TINKERINE STUDIOS LTD.

MANAGEMENT DISCUSSION AND ANALYSIS

For the year ended December 31, 2016

Ditto™ Pro 3D Printer & Tinkerine U online 3D content

MANAGEMENT DISCUSSION AND ANALYSIS

FOR

Tinkerine Studios Ltd. ("the Company")

President's Message

For Tinkerine, 2016 was a year that we focused on the core of our business and ensured that we continued building our knowledge base of how our products and services are leveraged by our customers.

Looking at the core of our business, we have made significant changes, optimized operational efficiency, and have implemented initiatives to lower operating cost while focusing on the top line of our business. An emphasis on sales and moving the Company towards profitability will continue to be the objective that we set up for 2017.

On the technologies. The technology platforms that we have built, namely Tinkerine U, continues to gain recognition in the education sector and the training of 3D technology and the skillsets for K-12 in 2016. With the vision "*The place to learn all things 3D"* in place, we are building the platform with the framework that emphasizes knowledge, resource, and execution transfer to the educators. Our corporate vision comes with the necessity to understand the challenges that our customers are facing, not only on the surface, but on a level that is fundamental to their workflow. It's this knowledge that allow us to move forward as a company in collaboration our customers.

At the end of 2016, there was a setback for the company over a dispute on payment terms with a distributor. We determined that it was best for the company to reverse the order, instead of utilizing scarce resources, money and time, to resolve the issues and therefore we chose to focus on building our top line.

Staying on our vision

To achieve our long-term vision, the team at Tinkerine evaluates every decision based on the premise of our vision, namely to simplify the tools, expand the human mind, and to allow for new creations to emerge. These ideas create the framework of our everyday activities, and with this framework as a basis, we have developed exciting plans for 2017. We have expanded our Sales team and education channels, with emphasis on the education market in North America. We are developing partnerships and collaborating with institutions and industry partners to further strengthen our position as the leaders in the 3D printing space for education and content. These efforts will require us to stay focused, to walk in the shoes of the customers using our products, and invest in areas that continue to bring value to them.

As we execute on our strategy, I would like to thank the shareholders for their continued support. Also, thank you to the dedicated team at Tinkerine for the execution of our strategies.

Please look forward to future developments and regular updates and developments.

Management's Discussion and Analysis of the Financial Position and Results of Operations

May 1, 2017

The following discussion and analysis regarding the financial position and results of operations provides information of the operations and financial results of Tinkerine Studios Ltd. ("the Company") that the management believes is relevant for the review, assessment and understanding the Company's audited consolidated financial statements for the year ended December 31, 2016 ("2016"). The Management's Discussion and Analysis (MD&A) should be read in conjunction with the audited consolidated financial statements, and the accompanying notes.

Background and Description of the Business

Tinkerine Studios Ltd is one of Canada's largest designer, producer and distributor of 3D printers, with its innovative software and through TinkerineU supports the growing related online educational content market.

Tinkerine designs, manufactures and distributes 3D printers in Canada, USA and to the APAC region. The Company's product offering is the Ditto, Litto and Ditto Pro which are well priced in each segment of the market and are gaining a reputation for quality 3D printers and innovative and high quality educational support.

The financial information in this MD&A is based on the Company's audited consolidated financial statements hat have been prepared in Canadian dollars, in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB") and the interpretations of the International Financial Reporting Interpretations Committee ("IFRIC").
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Non-IFRS Measures
The accompanying audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) in Canadian dollars. Certain supplementary information and measures not recognized under IFRS are also provided in this MD&A where management believes they assist the reader in understanding Tinkerine's results. These measures, are calculated by Tinkerine on a consistent basis unless otherwise specifically explained. These measures are further explained as follows:

EBITDA – means net earnings or losses before interest, taxes, depreciation, amortization, foreign exchange gains and losses and stock-based compensation. EBITDA is a metric used to assess the financial performance of an entity. Management believes that this metric assist in determining the ability of the Corporation to generate cash from operations.

Cash flow from operations – means cash flow from operations before changes in non-cash operating working capital. This measure is not intended to be an alternative to cash provided by operating activities as provided in the consolidated statements of cash flows, comprehensive income or other measures of financial performance calculated in accordance with IFRS. Cash flow from operations assists management and investors in analyzing operating performance and leverage.

Overview and Highlights

The Company's principal business is the design, manufacture and distribution of 3D printers, software and related online educational content. It is also the exclusive supplier of the filament that is used in the printer. Through 2016 the Company continued to reduce its expenses, re-launched TinkerineU, the Company's education platform and focused on its core business.

Specific highlights of the Company's activities for the year ended December 31, 2016 include:

- The TinkerineU content platform was re-launched in July with new features including professional development courses and challenges that provides educators, students and consumers with 3-D printer training, lesson plans and a forum to share content and best practices and be the primary marketing tool for Tinkerine;
- Integrated Tinkerine Studios 3-D printing software with other applications
- Launched Ht filament and limited series filament

- Maintained a commitment to Research & Development (“R&D”) in both hardware and content/software

SELECTED ANNUAL INFORMATION

	Year ended December 31, 2016	Year ended December 31, 2015	**Year Ended December 31, 2014**
Revenue	$847,188	$1,268,074	$342,839
Net Loss	($809,888)	($1,170,991)	($1,650,513)
Net and Comprehensive Loss	($833,133)	($1,069,447)	($2,700,252)
Basic and Diluted Loss per common share	-0.02	-0.03	-0.09
Number of shares outstanding (weighted avg.)	48,738,349	42,422,634	31,031,288
Total Assets	$783,077	$1,000,355	$1,982,621
Total long term liabilities	-	-	-

Earnings before interest, taxes, depreciation, amortization, foreign exchange gains and losses and stock- based compensation (EBITDA) decreased to a loss of $625,421 from a loss of $924,574 in 2015.

The Company’s net loss for 2016 decreased to $809,888 compared to the net loss of $1,170,991 in 2015, an improvement of $361,103 for the year. This improvement is attributable to the cost measures implemented to decrease our controllable expenses and our total cash expenses to approximately $970,220 in 2016 from $1,604,254 in 2015, a decrease of $634,034.

RESULTS OF OPERATION

1. Revenue

Revenue was $847,188 for the year ended December 31, 2016 (“2016”) versus $1,268,074 for the year ended December 31, 2015 (“2015”), a decrease of $420,886. The decrease in sales is due to the reversal of a sale booked in the third quarter to a distributor, as the result of a contract dispute over the payment terms, after they had signed the distributor agreement, and the printers had been shipped to their warehouse. The sales return, based on their purchase order, was booked in December 2016 and the order shipped back to Tinkerine. In the 4th quarter the Company, based on the analysis of the 2016 sales revenue, decided to pivot and focus its sales activity on the education channel as 80% of the 2016 sales revenue was generated by that channel. In quarter one of 2017, the Company will roll out a comprehensive national education program.

For 2016, revenue was represented by 78,8% hardware printer sales (2015 – 79.5%), 16.8% filament (2015 – 15.5%) and 4% services/miscellaneous (2015 – 5%). We experienced a 5% advance in the proportion of sales attributable to filament due to initial stocking activities by some of our newer dealers.

For 2016 revenue was represented by geographic segment as follows: Canada – $479,989, United States – $336,457 and Other - $30,742 versus geographic segmented sales in 2015 of Canada – $485,672, United States – $696,173 and Other – $86,229. While the Canadian market remained the same year over year, both the US market and the Other market generated a combined lower revenue of $367,199 in 2016 versus $782,402 in 2015, a reduction of 53%. The lower revenue in both the US and Other markets were due to changes in management and business focus in two of our key distributors in the US and Asia.

The number of 3D printers sold in 2016 was represented by the sale of 367 3D printers compared to 609 3D printers sold in 2015

2. Gross Profit Margin

Gross profit for 2016 to $370,669 or 43.7% versus $595,230 or 46.9% for 2015. Within the Statement of Comprehensive Income we also show margins that would be excluding production training and start-up costs incurred from mid-2014 to mid-2015 and expensed to cost of sales. Such gross profit margins would be 53% for 2015 and we believe these margin levels are reflective of those we can achieve moving forward if we operate near full capacity

3. Expenses

In 2016 the Company incurred $1,180,557 of total expenses compared to $1,766,221 in 2015, a reduction of $585,664 in total expenses. The Company has implemented measures to decrease its controllable expenses and the total cash expenses to approximately $970,220 in 2016 from $1,604,254 in 2015. We will continue to review departmental budgets and corporate spending in all areas and these are further discussed below.

Highlighted quarterly expenses include the following:

- Remuneration and benefits was lower at $395,289 for 2016 versus $657,446 for 2015, a reduction of $262,157.Staffing levels were adjusted in all functional areas, including the adjustment in business development and investor relations staff. Also, the Chief Financial Officer was internally replaced in January 2016 by one of the founders, Justin Sy who is now the interim Chief Financial Officer.
- Stock based compensation was $134,654 in 2016 versus approximately $110,268 in 2015. This is a non-cash expense and represents the fair value of stock options granted and outstanding using the Black Scholes calculation. Under IFRS, the expense is recognized as the options vest each quarter with a larger proportion of the expense recognized in earlier quarters. In the 1st quarter, 2016, the directors passed a resolution to amend the exercise price on all 2,425,000 issued options to $0.075. Also in quarter one, key employees were issued with a total of 1,060,000 share options at the exercise price of $0.075. In quarter two, key personnel were issued with a total of 1,195,000 share options at the exercise price of $0.075.
- Professional and consulting fees were $181,327 in 2016 versus $270,350 in 2015. During 2016, we continued to review consulting costs particularly expenses related to consultant and investor relations. The Company regularly engages independent contractors for accounting services, R&D, channel management and investor relations. We regularly engaged legal counsel for intellectual property matters, employment law and general commercial matters and expect the Company's 2017 expenses to be approximately the same.
- Product promotion, trade shows and travel was $28,077 in 2016 versus $169,900 in 2015. We amended our trade show strategy and focused on selective trade shows where key metrics including leads and attendee demographic and specific to educational focused industry versus expense were used to determine participation in the trade show. These costs predominantly relate to marketing, branding, advertising and attending trade shows and while we strive to maintain meaningful marketing activities each quarter such costs are not incurred evenly from period to period but are based on the timing of the trade show.
- Research & development was $116,722 in 2016 versus $133,808 in 2015. During 2016 we engaged a design contractor and hired an additional employee for hardware and software R&D.
- Rent and utilities were $122,755 for 2016 versus $116,502 in 2015, and reflects the increase in the basic rent rate as per the last year of the lease contract. In December 2016, the Company moved its offices from 341 West 6th Avenue Vancouver BC, to 213A 92nd Street Delta BC. The location is situated in an area for better distribution and the layout of the premises is designed for greater work flow and productivity for both production of the 3D printers and design of the TinkU and other educational initiatives.

4. Other Income and Expenses

In 2016, the Company incurred $19,000 and $4,245 (2015 - $Nil and $Nil) in loss on write-off of inventory and loss on disposal of assets, respectively. During 2015 the Company completed a research and development project that was partially funded by the National Research Council of Canada for which we recognized grant income of $50,000.

LIQUIDITY

As at December 31 2016, the Company had net working capital of $410,916 compared to $718,159 at December 31, 2015. Our cash position was $41,601 at December 31, 2016 compared to $200,748 at December 31, 2015. There was an injection of funds of $330,000 from the private placement in March 2016 and April 2016.

As at December 31, 2016 the Company's investment in inventory was $443,927 with inventory Finished Goods being $268,485 compared to Finished Goods of $257,340 at December 31, 2015. Prepaid and Deposits were $57,159 at December 31, 2016 versus $40,023 in December 31, 2015. These payments are with respect to overseas supplier prepayment of raw material purchases.

At the time of release of this MD&A, the Company's cash position had improved to $107,260 and management believes the Company is presently operating with adequate working capital, it may require further injection of capital to continue a steady expansion of its business over the coming months. While our cash position is somewhat tight we believe we can manage our existing operations with the existing working capital. However, any unforeseen downturn in sales or, alternatively, pursuit of a more aggressive growth strategy would necessitate further equity investment.

CAPITAL RESOURCES

As at December 31, 2016, the Company's share capital was $4,329,369 representing 49,238,349 issued and outstanding common shares without par value. In March and April 2016, 6,600,000 common shares were issued at $0.05 in a private placement. Also, 6,600,000 warrants were issued on a one for one basis as part of the same private placement. Reserves represent the fair value of stock options outstanding and vested and warrants issued, is recorded at $380,088. The net increase of approximately $13,508 in reserves during fiscal 2016 is the difference of the calculated charge for Stock-based Compensation of $134,654 and the reversal of $121,146 for stock options that were cancelled during the year.

As at December 31, 2016 the Company has 3,955,000 stock options outstanding with a weighted average exercise price of $0.075 and an average remaining term of 3.51 years. Warrants outstanding include 6,600,000 at $0.10 which expire in March 2018.

The Company has no debt facilities and no off balance sheet arrangements.

Management believes current cash resources are likely insufficient to fund its business plan over the next twelve months and therefore may seek further equity injection.

OUTSTANDING SHARE INFORMATION

The Company's authorized capital is unlimited common shares without par value. As at December 31, 2016, the following common shares, options and share purchase warrants were outstanding:

As December 31, 2016	Number of Issued and outstanding
Common Shares	49,238,349
Stock Options	3,955,000
Warrants	6,600,000
	59,793,349

TRANSACTIONS WITH RELATED PARTIES

Balances due to related parties are unsecured, non-interest bearing and have no fixed terms of repayment. Included in trade payables at December 31, 2016 is $8,430 (December 31, 2015 - $11,546) due to officers. These amounts were for company expenses paid by the officers. Included in Prepaids and Deposits is an amount of $2,435 that has been paid to a director

Key management personnel compensation

During the year ended December 31, 2016, the officers of the Company were paid salaries or independent contractor fees as follows: Eugene Suyu, CEO, $15,500 (2015 -$45,000); Justin Sy, CFO, $21,625 (2015 - $42,000). and Todd Blatt, VP Market Direction, $6,940 (2015: $32,200). In aggregate directors and officers received stock-based compensation of $38,076 in 2016 (2015: $25,358).

Officers and directors

The following individuals were elected director at the June 24, 2016 AGM and continue to the date of this MD&A. The board changes include the appointment of Mr. Bob Longo as Director and the resignation of Martin Burian as Director and CFO effective February 19th, 2016.

- Desmond Liew -- Chairman and Director
- Eugene Suyu -- Chief Executive Officer, President and Director
- Justin Sy – Director and iCFO
- Todd Blatt -- Director and Vice-President of Market Direction
- Bob Longo - Director

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements as at December 31, 2016 and to the date of this MD&A.

CHANGES IN ACCOUNTING POLICIES

The preparation of the annual financial statements and related MD&A have been prepared in conformity with IFRS requires estimates and assumptions that affect the amounts reported in these financial statements. Accounting policies for the current and comparative years have been prepared consistently with those applied and disclosed in the Company's annual audited financial statements.

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A on April 27, 2017

ADDITIONAL INFORMATION

Additional information relating to the Company is on SEDAR at www.sedar.com.

CAUTION REGARDING FORWARD-LOOKING INFORMATION

The MD&A contains forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable Canadian and US securities legislation. These statements relate to future events or the future activities or performance of the Company. All statements, other than statements of historical fact are forward-looking statements. Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate and similar expressions, or which by their nature refer to future events. These forward looking statements include, but are not limited to, statements concerning:

- the Company's strategies and objectives, both generally and in respect of its existing business and planned business operations;

- the Company's plans to grow sales and expand its distribution network;

- the Company's future cash requirements;

- general business and economic conditions;

- the Company's ability to meet its financial obligations as they come due, and to be able to raise the necessary funds to continue operations; and,

- the timing, pricing, completion, regulatory approval of proposed financings if applicable.

Although the Company believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Inherent in forward looking statements are risks and uncertainties beyond the Company's ability to predict or control, including, but not limited to, risks related to the Company's ability to raise the necessary capital or to be fully able to implement its business strategies, and other risks identified herein under "Risk Factors".

The Company cautions investors that any forward-looking statements by the Company are not guarantees of future performance, and that actual results are likely to differ, and may differ materially, from those expressed or implied by forward looking statements contained in this report. Such statements are based on a number of assumptions, which may prove incorrect, including, but not limited to, assumptions about:

- general business and economic conditions;
- conditions in the financial markets generally, and with respect to the prospects for small capitalization commercial/technology companies specifically;
- the Company's ability to roll out is business plan which includes new product launches and associated planning in production, sales, distribution and marketing;
- the Company's ability to secure and retain employees and contractors to carry out its business plans;

These forward-looking statements are made as of the date hereof and the Company does not intend and does not assume any obligation, to update these forward-looking statements, except as required by applicable law. For the reasons set forth above, investors should not attribute undue certainty to or place undue reliance on forward-looking statements.

Historical results of operations and trends that may be inferred from the following discussion and analysis may not necessarily indicate future results from operations.

BUSINESS RISK FACTORS

Each of the following factors could have a material adverse effect on the Company's financial condition and results of operations.

3D Printing Industry*:* The Company operates in the desktop market (alternatively described as the consumer segment) of the 3D printing industry. The desktop market has existed since 2008. Although projected to grow at a high rate, this segment can be viewed as being an early adopter stage market. The ability for the Company to successfully negotiate this market represents a substantial risk.

New Product Launch*:* The Company has launched three generations of products since its inception in May 2012. Additionally, the Company is investing in software development and the development of online courses and curriculum for the education sector. The ability to manage such product launches in a timely and cost effective manner, and achieve the desired results in terms of market penetration, comprises a substantial risk

Dependence upon key personnel: The success of the Company's operations will also depend upon its ability to attract and retain talented and qualified personnel. The Company currently has a small management team, several of which can be considered key to expanding the Company's business operation, the loss of which would likely be detrimental to the Company.

Competition: The desktop market of the 3D printing industry is competitive with several direct competitors having much greater financial resources than the Company and operating experience. Furthermore, the desktop market is undergoing a period of rapid innovation with many of the participants striving to improve the technology and the flexibility of the products. These factors combine to make the competitive environment a substantial risk.

Financing risks: The Company's existing financial resources have come from the issue of new equity and, may be viewed as limited. Further the Company has negative operating cash flow and a cash balance of $41,601 as at

December 31, 2016 Therefore, without growth in operating cash flow the Company will require further equity capital injection(s) to sustain itself. There can be no assurance that the Company will be able to obtain adequate financing in the future or that the terms of such financing will be favorable.

Dilution to the Company's existing shareholders: Any future equity issues may be dilutive to present and prospective holders of common shares.

***Regulatory requirements*:** The activities of the Company are subject to regulations governing various matters, including but not limited to standards and certifications for electronic devices, employment standards for employees engaged in manufacturing and assembly, export and import regulations and duties, and sales and goods and service tax compliance. While the Company endeavors to remain compliant in all such aspect, the inability to do so could have an adverse effect on its ability to continue to operate.

Foreign currency risk: The Company's functional and reporting currency is the Canadian dollar. The Company incurs foreign currency risk on purchases that are denominated in a currency other than the functional currency of the Company, which will have an impact on the profitability of the Company and may also affect the value of the Company's assets, liabilities and the amount of equity. The Company's main risks are associated with fluctuations in the US dollar as a substantial portion of its parts and materials purchases are denominated in US dollars and a portion of its sales are denominated in US dollars. The Company does not utilize foreign exchange hedging contracts.

REGISTERED OFFICE

1500-1055 West Georgia Street
Vancouver, British Columbia, Canada
V6E 4N7

HEAD OFFICE and OPERATIONS

Tinkerine Studios Ltd.
113A 8275 92 Street
Delta, British Columbia, Canada
V4G 0A4

OFFICERS & DIRECTORS

Eugene Suyu
Director and CEO

Justin Sy
Director and interim CFO

Todd Blatt
Director and VP Market Direction

Desmond Liew
Chairman of the Board

Bob Longo
Director

LISTINGS

TSX Venture Exchange: TTD.V
OTC Pink: TKSTF
FSE: WB6B

CAPITALIZATION
(as at December 31, 2016)

Shares Issued: 49,238,349

TRANSFER AGENT
Computershare
3rd Floor, 510 Burrard Street
Vancouver, British Columbia
V6C 3B9

AUDITOR
Dale Matheson Carr-Hilton LaBonte LLP
1500 – 1140 West Pender Street
Vancouver, British Columbia
V6E 4G1

LEGAL COUNSEL
McMillan LLP
Royal Centre
1500-1055 West Georgia Street
Vancouver, British Columbia
V6E 4N7