

## **QP Case Analysis Competition 2017 (HK)**

# **Best Written Report**



Hong Kong Institute of  
**Certified Public Accountants**  
香港會計師公會



*Embrace the new ERA*  
**Educate our future innovators**



# CONTENT

<b>Business Background</b>	<b>2</b>
<b>Financial Risks</b>	
<b>Profitability Risk</b>	<b>3</b>
<b>Liquidity Risk</b>	<b>3</b>
<b>Solvency Risk</b>	<b>4</b>
<b>Proposed Strategies: ERA</b>	
<b>Strategic Evaluation</b>	<b>4-5</b>
<b>Exploration</b>	<b>5-6</b>
<b>Revolution</b>	<b>6-7</b>
<b>Association</b>	<b>8-10</b>
<b>Risk Management</b>	<b>10</b>
<b>Financial Performance</b>	<b>11</b>
<b>Ethical Issue</b>	<b>11-13</b>
<b>Conclusion</b>	<b>13</b>
<b>References</b>	<b>14</b>
<b>Appendixes</b>	<b>14-15</b>

## 1. Executive Summary

This report aims to evaluate TT Limited's financial risks and propose a new strategy in response to its current financial risks and potential opportunities and threats. By grabbing demand for educational and digital toys, we adopt product development strategy. To turn threats of economic downturn, toy seasonality and short life cycle into opportunities, we would use market development strategy – Toy Rental. To tackle the operational problems such as ineffective communication with suppliers, we suggest market penetration strategy. Our "ERA" strategy could ultimately substantiate TT Limited's profitability and growth while alleviating its financial risks. Actions would be advised at the end of the report to Daniel Tong, CEO of Tiger Toys, to effectively solve the ethical issues by applying the HKICPA Code of Ethics.

## 2. Business Background

Established about 25 years in Hong Kong, TT Limited owning 20 large stores operates its business mainly in Hong Kong while having few stores in Mainland China. TT limited was financially well-managed three years ago. However, both internal and external factors such as poor supply chain management, changing consumer tastes and economic downturn have been hindering its development in terms of profitability and liquidity. SWOT



analysis is used to evaluate its business and market environment.

### 3. Financial Risks (see Appendix V)

**Profitability Risk:** From 2015 to 2016, declining gross margin arose from dropping sales by 3% and rising cost of sales by 5%, which was caused by higher purchase cost and weakening customer demand for toys. Plunging net margin, apart from diminishing sales, was mainly due to the higher labor cost by 5%. With marginal variation in assets and equity, dipping ROA and ROE indicated that TT Limited could not efficiently utilize its resources and/or harvest at peak season.

**Liquidity Risk:** We identified the problem of inadequate cash and excessive inventory from 2015 to 2016. The plummeting cash ratio from 0.80 to 0.58 caused the decreases in both current and quick ratios, raising grave concern with the ability to use cash for settling current debts. Current ratios were about twice the quick ratio, which showed the high level of inventory that deteriorated the liquidity. Proliferation of inventory, besides, implied the slowing down inventory turnover from 2.45 to 2.29. The current ratio, quick ratio, inventory turnover, cash ratio and days inventory presented large shortfalls to the market average. Poor marketing and management of working capital signified excessive inventories and insufficient cash and hence posed high liquidity risk.

<sup>1</sup> Hong Kong Trade Development Council. (2017, August). *Toy Industry in Hong Kong*. Retrieved from <http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Toy-Industry-in-Hong-Kong/hkip/en/1/1X000000/1X001DGH.htm>; Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>

<sup>2</sup> *Ibid.*

<sup>3</sup> Euromonitor International. (2017, June). *Toys and Games in China*. Retrieved from <http://www.euromonitor.com/toys-and-games-in-china/report>; Consumer Council. (2016, November). *Online Retail – A Study on Hong Kong Consumer Attitudes, Business Practices and Legal Protection*. Retrieved from [https://www.consumer.org.hk/ws\\_en/competition\\_issues/reports/2016/online-retail.html](https://www.consumer.org.hk/ws_en/competition_issues/reports/2016/online-retail.html)

<sup>4</sup> *Ibid.*

<sup>5</sup> McKinsey & Company. (2017, August). *Chinese luxury consumers: More global, more demanding, still spending*. Retrieved from <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/chinese-luxury-consumers-more-global-more-demanding-still-spending>

<sup>6</sup> Hong Kong Trade Development Council. (2017, August). *Toy Industry in Hong Kong*. Retrieved from <http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Toy-Industry-in-Hong-Kong/hkip/en/1/1X000000/1X001DGH.htm>

<sup>7</sup> CBRE Research. (2015). *December 2015 Global Prime Office Occupancy Costs*. Retrieved from [http://www.cbre.be/portal/pls/portal/CBWEB\\_utils\\_news\\_public.show\\_image?id=18602&field=doc1&trans=n](http://www.cbre.be/portal/pls/portal/CBWEB_utils_news_public.show_image?id=18602&field=doc1&trans=n); INS. (2017). *Chinese Employees Labor Cost in the Mainland*. Retrieved from <https://ins-globalconsulting.com/china-labor-cost/>

<sup>8</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>; Euromonitor International. (2017, June). *Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/toys-and-games-in-hong-kong-china/report>

**Solvency Risk:** D-E ratio and debt ratio were remarkably higher than the market average in 2016. Too much debt led to the problem of high financing charge where interest coverage ratio decreased from 9.1 times to 4.7 times. Since interest to sales marginally varied from 1.5% to 1.6%, slump of interest coverage could be illustrated by a collapse of EBIT by 45%. The solvency ratios concluded that TT Limited inefficiently used debt to generate earnings.

#### 4. Proposed Strategies: ERA

Current marketing targets at middle class. However, due to the weaknesses and threats, we believe that we could not only rely on one of the possible strategies proposed by the strategy study group.



#### **Strategic Evaluation:**

Internal weaknesses, especially supply chain communication problem, which impedes us from replenishing the inventory in real time to capture profit instantly from current trend, would not be mitigated by adopting either market development, product development or withdrawal. Without advancement of supply chain management and marketing strategies, TT Limited may have acute operational problems.

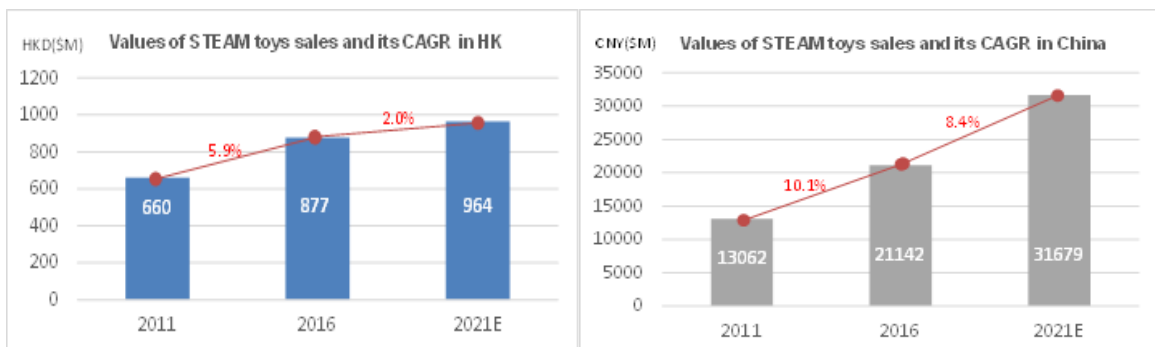
Given the threats that the economic downturn and social value on toy as unnecessary good would reduce middle class consumption on toys, only strengthening current marketing strategies or developing innovative toys in existing market may not sustain our business in long run. This points to the fact that TT Limited should expand the new market as well.

Hence, either one of them could not stand alone. To address the weaknesses and turn threats into opportunities, we would implement both market development and market penetration. Besides, we would seize the opportunities from demographic change and uprising demand for better children education by adopting product

development. As such, we would propose “ERA”, which comprises product development(E), market development(R) and market penetration(A), evolving our business into a new era.

## Exploration

We aim at selling attractive toys for children to explore their potentials. “Exploration” represents the core business idea and key product features. The major products would be educational and tech-based toys for children in wide-ranging age groups. Survey in 2016 revealed that 1 in 3 parents would train their children to “win at the starting line” and 55% of those parents claimed that developing children’s interest as early as possible was critical.<sup>9</sup> Therefore, we would promote the STEAM toys.<sup>10</sup> The sales of STEAM toys was thriving in HK with a CAGR of 5.9% from 2011 to 2016 and expected to further grow at 2% from 2016 to 2021.<sup>11</sup> In addition, the China sales of STEAM toys propelled from 2011 to 2016 with 10.1% CAGR. It is expected that it will generate 8.4% CAGR between 2016 and 2021.<sup>12</sup>



Tech-based toys would also be our opportunity to scale up in this new era. Children in this digital generation are surrounded by technological products. This demographic change has shown a new demand for smart toys. As shown in TT Limited’s analysis

<sup>9</sup> Ng, K. C. (2016, August). From kindergarten age, Hong Kong’s children are tutored to be winners. *South China Morning Post*. Retrieved from <http://www.scmp.com/news/hong-kong/education-community/article/2001021/kindergarten-age-hong-kongs-children-are-tutored>

<sup>10</sup> STEAM stands for “Science, Technology, Mathematics, Arts and Engineering”; Harbour Times. (2017, March 8). *Future Education: From STEM to STEAM*. Retrieved from <http://harbourtimes.com/2017/03/08/future-education-from-stem-to-steam/>

<sup>11</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-hong-kong-china/report>

<sup>12</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>

of sales, digital toy was the only increasing category among others, uplifting by 23.44% between 2015 and 2016. Market research indicated that the revenue of electronic toys presented a stronger growth at a CAGR of 6.4% than the non-electronic toys with a 4.4% CAGR in HK between 2011 and 2016.<sup>13</sup> For the same period, CAGR for electronic toy sales in China was at 10%.<sup>14</sup> It is also expected that its growth in HK and China will continue in the future.

Both historical and forecast data show the potential of developing STEAM and tech-based toys and that in China market will have a more dramatic expansion than that in HK market in the next five years.



The major source of income for TT Limited comes from selling toys. Facing the threats of intense competition and declining profit, we also plan to also penetrate into a new market - rental toy services.

The rental toy services have been spreading in Western countries since 2005 and recently in Asian countries. Toy rental businesses in Singapore have been accelerating exponentially from 3 to 6 in 2014 and currently 10+.<sup>15</sup> The flourishing rental services would provide an alternative for TT Limited to expand.

## Feasibility

According to Citibank, 65% of respondents from middle class would not spend on luxury items unless they were on sale.<sup>16</sup> Toy rental which is relatively cheaper could

<sup>13</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-hong-kong-china/report>

<sup>14</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>

<sup>15</sup> Nguyen, J. (2015, May). *Frenemy with Benefits: How can Toys Makers Capitalise on the Rise of Toy Rental in Asia? – Part 1*. Euromonitor International. Retrieved from <http://blog.euromonitor.com/2015/05/frenemy-with-benefits-how-can-toys-makers-capitalise-on-the-rise-of-toy-rental-in-asia-part-1.html>; Sassy Mama. (2016, September). *The Top Toy Rental Companies in Singapore*. Retrieved from <https://www.sassymamasg.com/top-toy-rental-party-companies-singapore/>

<sup>16</sup> Chen, A. (2015, August 9). Hong Kong's middle class most burdened by high housing costs. *South China Morning Post*. Retrieved from <http://www.scmp.com/news/hong-kong/article/1295325/middle-class-most-burdened-high-housing-costs>



be more appealing to the lower-middle class who seems to be more sensitive to price.

It could combat the above threats: economic downturn, seasonality and shorter toy life cycle. During the economic downturn where the household disposable income is shrinking, toys are labeled as unnecessary goods. Additionally, seasonal sales may mislead the demand estimation, triggering a shortage or excess in stock. Speedy change of consumer tastes derives the problem of shorter toy life cycle, dissuading parents from purchasing new toys. We believe that toy rental could be another revenue stream from which we could capture more profit and enlarge our customer base; children could enjoy diverse new toys; and parents could save much money.

#### **Implementation Plan - Location**

We would launch a pilot programme for rental toy services in HK first for 6 months to 1 year and then we may penetrate it to the China market. Since HK is a densely populated city and TT limited has multiple branches in various districts in HK with high prestige, we would set HK as starting location to maximize the effectiveness.

#### **Operation model**

Online rental service would be available apart from in-store renting where we would set up a small corner placing the rental toys in each physical store. For online services including on the website and mobile application, real time inventory system would support the function of online toy reservation for customers. Customers with rental order confirmation could choose a physical store to pick up their toys. Upon return, our staff would check the conditions and may charge for damages caused by the customers.



Emphasis on the associations with customers and suppliers could support our transformation and sustainability, which could wrap up the new business strategies.

**Customers**

**Quality:** Frequent quality control would be conducted with our supply partners. Tools like six sigma, firm visit, sampling and testing and communication of standard would be used to monitor the manufacturing process.

**Price:** Our educational and tech-based toys would usually be competitively priced at HK\$300-500. For rental toys, customers have to join membership by paying a refundable security deposit of HKD\$500, which would be placed in a special deposit account, before enjoying our rental services. We would charge, upon the return, our customers for each toy at a daily rate of approximately 0.8-0.9%.<sup>17</sup>

A toy would generally follow below timeline and be donated if it is unsold at the end.

	1 <sup>st</sup> Year												2 <sup>nd</sup> Year												3 <sup>rd</sup> Year		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
Original price <sup>#</sup>	[Blue bar]												[Blue bar]												[Blue bar]		
10% off	[Blue bar]												[Blue bar]												[Blue bar]		
Available for rent*	[Blue bar]												[Blue bar]												[Blue bar]		
Clearance round 40% off	[Blue bar]												[Blue bar]												[Blue bar]		
Donation	[Blue bar]												[Blue bar]												[Blue bar]		

<sup>#</sup>Occasional marketing campaign will be held and special discount may be provided to customer after the 1<sup>st</sup> year  
<sup>\*</sup>Some popular items will be classified as special items available for rent in 1st year

**Place:** We would continue to run the business both online and offline. In Hong Kong, we would distribute our toys through physical stores since CAGR for traditional toy stores in Hong Kong was 62.6% in 2016 but that for internet retailing was only 3.8%.<sup>18</sup>

In China, we would mainly operate online. With 20% CAGR in online toy retailing in China in 2016<sup>19</sup>, we expect to expand our online business in China through online platform such as Taobao and Tmall while maintaining few branches in top tier cities.

<sup>17</sup> (60%+15%)/90-day. Rental income could surpass the current situation where 27% of toys are sold at 60% of the original price within 3 months  
<sup>18</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-hong-kong-china/report>  
<sup>19</sup> Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>

**Promotion:** In response to the prevalence of smartphones, we would develop our own *mobile application* for reaching our customers and marketing. At the initial stage of rental toy services, we must grab the public attention and raise publicity. Thus, we would *free the rental fee* in the first two weeks for potential customers who registered as our members and made a security deposit of \$500. While rental toy services encourage our potential customers to be our members, data on the customer preferences and insights would be collected and used for *direct marketing* to boost sales especially in slack season. We would also introduce a *point-based loyalty programme* for existing members by offering special discounts on premium and popular items. *Online promotion* would be made through our mobile application and social media, such as Instagram and Weibo, on which we would occasionally hold *interactive events*, such as lucky draw, to reward our members and convert potential customers into our members. Leveraging of online tools, we could reach more customers and *seasonally promote* in Summer (June) and Christmas (December).

## Suppliers

**Information sharing:** Just-in-time inventory management could reduce the inventory but it requires association and effective communication with suppliers. We would form partnerships with suppliers and tie them to our cloud ERP system, facilitating the information sharing, where the suppliers could access the real-time sales and inventory data. It is conducive to accurate prediction and production scheduling. Improved communication could prevent shortage and shorten the lead time.

**Digital supply chain:** we would embrace the supply chain 4.0<sup>20</sup> which is about applying the technological innovations to the supply chain such as Radio Frequency Identification (RFID) and drone. RFID sensors could show which items have been

---

<sup>20</sup> PricewaterhouseCoopers. (2016). *Industry 4.0: How digitization makes the supply chain more efficient, agile, and customer-focused*. Retrieved from <https://www.strategyand.pwc.com/media/file/Industry4.0.pdf>

transported in real time and convey the tracking data across the supply chain.<sup>21</sup>

Drone could quickly count the inventory and detect depleted and improperly stored items.<sup>22</sup> With Internet of Things, we could obtain accurate real-time inventory data and share across the supply chain, reinforcing the communication.

## 5. Risk Management: Hygiene for Rental Toys

Apart from basic cleansing process, we would install the ZONO Sanitizing Cabinet. This is a scientific ozone generator covering 225 childcare centers in US, to sanitize all our rental toys before and after rent.<sup>23</sup>

Characteristics of ZONO Sanitizing Cabinet	
Reliability	Verified by testing laboratories such as Aerobiology Laboratory Associates and the University of Georgia, It kills 99.9% of common bacteria and viruses from toys. Furthermore, NASA in 2017 partnered with ZONO Services to develop "Innovative Laundering and Sanitization System Using Ozone".
Environmental Friendliness	Unlike other sanitizers using harsh chemicals, It inputs ambient air, half ounce of water and three cents of electricity to create ozone to sanitize toy, which in turn decreases the consumption of water.
Simplicity	It takes about 30 minutes for each sanitation cycle and accommodates diverse types of products including electronic toys.

The equipment would be placed at our warehouse and a toy would be vacuum-packed and redistributed to the store with a label as clean. We would regularly and randomly sample the rental toys to undergo the cleanliness test. To lessen the risk of damage, we would assign professionals for the maintenance and quality check each month. The warranty of ZONO Sanitizing Cabinet could also be extended throughout its lifetime.

<sup>21</sup> *Ibid.*

<sup>22</sup> Supplychain247. (2016, June 3). *Walmart Testing Warehouse Drones to Catalog and Manage Inventory*. Retrieved from <http://www.supplychain247.com/article/walmart-testing-warehouse-drones-to-manage-inventory>

<sup>23</sup> ZonoServices. (n.d.). *Industries Served: ChildCare*. Retrieved from <http://www.zonoservices.com/industries-served/child-care/>; NASA. (2017). *NASA 2017 SBIR Program Phase: Selections - Firm*. Retrieved from [https://sbir.nasa.gov/award\\_firm\\_list/selection\\_nid/58009](https://sbir.nasa.gov/award_firm_list/selection_nid/58009)

## 6. Financial Performance (see Appendix V)

**Profitability:** Sales and rental income are the main sources of revenues. The rental income would be about 25-30% of total revenues. Transformation of our business strategies would rocket our revenues by approximately 20% each year. The gross margin would first decrease to 55% and then recover to 60%. This is because production of digital toys raises the COGS whereas the digital supply chain counteracts this upsurge gradually. In addition to the astounding expansion of revenues, automation in warehouse and online sales could slightly relax our staff cost, further pushing the profit margin up from 5.2% in 2016 to 16.4% in 2021.

**Liquidity:** Current ratio and quick ratio become 2.17 and 1.71 in 2021 respectively, which would be mainly due to the strengthening cash where the cash ratio would reach 1.028 in 2021. Surge of net profit represents huge operating cash inflow, upholding our ability to meet the short-term financial obligations. Besides, plummeting days inventory would result in our successful supply chain management including effective communication with suppliers and implementation of digital supply chain.

**Solvency:** Propelling retained earnings and issuance of shares coupling with loan repayment and low dividend per share for the first two years could relieve our solvency risk. Thus D-E ratio and debt ratio will be plunging in next five years.

## 7. Ethical Issue: Dangerous Levels of Lead in Latest Batch of Jungle Land

**Issue:** Under the Toys and Children's Product Safety Ordinance (Chapter 424), failure to meet the toy safety standard would subject Daniel to a fine at level 6 (i.e.HKD100,000) and to imprisonment for 1 year.<sup>24</sup>

<sup>24</sup> Sections 3 and 31 of Chapter 424 Toys and Children's Products Safety Ordinance

**Self-interest threat<sup>25</sup>:** Daniel, as a CEO, COO and CPA would suffer from financial loss, being laid off and be legally liable for the fault once the scandal is disclosed.

**Ethical Principles:** “Accountancy profession is its acceptance of the responsibility to act in the public interest”.<sup>26</sup> Problematic toys jeopardize the public safety. To act in public interest, Daniel should take the following actions under objectivity<sup>27</sup> to prevent conflict of interest from overriding professional judgment and under integrity<sup>28</sup> in disclosure of information.

#### **Immediate Actions:**

**Issue disclosure:** By integrity<sup>29</sup>, inspection results for lead level, affected toys and production period should be honestly and truthfully disclosed via different channels to the public so that customers could identify which batch of Jungle Land was affected.

**Recall of problematic toys:** Daniel should immediately recall the latest batch of Jungle Land figurines with lead paints. Customers could return through the retailers and choose to get another toy from Tiger Toys within a price range or refund for compensation. An extra cash coupon would be given to those customers.

**Simple registration:** Upon returning the affected toys, customers could register their information for any follow-up actions if necessary. Tiger Toys should be liable for those registered customers who could testify the causation. Tiger Toys should further assess case by case in order to offer financial supports for medical treatments.

**Testing current toys:** To relieve the public fear, Daniel should hold a laboratory test with the accredited laboratories<sup>30</sup> on current toys to ensure the compliance with toy

<sup>25</sup> Section 100.12 of HKICPA Code of Ethics for Professional Accountants

<sup>26</sup> Section 100.1 of HKICPA Code of Ethics for Professional Accountants

<sup>27</sup> Section 120 of HKICPA Code of Ethics for Professional Accountants

<sup>28</sup> Section 110 of HKICPA Code of Ethics for Professional Accountants

<sup>29</sup> *Ibid.*

<sup>30</sup> Approved by Hong Kong Accreditation Service (HKAS) under section 9 of Cap. 424 Toys and Children’s Products Safety Ordinance

safety standard.<sup>31</sup> The result announced by a professional and a short video of testing procedure would be posted on the company website and social media.

**Change of suppliers:** Daniel should rescind the contract with that problematic supplier and cooperate with suppliers whose paint can fulfill the ISO standard<sup>32</sup>.

#### **Safeguards:**

**Frequent sampling and testing:** Third party quality control specialists and claims adjusters such as SGS Group can add the credibility of the inspections.

**Online events:** Short informative videos spreading toy safety information would be uploaded to social media like Youtube and Facebook, which could build a positive public perception that Tiger Toys understand the importance and assurance of product safety.

**Leadcheck swabs:** Leadcheck swabs from 3M could be provided for each Tiger Toys' product purchased. Customers could conduct lead test by themselves. This policy would last for about 1 year to boost the customers' confidence to Tiger Toys.

**Corporate governance control:** Daniel should designate the internal audit department which would be monitored by audit committee composed of INEDs for regular review of materials and quality control procedure in the toy production.

## **8. Conclusion**

By launching our strategy "ERA", TT Limited would evolve our business into a new era. TT Limited would initiate the development of digital and STEAM toys to cultivate our future innovators; penetrate to the rental toy market; and apply CRM with social media and SCM with sophisticated technologies. Consequently, "ERA" turns threats into opportunities and more importantly bolsters profitability and liquidity.

<sup>31</sup> Schedule 1 of Cap. 424 Toys and Children's Products Safety Ordinance: *ISO 8124-5:2015: Safety of toys - Part 5: Determination of total concentration of certain elements in toys*

<sup>32</sup> *Ibid.*

## 9. References

- CBRE Research. (2015). *December 2015 Global Prime Office Occupancy Costs*. Retrieved from [http://www.cbre.be/portal/pls/portal/CBWEB UTILS NEWS PUBLIC.SHOW\\_IMAGE?ID=18602&FIELD=DOC1&TRANS=N](http://www.cbre.be/portal/pls/portal/CBWEB UTILS NEWS PUBLIC.SHOW_IMAGE?ID=18602&FIELD=DOC1&TRANS=N)
- Chen, A. (2015, August 9). Hong Kong's middle class most burdened by high housing costs. *South China Morning Post*. Retrieved from <http://www.scmp.com/news/hong-kong/article/1295325/middle-class-most-burdened-high-housing-costs>
- Consumer Council. (2016, November). *Online Retail – A Study on Hong Kong Consumer Attitudes, Business Practices and Legal Protection*. Retrieved from [https://www.consumer.org.hk/ws\\_en/competition\\_issues/reports/2016/online-retail.html](https://www.consumer.org.hk/ws_en/competition_issues/reports/2016/online-retail.html)
- Euromonitor International. (2017, June). *Traditional Toys and Games in China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-china/report>
- Euromonitor International. (2017, June). *Traditional Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/traditional-toys-and-games-in-hong-kong-china/report>
- Euromonitor International. (2017, June). *Toys and Games in China*. Retrieved from <http://www.euromonitor.com/toys-and-games-in-china/report>
- Euromonitor International. (2017, June). *Toys and Games in Hong Kong, China*. Retrieved from <http://www.euromonitor.com/toys-and-games-in-hong-kong-china/report>
- Harbour Times. (2017, March). *Future Education: From STEM to STEAM*. Retrieved from <http://harbourtimes.com/2017/03/08/future-education-from-stem-to-steam/>
- Hong Kong Trade Development Council. (2017, August). *Toy Industry in Hong Kong*. Retrieved from <http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Toy-Industry-in-Hong-Kong/hkip/en/11X000000/1X001DGH.htm>
- Hong Kong Institute of Certified Public Accountants. (2016, December). *Code of Ethics for Professional Accountants*. Retrieved from [https://app1.hkicpa.org.hk/hksaebk/HKSA\\_Members\\_Handbook\\_Master/volumel/COErevised.pdf](https://app1.hkicpa.org.hk/hksaebk/HKSA_Members_Handbook_Master/volumel/COErevised.pdf)
- INS. (2017). *Chinese Employees Labor Cost in the Mainland*. Retrieved from <https://ins-globalconsulting.com/china-labor-cost/>
- McKinsey & Company. (2017, August). *Chinese luxury consumers: More global, more demanding, still spending*. Retrieved from <https://www.mckinsey.com/business-functions/marketing-and-sales/our-insights/chinese-luxury-consumers-more-global-more-demanding-still-spending>
- NASA. (2017). *NASA 2017 SBIR Program Phase: Selections - Firm*. Retrieved from [https://sbir.nasa.gov/award\\_firm\\_list/selection\\_nid/58009](https://sbir.nasa.gov/award_firm_list/selection_nid/58009)
- Ng, K. C. (2016, August). From kindergarten age, Hong Kong's children are tutored to be winners. *South China Morning Post*. Retrieved from <http://www.scmp.com/news/hong-kong/education-community/article/2001021/kindergarten-age-hong-kongs-children-are-tutored>
- Nguyen, J. (2015, May). *Frenemy with Benefits: How can Toys Makers Capitalise on the Rise of Toy Rental in Asia? – Part 1*. Retrieved from <http://blog.euromonitor.com/2015/05/frenemy-with-benefits-how-can-toys-makers-capitalise-on-the-rise-of-toy-rental-in-asia-part-1.html>
- PricewaterhouseCoopers. (2016). *Industry 4.0: How digitization makes the supply chain more efficient, agile, and customer-focused*. Retrieved from <https://www.strategyand.pwc.com/media/file/Industry4.0.pdf>
- Sassy Mama. (2016, September). *The Top Toy Rental Companies in Singapore*. Retrieved from <https://www.sassymamasg.com/top-toy-rental-party-companies-singapore/>
- Supplychain247. (2016, June 3). *Walmart Testing Warehouse Drones to Catalog and Manage Inventory*. Retrieved from [http://www.supplychain247.com/article/walmart\\_testing\\_warehouse\\_drones\\_to\\_manage\\_inventory](http://www.supplychain247.com/article/walmart_testing_warehouse_drones_to_manage_inventory)
- ZonoServices. (n.d.). *Industries Served: ChildCare*. Retrieved from <http://www.zonoservices.com/industries-served/child-care/>

## 10. Appendixes

### Appendix I. Forecast Analysis of Sales

Forecast analysis of sales	2016	2017	2018	2019	2020	2021
Items sold at 100% of full retail price	70.00%	67.00%	65.00%	65.00%	63.00%	63.00%
Items sold at 90% of full retail price		4.00%	4.00%	4.00%	4.00%	4.00%
Items sold through rental services		25.88%	29.12%	28.57%	28.57%	28.57%
Items sold at 60% of full retail price	27.00%	2.12%	1.38%	1.93%	3.93%	3.93%
Items given away	3.00%	1.00%	0.50%	0.50%	0.50%	0.50%
	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>	<b>100.00%</b>
Average selling price as a % of full retail price	86%	91%	93%	93%	92%	92%

### Appendix II. Breakdown of Total Revenues

	2017E			2018E			2019E			2020E			2021E		
	HK	PRC	Total	HK	PRC	Total	HK	PRC	Total	HK	PRC	Total	HK	PRC	Total
Sales	771789.0	273038.6	1044827.6	950249.8	303417.9	1253667.7	1096332.4	413710.3	1510042.8	1285318.2	538179.2	1823497.5	1488338.6	722105.0	2210443.6
Rental Income	364739.8	0.0	364739.8	404632.1	110322.8	514954.8	453012.8	151004.3	604017.1	532461.3	196937.7	729399.0	618924.2	265253.2	884177.4
Total Revenues	1047624.2	204778.9	1409567.4	1354881.9	413740.7	1768622.6	1549345.3	564714.6	2114059.9	1817779.5	735117.0	2552896.4	2107262.8	987358.2	3094621.1

\*Sales are based on proportion of sale between HK and PRC (from 80:20 to 70:30), digital and educational toys CAGR (6% for HK and 10% for PRC), basic estimated growth rate (10% for HK and 20% for PRC)

\*Estimation of rental income is based on 25% of total sales for that year, proportion of sale between HK and PRC, and pricing at 0.8-0.9%\*90days



Appendix III. Forecast Profit & Loss Statement

Forecast P&L (\$000)	Assumption	2016A	2017E	2018E	2019E	2020E	2021E	Trend
Revenues	Appendix II	1,034,237.00	1,409,567.40	1,768,622.55	2,114,059.88	2,552,896.44	3,094,621.06	-----■
Cost of Goods Sold	% of Sales	(426,108.00)	(634,305.33)	(742,821.47)	(845,623.95)	(1,021,158.57)	(1,237,848.42)	-----■
Gross Profit		608,129.00	775,262.07	1,025,801.08	1,268,435.93	1,531,737.86	1,856,772.64	-----■
Operating costs:								
Employee costs	18% of Sales	221,768.00	253,722.13	318,352.06	380,530.78	459,521.36	557,031.79	-----■
Occupancy costs	5% for HK; 3% for PRC*	108,325.00	113,307.95	118,474.79	123,806.16	129,327.91	135,018.34	-----■
Repairs and maintenance	1.6% of sales; 3% of rental income	16,730.00	27,659.44	35,507.33	42,281.20	51,057.93	61,892.42	-----■
Other costs	8% of sales	102,130.00	83,586.21	100,293.42	120,803.42	145,879.80	176,835.49	-----■
R&D	5% of sales		52,241.38	62,683.39	75,502.14	91,174.87	110,522.18	-----■
Depreciation		77,621.00	81,294.95	105,641.17	123,189.12	144,600.06	171,042.96	-----■
Total operating costs		(526,574.00)	(611,812.05)	(740,952.16)	(866,112.81)	(1,021,561.93)	(1,212,343.18)	-----■
EBIT		81,555.00	163,450.02	284,848.92	402,323.12	510,175.93	644,429.45	-----■
Finance costs	% of Sales	(17,321.00)	(14,095.67)	(15,917.60)	(17,123.89)	(18,610.62)	(20,303.81)	-----■
EBT		64,234.00	149,354.34	268,931.32	385,199.23	491,565.32	624,125.65	-----■
Taxation	16.5% for HK; 25% for PRC	(10,598.00)	(27,928.46)	(51,029.38)	(72,912.71)	(93,046.29)	(118,138.07)	-----■
Profit after taxation		53,636.00	121,425.89	217,901.94	312,286.52	398,519.03	505,987.58	-----■

\*CBRE Research. (2015). December 2015 Global Prime Office Occupancy Costs. Retrieved from [http://www.cbre.be/portal/pls/portal/CBWEB UTILS\\_NEWSPUBLIC.SHOW\\_IMAGE?ID=18602&FIELD=DOC1&TRANS=N](http://www.cbre.be/portal/pls/portal/CBWEB UTILS_NEWSPUBLIC.SHOW_IMAGE?ID=18602&FIELD=DOC1&TRANS=N)

Appendix IV. Forecast Cash Flow Statement

Forecast CF Statement (\$000)	2017E	2018E	2019E	2020E	2021E
Operating CF:					
Net income	121,426	217,902	312,287	398,519	505,988
Add: Depn	81,295	105,641	123,189	144,600	171,043
Change in NWC except cash	(12,573)	20,469	(5,921)	(29,956)	(32,127)
	190,147	344,013	429,555	513,163	644,904
Investing CF:					
CapEx	(253,722)	(229,921)	(274,828)	(331,877)	(402,301)
	(63,575)	114,092	154,727	181,287	242,603
Financing CF:					
Issuance of ordinary shares	156,000				
Long term loan (5yrs)	80,000		80,000		
Loans repayment		(20,000)	(20,000)	(20,000)	(20,000)
Dividend payout	(53,200)	(53,200)	(55,860)	(59,850)	(63,840)
DPS	0.40	0.40	0.42	0.45	0.48
No. of shares	133,000	133,000	133,000	133,000	133,000
	182,800	(73,200)	4,140	(79,850)	(83,840)
Net change in cash	119,225	40,892	158,867	101,437	158,763
Beginning Cash	105,008	224,233	265,125	423,992	525,428
Ending Cash	224,233	265,125	423,992	525,428	684,192

Ratio Analysis	2016 Market Average	2015A	2016A	2017E	2018E	2019E	2020E	2021E	Trend
Net Margin	0.0762	0.103	0.052	0.086	0.123	0.148	0.156	0.164	-----■
Asset turnover	1.1033	1.199	1.152	1.073	1.147	1.094	1.088	1.072	-----■
ROA	0.0915	0.124	0.060	0.092	0.141	0.162	0.170	0.175	-----■
Equity multiplier	1.6122	2.033	2.036	1.989	1.876	1.799	1.667	1.566	-----■
ROE	0.0898	0.251	0.122	0.184	0.265	0.291	0.283	0.274	-----■
Gross margin	0.4523	0.617	0.588	0.550	0.580	0.600	0.600	0.600	-----■
Current ratio									
Current ratio	2.3553	1.917	1.762	1.920	1.771	2.009	2.074	2.170	-----■
Quick ratio	1.9520	0.976	0.743	1.094	1.125	1.446	1.563	1.711	-----■
Cash ratio	1.1551	0.795	0.575	0.761	0.701	0.938	0.961	1.028	-----■
AR turnover	8.2803	33.333	33.538	18.250	13.519	11.061	9.125	7.935	-----■
Days AR	46.5639	10.950	10.883	20.000	27.000	33.000	40.000	46.000	-----■
AP turnover	9.1330	3.413	3.282	3.318	3.318	3.318	3.318	3.318	-----■
Days AP	66.7466	106.954	111.214	110.000	110.000	110.000	110.000	110.000	-----■
Inventory turnover	15.6340	2.448	2.289	2.607	3.042	3.318	3.650	4.056	-----■
Days inventory	77.1959	149.075	159.434	140.000	120.000	110.000	100.000	90.000	-----■
Debt ratio									
Debt ratio	0.3197	0.508	0.509	0.497	0.467	0.444	0.400	0.361	-----■
D-E ratio									
D-E ratio	0.6947	1.033	1.036	0.989	0.876	0.799	0.667	0.566	-----■
Interest Coverage ratio									
Interest Coverage ratio		9.106	4.708	11.596	17.895	23.495	27.413	31.739	-----■

\* Comparables include Dream int'l (1126.HK), Playmates Ltd, Kidsland and Bandai


Appendix VI. Forecast Statement of Financial Position

Forecast Statement of Financial Position	Assumption	2016A	2017E	2018E	2019E	2020E	2021E	Trend
PPE								
Opening balance		HK\$000	HK\$000	HK\$000	HK\$000	HK\$000	HK\$000	-----■
CapEx	% of Sales	549,735.00	575,755.00	748,182.18	872,461.94	1,024,100.61	1,211,377.09	-----■
Depn	14% of Opening Bal.	77,621.00	81,294.95	105,641.17	123,189.12	144,600.06	171,042.96	-----■
Ending balance		575,755.00	748,182.18	872,461.94	1,024,100.61	1,211,377.09	1,442,634.87	-----■
CA								
Inventories	Days inventory	186,126.00	243,295.19	244,215.28	254,845.58	279,769.47	305,222.90	-----■
Trade receivables and prepayments	Days AR	30,838.00	77,236.57	130,829.61	191,134.18	279,769.47	390,007.04	-----■
Bank - Rental Toy Security Deposits	100% of Security Deposit Liab.	-	21,000.00	29,400.00	38,220.00	49,686.00	64,591.80	-----■
Cash and cash equivalent	Appendix IV	105,008.00	224,233.22	265,124.90	423,991.73	525,428.47	684,191.65	-----■
		321,972.00	565,764.99	669,569.80	908,191.48	1,134,653.41	1,444,013.39	-----■
Total Assets		897,727.00	1,313,947.17	1,542,031.74	1,932,292.10	2,346,030.50	2,886,648.25	-----■
CL								
Trade payables	Days AP	129,833.00	191,160.51	223,864.01	254,845.58	307,746.42	373,050.21	-----■
Other payables	% of COGS	33,902.00	50,744.43	82,064.09	101,474.87	122,539.03	148,541.81	-----■
Tax liabilities	% of EBT	6,104.00	14,935.43	26,893.13	38,519.92	49,156.53	62,412.56	-----■
Security Deposit liabilities	*	-	21,000.00	29,400.00	38,220.00	49,686.00	64,591.80	-----■
Bank borrowings	% of Borrowings	12,905.00	16,897.91	15,899.69	18,894.37	17,896.14	16,897.91	-----■
		182,744.00	294,738.29	378,120.91	451,954.74	547,024.12	665,494.30	-----■
Net Working Capital		139,228.00	271,026.70	291,448.89	456,236.74	587,629.29	778,519.09	-----■
Total assets less current liabilities		714,983.00	1,019,208.89	1,163,910.83	1,480,337.35	1,799,006.38	2,221,153.95	-----■
NCL								
Borrowings	Appendix IV	258,558.00	338,558.00	318,558.00	378,558.00	358,558.00	338,558.00	-----■
Other NCL (Deferred tax liabilities)	% of PPE	15,587.00	20,200.92	23,556.47	27,650.72	32,707.18	38,951.14	-----■
		274,145.00	358,758.92	342,114.47	406,208.72	391,265.18	377,509.14	-----■
Total liabilities		456,889.00	653,497.20	720,235.38	858,163.46	938,289.30	1,043,003.44	-----■
Total assets less total liabilities		440,838.00	660,449.97	821,796.36	1,074,128.64	1,407,741.20	1,843,644.81	-----■
Share capital and reserves		440,838.00	660,449.97	821,796.36	1,074,128.64	1,407,741.20	1,843,644.81	-----■

\*\$500 for 3% of population penetration in HK; 20% of household at middle class; 30% further growth rate

## **QP Case Analysis Competition 2017 (Mainland)**

# **Best Written Report**

A close-up photograph of a child's hand holding a brown plastic toy animal, possibly a bear or a dog. The child is wearing a dark blue t-shirt with the letters 'JAY' visible in blue. The background is blurred, showing another person's hand holding a white object. The overall scene is indoors, likely a play area.

TELLY TOYS:  
GROW UP WITH YOU  
CASE ANALYSIS REPORT



Hong Kong Institute of  
**Certified Public Accountants**  
香港會計師公會

# Content

## Part I Summary 1

## Part II Macro Analysis of Toy Industry 1

Market Analysis

Future Marketability

## Part III Corporation Analysis 3

An Overview of the Company

SWOT Analysis

The Reason of Down Going Profit

## Part IV Strategic and Selection of Strategy 5

Strategic Overview

Revenue Strategy

Cost Strategy

Implementation Schedule

## Part V Financial Summary 10

Funding

Financial Risks Management

Investment

Profit Prediction & Dividends Distribution

## Part VI Ethical Issue 11

Problem

Proper Actions

## Appendix I 12

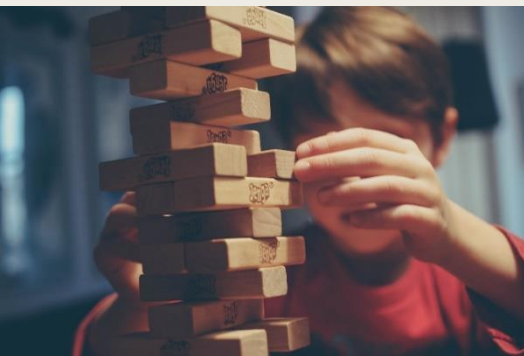
Operation Plan

## Appendix II Pro Forma Statement 13

Statement of Profit and Loss

Statement of Financial Position

Statement of Cash Flows





## Part I Summary

This report attempts to find out the causation of a sharp decline in profits of Telly Toys Limited, and offers a practical proposal to assist TT Ltd. actualize improvement in profitability. Recommendation is put forward after a detailed analysis of toy industry status and current situation of the company, which is to develop an exclusive new product—escort robot to establish brand and realize growth. Corresponding financial strategies are suggested likewise. Ethical issue is discussed and advised in the closing.

## Part II Macro Analysis of Toy Industry

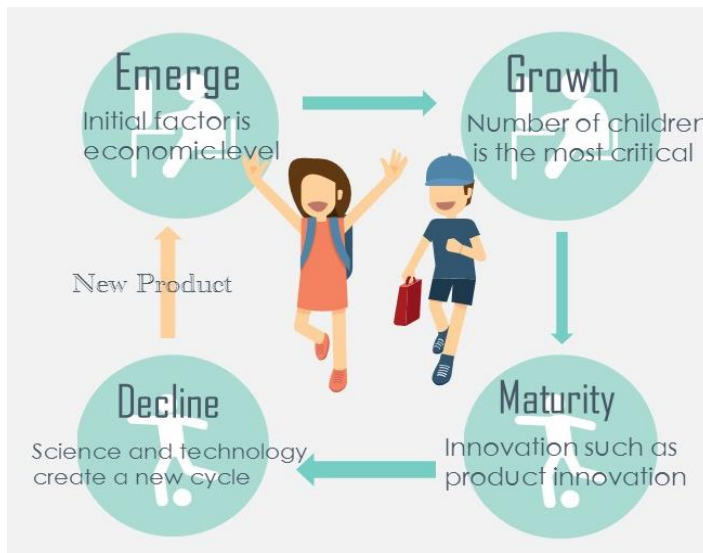


Figure 1 Factors Affecting Industry in Different Period

China, as an emerging market with a rapid increase in income per capita<sup>1</sup>, is the fastest growing one. It has also maintained a relatively stable growth in 2002-2016, with a CAGR of 8.63%.<sup>2</sup> Unlike other saturated market, China may still have most potential based on several reasons:

### 2.1 Market Analysis

Factors affecting toy industry development are multifaceted. Several main factor differs in each period and others have affection lasts in whole progress. Generally speaking, they can be summarized as left.



Figure 2: Market Growth in Past Five Years, Data source: Euromonitor, *Potential consumption and the scale of children give birth to Asia Pacific 170 billion market*

<sup>1</sup> Data source: World Bank, Economic Data in 2016

<sup>2</sup> CAGR stands for Compound Annual Growth Rate, Data source: Euromonitor



### **(1) Economic development**

Greater consumption capacity is reflected in growing disposable income. China's urban and rural residents' disposable income per capita rose from 6280 RMB in 2000 to 31790 RMB in 2015, annual growth rate of was about 11.42%.<sup>3</sup>

### **(2) The large number of children——potential customer**

In 2015 the number of newborns in China was about 16.55 million, and children aged 0-14 was about 240 million, ranking second in the world. Huge population base determines a huge toy consumption demand.

### **(3) Family structure tends to consume more on toys**

Single child indicates that adults in the family would spend more on their child's need, which promises high-end products an elevating prospect. Portion of toys over 500RMB in the Chinese market rose from 0.19% in 2002 to 4.5% in 2016.

In summary, projected sales in Chinese market is fairly considerable. We infer TT probably holds a minimal market share of 1.86%.

## **2. 2 Future Marketability**

**(1)Profit climax in R&D and marketing:** The values in the industrial chain are mainly added in product design and sales. Giants in this industry such as Mattel, Hasbro and LEGO largely concentrate their minds on relatively high value-added upstream and downstream development instead of manufacturing. Hence, TT should spare some focus to product design and development, and put more cultural ideas into the products to grasp substantial potential revenue.

**(2)Further subdivide product area:** Leading companies have occupied the frontier of most areas. Five largest companies' market share add up to 40.8%<sup>4</sup>, hardly

---

<sup>3</sup> Data source: Guangzheng Hengsheng: Potential Consumption and Children Population Brought An Asian Pacific Market of 170 Billion.

<sup>4</sup> Data source: Euromonitor



to exceed. More feasible proposal for smaller toy companies is dig deep in one subdivision field to capture sufficient market. For example, medium sized Hallmark Cards plays big in art and craft toys other than Hasbro or others.





**(3)Brand establishment:** Customers place high trust in toy brands. Brand guarantees the quality. Intensive competition make it difficult for a low distinguished brand to stand out if their product has little diversity. Company may utilize Disney as reference to construct brand image and raise brand status.

## Part III Corporation Analysis

### 3.1 An Overview of Company

**Telly Toys Limited (TT Ltd.) is a company mainly retails toys to residents and tourists in Hong Kong and Mainland China. TT's product scope range from traditional ones to high-end, modern digital toys. However, TT limited suffers a shaft dropdown in profit in 2016, and also suffering deficit in cash, which lead to a disappointing solvency to its due loan as well. Several pressing issue ahead, TT' s prospect seems more ambiguous.**

### 3.2 SWOT Analysis

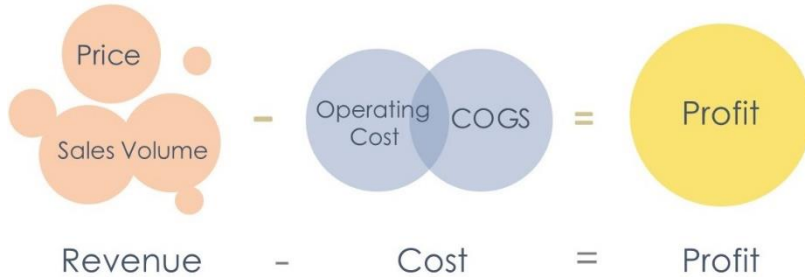
<p>1) Sophisticated delivery system 2) E-store channel expand sales cheaply 3) Authorization from famous brand</p>  <p style="font-size: 2em; font-weight: bold; text-align: center;">S</p>	<p style="font-size: 3em; font-weight: bold; text-align: center;">W</p>  <ol style="list-style-type: none"> <li>1) Large amount of unsold inventory</li> <li>2) High operation cost</li> <li>3) Grim financial situation with unstable cash flow and a due loan</li> <li>4) Pay little attention to clients' loyalty</li> <li>5) Undistinguished product and unaware brand</li> </ol>	<p>1) Potential marketability of brand and themed toys 2) STEM-related and digital toys are the future hit whose market remain untapped</p>  <p style="font-size: 2em; font-weight: bold; text-align: center;">O</p>	<p style="font-size: 3em; font-weight: bold; text-align: center;">T</p>  <ol style="list-style-type: none"> <li>1) Fierce competition in current market</li> <li>2) Incapable of bargain with manufacturers</li> <li>3) Strong dollar may add extra purchase expense</li> </ol>
--	--	--	--



### 3.3 The Reason of Down-going Profit

The cause to the reduce of profit may mainly lies in TWO aspect: *Decrease in revenue and Rise on cost.*

#### (1) Turnover kept sliding



Sales revenue basically made up from two parts: **PRICE** and **SALES VOLUME**.

In the perspective of price, average price of inventories sold falls 0.0268% (estimated about HK\$0.0804) because the proportion of goods sold at a lower discount and given away had raised 4%. Generally speaking, there is a fixed proportion between retail price and cost price. We infer TT Ltd. offers a relatively high price since the company itself purchase expensively. Under a circumstance which toy's consuming already suffers a low level, customers won't buy unappealing items unless it's notably cheap. Therefore the company has no option but compress profit margin by cutting retail price.

Then take a look at sales volume. Data shows a large percentage of toys have no market. This fact suggests that TT Limited made consecutive errors in predicting trend and catching customers' preference, especially the elderly children. The outcome was the company always have a great deal of items encounter poor sales, meanwhile products in excess demand continuously appears to have shortage. Compared with revenue in 2015, it have lessened 3%. Sales also dropped 379 million between children over 12(reduced 18.64%). Another probable reason for it is TT pay little attention to constructing customer's loyalty. As a consequence old customer leave when they can't get extra discount, further abates sales volume.

#### (2) Exorbitant GOCS and purchase cost of inventories





**The rise of cost of inventories is another initial reason to explain the downturn on the gross profit.** Inventory balance went through a significant growth of 11.83%, which implies an obvious backlog. Worse still, TT's COGS<sup>5</sup> went 4.56% up, accompanied with gross profit ratio declined 2.9%. Ratio of sales to cost rose 3% to 41.2% in 2016, far above the average 34.4% of 14 listed company. Make a comparison with Banbao, a mainland listed company whose business range resembles. Banbao realized a reduction in COGS at 9.04%, and stock balance reduced 11.67%<sup>6</sup>. Reasons behind high cost can be concluded in two similar part. One is TT misjudgments during purchase. Another is TT's inability to bargain with upstream to get a relatively low price among competitors.

### **(3) Boosting operation and occupancy cost**

Reasons above mainly caused reduction in gross profit. There are more factors lessens operating profit whose decrement is 44.8%. In this case, this sharp diminution may have come from two ways. TT's way of running physical stores demands a considerable staff to keep the system working. Since the labor force become more expensive, employees' wage cuts more profit. Besides, though the central warehouse in HK brought a lot convenient to distributing goods between stores, it also costs a lot as rental fee rose to 109 million due to increased land price in Hong Kong. **Operating cost had risen, leading to even lower operating profit.**

## **Part IV Evaluation and Selection of Strategy**

### **4.1 Strategy Overview**

As mentioned before, we conclude TT's low revenue leads to profit loss. Besides, based on market analysis, cost advantage is not suitable for TT Limited as the future trend is differentiation. Thus, approaches to raise profits should focus on promoting

---

<sup>5</sup> COGS is short for cost of goods sold

<sup>6</sup> Banbao, Annual Report of 2016



sales combined with target cost management.

## 4.2 Revenue Strategy

### 4.2.1 Evaluation and Selection

	Consolidation	Market Development	Product Development	Withdrawal
<b>Purpose</b>	<ul style="list-style-type: none"> <li>Expand market share and sales volume</li> <li>Implement cost control and scale effect</li> </ul>	<ul style="list-style-type: none"> <li>Enter new market to increase sales volume</li> </ul>	<ul style="list-style-type: none"> <li>Launch new products to increase sales volume</li> <li>Differentiation bring pricing power</li> </ul>	<ul style="list-style-type: none"> <li>Focusing on core product to increase sales volume and build brand</li> </ul>
<b>Risk</b>	<ul style="list-style-type: none"> <li>Capital demand may lead to bankruptcy</li> <li>Management risk after consolidation</li> </ul>	<ul style="list-style-type: none"> <li>Entry barrier and competition may lead to cash flow shortage</li> </ul>	<ul style="list-style-type: none"> <li>High cost in R&amp;D and advertisement</li> <li>Customers' preference changes quickly</li> </ul>	<ul style="list-style-type: none"> <li>Growth stagnation</li> <li>Lose current market share</li> </ul>

Table 1: General Evaluation of Business Strategy

Both sales volume and price will affect revenue. Strategic proposition include market penetration, market development, product development and withdrawn. When assessing these options, we measures from criteria, suitability, feasibility and risk.

- Penetration through consolidation is unrealistic: Though many company realize expansion on market share by acquisition, it requires a large amount of capital, TT's Cash & cash equivalent has reduced 5.1%, and most liquid assets are dead stock inventories. Lavish consolidation only worsens financial strait.
- No need to enter other market: From Part I we know TT have already had a place in most potential market. Entrance barrier may cost more than gain. Apart from this, TT Limited's core product gain little acceptance out of HK and southern China due to undistinguished brand name and indifferent product. Sizeable profit margin remain narrow in new market if TT solely seeks for entry.
- Withdrawal may lead to loss of market share: This approach only take effect when core products and their branch dominate a stable and large market share. Taking redundant product line may concentrate resources in entity on more profitable products. It is obviously not compatible with TT's current situation. Jungle Land is



in the absence of uniqueness, let alone other items. Withdrawing may lead to decrease of both stake and sales.

- New product is most viable if risk is controlled: New products may bring increase on both sales and pricing power. Aligning with future market trend and current state, 0-12 children digital products will become a hit. Besides, a large amount of fund will be saved for R&D stage and sales if manufacturing were outsourced. Thus, financial risk is avoidable.

Based on these analyses, launching new product is the best option.

#### 4.2.2 Choosing New Product: Escort robot

Item	Global market			Chinese Market		
	2016	2020	CAGR	2016	2020	CAGR
Year	2016	2020	CAGR	2016	2020	CAGR
The number of children ( 0-14 ) (hundred billion)	19.38	20	43.6%	2.23	2.5	40.2%
Penetration	26.4%	40%		32.2%	56%	
Each children	1	1		1	1	
Market size	1200 thousand	1800 thousand	43.6%	100 thousand	200 thousand	40.2%
Each price(RMB)	2000	1500		3000	2000	
Total market size(RMB)	24billion	27billion	35.7%	3 hundred million	4 hundred million	34.0%

Table 2: Market Size Prediction of Intelligent Escort Robot

Having a look on toy catalogue, escort robot for children is the most suitable stepping-stone. Evaluation and reports announced intelligent robot is expected to

own a market sizes trillion dollars. Among which, escort robot designed for children is to power the growth most (about 32.2%), other than ones designed for industrial and services (18.8% and 22.6% each)<sup>7</sup>. It probably bases on two reasons.

From the aspect of users, though children's purchasing power is low for now, their parents—the generation after 80s is the main force of consumption. Besides, parents pay much attention to infant enlightenment education and accompany. Escort robot may meet this preference.

From the aspect of technology, security tools like face recognition and artificial

<sup>7</sup> G-Mety's essay: Intelligent Robot: the next investment point



intelligence have come in to apply in family robot, which derive various products.

### 4.2.3 Product Introduction



#### Details & Specifications

Name	Alpha 1
Function	3D Visual Programming, Voice Interaction, Media, SI, Smart Alert
Outlook	A brain, LED eyes, Eight motors
Users' Age	Mainly 4-14
After Sale Service	One-for-One Engineer Consulting, Return& Exchange in 7 Days Without Reasons, 1 Year System Warranty, Instalment Allowed, Fast Delivery
Price	\$150-200 (The market price is about 50-1000\$)*
Security	Safe

			
3D Visual Programming & Modeling	Education Data	Simultaneous Interpretation	Dancing& Singing

Picture above tells specifications of our new product, Alpha 1. Our objective is to promote children's interest in STEM<sup>8</sup>. Given the function of escort, our product emphasis accompany while inspire curiosity to science and enhance ability of coding. When setting a price, we locate our range on current market average. As Alpha 1 aims high-end, 150-200\$ appears to be a comparatively mid-price scope, which also overlaps parents' acceptable extent. Feedback would be collected regularly from buyers to modify details.

### 4.2.4 Feasibility: Operation with New Product (Details in Appendix I)

To avoid excess money spent on fixed asset that takes long term to recover, we suggest outsource the manufacturing part and focus on R&D and sales. Three concrete strategies stands individually in respect of R&D, marketing and delivery.

### 4.3 Cost Strategy: Target Cost Management

Target Selling Price	150-200\$	We suggest TT Limited conduct target cost management that is useful for lowering cost. <sup>9</sup>
Target Profit	20%	
Target Cost	120-160\$	

<sup>8</sup> STEM stands for Science, Technology, Engineering and Mathematics

<sup>9</sup> Steps are: 1) Set target price 2) Estimate required profit 3) Calculating target cost 4) Analyze the gap between target and

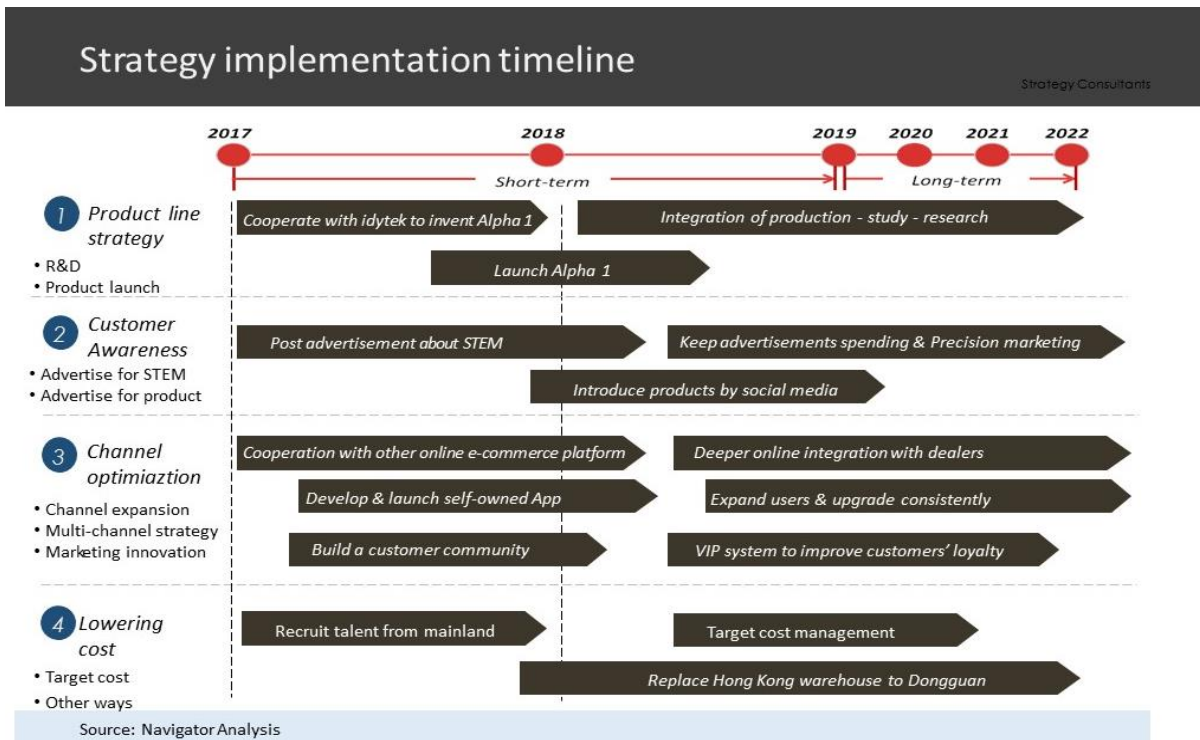


Target price must be considered on the foundation of willingness to pay. When setting a target profit, profitability of industry level needs be taken into account. High labor expense, financial expense, or other management expenses allocated to product cost may illustrate the gap.

We proposed 4 detailed strategies to blueprint TT’s future action. First, we advise TT Limited to launch a campaign appealing citizens to buy unsold inventories and donate to pool children at an extra low price instead of giving away directly, raising brand awareness simultaneously. Second, replace HK warehouse with a new one in Dongguan to cut occupancy costs, as rent we saved can cover distribution cost and spares. Third, recruit staff from mainland may reinforce cost management as labor force lingers lower.<sup>10</sup> Last but not least, TT limited will outsource production part thus maintenance and depreciation fee may go down dramatically.

### 4.4 Implementation Schedule

The timeline of this proposal follows two objective of the company: financial prudence



real cost 5) Look for methods to decrease it

<sup>10</sup> About 30% can be saved after calculation



and promoting new product.

## Part V Financial Summary of Proposed Strategy

### 5.1 Funding

As the TT Limited will outsource the production to other manufacturers, it would mainly focus on design and sales of toys. In this way, there will be savings in capital investment. In spite of this, the company still needs additional funding of HK \$ 45 million. We don't suggest seek more external fund because low solvency and due loan as barriers. Interest coverage ratio in 2015 was 9.106, and 4.708 in 2016, became a huge obstacle to raise outside funds. We assume it can be supplemented by two inner sources:

Capital Amount	Capital Source
HK \$ 30 million	Selling the warehouse in Hong Kong and buying a new one in Dongguan to save about HK \$ 30 million because of difference in land price. <sup>11</sup>
HK \$ 15 million	By its own free cash flow (On Dec.30 <sup>th</sup> 2016, the company had HK \$105 million cash)

### 5.2 Financial risks management

There are several financial risks need to be managed:

Risk Types	Risk Control Actions
Interest rate risk	Using the financial swap, by which part of the floating interest rate loans will be turned into a fixed interest rate, to avoid interest rate risk.
Exchange rate risk	The company should adopt risk control through options, futures, forward and other financial derivatives.
Liquidity risk	In view of the current corporate credit card is about to expire, the company should actively make credit card extension to reduce liquidity risk.

### 5.3 Investment

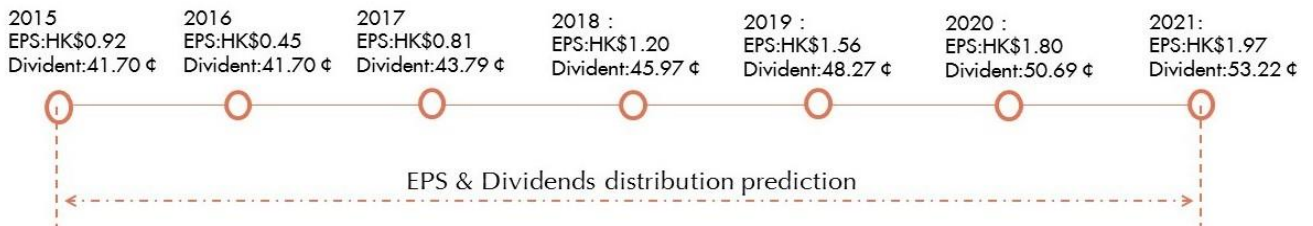
Seasonality in TT's income gives rise to periodical fluctuation in cash flow. In order to make more efficient utilization of its idle cash on hand, we suggest the company devote their surplus ready money to liquid investment, especially open- end funds and

<sup>11</sup> Land price in Dongguan is 9160 yuan/m<sup>2</sup> and in HK is 24.2875HK\$/m<sup>2</sup>, data source <http://www.landvalue.com.cn/>



money market fund. They both guarantee a higher yield rate than demand deposit and permit free access and withdraw. Having a thorough study on funds available on market, we recommend E-Fund B<sup>12</sup> as we take both yield rate and liquidity into account, it may meet both need.

#### 5.4 Profit prediction & dividends distribution



Based on the analysis of market data, we forecast the profit situation for the next five years (see in Appendix II). According to our profit prediction, the company will have the financial ability to pursue the policy of continual dividend each year.

## Part VI Ethical Issue

### 6.1 Problem

**This issue involves the interests of the Tiger Toys, public interests and the interests of downstream retailers. Their responsibility and relationship lie below.**



### 6.2 Proper Actions

Assume Aimee Chan was a CPA. We use the three steps strategy to solve the ethical dilemmas:

**Step1 Analyze consequences:** Two possible consequences: One is the incident

<sup>12</sup> 易方達天天貨幣基金 B, see more details in [http://www.efunds.com.cn/html/fund/110006\\_fundinfo.htm](http://www.efunds.com.cn/html/fund/110006_fundinfo.htm)



is concealed by the company; the other is that the company actively exposes it and actively solves the problem and minimize the damage. As the influence of this issue is very serious, sooner or later it will be exposed. The second one is the ideal one.

**Step2 Analyze actions:** In order to reach the Ideal consequence, the Tiger Toys should immediately take these remedial actions:

1. Let the production department stop production of leaded toys, let the sales department to suspend the sale of the product.
2. Contact downstream retailers to stop selling product, recall insecure products, and begin public relations activities ASAP;
3. Actively conduct in-depth investigation, to identify potential responsibility of paint supplier and minimize company's own losses.

**Step3 Make decision:** Aimee Chan should promptly give Daniel some advices, telling him pros and cons, to persuade him to take remedial measures as soon as possible rather than to conceal the incident.

### Appendix I Operation Plan

	Cooperate with idytek	Customer & Production Cycle	Building online shopping channel
<b>Purpose</b>	<ul style="list-style-type: none"> <li>• Diversify products</li> <li>• Build integrated operation route of " production , study and research "</li> </ul>	<ul style="list-style-type: none"> <li>• Realize zero-stock</li> <li>• Link customer with production for demands-oriented</li> </ul>	<ul style="list-style-type: none"> <li>• Increase sales channel and sales</li> <li>• Shape customer community</li> </ul>
<b>Reasons</b>	<ul style="list-style-type: none"> <li>• lacking of R&amp;D experience</li> <li>• Ifytek has a good foundation in intelligent voice and language technology</li> </ul>	<ul style="list-style-type: none"> <li>• Now customer need and product is separated</li> <li>• Now unable to seize customer need</li> <li>• Big data can be used for logistic</li> </ul>	<ul style="list-style-type: none"> <li>• Toy's RUS applied for bankrupt</li> <li>• The number of parents who choose online shopping is increasing dramatically.</li> </ul>
<b>Operation</b>	<ul style="list-style-type: none"> <li>• Invest Ifytek to invent new products</li> <li>• Obtaining sole license</li> </ul>	<ul style="list-style-type: none"> <li>• Using big data</li> <li>• Collecting customer data after purchasing and make demand</li> <li>• Building customer data pool and customer image</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperate with B2C platforms</li> <li>• Building own online shopping APP</li> </ul>



## Appendix II Financial Prediction

## Pro Forma Profit &amp; Loss Statement( HK\$000)

Dollars in thousands of HKD except per share

## Statement of Profit or Loss(5 year projection)

		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Revenue	HK\$	1137660.7	HK\$ 1228673.6	HK\$ 1321069.8	HK\$ 1382235.3	HK\$ 1436142.5
Cost of Inventories Sold		<u>-458066.1</u>	<u>-494711.4</u>	<u>-531814.7</u>	<u>-560000.9</u>	<u>-586881</u>
<b>Gross profit</b>	<b>HK\$</b>	<b>679594.6</b>	<b>HK\$ 733962.17</b>	<b>HK\$ 789255.07</b>	<b>HK\$ 822234.42</b>	<b>HK\$ 849261.55</b>
Investment Revenue		523.78	535.83	548.15	560.76	573.66
Employee costs		-219550.3	-218452.6	-216049.6	-213241	-215373.4
Occupancy costs		-107241.8	-108314.2	-109397.3	-110491.3	-111596.2
Property repairs		-17098.06	-17457.12	-17980.83	-18160.64	-18342.25
Depreciation		-77776.24	-78631.78	-78710.41	-79497.52	-79497.52
Research& Development		-14500	-13862	-14555.1	-16738.37	-14729.76
Outsourcing costs		-10342.37	-9101.29	-9239.63	-6116.55	-5390.72
Other costs		-100087.4	-100187.5	-103193.1	-104225	-105267.3
Total operating costs		<u>-546596.1</u>	<u>-546006.4</u>	<u>-549126</u>	<u>-548470.4</u>	<u>-550197.1</u>
<b>Operating profit</b>	<b>HK\$</b>	<b>132998.46</b>	<b>HK\$ 187955.76</b>	<b>HK\$ 240129.08</b>	<b>HK\$ 273764.07</b>	<b>HK\$ 299064.46</b>
Finance costs		-16887.98	-16550.22	-16384.71	-16351.94	-16024.91
Profit before taxation		116634.26	171941.37	224292.52	257972.88	283613.21
Taxation		<u>-19244.65</u>	<u>-28370.33</u>	<u>-37008.27</u>	<u>-42565.53</u>	<u>-46796.18</u>
<b>Profit after taxation</b>	<b>HK\$</b>	<b>97389.61</b>	<b>HK\$ 143571.04</b>	<b>HK\$ 187284.26</b>	<b>HK\$ 215407.36</b>	<b>HK\$ 236817.03</b>

## Statement of financial position( HK\$000):

		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
Inventories		190432	205204	215464	256237	287549
Trade receivables		33130	39318	46237	48378	50265
Cash and cash equivalents		189884	260331	318265	375849	384705
Non-current Asset		<u>561513</u>	<u>622218</u>	<u>704440</u>	<u>782884</u>	<u>868173</u>
<b>Total Assets:</b>	<b>HK\$</b>	<b>974959</b>	<b>HK\$ 1127070</b>	<b>HK\$ 1284407</b>	<b>HK\$ 1463348</b>	<b>HK\$ 1590692</b>
Accounts payables		159272	172014	171739	179691	186699
Tax liabilities		7336	9930	12953	14898	16379
Bank borrowings		16292	13691	13965	14384	14815
Non-current liabilities		<u>292417</u>	<u>285422</u>	<u>280556</u>	<u>278146</u>	<u>239764</u>
Total Liabilities:	HK\$	475317	HK\$ 481057	HK\$ 479213	HK\$ 487118	HK\$ 457656
Total Equity:	HK\$	499642	HK\$ 646014	HK\$ 805194	HK\$ 976230	HK\$ 1133036
<b>Total liability &amp; Equity</b>	<b>HK\$</b>	<b>974959</b>	<b>HK\$ 1127071</b>	<b>HK\$ 1284407</b>	<b>HK\$ 1463348</b>	<b>HK\$ 1590692</b>

## Statement of Cash flows ( HK\$000):

		<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
<u>Operating activities</u>						
Net income		97390	143571	187284	215407	236817
Depreciation&Amortization		77776	78632	78710	79498	79498
Less: Change in Working Capital		<u>-50262</u>	<u>-48887</u>	<u>-63045</u>	<u>-95643</u>	<u>-119922</u>
Cash flow from operating activities		124904	173316	202950	199262	196393
<u>Investing Activities</u>						
Cash flow from Investing Activities		-5758	-40706	-82222	-78444	-85288
<u>Financing Activities</u>						
Issuance&payment of loans		18272	-6995	-4866	-2410	-38382
Dividends payment		<u>-52542</u>	<u>-55169</u>	<u>-57928</u>	<u>-60824</u>	<u>-63865</u>
Cash flow from Financing Activities		-34270	-62164	-62793	-63234	-102247
Net change in cash		84876	70446	57934	57584	8857
Beginning cash balance		<u>105008</u>	<u>189884</u>	<u>260331</u>	<u>318265</u>	<u>375849</u>
<b>Ending cash balance</b>	<b>HK\$</b>	<b>189884</b>	<b>HK\$ 260331</b>	<b>HK\$ 318265</b>	<b>HK\$ 375849</b>	<b>HK\$ 384705</b>