



TINKERINE STUDIOS LTD.

MANAGEMENT DISCUSSION AND ANALYSIS

For the year ended December 31, 2021



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

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

May 04, 2022

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, 2021. 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 learning through Tinkerine. It supports the growing demand for related online educational content, storage, software and resources for 3D programs in the design market.

Tinkerine designs, manufactures and distributes 3D printers in Canada, USA and the APAC region. The Company's product offering is the Ditto Pro and Ditto Pro R which are well priced in each segment of the market, where the Company has developed a reputation for quality 3D printers and innovative and high quality, educational support for educators and design professionals and small to medium size enterprises ("SME"). As a result of the Covid-19 pandemic that impacted the world in 2020, the Company added personal protective equipment ("PPE") to its product offering.

Tinkerine announced in September 2021, the live release of its online modular skills development platform and Tinkerine cloud program. This business vertical is an addition to the manufacturing 3D printers, and provides an online digital platform to generate future recurring revenue, with 3D related content developed inhouse. Users can discover and learn 3D printing and 3D related skills with Tinkerine. The program is designed with a number of different users in mind including; 1) students seeking to develop 21st century skills through hands-on learning in their school programs, 2) entrepreneurs seeking a cost-efficient prototype and seeking to test their design ideas, 3) small businesses seeking to launch new products or create small scale production runs and lastly 4) makers who seek to apply advance manufacturing to enhance their joy and upgrade their skills for their maker projects. These users can also explore Tinkerine's 3D printing courses in video at one's own pace. Tinkerine now provides a singular platform to skill up these individuals and businesses with 21st century tools needed to compete in a fast-paced world together with a powerful workflow system to optimize additive manufacturing. In addition, 3D printing has an array of applications across many industries and is critical in the ability of businesses to be agile and innovative in today's manufacturing uncertainty which makes 3D printing a highly desirable and competitive centric technology. Tinkerine's expansion into 3D content development, and the 3D suite of products that the Company is currently developing, will provide the 3D knowledge baseline required by individuals and companies that are seeking manufacturing alternatives closer to their market using advance additive manufacturing.

The financial information in this MD&A is based on the Company's audited consolidated financial statements for the year ended December 31, 2021 that 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").

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 - EBITDA and EBITDA margin means net earnings or losses before interest, taxes, depreciation, amortization, foreign exchange gains and losses and stock-based compensation. EBITDA and EBITDA margins are not recognized as measures under IFRS and do not have a standardized meaning prescribed by IFRS and therefore may not be comparable to similar measures reported by other corporations. Management believes that this metric assists in determining the ability of the Corporation to generate cash from operations and is calculated on a consistent basis.

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. Through 2021 the Company continued to reduce its expenses, add content and support courses through the Company's TinkerineU education platform and focused on its core business.

Specific highlights of the Company's activities for the year ended December 31, 2021 include:

- The Company's results in 2021 continued to be impacted by the Covid 19 pandemic uncertainty as the Company's revenue from schools and other educational institutions were lower in particular in the Canadian market.
- The Company saw a significant increase in United States revenue as a result of partnering with a US based distributor, whose business is tendering for US state government tenders to supply schools in their state districts with technology including 3D printers. The Company sold 91 printers as a result of this contract.
- The Canadian market in the meantime saw a decrease in revenue, with lower PPE sales in 2021 versus 2020, being the difference from a year ago.
- Sales to Canadian schools was lower with the lingering affect due to the impact of the Covid-19 pandemic, where cuts to capital expenditures in the provincial school districts experienced the greatest fall in revenue.
- The Company announced the launch of its online digital platform that will be populated with 3D related videos and online lessons developed inhouse.

SELECTED ANNUAL INFORMATION

	Year Ended December 31 2021	Year Ended December 31 2020	Year Ended December 31 2019
Revenue	\$ 469,962	\$ 340,537	\$ 434,362
Net Income (Loss)	(521,029)	(671,802)	(383,660)
Net Comprehensive Income (Loss)	(521,029)	(537,115)	(383,660)
Basic and Diluted income(loss) per share	-0.01	-0.01	-0.01
Weighted average number of common shares			
Basic and Diluted	49,670,301	49,501,534	49,238,349

Earnings before interest, taxes, depreciation, amortization, foreign exchange gains and losses and stock-based compensation (EBITDA) decreased to a loss in 2021 of \$246,544 from a loss of \$323,438 in 2020, an improvement of \$76,894

The Company's net and comprehensive loss for 2021 increased to \$521,029 compared to the net and comprehensive loss of \$537,115 in 2020, a increase in net and comprehensive losses of \$16,086 year over year. This decrease in losses is partly attributable to the reduction in our expenses, in particular professional and consulting fees, stock-based compensation, shareholders communications filing and transfer agency and reduction in other income. Expenses that increased were Interest and accretion expense, remuneration and benefits and research and development. Our total cash expenses (total expenses net of amortization, accretion and stock-based compensation) increased to approximately \$545,542 in 2021 from \$525,905 in 2020, an increase of \$19,637 in cash expenses.

RESULTS OF OPERATION

1. Revenue

Revenue is \$469,962 for the year ended December 31, 2021 versus \$340,537 for the year ended December 31, 2020 an increase of \$129,425. The overall increase in revenue is attributed to the fulfilment of a US contract, thus recording an increase in sales volume in the US market. In addition, Canadian sales were lower in 2021 due to the lower comparative sale of PPEs when compared with 2020 revenue in Canada. While technology and STEAM continues to be emphasized in school districts in both countries, the implementation of these programs were disrupted by the Covid-19 pandemic, and this uncertainty continues in school operations in particular in Canada, as restrictions and rules continue to change through 2021 and that has impacted the funding availability and the focus on these programs.

For 2021, revenue was represented by 83% hardware printer sales (2020 – 41%), 6% filament (2021 – 13%) and 11% services/miscellaneous (2020 – 46%). Included in services/miscellaneous is revenue from PPEs. There is a change in the product mix in 2021 with the increase in percentage (83%) of sales generated by the sale of printers versus the product mix in 2020. This product mix is a return to the historic product mix trend generated by the Company prior the Covid 19 pandemic and implementation of PPE sales.

For 2021, revenue was represented by geographic segment as follows: Canada – \$131,819 and United States – \$338,143 versus geographic segmented sales in 2020 of Canada – \$293,379 and United States – \$47,158. While the Canadian market sales saw a decrease year over year of \$161,560, there was a significant increase in sales in our US market by \$290,985, versus last year. This significant increase in United States revenue is the result of a partnership with a US distributor whose business is tendering for US state government tenders to supply the schools in various states with technology including 3D printers and consumables

The number of 3D printers sold in 2021 was represented by the sale of 144 3D printers compared to 59 3D printers sold in 2020, a 144% increase year over year. In 2020 the lower printer hardware sales were offset by the introduction of the sale of PPEs that accounted for 51% of the revenue for that year

Filament revenue for 2021 was \$30,233 compared to \$37,815 in 2020, a decrease in filament sales of 20%. Historically schools in BC have been the biggest customers of filament and the lower filament sales reflects the ongoing interrupted school activities as a result of the Covid pandemic.

2. Gross Profit Margin

Gross profit for 2021 is higher at \$284,910 versus \$188,478 for 2020, an increase of \$96,432 year over year based on higher sales revenue and stronger margins from the sale of printers. Also contributing to the stable gross margin percentage were adjustments to salaries for government grants received by the Company to support salaries, as well as efficiencies in purchasing and supply chain management that improved the cost of goods at the higher revenue.

3. Expenses

In 2021 the Company incurred \$805,939 of total expenses compared to \$860,280 in 2020, a decrease of \$54,341 in total expenses. This decrease was partly due to a reduction in stock-based compensation which is a non-cash transaction and a reduction in professional and consulting fees offset against the increase in Interest and accretion expenses. The Company has continued its measures to manage its controllable expenses and as a result the total cash expenses (total expenses net of amortization, accretion expenses and stock-based compensation) is approximately \$518,898 in 2021 versus \$525,905 in 2020 a decrease in total cash expenses of \$7,007. We have continued to review departmental budgets and corporate spending in all areas and these initiatives are further discussed below.

Highlighted quarterly expenses include the following:

- Remuneration and benefits increased to \$282,649 for 2021 from \$199,176 in 2020, an increase of \$83,473. Included in this expense is the Government of Canada Emergency Wage Subsidy and Industrial Research Assistance Program subsidies to cover a portion of employee wages and assist small and medium sized enterprises where Canadian companies experienced decreased revenue during the Covid-19 pandemic. Staff responsibilities in 2021 were also revised and redistributed to improve efficiencies in key functional areas. The increase in this expense was due to a combination of a reduction in the funding received from these programs

in 2021 versus funding received in 2020, and the February 2021 appointment of a new part time CFO. The Company also utilizes contract workers where necessary.

- In 2021, \$109,383 was recognized as stock-based compensation. 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 this period the Company granted 1,130,000 stock options with an exercise price of \$0.07. Also, in 2021, \$4,453 was reversed from share options reserve and credited to share capital for 75,000 share options that had been exercised at \$0.075. In 2020, \$274,827 was recognized as stock-based compensation expenses. Also, in 2020 the Company granted 5,970,000 stock options with an exercise price of \$0.125. In this period, there was a reversal of \$21,242 from share options reserves and credited to share capital for 362,500 share options exercised at \$0.075. During 2021, 1,947,500 (2020- 50,000) stock options expired and were cancelled and the corresponding amount of \$88,392 (2020 - \$3,747) was reallocated from reserves to deficit.
- Professional and consulting fees were \$138,601 in 2021 versus \$193,436 in 2020, a decrease of \$54,835 in this expense. The lower professional fees is due to reducing consulting contracts for sales and marketing and corporate finance. The Company regularly engages independent professional firms and consultants for corporate finance, audit and accounting services that includes services for audit, business consulting, bookkeeping, and business development and operations, research & development for services related to design and sourcing of new and existing raw materials, sales and marketing for services related to the development of programs and development of sales and marketing assets and investor relations for services related to the de-semination of the Company's information and the communication with shareholders. We also regularly engaged legal counsel for intellectual property matters, employment law and general commercial matters and expect the Company's 2022 professional and consulting expenses to be approximately at a similar level.
- Product promotion, trade shows and travel were \$1,342 in 2021 versus \$11,692 in 2020, a decrease of \$10,350. Included in this expense are expenses related to digital marketing and advertising that was incurred to promote the sale of PPEs on various social media platforms. The decrease in product promotion in 2021 compared to 2020 was the lower spending on digital advertising in 2021, versus the spending on digital advertising in 2020. This expense also includes the cost training sessions held at the offices for educators interested to advancing their knowledge of 3D printing in their classrooms.
- Research & development was \$3,131 in 2021 versus \$521 in 2020. The expenses relate to R&D for products that the Company have been developing in 2021. In 2020 this expense was limited to design, testing and prototypes for the PPEs. Management all contribute to the R&D initiatives to ensure better concept generation and faster development. All research and development are performed internally with expenses primarily being the prototype development and testing of new systems and new parts designed by management. In Q3 of 2021 the Company announced the launch of their digital platform and cloud services for 3D printing.
- Rent and utilities expense was \$5,610 in 2021 versus \$5,608 in 2020. This presentation of the lease expense reflects the implementation and guidance of applying the modified retrospective method in terms of IFRS 16 to the office lease expense. IFRS 16 establishes the recognition, measurement, presentation and disclosure of all leases (Note 15). As a result, the right-of-use asset has been capitalized for the office lease and will be amortized over the term of the rental agreement. Lease liabilities were discounted at the discount rate of 5% as at January 1st, 2019. Amortization of \$47,864 and interest expense of \$5,871 are included in expenses. The office is leased from a director and is situated in an area designed for improved logistics and the layout of the premises is designed for greater work flow and productivity for both production of the 3D printers and the open design improves collaboration of products like TinkU platform and other educational initiatives.
- Interest Expense and Accretion Expense was \$117,727 in 2021 versus \$22,484 in 2020. Included in this expense are accretion expenses of \$99,365 that was recognized in 2021. This is an expense to recognize and update the present value of the promissory notes and the CEBA loan obligation on the balance sheet as at the end of December 31, 2021 and is a non-cash charge.

4. Other Income and Expenses

There were no other income and expenses for the year ended December 3, 2021. In 2020, the Company received the Canada Emergency Business Account ("CEBA") interest-free loan of \$60,000 (Note 10). In terms of IAS 20, the loan was recorded at a fair value of \$43,916 using an effective rate of 12%, considering the grant, the interest- free loan and the forgivable portion. The residual value of \$17,925 is recorded as other

income. As of December 31, 2021, accretion of \$2,593 has been recognized in the statement of comprehensive loss versus accretion of \$1,841 in 2020

On December 5 2020, the Company entered into an agreement with employees to settle wages payable to them. Under the agreement, the Company may, subject to TSX Venture Exchange approval, settle the wages payable with shares similar to unsecured convertible debentures, with no interest or dividend, payable in cash or shares no earlier than February 16, 2022. The total amount of wages payable was \$599,087 (Note 17).

On the date of the agreement in 2020, the fair value of the liability was determined to be \$482,325, resulting in a gain on convertible debenture of \$116,762, using a 20% discount rate, and was recorded as other income. Accretion expenses of \$99,365 has been recognized in the statement of comprehensive loss for the year ended December 31, 2021.

SUMMARY OF QUARTERLY INFORMATION

	Quarter ended:			
	"Q4 2021"	"Q3 2021"	"Q2 2021"	"Q1 2021"
	December 31 2021	September 30 2021	June 30 2021	March 31 2021
Revenue	\$47,332	\$288,726	\$59,381	\$74,523
Net Income (Loss)	(\$226,855)	\$184	(\$112,943)	(\$181,413)
Net Comprehensive Income (Loss)	(\$226,855)	\$184	(\$112,943)	(\$181,413)
Basic and Diluted Loss per share	(\$0)	(\$0)	(\$0)	(\$0)
Number of shares outstanding (w. avg.)	49,670,301	49,651,397	49,713,144	49,604,069
	Quarter ended:			
	"Q4 2020"	"Q3 2020"	"Q2 2020"	"Q1 2020"
	December 31 2020	September 30 2020	June 30 2020	March 31 2020
Revenue	\$57,978	\$86,819	\$154,896	\$40,845
Net Income (Loss)	(\$225,423)	(\$142,462)	(\$174,786)	(\$129,130)
Net Comprehensive Income (Loss)	(\$177,229)	(\$116,422)	(\$174,786)	(\$129,130)
Basic and Diluted Loss per share	(\$0)	(\$0)	(\$0)	(\$0)
Number of shares outstanding (w. avg.)	49,501,534	49,410,164	49,320,048	49,238,349

Summary and discussion of Quarter to Quarter results.

The Company has continued to experience the impact of the Covid-19 pandemic, with respect to the pattern of buying that we are accustomed to seeing from our customers. However, through a partnership with a US organization the Company's strongest quarter was Q3 for 2021 that accounted for more than 61% of the 2021 total revenue. Historically, Q2 and Q3 have been stronger than Q1 and Q4 and coincide with the buying pattern of the educational sector. For Q2 2021, revenue was \$59,381 and the Q3 2021 revenue was \$288,726, being 74% of the total revenue of \$469,962.

The Company's net comprehensive loss from Q1 2021 to Q3 2021 was lower at \$294,172 versus the net loss for the same period in 2020 of \$420,338, a decrease in the net loss for the first three quarters of \$126,166. This decrease in the net loss is the result of higher revenue during the first 3 quarters of 2021.

Summary and discussion of Fourth Quarter results.

Revenue for Q4 2021 was \$47,332 for the three months ended December 31, 2021, versus \$57,978 for the comparative period Q4 2020, a decrease in revenue of \$10,644. This decrease was due to lower printer and filament sales combined with the lower sales of PPEs in Q4 2020.

For Q4 2021 revenue was represented by geographic segment as follows: Canada – \$23,499 and United States – \$23,833 versus geographic segmented sales in Q4 2020 of Canada – \$44,681 and United States – \$13,296. While the Canadian market revenue was lower by \$21,182, the US market saw an increase year over year of \$10,537 respectively.

For Q4 2021, revenue was represented by 71% hardware printer sales, 14% filament and 14% services/miscellaneous. In comparison for Q4 2020, revenue was represented by 53% hardware printer sales, 15% filament and 32% services/miscellaneous/PPE, with the sale of PPE's being the reason for the change in sales mix

Gross profit for the three months ended December 31, 2021 was \$24,547 versus \$52,550 for the three months ended December 31, 2020. The gross margin percentage in Q4 2021 is 52% versus a gross margin percentage of 90% in Q4 2020. The impact on the gross margin in 2020 was the result of end of the year adjustments and change in sales product mix

In Q4 2021, the Company incurred \$251,401 of total expenses compared to \$277,960 in Q4 2020, a decrease of \$26,559 in total expenses. The decrease in Q4 2021 expenses were due to professional and consulting fees, stock based compensation and shareholders communication, filing and transfer.

LIQUIDITY

As at December 31 2021, the Company had working capital deficit of \$1,282,168 compared to net working capital deficit of \$360,185 at December 31, 2020. In 2020 the Company employees agreed to settle wages payable to them by issuing convertible debentures in the total amount of \$599,087 with no interest, or dividend, convertible no earlier than February 16, 2022. Although this agreement was extended on February 17, 2022 to May 17, 2023 as at December 31 2021, it was considered due within one year and reclassified to current liabilities in terms of IFRS. The cash position is \$14,469 at December 31, 2021 compared to the bank indebtedness of \$52,471 at December 31, 2020.

As at December 31, 2021 the Company's investment in inventory was \$72,217 with inventory finished goods being \$13,807 and raw materials of \$58,410 compared to investment in inventory of \$113,128 with finished goods of \$11,954 and raw materials of \$101,174 at December 31, 2020. Prepaid and Deposits were \$10,898 at December 31, 2021 versus \$15,354 at December 31, 2020. These payments are with regards to overseas supplier prepayment of raw material purchases.

At the time of release of this MD&A, the Company's cash position is \$6,804 and management believes the Company will require an injection of capital to ensure adequate operating working capital. On February 28th 2020 the Company arranged an interim short-term loan of \$90,000 at an interest rate of 12% pa through friends and family to continue a steady expansion of its business over the coming months. The Company also received the Canada Emergency Business Account ("CEBA") interest-free loan of \$60,000 of which \$10,000 is forgivable if repaid by December 31, 2022 and \$20,000 is payable on demand (Note 10). While we are funding the cash deficit position by managing our payments to suppliers, forecasted sales, and postponement of staff salaries, we believe in order to continue our existing operations, the Company will be required to raise additional funding. In addition, any unforeseen downturn in sales or, alternatively, pursuit of a more aggressive growth strategy would necessitate additional equity investment, debt or convertible debentures. The Company will therefore seek to raise additional capital in the coming months through a private placement of its common shares or review other alternative financing options.

CAPITAL RESOURCES

As at December 31, 2021, the Company's share capital was \$4,382,373 representing 49,675,849 issued and outstanding common shares without par value. During the year the Company issued 75,000 common shares to employees on the exercise of the stock options at \$0.075. As at December 31, 2020, the Company's share capital was \$4,372,295 representing 49,600,849 issued and outstanding common shares without par value. In 2020, the Company issued 362,500 common shares to employees and consultants on the exercise of the stock options at \$0.075. Reserves represent the fair value of stock options outstanding and vested and warrants issued, and is recorded at \$368,905 as at December 31st 2021 versus \$348,126 in 2020. During fiscal 2021, the following transactions were recorded in reserves; 1,130,000 stock options were issued and stock-based compensation of \$109,383 was credited to reserves, 75,000 stock options were exercised and \$4,453 was reversed and credited to share capital, and 1,947,500 share options were cancelled/expired and \$88,392 was reversed and credited to deficit.

As at December 31, 2021 the Company had 7,025,000 stock options outstanding with a weighted average exercise price of \$0.11 and an average remaining term of 3.4 years. There are no warrants outstanding as at December 31, 2021 or 2020. Warrants outstanding of 6,600,000 at \$0.10 expired in March 2018 and were not exercised and therefore cancelled.

OFF-BALANCE SHEET ARRANGEMENTS

The Company does not have any off-balance sheet arrangements as at December 31, 2021 and to the date of this MD&A.

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

On December 5 2020, the Company entered into an agreement with employees to settle wages payable to them. Under the agreement, the Company may, subject to TSX Venture Exchange approval, settle the wages payable with shares similar to unsecured convertible debentures, with no interest or dividend, payable in cash or shares no earlier than February 16, 2022. The total amount of wages payable was \$599,087 (Note 17).

The Company does not have any other instruments as at December 31, 2021 and to the date of this MD&A.

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

OUTSTANDING SHARE INFORMATION

The Company's authorized capital is unlimited common shares without par value. As at May 04, 2021 the following common shares, options and share purchase warrants were outstanding:

As as May 04, 2022	Number of issued and outstanding
Common Shares	49,675,849
Stock Options	7,025,000
Warrants	-
Total Shares - Fully diluted	56,700,849

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 and account liabilities at December 31, 2021 is \$15,567 (December 31, 2020 - \$33,856) due to officers. These amounts were for company expenses and/or fees due and payable to the officers. Included in Prepaids and Deposits is an amount of \$2,435 that has been paid to a director. The Company signed a three-year rental lease with a director, Eugene Suyu in December 2016 that has been renewed as of January 1st 2020.

Key management personnel compensation

During the year ended December 31, 2021, compensation of key management personnel as such as remuneration, fees and short-term benefits was \$150,000 (Eugene Suyu - \$60,000, Chris Lee - \$45,000, Justin Sy - \$45,000; 2020 - \$105,000). In 2021, directors and officers received stock-based compensation of \$48,184 Bob Longo- \$12,757, Eugene Suyu - \$9,443, Chris Lee - \$14,000, Justin Sy - \$8,353, Daniel Cugnet- \$3,632; 2020 - \$143,550).

Officers and directors

The following individuals were elected directors at the November 25, 2021 AGM and continue to the date of this MD&A. Their officer positions are also set out below. With regards to changes in management, Chris Lee was appointed Chief Financial Officer in February 2021 and Dan Cugnet resigned as director in August 2021, but remains an advisor to the Company.

- Eugene Suyu -- Chief Executive Officer, President and Director
- Justin Sy – Director and CTO
- Todd Blatt-- Director

- Bob Longo – Director (resigned January 2022)
- Chris Lee – Chief Financial Officer

PROPOSED TRANSACTION

The Company has announced that it has entered into a Definitive Agreement (“DA”) dated March 15, 2022 with respect to a potential business combination (the “Transaction”) with Electrum Charging Solutions Inc., an arm’s length third party (“Target”, “Electrum” or “ECS”), which would result in a reverse-takeover (“RTO”) of the Company by shareholders of Electrum.

The Company and Target have entered into a Definitive Agreement dated March 15, 2022. The RTO is expected to be completed by way of triangular amalgamation, result in the Target becoming a wholly-owned subsidiary of Company (the “Resulting Issuer”). The Resulting Issuer will carry on the business previously executed by Electrum upon completion of the RTO.

The DA is subject to the receipt of all necessary third-party approvals and the standard terms and conditions concerning the due diligence review of Target, including financial statements, potential liabilities and material contracts. The DA further contemplates that all of the common shares in the capital of Target will be exchanged for common shares of Company at a ratio resulting in the shareholders of Target, owning approximately 95% of the Resulting Issuer and the shareholders of Company owning approximately 5% of the Resulting Issuer on an undiluted basis, not including any shares to be issued pursuant to the private placement financing discussed below. The RTO does not constitute a non-arm’s length transaction.

It is contemplated that various employees of TTD will continue to be employed by ECS.

CHANGES IN ACCOUNTING POLICIES

The preparation of the annual financial statements and related MD&A have been prepared in conformity with IFRS and IAS, (see Note 2 and Note 8, 10, 15 and 17 of the Financial Statements).

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

APPROVAL

The Board of Directors of the Company has approved the disclosure contained in this MD&A on May 04, 2022,

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 plan 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, such as any future funding alternatives

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.

New Product Launch: The Company recently announced the launch of its online modular skills development platform and Tinkerine cloud program. Users can discover and learn 3D printing and skills with Tinkerine. The program is designed with a number of different users in mind including; 1) students seeking to develop 21st century skills through hands-on learning in their school programs, 2) entrepreneurs seeking a cost efficient prototype and seeking to test their design ideas, 3) small businesses seeking to launch new products or create small scale production runs and lastly 4) makers who seek to apply advance manufacturing to enhance their joy and upgrade their skills for their maker projects. All these user types can also explore Tinkerine's 3D printing courses in video at one's own pace. Tinkerine now provides a singular platform to skill up these individuals and businesses with 21st century tools needed to compete in a fast-paced world together with a powerful workflow system to optimize additive manufacturing. In addition, 3D printing has an array of applications across many industries and is critical in the ability of businesses to be agile and innovative in today's manufacturing uncertainty which makes 3D printing a highly desirable and competitive centric technology. Tinkerine's expansion into 3D content development, and the 3D suite of products that the Company is developing will provide the 3D knowledge baseline required by individuals and companies that are seeking manufacturing alternatives closer to their market using advance additive manufacturing. Although there is a need for 3D education in the 3D printer market, and has potential to grow at a high rate there remains significant risk that this platform will require time for adoption and therefore will require a significant investment to ensure its successful implementation

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, loans and may be viewed as limited. Further the Company has negative operating cash flow and a cash balance of \$14,469 as at December 31, 2021. 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.

The COVID-19 pandemic and its effect on the Company's business

In an effort to contain and mitigate the spread of COVID-19, many countries including, Canada, have imposed unprecedented restrictions on travel, and there have been business closures and a substantial reduction in economic activity in countries that have had significant outbreaks of COVID-19. The Company's business may be impacted by the COVID-19 outbreak, specifically, disruptions in the Company's supply chain, including disruptions from the Company's suppliers, as a result of industry closures relating to containment of COVID-19 may result in the declaration by the Company's suppliers of force majeure, which may result in the Company's inability to complete orders in accordance with the agreed order schedule. In addition, the Company's customers may determine to delay their decisions in connection with new orders as they assess the impact of COVID-19 on their businesses. It is currently not possible to predict how long the pandemic will last or the time that it will take for economic activity to return to prior levels. The COVID-19 pandemic has resulted in significant financial market volatility and uncertainty over the past months. A continuation or worsening of the levels of market disruption and volatility seen in the recent past could have an adverse effect on the Company's ability to access capital, business, results of operations and financial condition, and on the market price of the Common Shares. The extent of this potential disruption on the Company's business cannot be assessed as the full extent of the pandemic and its full impact on the global economy cannot be predicted.

The Company's markets are exposed to recessionary risk

A Canadian or global recession may result in lost or delayed sales orders, as many of the Company's existing and targeted customers may cut back their proposed capital spending in the face of economic uncertainty. This would impact the ability of the Company to grow its business and, as a result, sales orders may be lower than expected. Any decrease in sales would negatively impact the Company's cash flows and other financial results.

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HEAD OFFICE and OPERATIONS Tinkerine Studios Ltd. 113A - 8275 92 Street Delta, British Columbia, Canada V4G 0A4	CAPITALIZATION (as at May 04 2022) Shares Issued: 49,675,849
OFFICERS & DIRECTORS Eugene Suyu <i>Director and CEO</i> Justin Sy <i>Director and CTO</i> Todd Blatt <i>Director</i> Bob Longo* <i>Director</i> Chris Lee <i>Chief Financial Officer</i> <i>*Resigned January 2022</i>	TRANSFER AGENT Computershare 3 rd 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