other issuers. Gross margin referenced here relates to revenue less cost of sales. This measure does not have a comparable IFRS measure and is used by the Company to manage and evaluate the operating performance of the Company.



Management's Discussion and Analysis

For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## Expenses

	Three months ended:		
	December 31, 2016	September 30, 2016	December 31, 2015
Sales and marketing	\$ 776,413	\$ 988,997	\$ 1,874,363
Research and development	25,542	36,618	43,351
Administration	607,921	423,309	507,027
Stock-based compensation	(10,206)	(13,202)	33,976
Other operating expenses	123,749	21,122	127,110
Total expenses	\$ 1,523,419	\$ 1,437,844	2,585,827
As a percentage of revenue	71%	58%	46%

The decrease in expenses for the three months ended December 31, 2016 as compared to the three months ended December 31, 2015 was due to lower sales related costs and other expenses.

## Sales and Marketing

	Three months ended:		
	December 31, 2016	September 30, 2016	December 31, 2015
Expenses	\$ 776,413	\$ 988,987	\$ 1,874,363
Percentage of revenue	41%	39%	33%

Sales and marketing includes the cost for customer support activities. The decrease in sales and marketing expenses in the three-month period ended December 31, 2016 over the three months ended December 31, 2015 was due to the decreased sales activities, such as trade shows, and lower compensation expenses in the quarter.

#### **Research and Development**

	Three months ended:		
		September 30,	
	December 31, 2016	2016	December 31, 2015
Expenses	\$ 25,542	\$ 36,618	\$ 43,351
Percentage of revenue	1%	1%	1%

Research and development expenses relate primarily to salaries and related benefit costs and costs related to obtaining or maintaining regulatory approvals. The Company is currently focused on developing complimentary products to align with the Company's VELscope® technology.

## Administration

	Three months ended:		
		September 30,	
	December 31, 2016	2016	December 31, 2015
Expenses	\$ 607,921	\$ 423,309	\$ 507,027
Percentage of revenue	33%	17%	9%

Administration expenses include executive and administrative staff salaries, facilities, rent, investor relations, insurance, accounting and legal fees as well as various general administrative costs. The increase in administration expenses for the three months ended December 31, 2016 compared to the three months ended December 31, 2015 was primarily due to recognition of management earned bonus and deferral of reduced salaries.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## Other Expenses (Income)

	Three months ended:			
	December 31, 2016	September 30, 2016	December 31, 2015	
Stock based compensation (recovery)	\$ (10,206)	\$ (13,202)	\$ 33,976	
Depreciation of property, plant and equipment	123,749	21,122	75,801	
Amortization of intellectual property	-	-	6,451	
Warrants Issuance Costs	-		44,858	
Foreign exchange (gain) loss and other (gain) loss	(60,007)	(23,843)	100,072	
Interest expense	174,505	39,697	32,363	
Total other operating expenses (income)	\$ 228,041	\$ 23,774	\$293,521	

During the three months ended December 31, 2016, other operating expenses decreased from the three months ended December 31, 2015 due to a foreign exchange gain and recovery of stock based compensation expense due to forfeitures offset by increased interest expense.

## Net Loss and Comprehensive Loss

het Loss and comprehensive Loss	Thr	ee months ended:	
	December 31, 2016	September 30, 2016	December 31, 2015
Net loss and comprehensive loss for the period	\$ (1,383,130)	\$ (855,484)	\$ (1,122,554)
Loss per share - basic and diluted	\$ (0.01)	\$ (0.01)	\$ (0.01)

Net loss for the three months ended December 31, 2016 increased over the three months ended December 31, 2015 due to lower revenue for the period.

## SELECTED ANNUAL INFORMATION

	Year ended December 31,	Year ended December 31,	Year ended December 31,
	2016	2015	2014
Revenue	\$ 10,168,896	\$ 13,135,007	\$ 9,361,738
Operating income (loss)	(5,114,465)	(5,199,974)	(5,702,404)
Net Loss and comprehensive loss for the year	(5,373,272)	(5,175,899)	(5,181,130)
Loss per common share (basic and diluted)	(0.05)	(0.06)	(0.08)
Distributions/cash dividends declared	-	-	-
As at	December 31, 2016	December 31, 2015	December 31, 2014
Total assets	2,669,908	\$ 9,912,587	\$7,787,160
Total non-current financial liabilities	2,048,024	87,411	24,512

See Financial Results section below for discussion on Revenue and Net Loss for the year. The increased net loss and comprehensive loss for December 31, 2016 to December 31, 2015 was due to the decrease in revenues from LED's Digital product line.



#### FINANCIAL RESULTS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2016

The following analysis of the results of operations for the Twelve months ended December 31, 2016 includes comparisons to the Twelve months ended December 31, 2015.

#### Revenue

Revenue is derived from the sale of the Company's VELscope® product, related consumable products which are disposal components for singular use of the VELscope® product and our digital imaging product line. Revenue is expressed net of sales and early payment discounts.

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Total revenue	\$ 10,168,896	\$ 13,135,007

The company is subject to seasonality with the summer months being slower and activity picking up in the winter months as US dental practices make year-end capital equipment purchases. Revenue decreased 22% when comparing Twelve months ended December 31, 2016 to the Twelve months ended December 31, 2015 due to cashflow constraints preventing the Company from taking advantage of sales opportunities during the height of seasonality for capital purchases in the US dental market.

In each respective period, revenue from customers which amounted to 10% or more of the Company's revenue, accounted for the following percentages of the Company's total revenue:

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Revenue	\$ 0	\$ 0
Percentage of revenue	0%	0%

## **Gross Margin<sup>2</sup>**

The Company experienced the following gross margin for the periods outlined:

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Revenue	\$ 10,168,896	\$ 13,135,007
Cost of sales	7,690,130	9,561,060
Gross margin	2,478,766	3,573,947
Percentage of revenue	24%	27%

The Company earned gross margin for the twelve months ended December 31, 2016 of 24% compared to 27% for the twelve months ended December 31, 2015.

<sup>&</sup>lt;sup>2</sup> Gross margin is a non-IFRS measure that does not have a standard meaning and may not be comparable to a similar measure disclosed by other issuers. Gross margin referenced here relates to revenue less cost of sales. This measure does not have a comparable IFRS measure and is used by the Company to manage and evaluate the operating performance of the Company.



Management's Discussion and Analysis

For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## Expenses

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Sales and marketing	\$ 4,742,093	\$ 5,995,539
Research and development	132,097	189,873
Administration	2,150,282	2,082,781
Stock based compensation	220,148	163,196
Other expenses/(income)	348,612	485,748
Total expenses	\$ 7,593,232	\$ 8,773,921
As a percentage of revenue	75%	67%

The decrease in expenses for the twelve months ended December 31, 2016 as compared to the twelve months ended December 31, 2015 was due to decreased sales and marketing expenditures such as reduction of head count and trade show initiatives.

#### Sales and Marketing

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Expenses	\$ 4,742,092	\$ 5,995,539
Percentage of revenue	47%	45%

Sales and marketing includes the cost for customer and support activities. The decrease in sales and marketing expenses for the twelve months ended December 31, 2016 over the twelve months ended December 31, 2015 was due to the decreased sales activities such as trade shows and sales staff reduction

## Research and Development

	Twelve mont	Twelve months ended:	
	December 31, 2016	December 31, 2015	
Expenses	\$ 132,097	\$ 189,873	
Percentage of revenue	1%	2%	

Research and development expenses relate primarily to salaries and related benefit costs and costs related to obtaining or maintaining regulatory approvals. The Company is currently focused on developing complimentary products to align with the Company's VELscope® technology.

## Administration

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Expenses	\$ 2,150,282	\$ 2,082,781
Percentage of revenue	21%	16%

Administration expenses include executive and administrative staff salaries, facilities, investor relations, insurance, accounting and legal fees as well as various general administrative costs. The increase in administration expenses for the twelve months ended December 31, 2016 compared to the twelve months ended December 31, 2015 was primarily due to recognition of executive management's earned bonus and previously deferred compensation offset by decreased costs related to consulting expense and lower audit costs.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

#### Other Operating Expenses (Income)

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Stock based compensation	\$ 220,148	\$ 163,196
Depreciation of property, plant and equipment	315,501	263,627
Amortization of intellectual property	10,751	25,805
Other operating expense	22,360	-
Foreign exchange (gain) loss and other (gain) loss	(22,353)	25,724
Change in fair value of Canadian denominated warrants	-	(94,610)
Finder's warrants issuance costs	-	53,100
Interest expense	281,160	48,906
Total other operating expenses (income)	\$ 827,567	\$ 485,748

During the twelve months ended December 31, 2016, other operating expenses increased from the twelve months ended December 31, 2015 due to higher stock compensation expense, higher interest expense and the absence of the mark to market adjustment on the Canadian warrants.

#### Net Loss and Comprehensive Loss

	Twelve months ended:	
	December 31, 2016	December 31, 2015
Net loss and comprehensive loss for the period	\$ (5,373,272)	\$ (5,175,899)
Loss per share - basic and diluted	\$ (0.05)	(0.06)

Net loss for the twelve months ended December 31, 2016 increased over the twelve months ended December 31, 2015 due the lower sales revenue and increased other operating expenses such as interest expense.

## LIQUIDITY AND CAPITAL RESOURCES

The Company finances its operations and capital expenditures through cash generated from operations and debt and equity financings. As at December 31, 2016, the Company had cash of \$874,568 and Net Working Capital deficit of \$2,109,442 as compared to cash of \$1,987,409 and net working capital of \$744,501 as at December 31, 2015.

	I welve month	I welve months ended:	
Cash (used in) provided by:	December 31, 2016	December 31, 2015	
Operating activities	\$ (2,449,562)	\$ (5,078,306)	
Investing activities	(117,668)	(281,577)	
Financing activities	1,457,079	4,930,524	
Foreign exchange effect on cash	(2,690)	19,744	
Net decrease in cash	\$ (1,112,342)	\$ (409,615)	

Cash used in operating activities for the period ended December 31, 2016 was attributable to the Company's net loss, decreases in trade payables and deferred revenues offset by increased cash from accounts receivable.

The investing activities for the period ended December 31, 2016 were primarily due to an increased number of sales demo units purchased to support the Company's marketing programs.

The financing activities during the twelve months ended December 31, 2016 relate to the proceeds from the Company's Debenture issuances in July, October and December. The financing activities were conducted for the twelve months ended December 31, 2016 were related to a private placement financing.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## STAFFING LEVELS

The following table summarizes the Company's headcount, by functional group:

	As at December 31, 2016	As at September 30, 2016	As at December 31, 2015
Sales and marketing	12	12	19
Support	10	10	9
Research and development	1	1	1
Administration	5	5	7
Total	28	28	36

## COMMITMENTS

The Company continues to have no bank debt, off-balance sheet financing arrangements or capital leases. The Company has leased facilities in Canada and the USA. Minimum lease payments as of December 31, 2016 are \$905,957.

## INTANGIBLE ASSET IMPAIRMENT

The Company has no impaired intangible assets.

## **OFF-BALANCE SHEET ARRANGEMENTS**

The Company has no off-balance sheet arrangements.

## TRANSACTIONS WITH RELATED PARTIES

Related parties include key management, the Board of Directors, close family members and enterprises that are controlled by these individuals as well as certain persons performing similar functions.

During the three months ended December 31, 2016 and 2015 respectively, the Company paid or accrued the following compensation expenses to key personnel of the Company:

Cash used in:	Twelve months ended:		
	December 31, 2016	December 31, 2015	
Short-term compensation	\$ 802,221	\$ 709,731	
Share-based payments	\$ 187,548	\$ 93,722	



(Expressed in U.S. dollars, unless otherwise noted)

## CRITICAL ACCOUNTING POLICIES AND ESTIMATES

The Company's management makes judgments in its process of applying the Company's accounting policies in the preparation of its condensed interim consolidated financial statements. In addition, the preparation of the financial data requires that the Company's management make assumptions and estimates of the impacts from uncertain future events on the carrying amounts of the Company's assets and liabilities at the end of the reporting period, and the reported amounts of revenue and expenses during the reporting period. Actual results may differ from those estimates, as the estimation process is inherently uncertain. 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 and the resulting impacts on the carrying amounts of the Company's assets and liabilities are accounted for prospectively. The critical judgments and estimates applied in the preparation of the Company's condensed interim consolidated financial statements for the three months and twelve months ended December 31, 2016 are consistent with those applied and disclosed in note 3 to the Company's audited consolidated financial statements for the year ended December 31, 2015.

## New Standards and Interpretations Not Yet Effective

Standards issued but not yet effective up to the date of issuance of the Company's condensed interim consolidated financial statements are listed below. This listing is of standards and interpretations issued, which the Company reasonably expects to be applicable at a future date. The Company is currently assessing the impact of the following standards on the condensed interim consolidated financial statements and intends to adopt these standards when they become effective.

#### IFRS 9 – Financial Instruments

IFRS 9 replaces the current IAS39 - Financial Instruments Recognition and Measurement. The new standard introduces extensive changes to IAS 39's guidance on the classification and measurement of financial assets and introduces a new 'expected credit loss' model for the impairment of financial assets. IFRS 9 also provides new guidance on the application of hedge accounting. The standard is effective for annual periods beginning on or after January 1, 2018. The Company is currently evaluating the impact the final standard is expected to have on its consolidated financial statements.

## IFRS 15 – Revenue from Contracts with Customers

In May 2014, the IASB issued IFRS 15 – Revenue from Contracts with Customers ("IFRS 15") which supersedes IAS 11 – Construction Contracts, IAS 18 – Revenue, IFRIC 13 – Customer Loyalty Programs, IFRIC 15 – Agreements for the Construction of Real Estate, IFRIC 18 – Transfers of Assets from Customers, and SIC 31 – Revenue – Barter Transactions involving Advertising Services. IFRS 15 establishes a single five-step model framework for determining the nature, amount, timing and uncertainty of revenue and cash flows arising from a contract with a customer. The standard is effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Company is currently evaluating the impact the final standard is expected to have on its consolidated financial statements.

## IFRS 16 and IAS 38 - Clarification of Acceptable Methods of Depreciation and Amortization

IFRS 16 and IAS 38 – Clarification of Acceptable Methods of Depreciation and Amortization clarify the principle in IAS 16 - Property, Plant and Equipment and IAS 38 - Intangible Assets that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, the ratio of revenue generated to total revenue expected to be generated cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortize intangible assets.



## FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

The Company is exposed in varying degrees to a variety of financial instrument related risks. The Board of Directors approves and monitors the risk management processes, inclusive of documented investment policies, counterparty limits, and controlling and reporting structures. The type of risk exposure and the way in which such exposure is managed is provided as follows:

#### Classification of financial instruments

Financial assets included in the statement of financial position are as follows:

	Twelve months ended:	
Cash and cash equivalents	December 31, 2016	December 31, 2015
Cash	\$ 874,567	\$ 1,987,406
Receivables	799,339	1,565,853
Total	\$ 1,673,906	\$ 3,553,262

Financial liabilities included in the statement of financial position are as follows:

Non-derivative financial liabilities	Twelve months ended:	
	December 31, 2016	December 31, 2015
Trade payable and Accrued liabilities	\$ 3,534,972	\$6,685,719
Deferred Revenue	309,531	746,242
Debenture	2,623,542	1,246,338
Total	\$ 6,458,045	\$ 8,678,299

## Fair value

The fair value of the Company's financial assets and liabilities approximates their carrying amount.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- Level 1 Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and
- Level 3 Inputs that are not based on observable market data.

As at December 31, 2016, the Company no longer measures any assets at an estimated fair value.

## Credit Risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. The Company is exposed to credit risks arising from its cash and restricted cash and receivables. The Company manages credit risk by placing cash with major Canadian financial institutions. With respect to receivables, the Company performs ongoing credit evaluations of its customers' financial condition.

The Company monitors collectability of receivables on an on-going basis to determine credit risk. In order to mitigate credit risk, the Company offers credit terms to established customers. Other customers are required to pay in advance or by credit card, prior to shipping of the product. At December 31, 2016, no accounts receivable is due beyond one year.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

As at December 31, 2016 and December 31, 2015, the Company's exposure to credit risk for these financial instruments was as follows:

Twelve month	Twelve months ended:	
December 31, 2016	December 31, 2015	
\$ 874,567	\$ 1,987,409	
799,339	1,565,853	
\$ 1,673,906	\$ 3,553,262	
	<b>December 31, 2016</b> \$ 874,567 799,339	

Trade accounts receivable as at December 31, 2016 and December 31, 2015 were aged as follows in the below table.

	Twelve months ended:	
Accounts Receivable Aging	December 31, 2016	December 31, 2015
Current	\$ 540,537	\$ 1,267,418
31 - 60 days	72,646	18,946
Over 60 days	142,075	279,489
Total accounts receivable	\$755,258	\$ 1,565,853
Goods and services tax receivable	34,738	16,195
Total Accounts Receivable less taxes receivable	\$ 789,996	\$ 1,582,048

## Liquidity risk

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. The Company has a planning and budgeting process in place to help determine the funds required to support the Company's normal operating requirements on an ongoing basis. The Company manages its liquidity risk associated with its financial liabilities through the use of cash flow generated from operations, and the issuance of additional equity primarily through private placements, as required to meet the payment requirements of maturing financial liabilities.

The contractual maturities of the Company's trade payables as at December 31, 2016 are listed below.

Trade payables were aged as follows as at December 31, 2016 and December 31, 2015 and does not include accrued liabilities, warranty provision and state and provincial sales tax payable of which are all current:

Accounts payable aging	Twelve months ended:	
	December 31, 2016	December 31, 2015
Current	\$221,101	\$ 2,062,258
31 - 60 days	164,082	2,573,223
Over 60 days	2,179,319	493,095
Total	\$ 2,564,502	\$ 5,128,576



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

The following is an analysis of the contractual maturities of the Company's non-derivative accrued liabilities as at December 31, 2016:

	Between one and	
Contractual Maturities	Within one year	five years
Trades Payable and Accrued liabilities	\$ 3,534,972	\$ -
Total	\$ 3,534,972	\$ -

The ability of the Company to make the aforementioned payment requirements related to maturing financial liabilities in the near term is dependent on the ability to secure additional financing and the timing of cash flows from operations. The ability to obtain additional financing is dependent on continued access to debt and/or equity markets, which may not be available on acceptable terms. In the event that debt or equity capital is not available on acceptable terms, the Company may need to explore other strategic alternatives.

## Interest rate risk

Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Interest rate risk is limited to the portion of the Company's cash held in bank accounts that earn interest.

Due to the limited and short-term nature of these financial instruments, fluctuations in the interest rates will not have a significant impact on their fair value. As at December 31, 2016, the Company had not entered into any derivative contracts to manage this risk.

## Currency risk

The Company is exposed to the financial risk related to the fluctuation of foreign exchange rates. The Company operates in Canada and the United States. The Company's functional currency is the U.S. dollar. The Company has not hedged its exposure to currency fluctuations.

Assuming that all other variables remain constant, a 10% change in the value of the Canadian dollar against the U.S. dollar would not materially affect the loss from operations.

## DISCLOSURE OF OUTSTANDING SHARE DATA

The Company is authorized to issue an unlimited number of common shares, without par value and an unlimited number preference shares without par value. As of the date of this MD&A, the Company has 116,428,516 common shares outstanding and no preference shares outstanding.

The Company has instituted a rolling incentive stock option plan whereby shares reserved for issuance under the plan shall reflect 10% of the issued and outstanding common shares of the Company from time to time. As of December 31, 2016, the Company is entitled to grant incentive stock options for 11,642,851 common shares under the Company's stock option plan with a total of 5,500,666 options being issued and outstanding and has issued 360,000 deferred share units under the Company's Deferred Share Unit Plan. The Company also had 17,242,604 warrants outstanding.

## SUBSEQUENT EVENTS

On February 10, 2017, the Company acquired 100% of the common shares of Apteryx, Inc ("Apteryx") for aggregate consideration of US\$10.25 million and closed the relating financing for gross proceeds of approximately CDN \$14.4 million. The Company paid US\$6.987 million in cash and issued 33,858,400 common shares of the company to the seller at C\$0.07, representing US\$1.8 million of value. An additional US\$1.2 million of the purchase price will be paid in cash in tranches over the next 18 months. The final payment of US\$450,000 will be paid in common shares of the Company or in cash at the Company's option, 24 months from closing. Apteryx is a custom software development company located in Akron, Ohio specializing in medical and dental image processing, data encryption and security, database, data conversion and distributed systems.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

The Company anticipates the following benefits from the purchase of Apteryx:

- Expected to be significantly accretive to revenue, EBITDA, and net income for the 2017 fiscal year
- Diversifies LED's revenue base and revenue timing, adding significant recurring revenue opportunities
- Apteryx has a proven and consistent history of profitable operations and attractive financial operating margins
- Establishes LED as a leader in imaging software to dental practices across the United States
- Provides LED with a range of software applications to augment its hardware offerings establishing the Company as an end-to-end dental imaging solution provider in a growing market
- Provides LED the addition of significant customer user base of dental professionals as well as partnership opportunities with Apteryx's existing OEM distribution partners for new and existing LED imaging products
- The addition of a software development team which will help expand development of new products
- Provides LED critical mass to support significant growth operationally and financially
- · Kevin Crucs, founder of Apteryx, is joining LED in a senior leadership role
- LED management team is very familiar with Apteryx's management team and products. LED is currently a customer of Apteryx products and services
- Significant expansion of LED's IP portfolio with addition of 28 patents

The Company closed a series of financings related to the acquisition for gross proceeds of approximately \$14.4 million CDN. The Company completed a private placement of 214,452,734 equity units of the Company (the "Equity Units") for gross proceeds of approximately C\$13.3 million. The Equity Units were priced at C\$0.06 per Equity Unit, each consisting of one common share and one-half of one common share purchase warrant, with each whole warrant being exercisable for a period of 24 months into one common share of LED at a price of C\$0.10 per common share.

The Company also issued senior secured debentures with a principal amount of \$1,150,000 CDN maturing 24 months from the closing date. The debenture is attached with a 12% coupon and 2,443,750 common shares of the Company.

On February 10, 2017, the Company issued 6,258,806 common shares of the Company to key management and the Board of Directors in lieu of deferred compensation and director's fees.

## **RISKS AND UNCERTAINTIES**

An investment in the securities of the Company may be regarded as speculative due to the Company's stage of development. Risk factors relating to the Company could materially affect the Company's future results and could cause them to differ materially from those described in forward-looking statements relating to the Company. Prospective investors should carefully consider these risks.

The following are some of the risks that are associated with the Company's business and operations and should be carefully considered by any potential investor in the Company's shares.

## History of Losses

The Company has a history of losses, and there can be no assurance that the Company's losses will not continue in the future. The Company's prospects must be considered in the context of its stage of development, the risks and uncertainties it faces, and the inability of the Company to accurately predict its operating results in the results of product development and sales and marketing initiatives. There can be no assurances that implementation of the Company's strategies will result in the Company becoming profitable. The Company uses cash raised in equity markets to partially fund working capital. If adequate funds are not available when required or on acceptable terms, the Company may be required to delay, scale back or terminate its product development activities and sales and marketing efforts, and may be unable to continue operations. There can be no assurance that the Company will be able to obtain the additional financial resources required to compete in its markets on favorable commercial terms or at all. Any equity offering may result in dilution to the ownership interests of shareholders and may result in dilution of the value of such interests.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

The availability, or lack thereof, of bank credit, additional supplier credit, or additional equity investment could adversely affect the Company's ability to meet its business objectives. Recent market events and conditions, including disruptions in the Canadian and international credit markets and other financial systems and the deterioration of the Canadian and global economic conditions, could, among other things, impede access to capital or increase the cost of capital, which would have an adverse effect on the Company's ability to fund its working capital and other capital requirements. The Company's access to additional capital may not be available on terms acceptable to the Company or at all.

## **Operational Risk**

In the normal course of business, LED's operations continue to be influenced by a number of internal and external factors and are exposed to risks and uncertainties that can affect its business, financial condition and operating results. LED's activities are subject to ongoing operational risks, including the performance of key suppliers, product performance, government and other industry regulations, all of which may affect its ability to meet its obligations. While management believes its innovation and technology make it a leader in the industry, revenue and results may be affected if products are not accepted in the marketplace, are not approved by regulatory authorities, or if products are not brought to market in a timely manner. LED is reliant on a small number of key employees, the loss of any one of whom could materially affect operating results and the ability to design and manufacture new products.

## **Distributor Risks**

LED distributes its VELscope® product line in the North American market through non-exclusive distribution partnerships with multiple distributors. LED's reliance on distributors or if the distributors are unable or unwilling to promote and deliver the product to end customers, the Company's financial condition and operating results could be materially impacted. There can be no assurance the Company will be successful in managing the nuances of their markets to ensure the success of the Company's products in those markets.

## **Disruptions in Production**

Factors that affect the production and sale of LED's products which could result in decreases in profitability include: (a) Acts of God; (b) the expiration or termination of leases, contracts, permits or licenses; (c) sales price redeterminations; (d) future litigation; (e) work stoppages or other labor difficulties; (f) disputes with suppliers, distributors and subcontractors; (g) political risk with offshore suppliers; (h) reliance on suppliers with highly technical and not easily replaceable expertise; and (i) changes in the market and general economic conditions. Weather conditions, equipment replacement or repair and fires can have a significant impact on operating results.

## Seasonality

Sales may have seasonal components which may result in significant variances in quarterly operating results and may also significantly increase working capital requirements on a quarterly basis.

## **Working Capital Requirements**

Although Company management believes in the long term opportunity and its ability to execute on its business plan, the continued growth and success of the Company is tied to its ability to raise additional capital. The Company may not be able to raise capital or obtain favorable credit terms or debt financing to finance the investment into working capital for the business.



## Management's Estimates

Management's estimates may prove to be inaccurate due to unexpected changes in business or market conditions.

#### **Regulatory Requirements**

Regulatory requirements in international markets may require clinical or other studies that may restrict the ability or timing of LED to sell in these markets.

The Company faces regulatory risk including national security review risk by the Committee on Foreign Investment in the United States.

#### **Reliance on Suppliers**

The Company has a limited number of suppliers for the raw materials required for its products. A dispute with one of these suppliers, or adverse changes in the business of the suppliers may have a negative impact on the business, operating results and financial condition of the Company if it is unable to source comparable raw materials from alternate sources at competitive rates. Reliance on key distribution partners whose products the Company resells/distributes as part of its new imaging produce offering. The Company has agreements with its manufacturer distribution partners that have termination for convenience provisions of various time frames. In the event a termination notice is received from a key supplier and the Company is not able to reach an agreement with an alternative supplier in a timely manner. This could result in a material adverse effect on the Company's product offering and recognized revenue.

#### Dependence on a Limited Number of Third Party Product Vendors

The Company is a distributor of third party products to its customers, which are supplied by vendors such as RAY Company. The Company is dependent upon the timely availability of these third party products in addition to obtaining reasonable commercial terms pertaining to the purchase of such third party products for resale by the Company. The distribution agreements between the Company and these third party vendors include termination by the vendor with a limited notice period. In the event that the distribution agreement is either terminated by the third party vendor or the third party vendor is not able to supply the Company with its products or the vendor competes with the Company either directly or indirectly in its market, the Company's ability to resell such third party products may be hindered accordingly resulting in a material adverse effect on the Company's revenue and related gross margin due to no longer being able to sell such third party products.

#### **Reliance on Subcontractors**

LED utilizes a primary supplier for the production and supply of its products with the corresponding dependence on subcontractors who are responsible for their respective manufacturing requirements. If the primary supplier experiences business interruption issues or ceases operations or in the event that the Company's respective subcontractors manufacturing a material amount of products cease operations or are unable to come to terms on suitable arrangements with LED, LED's business and profitability may be adversely affected.

#### The Company May Not Realize the Benefits Currently Anticipated

As part of its strategy, the Company intends to continue its efforts to expand its existing customer base and products. A number of risks and uncertainties are associated with the development of new customers and products, including political, regulatory, design, sourcing, labor, operating, technical, technological risks and limited accessibility to distribution and or non-economic distribution channels. There are also uncertainties relating to capital and other costs, and financing risks in developing new products. The failure to develop one or more of these initiatives successfully could have an adverse effect on the Company's financial position and results of operations.



#### **Operating Cost Fluctuations**

Although the Company believes it has prudently adopted conservative assumptions in its business planning and related cost estimations, no assurances can be given that such assumptions will prove to be accurate, and, therefore, the operating costs of the Company may prove to be higher or lower than those estimated. These estimates are influenced by the availability and pricing of third party raw materials and components required in the Company's products. The transition to higher cost US operations, which are fixed in general, increases breakeven point, which may not be fully funded by sales resulting in negative cash flow.

#### Fluctuations in Exchange Rates

The Company is exposed to the financial risk related to the fluctuation of foreign exchange rates. The Company operates in Canada and the United States. The Company's functional currency is the U.S. dollar. The Company has not hedged its exposure to currency fluctuations.

Assuming that all other variables remain constant, a 10% change in the value of the Canadian dollar against the US dollar would not materially affect the loss from operations. All sales and cost of sales are in US\$ with a large majority of operating expenses are also in US\$.

The following is a summary of the Company's exposure to currency risk:

	December 31, 2016	December 31, 2015
	CDN	CDN
Cash	\$ 461,801	\$ 871,646
Account Receivable	30,703	70,449
Trade payable and accrued liabilities	(799,414)	(340,513)
Net statement of financial position exposure	\$ (306,910)	\$ 601,582

#### Taxation

Canadian taxation authorities may challenge expense or tax credits claimed by LED including research and development expenses and related tax credits. If Canadian tax authorities successfully challenge such expenses or the correctness of tax credit claims, LED's operating results could be adversely affected. If Canadian taxation authorities reduce the tax credit either by reducing the rate of the grant or the eligibility of some research and development expenses in the future, the Company's operating results will be adversely affected.

#### **Worsened General Economic Conditions**

The decline in the global economic environment in recent years and the continuing economic instability in certain parts of the world resulted in increasing uncertainty regarding future revenue and customer commitments, both in terms of timing and magnitude for such future sales. If the global economic climate does not recover, the Company may not generate the sales activity required to support its operations resulting in requirement for additional restructurings and erosion of its existing capital resources, which may hinder the future viability of the Company.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## Additional Financing

The Company has a history of operating losses and uses cash raised in equity markets to partially fund working capital. If adequate funds are not available when required or on acceptable terms, the Company may be required to delay, scale back or terminate its product development activities and sales and marketing efforts, and may be unable to continue operations. There can be no assurance that the Company will be able to obtain the additional financial resources required to compete in its markets on favorable commercial terms or at all. Any equity offering may result in dilution to the ownership interests of shareholders and may result in dilution of the value of such interests. The availability, or lack thereof, of bank credit, additional supplier credit, or additional equity investment could adversely affect the Company's ability to meet its business objectives. Recent market events and conditions, including disruptions in the Canadian and international credit markets and other financial systems and the deterioration of the Canadian and global economic conditions, could, among other things, impede access to capital or increase the cost of capital, which would have an adverse effect on the Company's ability to fund its working capital and other capital requirements. The Company's access to additional capital may not be available on terms acceptable to the Company or at all.

## **Research and Development**

If the Company fails to develop new products, incurs delays in developing new products, or if the product the Company develops are not successful, the Company's business could be harmed. Even if the Company does develop new products, which are accepted by its target markets, the Company cannot assure that the revenue from these products will be sufficient to justify the Company's investment in research and development.

## **Stock Price Volatility**

The market price for the common shares of the Company fluctuates significantly, and these fluctuations tend to be exaggerated if the trading volume is low. The market price of the common shares may rise or fall in response to announcements of technological or competitive developments, acquisitions or strategic alliances by the Company or its competitors, the gain or loss by the Company of significant orders or broad market fluctuations. The Company has expanded to the OTC stock exchange in the United States and Frankfurt Stock Exchange in Germany, which may not increase future trading volume of the Company's common shares.

## Product Development and Technological Change

The market for the Company's products is characterized by rapidly changing technology, evolving industry standards and frequent new product introductions. To be successful, the Company will need to enhance existing products and to introduce new products and features in response to changing standards, customer requirements, and technological innovations by others. There can be no assurance that the Company will be successful in doing this in a timely manner or at all. There can be no assurance that products or technologies developed by others will not render the Company's products obsolete or non-competitive. There is no assurance that the Company will be able to successfully develop next generation operational products. Failure to do so may have an adverse effect on the business, operating results and financial condition of the Company.

## Sales and Marketing and Strategic Alliances

The Company has focused its distribution sales and marketing initiatives with a primary distributor in North America resulting in significant dependency for sales of its products on this primary distributor. If the Company is to become successful, it must continue to expand its sales and distribution channels and its marketing and technology alliances. There is no assurance the Company will be able to reach agreements with additional alliance or distribution partners on a timely basis or at all, or that these partners will devote sufficient resources to advancing the Company's interests. The Company's business, results of operation, financial condition and stock price may be materially adversely affected if any strategic partner discontinues its relationship with the Company for any reason. Additionally, the Company at times relies on the voluntary efforts of its strategic partners rather than compliance with contractual obligations, and here are at times no minimum performance requirements. Therefore, the Company cannot be certain that these relationships will be successful.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

#### Dependence on a Small Number of Customers

The Company markets and sells its products primarily through its primary distributor relationships in North America resulting in economic dependence upon such distributors for the sales of its products. Management believes that revenue derived from current and future large customers will continue to represent a significant portion of total revenue. The inability to continue to secure and maintain a sufficient number of large contracts would have a material adverse effect on the business, financial condition, operating results and cash flows of the Company. Moreover, the success of the Company will depend in part upon its ability to obtain orders from new customers, as well as the financial condition and success of its customers and general economic conditions.

## **Intellectual Property Protection**

The Company's ability to compete may be affected by its ability to protect its intellectual property. It relies primarily on a combination of copyright, trademark, patent and trade secret laws, confidentiality procedures and contractual provisions to protect its intellectual property. While the Company believes that its products and technologies are adequately protected against infringement, there can be no assurance of effective protection. Monitoring and identifying unauthorized use of the Company's technology is difficult, and the prohibitive cost of litigation may impair the Company's ability to prosecute any infringement. The commercial success of the Company will also depend upon its products not infringing any intellectual property rights of others and upon no claims for infringement being made against the Company. The Company believes that it is not infringing any intellectual property rights of third parties, but there can be no assurance that such infringement will not occur. Infringement claims against the Company by a third party, even if it is invalid, could have a material adverse effect on the Company because of the costs of defending against such a claim. LED may fail to protect or obtain protection of intellectual property. In addition, LED may be exposed to infringement, misappropriation or other claims by third parties, which, if determined adversely, could result in LED paying significant damage awards. LED currently uses patents, trademarks and contractual arrangements with employees to protect its intellectual property rights. LED's existing and future patents could be challenged, invalidated, circumvented or rendered unenforceable. LED's pending patent applications may not result in issued patents, or if patents are issued, such patents may not provide meaningful protection again competitors or against competitive technology. Patents afford only limited protection, and the actions that LED takes to protect intellectual property rights may not be adequate. In addition, the process of seeking patent and trademark protection can be time consuming and expensive and there can be no assurance that any future patent or trademark applications will be granted in respect of LED's technology or business.

## Competition

Because of intense market competition, the Company may not succeed. Some of the Company's current and potential competitors have longer operating histories, stronger brand names and greater financial, technical, marketing and other resources than the Company. Current and potential competitors may also have existing relationships with many of the Company's prospective customers, and prospective OEM customers may be developing products for their own use that are comparable to the Company's products. In addition, the Company expects competitors have and may in the future, which could adversely affect the Company's ability to increase sales. Competitors have and may in the future align themselves with one or more of several large distributors of dental products, which may include exclusive marketing arrangements making a significant portion of the market unavailable to LED.

## **Potential Fluctuations in Quarterly Results**

The Company's quarterly operating results may vary significantly depending on factors such as the timing of new product introductions and changes in pricing policies by the Company and its competitors, market acceptance of new and enhanced versions of the Company's products and the timing of significant orders. Because the Company's operating expenses are based on anticipated revenue and a high percentage of the Company's expenses are relatively fixed in the short term, variations in the timing of recognition of revenue can cause significant fluctuations in operating results from quarter to quarter and may result in unanticipated quarterly earnings shortfalls or losses. The market price of the Company's common shares may be highly volatile in response to such quarterly fluctuations.



Management's Discussion and Analysis For the three and Twelve months ended December 31, 2016 (Expressed in U.S. dollars, unless otherwise noted)

## **Dependence on Key Personnel**

The Company's future success depends largely on its ability to attract and retain talented employees. The Company's future results of operations will depend in part on the ability of its officers, management and other key employees to implement and expand operational, customer support and financial control systems and to expand, train and manage its employee base. The Company's future performance will also depend to a significant extent on its ability to identify, attract, train and retain highly skilled sales, technical, marketing and management personnel. If the Company were to lose the services of any key personnel, the Company may encounter difficulties finding qualified replacement personnel. LED's success is largely attributable to the leadership, contacts and efforts of LED's chief executive officer and senior management. If LED's Chief Executive Officer or one or more of the members of the senior management cease working with the Company, and the Company is unable to engage suitable replacements on a timely and commercially viable basis, the business, operating results and financial condition of the Company may be adversely affected.

## Acquisitions

The Company in the future may, acquire businesses, products or technologies that it believes complement or expand its existing business. Acquisitions of this type involve a number of risks, including the possibility that the operations of the acquired business will not be profitable or that the attention of the Company's management will be diverted from the day-to-day operation of its business. An unsuccessful acquisition could reduce the Company's margins or otherwise harm its financial condition. Any acquisition could result in a dilutive issuance of equity securities, the incurrence of debt and the loss of key employees. The Company cannot ensure that any acquisitions will be successfully completed or that, if one or more acquisitions are completed, the acquired businesses, products or technologies will generate sufficient revenue to offset the associated costs of the acquisitions or other adverse effects.

## **Product Liability and Medical Malpractice Claims**

LED will be exposed to risks associated with product liability claims if the use of LED's products results in injury or property damage. Users and their patients of the VELscope® may be injured as a result of malfunctions, defects or other causes. In addition, medical malpractice claims may be brought against LED. Because of LED's limited operating history, it is difficult to predict if product liability or medical malpractice claims will be brought in the future. LED carries what it believes to be adequate product liability insurance, but LED may not have adequate resources to satisfy a judgment if a successful claim is brought. The assertion of product liability or medical malpractice claims may also significantly damage LED's reputation.

## **Future Share Sales**

If the Company's shareholders sell substantial amounts of the Company's common shares, the market price of the Company's common shares could decrease.

## **Management of Growth**

The Company's future results of operations will depend in part on the ability of its officers and other key employees to implement and expand operational, customer support and financial control systems and to expand, train and manage its employee base. The Company's future performance will also depend to a significant extent on its ability to identify, attract, train and retain highly skilled sales, technical, marketing and management personnel.

