



TINKERINE STUDIOS LTD.

MANAGEMENT DISCUSSION AND ANALYSIS

For the six months ended June 30, 2017



Ditto™ Pro 3D Printer

MANAGEMENT DISCUSSION AND ANALYSIS
FOR
Tinkerine Studios Ltd. (“the Company”)

President’s Message

Tinkerine Studios has been focusing and striving to bring user friendly, reliable, high performance 3D printing technology and knowledge/training to our customers. All this is to set the foundations for how we approach bringing value not just on the hardware, but to the ecosystem of what we have to offer to our customers.

We have seen a fast change in the last few years to the landscape of the 3D printing industry. One that went from a focus on consumers and hobbyist, to one of industrial, commercial, and education. Our focus on education is not one we take lightly. It is an area that we foresee as a pillar that leads into understanding other verticals, a part of a triangulation that we have built into the fabric of our company. Understanding the pain points of an industry and the challenges of our customers provides us with insight and strategies that goes further than theory and predictions. This data driven approach is part of our core that will prove to be a strength in our long-term success.

Now education. Education for us means more than a simple selling of hardware into a school, institution, or a district. Our success is determined by our ability to ensure that educators and institutions understand how to best leverage this technology and to educate and build a generation that understands design and critical thinking. It means more than selling curriculum and content as a way of revenue generation. It is the sum of all the pieces from hardware to content, service to training, and much more. An ecosystem that not only benefits and ensures that our customers (students, education administration, and educators) see true value in our products and services, but also brings value to us as a company and ultimately reflected for our shareholders in share value.

Our Vision

It starts with three words: Simplify. Empower. Accelerate. These words stem from our vision, an ability to get our customers to fully understand how to realize their ideas so that we are able to accelerate the pace of innovation for the world.

I would like to bring highlight to the whole Tinkerine team for their continuing dedication in seeing our company succeed. I also thank our shareholders for their support as we execute our business strategy and look forward to future developments and regular updates on our expansion.

Sincerely,
Eugene Suyu President and CEO,

Tinkerine Studios

Financial Highlights

	Six Months Ended June 30th 2017	Six Months Ended June 30th 2016	Q2 Ended June 30th 2017	Q2 Ended June 30th 2016	Q1 Ended Mar 31st 2017	Q1 Ended Mar 31st 2016
Revenue	\$ 433,123	\$ 450,399	\$ 266,276	\$ 278,710	\$ 166,847	\$ 171,689
Cost of Goods Sold	255,292	275,272	148,285	168,155	107,007	107,117
Gross Margin	177,831	175,127	117,991	110,555	59,840	64,572
EBITDA	(119,435)	(372,501)	(28,989)	(158,019)	(90,631)	(214,480)
Net Income (Loss)	(151,850)	(501,327)	(35,137)	(189,913)	(116,712)	(311,224)
Net Comprehensive Income (Loss)	(151,850)	(501,326)	(35,137)	(189,913)	(116,712)	(311,223)
Basic and Diluted income(loss) per share	0.00	-0.01	0.00	0.00	0.00	-0.01
Weighted average number of common shares						
Basic and Diluted	49,238,349	46,180,338	49,238,349	46,180,338	49,238,349	43,192,195

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

August 14, 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 unaudited condensed consolidated interim financial statements for the six months ended June 30, 2017. The Management's Discussion and Analysis (MD&A) should be read in conjunction with the unaudited consolidated interim financial statements. Readers may want to refer to the December 31, 2016 audited financial statements and the accompanying notes which are available at www.sedar.com.

Background and Description of the Business

Tinkerine Studios Ltd is one of Canada's largest developer, producer and distributor of 3D printers, with its innovative software platform that is supported through TinkerineU, the online educational support and content portal.

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

The financial information in this MD&A is based on the Company's unaudited consolidated interim financial statements which have been prepared in Canadian dollars, in accordance with International Financial Reporting Standard ("IFRS").

Non-IFRS Measures

The accompanying unaudited interim condensed 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 assists 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.

Q2 2016 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

- Q2 2017 revenue is \$266,276 for the second 3 months of the year, versus Q2 2016 revenue of \$278,710, down by 4.4% compared to a year ago.
- Revenue for the first 6 months ended June 30, 2017 is \$433,123, down by 3.8% compared to revenue of \$450,399 a year ago. In analyzing the revenue for 6 months there was growth in the Canadian market of 5%. Both the US market and the Other market was down over last year by 20% and 51.5% respectively.
- Tinkerine has expanded their sales team and have hired sales representatives in the first 2 quarters to better support their existing clients and expand the sales effort. Tinkerine will continue to expand their sales force through the rest of the year adding sales representatives to cover key growth areas. The Company strategic

focus is to build, expand and strengthen the demand for our Ditto™ Pro 3D printers with primary focus on the education market.

- In the first 6 months of 2017 revenue derived by geographic segment was Canada – \$327,667 and United States – \$98,235 and Other is \$7,221 versus geographic segmented sales in the first 6 months in 2016 of Canada – \$312,293, United States – \$123,209 and Other – \$14,897. Canadian sales continue to grow and remains a focus for the education programs that the Company offers to this sector.
- The Tinkerine U platform that was launched in July 2016 was expanded in 2017 to include the addition of 3D courses and 3D testing certification, that has been made available on line for educators and professionals. In addition, the company has utilized this platform for a large part of their sales and marketing initiatives

Q2 loss before interest, taxes, depreciation, amortization, foreign exchange gains and losses and stock-based compensation (EBITDA) improved by \$129,030 to a loss \$28,989 in Q2 2017 compared to a loss of \$158,019 in Q2 2016.

The Company's net loss for Q2 2017 improved to a loss of just \$35,137 compared to the net loss of \$189,913 in Q2 2016. This improvement is attributable to the implemented cost measures to decrease our controllable expenses and our total cash expenses to approximately \$147,166 in Q2 2017 from \$268,955 in Q2 2016.

Q2 2017 Financial Highlights

- **Sales revenue decrease by 4.5% to \$266,276 in Q2 2017 versus \$278,710 to a year ago.**
- **49% decrease in expenses to \$153,128 in Q2 2017 from \$300,468 in Q2 2016.**
- **EBITDA improved to \$28,989 in Q2 2017 compared to \$158,019 in Q2 2016.**
- **Working capital decreased in Q 2 2017 to \$283,102 from \$676,514 in Q2 2016.**
- **An improvement of 145% in the quarterly net cash from operating activities of \$136,457 in Q2 2017 versus deficit of \$302,597 in Q2 2016.**

Detailed Discussion and Analysis of Operating Results for the Periods Ended June 30 2017 and June 30 2016

1. Revenue

Revenue for Q2 2017 was \$266,276 for the three months ended June 30, 2017 versus \$278,710 for the comparative period Q2 2016. For the six months period ended June 30, 2017, the revenue was \$433,123 versus \$450,399 in 2016

For Q2 2017, revenue was represented by 86% hardware sales, 8.4% filament and 5.6% services/miscellaneous. Comparatively revenue for Q2 2016 was represented by 83% hardware sales, 12% filament and 5% services/miscellaneous. This slight change is reflective of the increase in other services offered by the company.

The number of 3D printers sold in Q2 2017 increased to 137 3D printers compared to 120 3D printers sold in the second quarter of 2016. This increase of 14.1 % of units sold is reflective of the units being sold as a result of the education marketing initiative.

Filament Revenue for Q2 2017 is \$21,302 compared to \$33,445 in Q2 2016. The Company has offset this volume decrease by expanding the filament product line and added a variety filament colours and textures available for use with the 3D printer.

2. Gross Profit Margins

Gross profit for the three months ended June 30, 2017 was \$117,991 or 44%, an improvement of 5% in the gross profit margin versus \$110,555 or 39% for the three months ended June 30, 2016. This improvement in gross profit margin can be attributable the US sales in Q2 and to the weak dollar in Q2. Gross profit margin for the six months ended June 30, 2017 is \$177,831 or 41% versus \$175,127 or 39% in 2016.

3. Expenses

In Q2 2017 the Company incurred \$153,128 of total expenses compared to \$300,468 in Q2 2016, a reduction of \$147,340 in total expenses. For the six months ended June 30, 2017 total expenses were \$329,681 versus \$676,455 for the six months ended June 30, 2016, a reduction of \$346,774. The Company's RTO occurred in April 2014 and expenditures prior to that time were more limited. The Company has implemented measures to decrease its controllable expenses and the total cash expenses to approximately \$147,166 in Q2 2017 from \$268,955 in Q2 2016, a decrease

of \$121,789. For the six months ended June 30, 2017 total cash expenses were \$302,594 versus \$546,773 for the six months ended June 30, 2016 a decrease of \$244,179. We continue to review departmental budgets and corporate spending in certain areas and these are further discussed below.

Highlighted quarterly expenses include the following:

- Remuneration and benefits was significantly lower at \$77,154 for Q2 2017 versus \$102,521 for Q2 2016. For the six months ended June 30, 2017 remuneration and benefits also trended lower at \$140,076 versus \$234,283 for the six months ended June 30, 2016. Staffing levels were adjusted in all functional areas, including the adjustment in business development and investor relations staff. The Chief Financial Officer was internally replaced in January 2016 by one of the founders. The sales department was expanded and sales representatives were onboarded in Q2.
- Stock based compensation was \$1,875 in Q2 2017 before the reversal of \$13,895 for share options that were cancelled, versus approximately \$12,768 in Q2 2016. For the six months ended June 30, 2017 stock based compensation was \$8,612 before the reversal of \$13,895 for share options cancelled, versus \$92,107 for the six months ended June 30, 2016. 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. There were no stock options issued in the first 6 months of fiscal 2017. In Q1 2016 the directors passed a resolution to amend the exercise price on all 2,425,000 issued options to \$0.075. Also in Q1 2016 key employees were issued with a total of 1,075,000 share options at the exercise price of \$0.075. In Q2 2016 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 \$29,650 for Q2 2017 versus \$50,420 in Q2 2016. For the six months ended June 30, 2017 professional and consulting fees was \$56,913 versus \$83,276 for the six months ended June 30, 2016. During the first six months of 2017 we continued to review consulting costs particularly expenses related to R&D services and moving those expenses inhouse.
- Product promotion, trade shows and travel was \$1,563 for Q2 2017 versus \$15,238 in Q2 2016. For the six months ended June 30, 2017 product promotion, trade shows and travel was \$1,928 versus \$26,106 for the six months ended June 30, 2016. We amended our trade show strategy and focused on selective trade shows, which are scheduled later in the year. 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.
- We have also supplemented our trade show strategy with the introduction of inhouse seminars hosted at our offices for selected attendees in education and expanded to professionals in other engineering, design and creative industries

LIQUIDITY

As at June 30, 2017, the Company had net working capital of \$283,102 compared to \$410,916 at December 31, 2016. Our cash position was \$175,006 at the end of Q2 2017 compared to \$41,601 at December 31, 2016. This improved liquidity is due to initiatives to reduce cash expenses including employees accruing part of their salaries.

In Q2 2017 the Company's investment in inventory was \$369,860 with finished goods being \$196,930 and raw materials \$172,930, compared to finished goods of \$268,485 and raw materials of \$175,442 at December 31, 2016. The investment in 3D printer inventory improves our ability to fulfil dealers' orders in a timely manner and provides the infrastructure to sell into large institutions. Prepaid and Deposits were \$20,842 at June 30, 2017 versus \$57,159 in December 31, 2016 and these payments are related to prepayment of overseas parts purchases.

At the time of release of this MD&A management believes the Company is presently operating with adequate working 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 June 30, 2017, the Company's share capital was \$4,329,369 representing 49,238,349 issued and outstanding common shares without par value. There were no share transactions for the first six months of 2017 fiscal year. In March and April of fiscal 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, representing the fair value of stock options outstanding and vested and warrants issued, is recorded at \$374,805. The net decrease in Reserves during the first six months of 2017 is the net difference of \$5,283, based on the calculated charge for Stock-based Compensation of \$8,612 to the reserve account and the reversal of \$13,895 from the reserve account due to the cancellation of stock options.

As at June 30, 2017 the Company has 4,135,000 stock options outstanding with a weighted average exercise price of \$0.075 and an average remaining term of 3.5 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.

OUTSTANDING SHARE INFORMATION

The Company's authorized capital is unlimited common shares without par value. As at August 18, 2016, the following common shares, options and share purchase warrants were outstanding:

As at August 14, 2017	Number of Issued and outstanding
Common Shares	49,238,349
Stock Options	4,135,000
Warrants	6,600,000
	59,973,349

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 June 30, 2017 is \$4,731.51 (December 31, 2016 - \$11,546) due to officers in the normal course of business.

Key management personnel compensation

During the six months ended June 30, 2017, the officers of the Company were paid salaries or independent contractor fees as follows: Eugene Suyu, CEO, \$30,000 (2016 -\$30,000); Justin Sy Interim CFO, \$22,500 (2016 - \$22,500). In aggregate Stock-based compensation of \$2,218.13 was attributable to options held by directors and officers in the six months ended June 30, 2016 (2015 - \$17,556).

Officers and directors

The following individuals were re-elected or elected director at the June 24, 2017 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 June 30, 2017 and to the date of this MD&A.

CHANGES IN ACCOUNTING POLICIES

The preparation of the condensed interim 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 these condensed financial statements have been prepared consistent 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 August 14, 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 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

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.

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 more 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 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 \$175,006, as at June 30, 2017. 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 endeavours 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 enter into any foreign exchange hedging contracts.

Corporate Information

REGISTERED OFFICE

1500-1055 West Georgia Street
Vancouver, British Columbia, Canada
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HEAD OFFICE and OPERATIONS

Tinkerine Studios Ltd.
113A 8275 92 Street
Delta, British Columbia, Canada
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OFFICERS & DIRECTORS

Eugene Suyu
Director and CEO

Justin Sy
Director and Interm CFO

Todd Blatt
Director

Desmond Liew
Chairman of the Board

Bob Longo
Director

LISTINGS

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

CAPITALIZATION

(as at June 30th, 2017)

Shares Issued: 49,238,349

TRANSFER AGENT

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AUDITOR

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LEGAL COUNSEL

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