General

The following managementôs discussion and analysis (ñMD&Aò) of the financial condition and results of operations of ZTEST Electronics Inc. (ñZTESTò or the ñCompanyò) constitutes managementôs review of the factors that affected the Companyôs interim condensed consolidated financial and operating performance for the six months ended December 31, 2017. The MD&A was prepared as of February 28, 2019 and was approved by the Board of Directors on February 28, 2019. It should be read in conjunction with the unaudited interim condensed consolidated financial statements of the Company for the six months ended December 31, 2018, and the audited consolidated financial statements for the year ended June 30, 2018, including the notes thereto. Unless otherwise stated, all amounts discussed herein are denominated in Canadian dollars.

Additional information about the Company can be found at www.sedar.com.

The Company

ZTEST is located at 523 McNicoll Avenue, Toronto, Ontario. Through its wholly-owned subsidiary, Permatech Electronics Corporation (ñPECò), the Company operates a single business segment designing, developing, and assembling printed circuit boards and other electronic equipment. The Companyôs shares trade on the Canadian Securities Exchange under the symbol "ZTE".

The Company held its annual general meeting on January 8, 2019 resulting in the election, or re-election, of the Board members noted below. The inaugural meeting of this Board was held immediately following the annual general meeting, during which the Officers of the Company were reappointed and the subcommittee noted below was formed.

Name	Position(s)
Steve Smith [(1)]	Chairman, President & Chief Executive Officer
K. Michael Guerreiro [(1*)]	Director (Independent), and Director of subsidiary
Brendan Purdy [(1)]	Director (Independent)
Michael D. Kindy, CPA, CA	VP Finance & Chief Financial Officer
William R. Johnstone, LLB	Corporate Secretary
Wojciech Drzazga	Director and Officer of subsidiary
John Perreault	Officer of subsidiary
William J. Brown	Director of subsidiary

[*] Acts as Committee Chair
[(1)] Member of the audit committee

Corporate Performance

The second fiscal quarter of 2019 has built on the positive trends that commenced late in the 2018 fiscal year and continued through the first quarter. Fiscal 2018 was, simply put, not a good year. The second and third quarters provided less than break-even operating volumes thereby putting pressure on the Companyôs liquidity and cash flows. Signs of improvement started to appear during the final quarter of 2018 and, while the Company is not yet profitable, those signs have become better entrenched thus far in 2019.

The primary evidence in support of this improvement is that periodic revenues, which were off by approximately 30% during the lows of 2018, have returned to levels more consistent with historical norms. Furthermore, there are indications that this will continue, at least for the immediate term. On a year to date basis, revenues are just over 6% greater than they had been one year earlier however the second quarter provided 13.5% more revenues than the first quarter and those revenues are more than 37% higher than they were during the second quarter of the 2018 fiscal year. This signal that the market may have stabilized and that revenues may be more consistent from period to period is highly encouraging.

Corporate Performance - continued

It was noted that the lows of 2018 impacted negatively upon the Companyôs liquidity and cash flows. The return to more traditional revenue figures is a necessary step to remedying this process however the escalation of operating volumes adds to the cash flow pressures in the immediate term, before providing anticipated relief down the road. In the first six months of 2019 the Company has grown it current and total assets but, through cash management, has also seen current liabilities rise such that there has been marginal erosion of working capital during this period. This is anticipated through the growth phase and is expected to improve as inventory is converted and sold and accounts receivable are collected.

While the day-to day operations are certainly a focal point, the Company also continues to closely monitor the progress being made by Conversance Inc., as it continues to develop its proprietary artificial-intelligence supported distributed ledger technologies, and is now aggressively pursuing another opportunity as well. An opportunity for which ZTEST perceives there to be opportunities for potential future collaboration and synergies with Conversance.

In December 2018, ZTEST entered into a non-binding Letter of Intent (LOI) to make an investment into Twenty49 Ltd. (ñTwenty49). Twenty49 is a technology company, based in Waterloo, Ontario, and operating in the US through its wholly-owned subsidiary which is developing technology for four business units. Each of Data420, Fiscal420, and AI420 focus on collecting information through proprietary hardware and software, then selling data to all operational levels of the cannabis industry. Fiscal420 will provide US cities and townships with the ability to automate the collection of cannabis sales taxes from all companies selling cannabis in their jurisdictions.

In January 2019 the LOI was modified such that the Company will, subject to satisfactory due diligence and other matters, all of which must be completed no later than March 15, 2019, invest $112,000 to acquire 5,600,000 shares of Twenty49, as well as 8,200,000 warrants. The initial investment will represent not less than a 30.27% interest in Twenty49. Twenty49 is expected to close another financing on or before May 31, 2019 such that, assuming exercise of all warrants, the Company would hold not less than a 34.84% interest. The warrants have an exercise price of $0.025, or $205,000 in total, and may be exercised until May 31, 2019.

The following data may provide some additional insights relative to the Companyôs operating performance and financial position:

	For the fiscal years ended:		
	June 2018	June 2017	June 2016
Total Revenues	3,686,132	3,754,883	4,211,885
Net loss from operations	(856,314)	(203,576)	(42,595)
Per share - basic	(0.046)	(0.014)	(0.004)
Net loss for the year	(883,756)	(497,881)	(42,553)
Per share - basic	(0.047)	(0.035)	(0.004)
Total assets	2,226,121	1,783,512	1,708,698
Total long-term financial liabilities	3,291	42,784	82,276
Total liabilities	783,898	862,688	661,368

	For the fiscal quarters ended:			
	Dec. 2018	Sept. 2018	June 2018	Mar. 2018
Total Revenues	1,097,839	966,483	1,010,852	729,743
Net income (loss) from operations	(73,351)	(104,184)	(12,076)	(741,021)
Per share - basic	(0.004)	(0.005)	(0.001)	(0.038)
Net income (loss) for the period	(87,749)	(116,203)	(29,583)	(750,957)
Per share - basic	(0.004)	(0.006)	(0.001)	(0.038)
Total assets	2,373,935	2,287,820	2,226,121	2,224,813
Total long-term financial liabilities	-	-	3,291	13,164
Total liabilities	1,004,124	956,800	783,898	753,008

Corporate Performance - continued

	For the fiscal quarters ended:			
	Dec. 2017	Sept. 2017	June 2017	Mar. 2017
Total Revenues	800,502	1,145,035	1,158,812	1,099,568
Net income (loss) from operations	(148,014)	44,797	60,350	33,568
Per share - basic	(0.008)	0.003	0.004	0.002
Net income (loss) for the period	(148,013)	44,797	(234,114)	33,569
Per share - basic	(0.008)	0.003	(0.014)	0.002
Total assets	1,399,349	1,662,504	1,783,512	1,954,654
Total long-term financial liabilities	23,037	32,911	42,784	52,656
Total liabilities	544,242	686,883	862,688	819,716

There were no cash dividends paid or accrued during any of the periods noted above.

Results of Operations

As noted previously, revenues for the recently concluded quarter were more than 37% greater than revenues for the corresponding period ended December 31, 2017. The gross margins realized during the quarter also rose, albeit at a slightly lesser rate. Gross margin percentage actually declined slightly from 29.6% in December 2017 to 28.1% for the quarter ended December 2018.

There has been pressure on gross margin percentages since the first quarter of the 2018 fiscal year which contributed to gross margins declining, in both amount and percentage, when comparing the six month periods ended December 31, 2018 and 2017. Although revenues rose just over 6% gross margins declined just over 6% as they fell from just over 30% of revenues to 27.3%.

To better understand these gross margin results one must look more closely at cost of product sales. The different elements of cost of product sales for the periods ended December 31are as follows:

Six month periods ended December 31	2018	2017	Change
Raw materials and supplies consumed	$ 1,021,701	$ 919,245	$ 102,456
Labour costs incurred	386,893	343,239	43,654
Depreciation	29,520	36,136	(6,616)
Other costs	66,355	50,508	15,847
Net change in finished goods and work in process	(3,835)	(7,682)	3,847
Total cost of product sales	$ 1,500,634	$ 1,341,446	$ 159,188

Three month periods ended December 31	2018	2017	Change
Raw materials and supplies consumed	$ 568,200	$ 338,576	$ 229,624
Labour costs incurred	187,157	161,085	26,072
Depreciation	14,760	18,068	(3,308)
Other costs	29,542	21,889	7,653
Net change in finished goods and work in process	(10,732)	23,563	(34,295)
Total cost of product sales	$ 788,927	$ 563,181	$ 225,746

Raw materials and supplies consumed have risen during each of the 2018 periods presented, negating a decline that arose during the first fiscal quarter of 2018. It is noted each period that these costs are incurred at our customersô discretion, since they also have the option of providing their own materials, and that this discretion contributes to inconsistent results, particularly when comparing individual quarters. When comparing the six month periods we see that material costs equated to 49.5% of periodic revenues in 2018 as compared to 47.2% in 2017. This results from increased utilization of this service by our customers as well as a negative impact from commodity-based pricing for material supplies. Management consistently promotes the benefits customers may derive from our provision of necessary materials, however management also has no control over this choice and recognizes that this frequently leads to cost variances, particularly over shorter time periods.

Results of Operations - continued

The cost of labour incurred in any given period is reflective of the Companyôs continual efforts to match, as closely as possible, labour supply with current and expected future demand. While there is no absolute correlation, it is quite common for labour supply to increase in periods when revenues increase. The 2018 increase however, is primarily driven by a legislated wage increase of almost 23% that was effective January 1, 2018. Management will continue efforts to ensure that labour costs are kept as low as possible without impeding the ability to increase supply in future periods, should it be required.

The net change in finished goods and work in process is a measure of the change in labour costs included in inventory and this must be combined with labour costs incurred to determine the total labour costs included in cost of product sales. It has been common for these aggregated labour costs to decline as a percentage of periodic revenues when material costs rise as a percentage of those same revenues. This general trend holds true for the quarter ended December 31, 2018 when labour costs equated to 16.1% of revenues while as compared to 23.1% of revenues at December 2017. The same is not true of the six month period however as 2018 labour costs rose from 17.2% to 18.6% even though material costs also rose as a percentage of revenues. This seemingly anomalous result arises as a consequence of having completed more labour intensive assemblies during the second quarter of 2017 as well as the impact of the legislated wage increase.

Depreciation is a function of time and the carrying value of the manufacturing equipment in use. No significant additions have been necessary since the end of the 2014 fiscal year so depreciation costs continued to decline. Management continually evaluates equipment needs and monitors the equipment market for opportunities, but there are no major equipment additions currently being investigated.

Other costs include repairs and maintenance, stencils and tooling, packaging, and freight costs net of amounts recovered. Each of these costs is incurred on an as-needed basis without any specific correlation with revenues. These costs are closely monitored and are within management expectations so they will not be further elaborated upon.

Selling, general and administrative expenses for the periods ended December 31 were as follows:

Six month periods ended December 31	2018	2017	Change
Employee and consultant compensation	$ 499,991	$ 455,391	$ 44,600
Occupancy costs	128,334	138,557	(10,223)
Professional fees	30,535	52,957	(22,422)
Shareholder services	16,494	17,181	(687)
Insurance	15,727	15,088	639
Other costs	27,082	31,946	(4,864)
Total selling, general and administrative	$ 718,163	$ 711,120	$ 7,043

Three month periods ended December 31	2018	2017	Change
Employee and consultant compensation	$ 253,632	$ 232,742	$ 20,890
Occupancy costs	59,965	64,554	(4,589)
Professional fees	15,876	43,742	(27,866)
Shareholder services	13,244	14,109	(865)
Insurance	7,799	7,670	129
Other costs	14,183	21,012	(6,829)
Total selling, general and administrative	$ 364,699	$ 383,829	$ (19,130)

Employee and consultant compensation costs, which include salaries, benefits, consulting fees, and independent directorsô fees, have risen almost 10% in comparison to the 2017 expenses. Most individual elements of this cost category were quite comparable from one period to the other, with the most notable exception being that the Company retained a new CEO effective July 3, 2018 and there was no similar fee in the 2017 period.

Results of Operations - continued

Occupancy costs consist primarily of rent, common area costs, and utility charges for the Companyǿs operating facility. Basic rental charges increased by 1.0% in January 2018. The remaining variance is due to fluctuations in utility rates and usage, property tax rates, and other common area costs associated with the facility and its lease. The Companyǿs operating facility lease runs through March 2021 and occupancy costs are expected to remain generally comparable throughout that lease term.

Professional fees are comprised of fees for legal services and a prorated portion of the estimated cost of the upcoming audit of the annual financial statements. Audit costs have remained consistent from 2017 to 2018. Legal fees however were higher than usual in 2017, not only as a consequence of additional corporate administration and governance services, but also because of diligence services made necessary by matters relating to the annual general meeting held December 17, 2017.

Shareholder services, insurance expense and other costs are all closely monitored, are within management expectations, and are reasonably consistent from period to period.

The costs of financing for the periods ended December 31 were as follows:

Six month periods ended December 31	2018	2017	Change
Interest expense ï long term	$ 896	$ 1,758	$ (862)
Interest expense ï other	4,975	609	4,366
Financing fees	8,963	-	8,963
Total financing expenses	$ 14,834	$ 2,367	$ 12,467

Three month periods ended December 31	2018	2017	Change
Interest expense ï long term	$ 387	$ 844	$ (457)
Interest expense ï other	2,487	142	2,345
Financing fees	5,758	-	5,758
Total financing expenses	$ 8,632	$ 986	$ 7,646

The Company has a single long-term debt instrument outstanding, being a commercial term loan used to finance a 2014 equipment acquisition. The term loan, which matures July 2019, has a declining balance as a result of monthly principal repayments, and this results in declining interest costs.

Interest expense ï other represents interest arising from the use of the Companyǿs operating line as well as miscellaneous interest charges incurred. During the first six months of 2018 the Company made relatively consistent use of its bank operating line while in 2017 there was virtually no utilization.

During the first fiscal quarter the Company entered into an agreement with a related party whereby it may offer to sell specific accounts receivable to that related party. If the related party accepts then they assume all collection risks associated with that receivable in exchange for a discount from the face value of the receivable. The resulting discount is accounted for as financing fees at the time of the sale.

Liquidity

At December 31, 2017, the Company had working capital of $264,055 (June 30, 2018 ï $281,753) and current financial assets of $634,115 (June 30, 2018 ï $479,621) available to settle current financial liabilities of $1,004,124 (June 30, 2018 ï $780,607). The Company also has access to a $250,000 bank operating line, of which $190,000 (June 30, 2018 ï $110,000) had been drawn as of December 31, 2018.

Liquidity - continued

In addition to satisfying the cost of operations, the Company must also address the settlement of the following obligations as at December 31, 2017:

	Due by Dec. 2019	Due by Dec. 2021	Due after Dec. 2023	Total Due
Long-term debt	$ 23,038	-	-	23,038
Operating lease	107,743	134,679	-	242,422
All obligations	$ 130,781	$ 134,679	$ -	$ 265,460

Capital Resources

The Company has a $250,000 commercial line of credit from which $190,000 (June 30, 2018 - $110,000) was drawn as at December 31, 2018. The loan bears interest at the TD Bank prime lending rate plus 2.5%, is due upon demand, and is secured by a general security agreement covering the assets of PEC.

In December 2018, the Company completed the first closing of a private placement transaction whereby it issued 440,000 working capital units for gross proceeds of $132,000. Each unit consisted of 1 common share and ½ common share purchase warrant. Each full common share purchase warrant entitles the holder to acquire 1 additional common share of the Company at a price of $0.40 until June 28, 2020. The Company paid findersô fees of $7,140, incurred other costs of $6,750, attributed a value of $27,859 to the common share purchase warrants, and issued 23,800 broker warrants valued at $5,294. Each broker warrant entitles the holder to acquire 1 common share of the Company for $0.30 until June 28, 2020.

In January 2019, the Company completed the final closing of the private placement transaction whereby it issued 340,000 working capital units for gross proceeds of $102,000. Each unit consisted of 1 common share and ½ common share purchase warrant. Each full common share purchase warrant entitles the holder to acquire 1 additional common share of the Company at a price of $0.40 until July 31, 2020. The Company paid findersô fees of $4,620, incurred other costs of $4,250, attributed a value of $23,377 to the common share purchase warrants, and issued 15,400 broker warrants valued at $3,682. Each broker warrant entitles the holder to acquire 1 common share of the Company for $0.30 until July 31, 2020.

Related Party Transactions

The Company had transactions during the period with key management personnel and with 1114377 Ontario Inc., a company controlled by the spouse of a Director of Permatech Electronics Corporation. These include consulting fees paid to Steve Smith (President and CEO), consulting fees and accounting fees paid to Michael D. Kindy (CFO), Directorsô fees paid to independent Directors of the Company and its subsidiary, salaries and benefits paid to Wojciech Drzazga(3) and John Perreault(4) as officers of the subsidiary, legal fees paid to a legal firm in which William R. Johnstone (Corporate Secretary) is a partner, financing fees paid to 1114377 Ontario Inc., and share-based payments related to key management personnel. Compensation rates are agreed to by the related parties and are predicated upon prevailing market rates. The following expenses, involving these related parties, have arisen during the reporting periods:

Six month periods ended December 31	2018	2017
Salaries and benefits (1)	$ 133,001	$ 135,659
Consulting fees (1)	90,719	51,381
Directorsô fees (1)	24,450	24,655
Legal fees (2)	18,035	34,861
Accounting fees (2)	1,750	3,500
Financing fees	8,395	-
Legal fees accounted for as share issuance costs	6,000	-
Cash based expenditures	$ 282,350	$ 250,056
Share-based payments	$ -	$ -

Related Party Transactions - continued

(1) Reported in the unaudited condensed interim consolidated financial statements as an element of employee and consultant compensation.
(2) Reported in the unaudited condensed interim consolidated financial statements as an element of professional fees.
(3) Wojciech Drzazga is CEO of Permatech Electronics Corp. and was also CEO of ZTEST until his resignation on June 15, 2018.
(4) John Perreault is President and COO of Permatech Electronics Corp. and was also President and COO of ZTEST until his resignation on December 19, 2017.

The following balances are due to related parties, and were reported in the unaudited condensed interim consolidated financial statements as an element of accounts payable and accrued liabilities, as at December 31 of each year:

	2018	2017
Salaries and benefits payable	10,669	9,378
Consulting and Director fees payable	262,957	116,200
Legal fees payable	30,336	29,471

The following stock options have been issued to Directors and/or Officers of the Company and were outstanding as at December 31, 2018:

Description	Expiry Date	Number of Shares
Stock options @ $0.05 per share	Mar. 3, 2021	400,000
Stock options @ $0.15 per share	Dec. 21, 2021	150,000
Stock options @ $0.95 per share	Jan. 12, 2023	600,000

During the period ended December 31, 2018, 150,000 options held by Directors and/or Officers were exercised and 150,000 expired. No new stock options were granted to Directors and/or Officers.

Convertible Instruments and Other Securities

The Company has the following securities issued and outstanding:

Common shares	Number of Shares	Amount
Common shares as at June 30, 2018	20,173,969	$ 23,215,877
Common shares issued on exercise of stock options	150,000	27,426
Common shares issued through private placement (1)	440,000	84,957
Common shares as at December 31, 2018	20,763,696	23,328,260
Common shares issued through private placement (1)	340,000	66,071
Common shares as at the date of this document	21,103,696	$ 23,394,331

(1) Reported net findersô fees, estimated legal and brokerage fees, and the value of warrants and broker warrants estimated using the Black-Scholes valuation model, using inputs currently available.

In addition to the common shares issued and outstanding the Company has issued share purchase warrants and stock options as incentives to various parties. The following list itemizes the common shares that have been reserved to satisfy the conversion of Class A shares and the exercise of warrants and options along with the expiry dates associated therewith.

Convertible Instruments and Other Securities - continued

Common shares reserved	Expiry Date	Number of Shares
Common shares to be issued for Class A shares [(1)]		8,246
Broker warrants @ $0.85 per share	Jan. 2019	43,750
Warrants @ $1.10 per share	Jan. 2020	312,500
Stock options @ $0.05 per share	Mar. 2021	400,000
Warrants @ $0.06 per share	Dec. 2021	2,900,000
Stock options @ $0.15 per share	Dec. 2021	200,000
Stock options @ $0.95 per share	Dec. 2021	600,000
Broker warrants @ $0.30 per share	June 2020	23,800
Warrants @ $0.40 per share	June 2020	220,000
Common shares reserved as at December 31, 2018		4,708,296
Broker warrants @ $0.30 per share	July 2020	15,400
Warrants @ $0.40 per share	July 2020	170,000
Common shares reserved as at the date of this document		4,893,696

(1) In the 2013 fiscal year, the Companyôs shareholders approved the issuance of 99,454 common shares in exchange for 100% of the Class A Special Shares outstanding. 8,246 common shares remain reserved to be issued if, and when, the remaining Class A shareholders identify themselves to the Company.

Fully diluted common shares	Number of Shares
Shares issued at December 31, 2018	20,763,696
Shares reserved at December 31, 2018	4,708,296
Fully diluted number of common shares at December 31, 2018	25,471,992
Shares issued through private placement	340,000
Shares reserved for warrants issued through private placement	170,000
Shares reserved for broker warrants issued through private placement	15,400
Fully diluted number of common shares at the date of this document	25,997,392

The following provides additional details with respect to stock options to the date of this document:

	Common Shares Under Option	Weighted Avg. Price / Option	Weighted Avg. Expiry Date
Balance, June 30, 2018	1,500,000	$ 0.43	Aug. 2, 2021
Exercised during the period	(150,000)	$ 0.10	Dec. 31, 2018
Expired during the period	(150,000)	$ 0.10	Dec. 31, 2018
Balance, December 31, 2018 and at the date of this document	1,200,000	$ 0.52	Mar. 26, 2022

As at the December 31, 2018 the following stock options, all of which were vested, were outstanding:

	Common Shares Under Option	Exercise Price	Expiry Date
Granted March 3, 2016	400,000 [(1)]	$ 0.05	Mar. 3, 2021
Granted December 21, 2016	150,000 [(1)]	$ 0.15	Dec. 21, 2021
Granted December 21, 2016	50,000	$ 0.15	Dec. 21, 2021
Granted January 12, 2018	600,000 [(1)]	$ 0.95	Jan. 12, 2023

(1) Directors and/or Officers of the Company hold these options.

The Company has no ability to cause these options to be exercised.

Convertible Instruments and Other Securities - continued

The following provides additional details with respect to share purchase warrants to the date of this document:

The following weighted average assumptions were used to calculate the fair value of the warrants issued during the period:

	Dec. 31 2018	Dec. 31 2017
Dividend yield	Nil	None issued
Risk free interest rate (%)	1.84	None issued
Expected stock volatility (%)	116.25	None issued
Expected life (years)	1.5	None issued

As at the December 31, 2018 the following share purchase warrants were outstanding:

	Number of Warrants	Exercise Price	Expiry Date
Issued Dec. 15, 2016	2,900,000	$ 0.06	Dec. 15, 2021
Issued Jan. 30, 2018	43,750	$ 0.85	Jan. 30, 2019
Issued Jan. 30, 2018 (1)	312,500	$ 1.10	Jan. 31, 2020
Issued Dec. 28, 2018	220,000	$ 0.40	June 28, 2020
Issued Dec. 28, 2018	23,800	$ 0.30	June 28, 2020

Subsequent to December 31, 2018 the Company issued the following share purchase warrants in connection with a private placement:

1. 170,000 warrants with an exercise price of $0.40 and expiring July 31, 2020.
2. 15,400 broker warrants with an exercise price of $0.30 and expiring July 31, 2020.

	Warrants	Weighted Avg Price/Warrant	Weighted Avg Expiry Date
Balance, June 30, 2018	3,256,250	$ 0.17	Aug. 22, 2021
Granted during the period	243,800	$ 0.39	June 28, 2020
Expiry date extended during the period	(312,500)	$ 1.10	Jan. 31, 2019
Expiry date extended during the period	312,500	$ 1.10	Jan. 31, 2020
Balance, December 31, 2018	3,500,050	$ 0.19	Aug. 25, 2021
Granted subsequent to the period	185,400	$ 0.39	Jul. 31, 2020
Balance, as at the date of this document	3,685,450	$ 0.17	Jul. 25, 2021

Changes in Accounting Policy

The Companyœs accounting policies will typically change only when there is a change in IFRS. Effective July 1, 2018 the Company has adopted:

- IFRS 9 Financial instruments, which uses a single approach to determine whether a financial asset is measured at amortized cost or fair value, replacing multiple rules in IAS 39
- IFRS 15 Revenue from contracts with customers, which replaces existing revenue standards and interpretations with a single standard and provides additional guidance on revenue recognition for contracts with customers.

IFRS 9 Financial instruments:

The approach in IFRS 9 is generally based on how an entity manages its financial assets in the context of its business model and the contractual cash flow characteristics of the financial assets. Impairment of financial assets is determined using a single impairment model that requires entities to recognize expected credit losses without requiring a triggering event to occur. The new impairment model applies to financial assets measured at amortized cost. IFRS 9 largely retains the existing requirements under IAS 39 for the classification and measurement of financial liabilities.

Changes in Accounting Policy - continued

This standard has been applied retrospectively, resulting in no changes to any amounts presented in prior periods.

We have assessed the classification and measurement of our financial instruments under IFRS 9, with reference to the former classification under IAS39, as follows:

Financial Assets	**IFRS 9**	**IAS39**
Cash	Amortized cost	Fair Value through profit and loss
Accounts receivable	Amortized cost	Loans and receivables
Financial Liabilities		
Bank indebtedness	Amortized cost	Other financial liabilities
Accounts payable and accrued liabilities	Amortized cost	Other financial liabilities
Customer deposits	Amortized cost	Other financial liabilities
Long-term debt	Amortized cost	Other financial liabilities

Amortized cost ï The amount at which a financial asset or financial liability is measured at initial recognition minus the principal repayments, plus or minus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount and, for financial assets, adjusted for any expected credit losses.

The effective interest method - The effective interest method is a method of calculating the amortized cost of a financial asset or liability and of allocating interest and any transaction costs over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts or payments through the expected life of the financial asset or liability to the net carrying amount on initial recognition.

IFRS 15 Revenue from contracts with customers:

IFRS 15 provides a definition of what constitutes a contract with customers as well as differentiating between changes to an existing contract and the commencement of a new contract. It also requires the determination of performance criteria which then trigger the recognition, subject to additional criteria, of revenue at various times throughout a contract or at the end of a contact. Revenue is to be recognized to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods and services.

This standard has been applied retrospectively, resulting in no changes to any amounts presented in prior periods, but it has resulted in modification of how the Companyôs revenue recognition policy is characterized. The new policy is described as follows:

Revenue recognition - Revenue is recognized when the Company has satisfied its performance obligations, the consideration to be received can be measured reliably, and the ability to collect is probable, which typically arises when the product is delivered.

Impairment of Non-financial Assets

At the end of each reporting period, the Company reviews the carrying amounts of its non-financial assets with finite lives to determine whether there is any indication that those assets have suffered an impairment loss.

Impairment of Non-financial Assets - continued

Where such an indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. The recoverable amount is the higher of an assetǿs fair value less cost to sell or its value in use. Fair value is determined as the amount that would be obtained from the sale of the asset in an armǿs length transaction between knowledgeable and willing parties. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is reduced to its recoverable amount and the impairment loss is recognized in the income for the period.

Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset in prior years. A reversal of an impairment loss is recognized immediately in income for the period.

The Company has assessed the assets of each of its operating entities and has determined that the fair value of its investment in Conversance Inc. *(note 5)* is not currently determinable resulting in an impairment provision of $294,562 to reduce the carrying value of the investment to $Nil.

Impairment of Investments

Non-controlling interests, which are not financial instruments, and are less than a 20% ownership interest, are considered impaired when its carrying amount exceeds its recoverable amount.

During the 2017 fiscal year the Company determined that the fair value of its investment in Conversance Inc. was not currently determinable resulting in an impairment provision of $294,562, to reduce the carrying value of the investment to $Nil.

Non-controlling interests, which are not financial instruments, and are equal to or exceeding a 20% ownership interest (an equity instrument) is considered impaired if, and only if, there is objective evidence of impairment as a result of one or more events that occur after the initial recognition of the asset (a 'loss event') and that loss event, or events, has an impact on the estimated future cash flows of the non-controlling interest that can be reliably estimated. Losses expected as a result of future events, no matter how likely, are not recognized.

Some items that may be taken into consideration in determining whether a loss event has occurred include significant financial difficulty of the investee, a breach of contract such as a default or delinquency in payments by the investee, it becomes probable that the investee will enter bankruptcy or other financial reorganization, or significant changes with an adverse effect that have taken place in the technological, market, economic or legal environment in which the investee operates, and such changes indicate that the cost of the equity instrument may not be recovered.

During the period ended December 31, 2018 the Company determined that no loss event had occurred and accordingly no test for impairment was completed.

Risk Factors

Events seemingly unrelated to the Company, or to its industry, may adversely affect its finances or operations in ways that are hard to predict or defend against. For example, credit contraction in financial markets may hamper the Companyǿs ability to access credit when needed or rapid changes in foreign exchange rates may adversely affect its financial results. Finally, a reduction in credit, combined with reduced economic activity, may adversely affect businesses and industries that constitute a significant portion of the Companyǿs customer base. As a result, these customers may need to reduce their purchases, or the Company may experience greater difficulty in collecting amounts due from them. Any of these events, or others caused by uncertainty in world financial markets, may have a material adverse effect on the Companyǿs business, operating results, and financial condition.

Risk Factors - continued

In addition to the foregoing, the Company is exposed to credit risk, concentration of credit risk, liquidity risk, and currency risk. The Companyös primary risk management objective is to protect earnings and cash flow and, ultimately, shareholder value. Risk management strategies, as discussed below, are designed and implemented to ensure that the Companyös risks and the related exposure are consistent with its business objectives and risk tolerance. There have been no changes to the risk management strategies during the current year.

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 Companyös primary exposure to credit risk is in its accounts receivable. To help mitigate this risk, management actively manages and monitors its receivables and obtains pre-payments where warranted. It has been determined that all outstanding amounts are collectible. No bad debts were recorded in the periods ended December 31, 2018 or December 31, 2017**.**

Concentration of credit risk

Concentration of credit risk arises when one or more customers, defined as a major customer, individually account for 10% or more of the Companyös revenues during a reporting period. During the six-month period ended December 31, 2018 the Company had 2 major customers who represented 13% and 10% of total revenues. In the comparative period, there were 2 major customer which represented 15% and 12% of revenues. Amounts due from major customers represented Nil% of accounts receivable at December 31, 2018 (Dec. 2017 - 8%). The loss of a major customer, or significant curtailment of purchases by such customer, could have a material adverse effect on the Company's results of operations and financial condition. The Company monitors the relationship with all customers closely and ensures that every customer is subject to the same risk management criteria.

Liquidity risk

Liquidity risk arises through the excess of financial obligations over available financial assets due at any point in time. At December 31, 2018 the Company had current financial assets of $634,115 (June 30, 2018 - $479,621) available to settle current financial liabilities of $1,004,125 (June 30, 2018 - $780,607). The Company manages its liquidity risk through the management of its capital which incorporates the continuous monitoring of actual and projected cash flows to ensure that it has sufficient liquidity to meet its operating commitments without incurring unacceptable losses or risking damage to the Companyös reputation.

Market risks

The Company is exposed to interest rate risk due to obligations that have floating interest rates as well as currency risk related to cash, accounts receivable, prepaid expenses, customer deposits, and accounts payable denominated in US dollars. Market risks give rise to the potential for future cash flows to fluctuate because of changes in interest rates or foreign exchange rates. Market risks are closely monitored and attempts are made to match foreign cash inflows and outflows. During the current six month period the Company realized a loss on foreign exchange in the amount of $5,786 (Dec. 2017 ï gain of $8,757).

Sensitivity to market risks

At December 31, 2018, the Company had:

- $23,037 (June 30, 2018 - $42,784) in long term debt and a bank operating loan in the amount of $190,000 (June 30, 2018 - $110,000) each of which bears interest predicated upon the TD Bank prime lending rate. The bank operating loan is revolving, meaning it may increase or decrease based on daily cash requirements. Based upon the current amount due on the operating loan, a 1% increase in the TD Bank prime lending rate, as at the financial reporting date, would result in additional interest expense ï long-term debt of $95 and interest expense ï other of $1,900 over the next 12 month period.
- US$102,502 (June 30, 2018 ï US$63,433) included in accounts receivable. A 5% increase in the value of the Canadian dollar relative to the US dollar would result in a reduction of $1,901 in future cash inflow.
- US$3,830 (June 30, 2018 ï US$4,634) included in prepaid expenses. A 5% increase in the value of the Canadian dollar relative to the US dollar would result in recognition of $71 in additional future expenses.
- US$9,584 (June 30, 2018 ï US$16,417 overdraft) included in cash or bank indebtedness. A 5% increase in the value of the Canadian dollar relative to the US dollar would result in a reduction of $178 in carrying value.

Risk Factors – continued

Sensitivity to market risks - continued

- US$136,028 (June 30, 2018 ï US$119,219) included in accounts payable. A 5% decrease in the value of the Canadian dollar relative to the US dollar would result in an increase of $2,523 in future cash outflow.
- US$15,998 (June 30, 2018 ï US$27,879) included in customer deposits. A 5% decrease in the value of the Canadian dollar relative to the US dollar would result in an increase of $297 in future cash outflow.

Based upon observations of recent market trends management believes that each of these outcomes is possible but most likely exceed the Companyõs immediate market risk exposures.

Forward-looking Information

Certain statements in this MD&A may constitute ñforward-lookingò statements that involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company and its subsidiary, or the industry in which they operate, to be materially different from any future results, performance or achievements expressed or implied by such forward-looking statements. When used in this report, the words ñestimateò, ñbelieveò, ñanticipateò, ñintendò, ñexpectò, ñplanò, ñmayò, ñshouldò, ñwillò, the negative thereof or other variations thereon or comparable terminology are intended to identify forward-looking statements.

Such forward-looking statements reflect the current expectations of the management of the Company with respect to future events based on currently available information and are subject to risks and uncertainties that could cause actual results, performance or achievements to differ materially from those expressed or implied by those forward-looking statements, such as reduced funding, long sales cycles, currency and interest rate fluctuations, increased competition and general economic and market factors and including the risk factors summarized above under the heading ñRisk Factorsò. New risk factors may arise from time to time and it is not possible for management of the Company to predict all of those risk factors or the extent to which any factor or combination of factors may cause actual results, performance or achievements of the Company to be materially different from those expressed or implied in such forward-looking statements.

Given these risks and uncertainties, readers should not place undue reliance on forward-looking statements as a prediction of actual results. Although the forward-looking statements contained in this MD&A are based upon what management believes to be reasonable assumptions, the Company cannot assure readers that actual results will be consistent with these forward-looking statements. The forward-looking statements contained in this MD&A speak only as of the date hereof. The Company does not undertake or assume any obligation to release publicly any revisions to these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events, except as required by law.