



TINKERINE STUDIOS LTD.

MANAGEMENT DISCUSSION AND ANALYSIS

For the year ended December 31, 2015



Ditto™ Pro 3D Printer

Form 51-102F1

MANAGEMENT DISCUSSION AND ANALYSIS

FOR

Tinkerine Studios Ltd. (“the Company”)

This management discussion and analysis of financial position and results of operations (“MD&A”), prepared as of February 26, 2016, provides an analysis of the operations and financial results of Tinkerine Studios Ltd. (“the Company”) for the year ended December 31, 2015, and should be read in conjunction with the audited consolidated financial statements for the year ended December 31, 2015.

The Company's primary business is the design and distribution of 3D printers, software and related online educational content.

On April 4, 2014, Tinkerine Studio Ltd. and White Bear Resources Inc. (“White Bear”), a TSX Venture listed company, completed a share exchange transaction which resulted in a reverse take-over (“RTO”) transaction. Under the RTO, White Bear acquired all of the securities outstanding in Tinkerine Studio Ltd. and it became a wholly owned operating subsidiary of White Bear and the shareholders of Tinkerine Studio Ltd. acquired control of White Bear. Immediately following the RTO White Bear changed its name to Tinkerine Studios Ltd. and the acquired operating entity changed its name to Tinkerine 3D Print Systems Ltd. For financial statement presentation Tinkerine Studio Ltd. is considered the continuing entity.

The financial information in this MD&A is derived from the Company's audited consolidated financial statements which have been prepared in Canadian dollars, in accordance with International Financial Reporting Standard (“IFRS”) as issued by the International Accounting Standards Board (“IASB”) and the interpretations of the International Financial Reporting Interpretations Committee (“IFRIC”).

This discussion contains forward-looking statements that involve risks and uncertainties. Such information, although considered to be reasonable by the Company's management at the time of preparation, may prove to be inaccurate and actual results may differ materially from those anticipated in the statements made.

CAUTION REGARDING FORWARD-LOOKING INFORMATION

This 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 offer new products and services;
- 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;
- 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 MD&A. 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 continue to roll out its 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. In particular, up to April 4, 2014, the Company was operating as a private company with constrained resources and such period forms approximately one quarter of the comparative year to December 31, 2014. Accordingly, drawing trends from the Company's limited operating history is difficult.

OVERALL PERFORMANCE

The Company's principal business is the design and distribution of 3D printers, software and related online educational content. Through 2015, the Company's focus continued to be the commercial roll out of its Ditto™ Pro 3D printer and establishment of a dealer network for this product.

Specific highlights of the Company's activities for the year ended December 31, 2015 include:

- Achieved a 270% increase in 2015 revenue over 2014 revenue;
- Successfully implemented a dealer network for the Ditto Pro product with good coverage of the Canadian and USA markets;
- Made the initial launch of Tinkerine U content delivery platform which provides educators, students and consumers with 3D printer training, lesson plans and a form to share digital files.
- Maintained a commitment to research and development in both hardware and content/software.

SELECTED ANNUAL INFORMATION

	Year ended December 31, 2015	Year Ended December 31, 2014	Year Ended December 31, 2013*
Revenue	\$1,268,074	\$342,839	\$122,739
Net Loss	(\$ 1,170,991)	(\$1,650,513)	(\$72,202)
Net and Comprehensive Loss	(\$1,069,447)	(\$2,700,252)	(\$72,202)
Basic and Diluted Loss per common share	(0.03)	(0.09)	(\$0.01)
Number of shares outstanding (weighted avg.)	42,422,634	31,031,288	7,068,493
Total Assets	\$1,000,355	\$1,982,621	\$128,912
Total long term liabilities	-	-	-

RESULTS OF OPERATIONS

1. Revenue

Revenue was \$1,268,074 for the year ended December 31, 2015 ("2015") versus \$342,839 for the year ended December 31, 2014 ("2014"). This increase in sales is due to the continued ramp-up of production and sale of our Ditto Pro product through 2015, whereas in 2014 this product was introduced mid-year. Within the context of our overall business expansion plan, 2014 sales were constrained by the configuration of our larger production facility and training of our initial production staff. 2015 sales have been positively influenced by the establishment of our dealer network for the Ditto Pro, particularly in the United States and Canada. Our dealer network still requires expansion in certain regions of the USA and Canada and also internationally. We will continue this initiative in 2016.

For 2015, revenue was represented by 79.5% hardware sales (2014 - 87%), 15.5% filament (2014 - 9%) and 5% services/miscellaneous (2014 - 4%). In 2015 filament (the plastic consumable) sales were positively affected by our growing installed base of printers and also initial stocking activities by some of our dealers. In 2015, the Company sold 609 3D printers, versus 183 in 2014.

2. Gross Profit Margins

Gross profit for 2015 was \$595,230 or 47% versus \$151,312 or 44% for 2014. Within the Statement of Comprehensive Income we also show what margins 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 54% for 2014 and we believe these margin levels are reflective of those we can achieve moving forward if we operate near full capacity.

In 2015, our gross profit margins were positively affected by the weakness of the Canadian dollar relative to the US dollar. Sales in the United States and internationally are denominated in US dollars and such sales made up

approximately 62% of total sales in 2015 (see Segmented Information note to the December 31, 2015 Financial Statements).

3. Expenses

In 2015 the Company incurred \$1,766,221 of total expenses compared to \$1,801,825 in 2014.

Highlighted expenses include the following:

- Remuneration and benefits was \$657,446 for 2015 compared to \$487,434 in 2014. The number of employees for non-production staff were similar through 2015 and in the latter three quarters of 2014, whereas employee remuneration was minimal in Q1 2014.
- For 2015 stock-based compensation was \$110,268 versus \$498,080 in 2014. 2015 was much lower as only a small number of stock options were granted in the year compared to 2014 when a larger proportion of stock options were granted and began vesting. Stock-based compensation is a non-cash expense and represents the fair value of stock options granted using a 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.
- Professional and consulting fees were \$270,350 versus \$323,535 for 2014. 2014 fees were somewhat higher due to the completion of the Company's RTO. The Company regularly engages independent contractors for accounting services, R&D, channel management and investor relations. In mid-2015, we curtailed certain investor relations activities and have maintained them at lower levels moving into 2016. In 2014 and 2015, we regularly engaged legal counsel for intellectual property matters, employment law and general commercial matters and expect the Company's need to seek legal advice to be lower moving into 2016.
- Product promotion and travel was \$169,900 in 2015 versus \$183,129 in 2014. These costs predominantly related to marketing, branding and advertising for the Ditto Pro product. Every year we attended several trade shows in this effort.
- Shareholder communications, filing fee and transfer agency costs totaled \$189,087 for 2015 versus \$118,853 for 2014. Such costs relate to maintaining the Company's listing and public company status. We held an annual general meeting in June 2015 whereas in 2014 it was earlier in the period and formed part of our RTO costs. Also in 2015, we had a full year of news releases and related costs, an area we intend to incorporate some cuts in 2016.
- Research & development was \$133,808 in 2015 versus \$49,734 in 2014. Through 2015 we engaged an additional contractor and hired an additional employee for hardware and software R&D of which \$50,000 was funded by a research grant (see Other Items below).
- Rent and utilities were \$116,502 for 2015 versus \$66,905 in 2014, and reflects a full year's rent versus approximately 7 months in 2014.

3. Other Items

In early 2015 we conducted a research initiative partially funded by the National Research Council of Canada for \$50,000. Also during 2015 we derecognized a \$46,536 account payable that had existed in the public company for several years. For 2014, the Transaction Costs of \$1,061,174 represents the calculated cost of completing the RTO and Share Exchange and is a non-cash item.

SUMMARY OF QUARTERLY INFORMATION

	Quarter ended:			
	"Q4 2015" December 31, 2015	"Q3 2015" September 30, 2015	"Q2 2015" June 30, 2015	"Q1 2015" March 31, 2015
Revenue	\$348,756	\$465,780	\$344,986	\$108,552
Net Income (Loss)	(163,702)	(138,589)	(340,076)	(528,624)
Net Comprehensive Income (Loss)	(117,166)	(138,589)	(338,665)	(475,027)
Basic and Diluted Loss per share	(0.01)	(0.01)	(0.01)	(0.01)
Number of shares outstanding (w. avg.)	42,638,349	42,548,349	42,507,690	42,026,505
	"Q4 2014" December 31, 2014	"Q3 2014" September 30, 2014	"Q2 2014" June 30, 2014	"Q1 2014" March 31, 2014
Revenue	\$103,682	\$98,896	\$54,603	\$85,655
Net Income (Loss)	(\$512,791)	(\$536,382)	(\$609,564)	8,224
Net Comprehensive Income (Loss)	(\$507,727)	(\$531,210)	(\$1,669,539)	\$8,224
Basic and Diluted Loss per share	(0.01)	(0.01)	(\$0.04)	\$0.00
Number of shares outstanding (w. avg.)	41,966,751	41,769,005	41,660,733	12,000,000

Summary and Discussion of Quarter to Quarter results

Significant increases in revenue were achieved in Q2 2015 and later quarters due to the implementation of our dealer network for the Ditto Pro. Up until Q1 2015 production of the Ditto Pro model was constrained by our commissioning of the new Vancouver assembly facility late in 2014, as well as the training of our initial group of production employees from Q3 2014 through to Q2 2015. The Company intends to appoint additional dealers in 2016 and to continue to build out of dealer network in order to further expand sales.

The Company's net loss from Q2 2014 to Q1 2015 had been running \$500,000 to \$600,000 per quarter due to investing in the roll out of our overall business, while not yet enjoying material revenue. In Q2 2015 the Company had a material increase in sales while maintaining a similar level of expenses to previous quarters. In Q3 and Q4 2015 the Company decreased certain discretionary expenses while sales maintained at Q2 levels or higher, and therefore the Company decreased its net loss to \$135,000 to \$165,000 in each of Q3 and Q4 2015.

Moving forward into early 2016 quarters, the Company plans to maintain expenses at similar levels to Q3 and Q4 2015, while endeavoring to add more dealers to our network and further expand sales.

LIQUIDITY AND OUTLOOK

As at December 31, 2015, the Company had working capital of \$718,159 (2014 – \$1,578,660) and a cash position of \$200,748 (2014 – \$1,471,072).

More instructive than the year over year comparison is comparing the last few quarters of 2015, as the Company is at a critical juncture in its evolution.

	<u>Working capital</u>	<u>Cash</u>
Q2: June 30, 2015	\$ 903,502	\$ 460,262
Q3: Sept 30, 2015	\$ 803,604	\$ 293,102
Q4: Dec 31, 2015	\$ 718,159	\$ 200,748

This short term trend demonstrates that, as our net loss has narrowed, we have consumed approximately \$100,000 of working capital in each of the last three quarters. Management estimates in excess of \$500,000 of working capital is required to operate the business and maintain the resources to continue to expand our dealer network and sales. From January 1, 2016 to the date of this MD&A, the Company has experienced a slow-down in sales that are not on pace to equal sales achieved in Q4 2015. Accordingly, the Company's rate of cash consumption may accelerate. Management assesses an injection of capital will be required in the near term.

During 2015, the Company purchased a very small amount of Equipment, Computers and Leasehold Improvements (\$9,434) as it had acquired in 2014 most of the long-term assets it needs to operate.

Similarly, in 2015, expenditures on intangible asset additions were small at \$8,636 versus \$137,773 in 2014. The intangible costs are the external expenditures of developing "Tinkerine U" our online portal and collection of 3D printing content, educational videos and materials. By mid-2015, we had fully developed the initial version of Tinkerine U and made it available to the public. Management accumulated data relate to this initial launch and intends develop and refine Tinkerine U for increased functionality and frequency of use in 2016.

CAPITAL RESOURCES

During 2015, the only transactions that affected capital resources were the exercise of 603,000 warrants into common shares for proceeds of \$60,300. At December 31, 2015, the Company had no warrants outstanding as all unexercised warrants expired. During 2014, 390,116 warrants were exercised into common shares for proceeds of \$39,012.

At December 31, 2015 the Company has 2,425,000 stock options with a weighted average exercise price of \$0.24 and an average remaining term of 3.25 years. Subsequent to year end the Company successfully applied to the TSX Venture Exchange and reduced the exercise price of all outstanding options to \$0.075. No stock options were exercised during 2015. During 2014, 22,000 shares were issued from the exercise of stock options for proceeds of \$3,300.

During 2014, the Company completed its RTO and share exchange. Concurrent with the RTO, the Company completed a private placement of 12,351,000 units (each a "Unit") at \$0.25 for gross proceeds of \$3,087,750 and net proceeds of \$2,907,262. Each Unit consisted of a share and one half a share purchase warrant, each whole warrant was exercisable into an additional share at an exercise price of \$0.40 until October 4, 2015 (now expired).

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.

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 within desktop segment (sometimes referred to as the consumer segment) of the 3D printing industry. The desktop segment has really only existed since 2008. The whole segment can be viewed as being an early adopter stage market. The ability for the Company to successfully negotiate this market setting comprises 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.

Young Company and its stage of development: The Company has only operated since May 2012 and most of the time since then has been in the start-up and product development phase. Management's ability to manage a fast growth enterprise and put sufficient operating procedures and controls in place 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 its business operation, the loss of which would likely be detrimental to the Company.

Competition: The desktop segment of the 3D printing industry is already competitive with several direct competitors having much greater financial resources than the Company and also greater length of operating experience. Furthermore, the desktop segment is going through a period of rapid innovation with many participants striving to

drive down the price at which they can offer products. These factors combine to make the competitive environment a substantial risk.

Financing risks: The Company existing financial resources have come from the issue of new equity and, in an international setting, can be viewed as limited. Further the Company has limited operating cash flow. 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 device, 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 permissions 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 ("US") as a substantial portion of its parts and materials purchases are denominated in US dollars as well as a substantial portion of sales. The Company does not enter into any foreign exchange hedging contracts.

OUTSTANDING SHARE DATA

The Company's authorized capital is unlimited common shares without par value. As at February 26, 2016, the following common shares, options and share purchase warrants were outstanding:

As at February 26, 2016	Number issued and outstanding
Common Shares	42,638,349
Stock Options	3,500,000
Warrants	-
Fully Diluted	46,138,349

TRANSACTIONS WITH RELATED PARTIES

Key management personnel compensation

During 2015, the officers of the Company were paid salaries or independent contractor fees as follows: Eugene Suyu, CEO, \$60,000 (2014 - \$37,884); Martin Burian, CFO, \$99,000 (2014 - \$81,000); and Todd Blatt, VP Market Direction, \$32,200 (2014 - \$30,976). John Veltheer was paid independent contractor fees of \$15,000 (2014 - \$18,333) in his capacity as a director up to his resignation in August 2015. In aggregate directors and officers received Stock-based compensation valued at \$25,358 in 2015 (2014 - \$165,705).

Due to shareholders and transactions with shareholders

As at December 31, 2015, included in trade payables is \$11,546 (2014 - \$23,045), which is due to officers. Such amounts arise from the routine submission of expense reports.

On April 4, 2014, the Company purchased \$47,619 of equipment from a company controlled by the family of the Company's Chief Executive Officer. This equipment made up the equipment that Tinkerine Studio Ltd. had use of for its regular operation at its previous location in Langley, BC, but did not yet own.

Officers and Directors

As of the date of this MD&A the directors and officers of the Company are:

- Desmond Liew -- Chairman and Director
- Eugene Suyu -- Chief Executive Officer and Director
- Todd Blatt -- Director and Vice-President of Market Direction

In August 2015 John Veltheer resigned from the board of directors. In February, 2016 Martin Burian resigned from the board of directors and from his position as Chief Financial Officer.

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements as at December 31, 2015 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 year have been consistently applied.

FINANCIAL INSTRUMENTS

The Company's financial instruments consist of cash, trade receivables, and trade payables. For further discussions of the fair values of the financial instruments and financial items please see Note 17 of the audited financial statements for the year ended December 31, 2015.

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A on February 26, 2016.

ADDITIONAL INFORMATION

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

REGISTERED OFFICE

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OFFICERS & DIRECTORS

Eugene Suyu
Director and CEO

Justin Sy
Interim CFO

Todd Blatt
Director and VP Market Direction

Desmond Liew
Chairman of the Board

LISTINGS

TSX Venture Exchange: TTD.V
OTC Pink: TKSTF

CAPITALIZATION

(as at February 26, 2016)

Shares Issued: 42,638,349

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