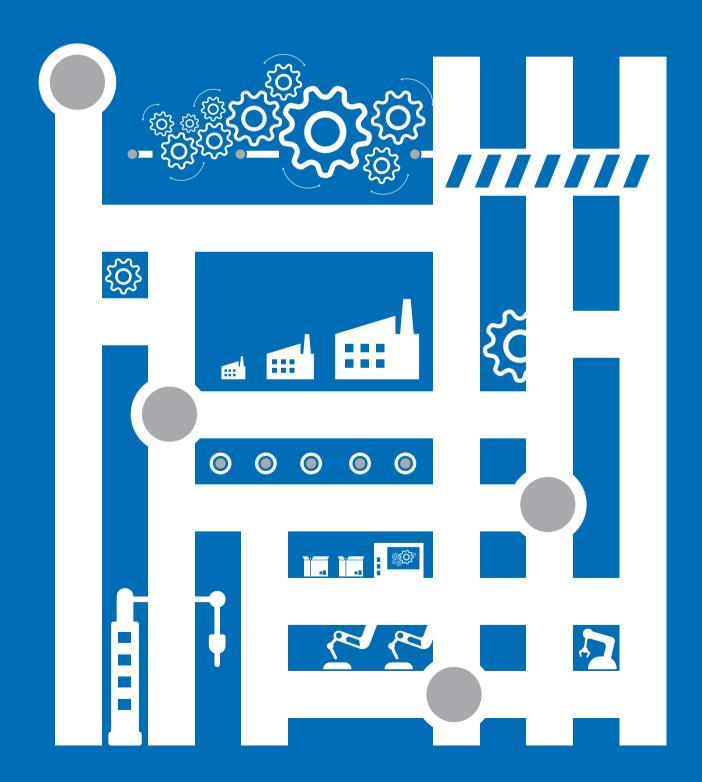
## The Roadmap of Design Strategy for Hong Kong Manufacturing SMEs

Watch & Clock | Garment Manufacturing & Fashion | Power Tools & Houseware | Integrated Products & Service Industry | Furniture | Jewellery | Paper & Printing | Chinese Food | Technology



# The Roadmap of Design Strategy for Hong Kong Manufacturing SMEs

### **Reshaping SMEs for a New History**

If we were to study and write the history of Hong Kong industrial design, who would be considered the most suited to take the loaded responsibility? The industrialist, designer or academic? This is indeed an issue worth pondering. In particular, seeing the gradual retreat of many influential Hong Kong veterans in the design and industrial sectors. I deeply feel the urge as the deadline for documenting the history of Hong Kong industrial design has become more imminent than ever. With careful consideration, wouldn't the Design Council of Hong Kong (DCHK) naturally be the best proving witness to trace the development of Hong Kong industrial design when it has been commemorating its 50th Anniversary and the work in promoting the use of design in the industrial sector over the decades? After rounds of discussion, we finally decided to explore the delicate relationship between the development and design of individual enterprises and design strategies by studying 50 cases of SMEs with manufacturing capability in Hong Kong.

History is not just a collection of information about the past, but how the facts should be interpreted and understood. The research team of "The Roadmap of Design Strategy for Hong Kong Manufacturing SMEs" (RDS) has shifted its perspective from the original historical development to focus on interviewing primary sources and analysing more than 40 selected success stories of Hong Kong manufacturing enterprises across different industries in the past 50 years. The purpose is to review the development of how design has been applied to industries in Hong Kong and to provide answers to questions like why companies or even industries developed in the ways they were. It also reflects the changes in nine major industries, including Garment Manufacturing & Fashion, Watch & Clock, Power Tools & Houseware, Integrated Products & Services, Furniture, Jewellery, Paper & Printing, Chinese Food, and Technology. In addition to drawing parallels between Hong Kong's economic development and the business development of individual enterprise cases, this book also documents how the latter has moved from "designing products" to "designing corporate strategies".

Understanding that industry embodies much more than just manufacturing, but the planning and operation of the entire industrial chain, it is easy to follow that industries and industrial design always go hand in hand. The function of a product is no longer the only focus of development; its user interface and experience are equally indispensable. The section of Design Thinking Tool Kit at the end of this book hence serves as a practical tip for Hong Kong SME manufacturers who wish to use design strategies to grow their businesses. Designing an effective business development strategy is a complex journey. The SME management may flexibly make use of the eight selected design tools to lead the team to re-plan and change the mindset and culture through actual actions, generating creative reforms to realise business innovation and transformation.

The DCHK has been playing a vital role in promoting industrial design and its development. It has also launched a series of iconic celebrations and programmes to

set a milestone for its 50th anniversary, such as organising the 50th-anniversary D-Awards, publishing a book and exhibition on "Designing a Better Tomorrow", conducting the infographics research on "Scale Customisation", and launching the "Shenzhen x Chengdu Dual-Brand Promotion Programme" etc. They did not only deepen the industry's understanding of "Industry 4.0" and local elite companies, but also introduced the creativity of Hong Kong design brands into the domestic market of the Mainland for win-win collaborations.

As a closing note of the project, we would like to express the deepest thanks to stakeholders for the enthusiastic support for this project and working together to promote the development of industrial design in Hong Kong. Our special thanks go to the Trade and Industry Department of the Hong Kong Special Administrative Region Government for the SME Development Fund, all our friendly partners, support organisations, and interviewed companies!



Prof. Eric C. Yim, JP Honorary President of Design Council of Hong Kong Convener of the Advisory Committee of The Roadmap of Design Strategy for Hong Kong Manufacturing SMEs



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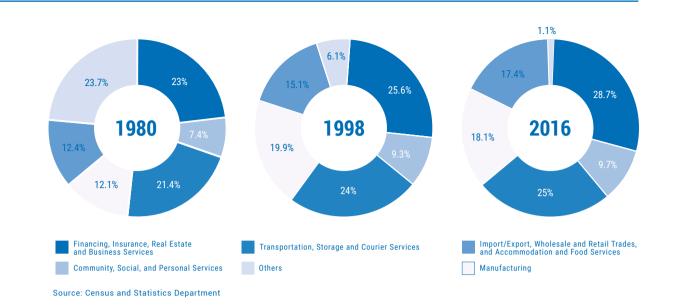
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### An Overview of Hong Kong's Re-industrialisation

"Hong Kong industry" may sound dated to younger readers. To many, "industry" connotes either a family diligently making plastic flowers in a narrow greasy space, or hundreds of workers gathering along the production lines in a factory filled with machines. These images probably match well with the legacy photos of Hong Kong's industrial past.



Similar scenes were commonly found in the 1950s-60s, especially in the mould, plastic, textile, garment, electronics and toys industries. However, many of the established factories were moved northwards to the Mainland following China's Reform and Opening Up in 1979, leading to 20 years of deindustrialisation in Hong Kong.

In its golden time, taking the year 1980 as an example, the manufacturing industry amounted to 23.7% of the local GDP. However, it plunged to 10% in 1998 and further dropped to 1.1% in 2016 (see figures at left). There were once nearly 1 million factory workers; but by 2019, the workforce had shrunk to just around 88,000. Textile, garment, plastic, watch, toys, electronics, mould and other industries were the pillars of Hong Kong's manufacturing sector, yet they are close to non-existent at present.

The official narrative describes the change as follows: Hong Kong's manufacturing industry was once dubbed one of the "Four Asian Dragons", but the labour-intensive, low value-added Original Equipment Manufacturing (OEM) entities focusing on parts assembly were then appealed to by the Reform and Opening Up policy of China. They moved their production lines to the Mainland (especially the Pearl River Delta of the Guangdong province) to benefit from the low rent and labour costs, expanding Hong Kong's industry through low-technology and labour-intensive production methods. This industrial model had practically matured by the 1990s, which academics describe as a "front shop, back factory" approach – the manufacturing processes were moved to the Pearl River Delta, leaving Hong Kong as a shop front responsible for sales, taking orders and distributing goods to overseas markets.

As we do recollections on the past, we cannot help but wonder: how the deindustrialisation has really impacted the local industry and economy?

The positive viewpoint regards the development as a step towards "producer services". Factories were relocated to Mainland China while Hong Kong's companies shifted their focus to high-end commercial services, such as design, order-processing, information management, logistics and financing. The change in manufacturers' role also brought about the growth of related sectors, fostering an ecosystem of producer services. As seen in the charts above, the expanding service industries (e.g. finance, commercial services, transport, wholesale and retail, import and export) witnessed the formation of this new economic model. On the other hand, the negative view considers the socio-economic conditions a worrying passage to the post-industrial society. In contrast to highly developed countries, Hong Kong's transition did not give rise to high-tech and high value-added Research and Development (R&D) activities. The overall local engagement in R&D was still lower than Europe, America, Singapore and Mainland China. Hong Kong's industry therefore saw little progress in innovation, design, and knowledge of IT management, and was unable to undergo upward transformation. However, we do not agree with this statement and will elaborate more on our reasons soon.

Another perspective point to the recent return of manufacturing processes from the Mainland to Hong Kong. Apart from traditional industries like watch, mould, jewellery, food and medicine, the returnees also come from emerging fields such as bio-tech-nology, artificial intelligence, and digital technology. The returning and prospective manufacturers focus on high value-added production processes, namely R&D, product design, brand management, road-mapping of automated production systems and so on.

The changing macro environment was found to be the catalyst of the re-industrialisation. Operating costs have been increasing in Mainland China over the last few years, which essentially removes the past competitive advantages of cheap land and labour. In addition, the national policy now aims to develop high value-added sectors as well as to encourage the transformation and upgrade of the Guangdong industry. Labour-intensive, polluting, and inefficient industries have been gradually replaced or forced to move away from the region. The changing factors make us keen to reassess the role and position of Hong Kong's manufacturers in the Pearl River Delta and Greater Bay Area.

If the reversal of deindustrialisation is seen as a budding trend, where should Hong Kong's re-industrialisation be headed? This has been an ongoing discussion between the Government and the businesses, with the industrial sector actively contributing opinions and suggestions. As a result, the Committee on Innovation, Technology and Re-industrialisation was established in 2017; the 2018-19 and 2019-20 Budgets have also been allocated an addition fund of 4 billion Hong Kong dollars to push forward policies of re-industrialisation (e.g. the Re-industrialisation Funding Scheme). It will take more time to observe the effectiveness of these measures; but without a doubt, businesses and the public are taking the discussion more seriously, exploring possibilities and pathing the way for Hong Kong's new industrial development. How has the manufacturing industry evolved to this day in the 21st century? What we can be certain of is that it has become vastly different from the images first mentioned in the Foreword. In the era of digitalisation and elaborate division of labour, the journey from assembly of parts to distribution to markets is an interlinked flow. The Federation of Hong Kong Industries sums this up: "The modern industry does not stop at manufacturing, but also includes the preceding technological innovation and creative design, as well as succeeding steps such as brand management, sales and marketing, and supply chain management." Moreover, production processes can be carried out simultaneously in different departments and locations. One working procedure does not have to be carried out in Hong Kong either; it can be coordinated and completed by production departments in different regions. "Modular", "networked", "collaborated" - these are some of the keywords used to describe the new industrial model in Hong Kong.

Local industrialists seize the chance to redesign their production processes and workflows as the networked model emerges. They rethink the role and position of entrepreneurship, going through trials and errors in order to adapt to the new industrial development. In fact, many of them have had a grasp of the new commercial environment and opportunities amid the rapid change, and have been endeavouring to restructure their business operations accordingly.

This book has a clear goal of showcasing how Hong Kong industrialists create and reform their production processes through over 40 case studies. Their practices and experiences can provide some pointers on rebuilding the local industry. As the team dedicated to this research project and the dear readers who have witnessed the industrial transformation, we must depart from dated stereotypes of the manufacturing industry, so as to open-mindedly explore the potentials of Hong Kong's re-industrialisation.

To this book, consisting of over 40 case studies on local industries (watch & clock, garment manufacturing & fashion, power tools & houseware, integrated products & service industry, furniture, jewellery, paper & printing, chinese food and technology industries). 34 of these accounts are compiled with primary data from interviews as well as secondary information from relevant literature; the rest are organised collections of materials from existing publications. The case studies aim to outline the journeys taken by local enterprises, featuring how industrialists create value, redesign their operations and business models, reform their production processes and procedures, branding themselves, or expanding sales channels. We examine the changes through the lens of "design strategy", which is yet another characteristic of the book.

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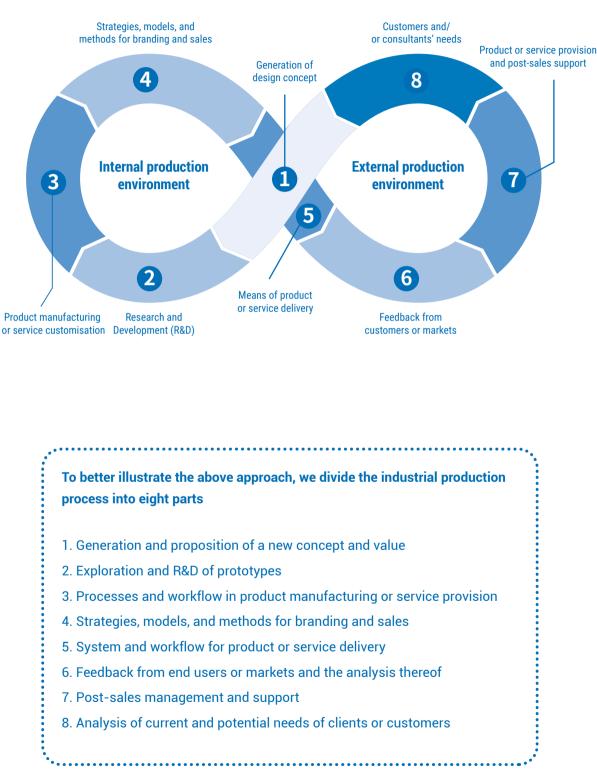
### **Design Thinking in Hong Kong's Industry**

### A lot of people associated the transformation and upgrade of industry with the transition from Original Equipment Manufacturing (OEM) to Original Design Manufacturing (ODM) or Original Brand Manufacturing (OBM)<sup>1</sup>. A strong value judgment is embedded in this progression model - OEM is thought to be at the low end of the value chain (which is based on the product's selling price), while the client's design and brand bring in much more value. Foxconn, the company engaging in OEM for Apple, is an epitome of this aspect. It is estimated Foxconn gained just about 9 or 9.5 US dollars from each iPhoneXS Max it manufactures, even though the product sold for 1,478 US dollars when it was first launched. Apple profits the most with its own technology and brand; on the contrary, the OEM Foxconn earns less than 0.65% of each phone's selling price.

The profit calculation of OEM's is simple: simply subtract the material costs from the OEM fee, then you would be left with a small profit on each piece of manufactured goods. This formula strengthens the notion of OEM being a low-value mode of production. It is not our aim to defend OEM or to attest the good and bad of any industrial model. But rather, we seek to reason that imposing an idealistic framework to the evaluation of Hong Kong's industrial development, or basing an industrial model's merits on its "production value" would only amount to prescriptive thinking, not "industry thinking".

What, then, is industry thinking? Industrial activities are complex production processes - the course from raw materials to finished goods involves a large variety of decisions, strategies, procedures, resources and technologies, Moreover, the coordinations between people and people as well as people, machines, and the environment are also important considerations in the workflow. The product or service can only be produced by these interlinked factors. Academics name this process the "Manufacturing Value Chain". There is room for improvement and reform in each of the chain's elements along with the relations between them. The industry thinking manifests itself as manufacturers continuously reflect on their transformations in order to overcome the challenges brought by the environment and market's changes over time.

### methods for branding and sales Generation of 4 design concept **Internal production** 3 environment 2 Means of product or service delivery Product manufacturing Research and



### **Eight Parts to Industrial Production**

**Research Results** 

Original Equipment Manufacturing (OEM) refers to a production model that does not involve product development as the design and manufacturing recipe are provided by the client. Original Design Manufacturing (ODM) refers to a model where the recipe and design belong to the manufacturer while the client

owns the brand license

Original Brand Manufacturing (OBM) is a model where the manufacturer owns and develops the brand and sell its own line of products.

The eight units constitute the value chain in the production process. Businesses reform one or a few of these eight with the aim to increase both the profit margin and various other values – namely efficiency, management, technology, aesthetics, user experience and so on. The concept map does not focus on listing out all elements of the value chain in an exhaustive or definitive manner. It proposes the perspective that places the focal point back to the actual industrial processes, instead of debating the winners and losers among production modes on paper.

Although changes in industrial processes vary along with factors like time, location, people, and historical background, their essence lies in how "design" is understood and interpreted.

From the following quote from an advertisement of Hong Kong Products Expo, we can have a glimpse of how local industrialists viewed design decades ago:

"Nationally pioneering, artistic designs by experts and scientific production methods are the saviour for a declining market, a powerful instrument in product promotion." (an advertisement in the brochure of the third Exhibition of Chinese Products, held by the Chinese Manufacturers' Association of Hong Kong in 1939)

At that time, design was equated to the appearance, visual composition, and manufacturing or production technology of a product. Following the post-war economic boom and the northward expansion of Hong Kong industry in the 1980s, the local industrialists now see design as a more diversified and broader concept. The Commission of the European Communities has summarised the following three points on the definition of design:

"Design is a process, an activity, and not only the results of that activity. ...design is an activity that follows a certain methodology and a number of steps — such as research, conceptualising, modelling, testing and re-design — and not only the results of that activity. ... As such, it is considered as the bridge between for example creativity and innovation, technology and the user, scientific and commercial disciplines." "Design is a holistic approach which allows a range of considerations beyond aesthetics to be taken into account, including functionality, ergonomics, usability, accessibility, product safety, sustainability, cost and intangibles such as brand and culture. ... User considerations are at the core of design activities, and balanced against other considerations such as cost and environmental impact."

The industrialists in Hong Kong may not have come across the above conclusions by the Commission or the new definitions of design in the creative and academic sectors. However, they have long stepped beyond the limits on design with their own experiences and endeavours.

We deeply respect the local industrialists for their wisdom and experiences. Their practices demonstrate various innovative means of transforming the production process. This book looks into how entrepreneurs have modified one or more parts of the Manufacturing Value Chain, what external factors catalysed the reforms, and how industrial processes can be redesigned and transformed.

Through examining the changes that have taken place, we hope our dear readers will gain a better understanding of Hong Kong's design thinking and see the local industry at present in a new light.

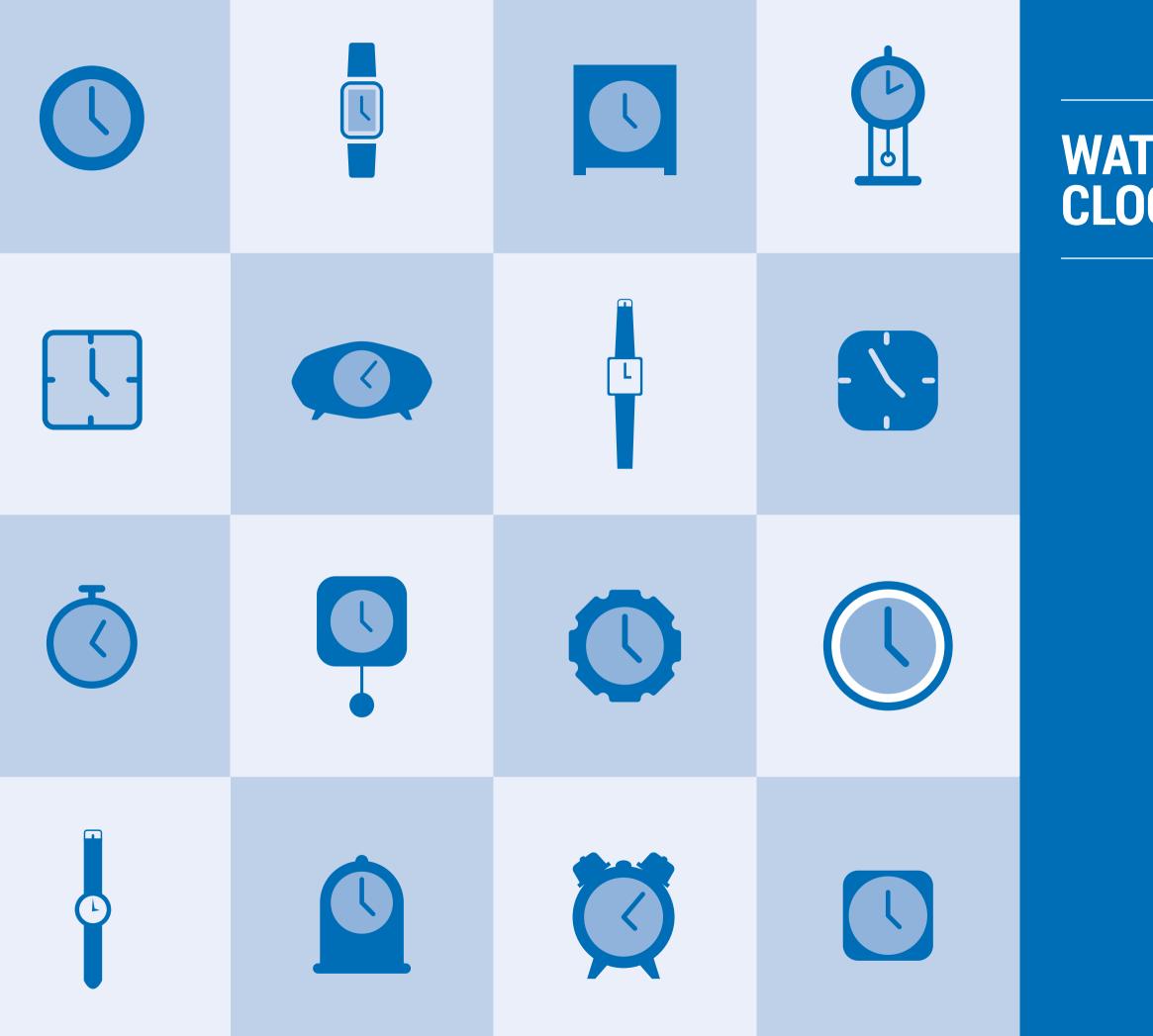
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# WATCH & CLOCK

### Chapter 01 | Watch & Clock

### Memorigin Watch Company Limited

### **The Emerging Local Tourbillon Watch Brand of East Meets West**

What is the key to the success of emerging brands when starting up?

What are the strategies to sustain the development and growth of the brand?

Memorigin Watch Company Limited produces tourbillon watches that combine Occidental and Oriental craftsmanship. The design and position of the brand are so unique that it has successfully become more than a locally known brand. Its products reach the global market - in Japan alone there are 20 points of sales.

William Shum, the founder of Memorigin Watch Company Limited, came from a family of watch business. The factory of William's father is located in Hangzhou, China. His father's factory had 40 years of experience of watchmaking, producing mechanical as well as guartz watches. Back in the 1980s, many manufactures specialised in mechanical watchmaking were closed as a result of the overwhelming popularity of guartz watches. The factory of William's father was one the few that remained, thus retaining the professional knowledge and practice needed. In 1999, a client of a foreign brand invited the factory to produce tourbillon – which involves meticulous craftmanship. Since then the factory has been producing tourbillon for brands worldwide.

Given that William's father's factory fulfilled the criteria for tourbillon watches production in terms of technique and experience, and the higher standard required for such a particular type of watch means a pirate version of it would be highly unlikely, William had an idea of having his own brand. Returning from Cornell University with a master degree in Economics and Business Management, and having worked in for private banking for a year, William finally started Memorigin Watch Company Limited with his father in 2011. Very naturally, his father's factory became the supplier of the company; while William himself got involved in the design – which incorporates traditional Chinese woodcraft technique into tourbillon watch manufacture.

Competitions in high-end watches, such as perpetual calendar, minute repeater and tourbillon watches are limited. William believes that with a unique design as such there would be a lot of potentials. In particular, his products are positioned as a "down-to-earth" type of tourbillon watches, attracting not only collectors interested in local brands but also a wider range of consumers.

As for capital required in start-up, William finds being the agents of watches of many known brands providing him a "safety zone", as returns are predictable, and profit made could then be used in developing his own brand. Now as his brand grows, he continues to explore new markets with various "cross-over" projects - such as making special editions under the themes of Star Wars, The Avengers, The Transformers and Gundam, among others.

1986	William's father Shum Mak-ling i Hangzhou.
1999	The Hangzhou watch factory ha watch.
2011 2012	Established the Memorigin Wato the proxy business for the launc
2014	Obtained the quality assurance Repair Master.
2015	Established the research and de
2017	Entered the U.S. market with the

### TAKEAWAY

### **Construct Brand Style and Direction from Experience of Upbringing**

At the start-up phase of William's business, he was troubled by how to set the brand direction, because he did not want to copy the European and American brands, yet it was difficult to look for inspiration handily. He finally found the direction from his personal growth and traditional culture.

William has long decided to establish a brand of the tourbillon watch. The guestion was how to create the soul of the tourbillon. In the end, he got his inspirations from his father's woodcarving collection. He has been deeply cultivated by his grandfather and father in Chinese culture, not to mention that his father is a collector of wooden products. Such upbringing allowed William to merge elements of Western and Chinese craftsmanship to create a Hong Kong local brand. A series of products with Chinese cultural imagery and woodcarving features such as "Magu Shouxing" and "Stellar" series were subsequently created.

#### The Entrepreneurial Force of Execution to Step Out is More Important

As an emerging brand, Memorigin did not spend a lot of time and money to do market research, or to investigate the preferences of consumers. William believed that plucking up the courage to set foot in the market would be the most effective first step in entrepreneurship.

The first year of Memoriain's business started with the European proxy brand from the Hangzhou watch factory. This way not only had low risks, but it could also bring in considerable income. On the contrary, if William were to put his own products into the market, he could be facing the risks of losing everything. However, William finally decided to produce 50 trial products for sales in the market during the Christmas and New Year's retail peak season, and they successfully sold out the goods within two weeks. This experience could not only explore consumer preferences, but it also allowed entrepreneurs to learn while doing, and gradually adjust their market strategies.

#### **Expand the Markets through Plenty and Diverse Crossover Series**

The tourbillon is originally a high-end watch, its buyers have always been limited to customers who can afford luxury goods and watch collectors. However, Memorigin positions itself as an affordable tourbillon brand and collaborates with celebrities at home and abroad, launching unique crossover series to create talking points in town and opening up new markets and clientele.

Memorigin has worked with the local stars Ronald Cheng, Marco Fu, and Mark Lui etc. to launch special-edition series designed personally by them. The brand also rolled out the movie-themed watches of representative Western cultural trends such as Star Wars and The Avengers etc. It even entered the US market with the watch collaboration with Jermaine Jackson

ad first succeeded in producing the tourbillon

ch Company Limited, accumulating capital with ch of its first batch of Memoriain watches later.

from the Japanese watch testing centre Watch

evelopment studio in Hong Kong.

e "Jackson Series – Jelephant".

### **Renley Group Limited**

### **The Multi-Faceted Development of a Watch Group**

How does a small-scale factory strike a balance between OEM and developing its own brand, expanding its retail network?

What can we learn from a company in possession of three Swiss brands and an original Hong Kong brand?

Renley Group Limited was established in 1983 by Stanley C. H. Lau. It began as a small 2000 sqf. OEM factory located in Tsuen Wan, which was gradually expanded to 15,000 sqf. Stanley then came to realise that he has to produce high-end and quality watches, for making cheap watches competing with low prices is not the way forward in the long run. This explains why, when many of his fellows went to Mainland China to open factories to lower the cost, he went instead to Switzerland to open a watch assembling factory. This factory, named Renley S.A., opened in 1990, also became the first Swiss watch production line ran by a Hong Kong manufacturer.

From 1992 onwards, Stanley Lau acquired swiss brands such as Jean d'Eve, Sultana and Butler, followed with the establishment of Free Town Watch Products. The extension in retailing was marked by the opening of "Global Timepieces" in 1999, which sold watches of various brands, including those the group acquired. 2004 was a defining year as the group moved to develop its own local brand, "Temporis", which targets domestic market as well as markets of Mainland China and Middle East. Stanley Lau's son Gary Lau, joined the group in 2007, being responsible for promotion, marketing, management and after-sale services for the group's four fully owned brand. He prioritised the task of branding above all. For him, having one's own brands implies not only a larger share in profit, but also more autonomy in adjusting oneself to accommodate market demands, as opposed to selling brands that are owned by others. Gary Lau recalls that Temporis had too many varieties in its early stage, to an extent that it did not have its own signature style. In response, his team set to develop a more feminine appeal in the designs, considering that watches have become part of accessories and female customers who care about their looks are willing to spend money on watches. Some of their watch designs even incorporate Swarovski crystals. The ratio of female to male watches is about 5:1.

Gary Lau recognises that the rise of "smart watches" is one of the many challenges that the whole watch business has been facing in recent years. But he has hope in the future and sees developing a brand as a long-term task. "Many brands have been established for more than 100 years; and even for household brand like Coco Cola, it has to continue to spend on advertising. Now my work on my brand might not come to fruition until two generations after. It is a long-term task," he concludes.

1983	A plant was set up in Tsuen War
1990	Renley Watch S.A., an assembly
1991	Free Town Watch Products Ltd.
1992	The Swiss brands Jean d'Eve, S Lucky Year Holdings.
1993	Renley Watch Manufacturing Cc Productivity organised by Hong
1994	In the Hong Kong watch industr first to be granted a certification standard of Quality Managemer Agency (HKQAA) and British Sta
1999	Global Timepieces Limited, a re
2004	Temporis, a Hong Kong brand, v

### **AKEAWAY**

### Producing High-End, High-Quality Watches

Stanley Lau believes that instead of competing with an edge in prices, one could only plant his feet firmly on solid ground and secure himself an impregnable position by producing high-end, high-quality watches.

Setting up a plant in Switzerland in 1990, Lau was the first to set up a production line in Switzerland. Subsequently, three middle- to high-end Swiss watch brands were wholly-owned by him through acquisitions. On the front of OEM, the pursuit of quality and professionality of Lucky Year Holdings has won the company large orders from high-end clients.

#### **Clear Brand Positioning**

Stanley Lau has positioned the four brands in his hands and devised respective plans for them. Sultana caters to the mainland market with its designs and productions, while Temporis locks its target on female customers, eliciting positive response during the golden times of the watch industry.

Temporis had been an advocate of vogue, but too much an emphasis on diversity had instead given rise to an unclear brand positioning. Temporis' designed pathway of targeting female customers manifests in an increasing variety of colours and materials in designs, some even decorated with Swarovski crystals. The ratio of watches for women to watches for men is approximately 5:1.

#### Adjusting the Mindsets of Brand Development

Adoption of both production modes, Original Equipment Manufacturing (OEM) and Original Brand Manufacturing (OBM), certainly brings considerable revenue at an early stage, with OEM being also a useful device to support the brand. However, there is a fundamental difference between the mindsets behind OEM and OBM. The latter should be hailed as the long-term developing strategy, worthy of the heavy investment of resources required.

Though having brought Sultana into the mainland market at an earlier time, Stanley Lau confessed that he had missed the golden opportunity to develop the brand; the mindset of OEM, all prices and costs, had driven him to sell his products in the mainland only by means of distribution, with no consideration or idea to invest in developing the brand name.

#### an.

ly plant, was opened in Switzerland.

was established.

Sultana and Butler were successfully acquired by

Co Ltd won the Governor's Award for Industry: g Kong Productivity Council.

ry, Renley Watch Manufacturing Co Ltd was the n of ISO 9001, the internationally recognised nt System, by Hong Kong Quality Assurance andards Institution (BSI).

etail store, was founded in Hong Kong.

was launched by means of patent license.

### Sweda Limited

### The Entrepreneur in the Watch Industry who Adapts to Changes

Why quit after successfully transitioning from an OEM to an own brand?

How does an industrialist of his generation go from self-innovation to encouraging innovation in others?

In the 1970s, Paul So started his watch business from scratch. In the 1980s, production lines were set up in Mainland China while the Hong Kong office catered to distribution, sales and design. In as early as 1993, Paul released his first own brand "SWEDA": watches that were craved with customers' names. It was well received. In 1999, o.d.m., a brand combining initials for "Original", "Dynamic", "Minimalism", was launched. With fashionable designs, the brand aims to appeal to young people and middle-to-low end market.

In 2003, o.d.m. became the first locally designed brand to be presented in Baselworld, Switzerland. In 2004, one of the most innovative designs among others of the o.d.m was launched: the DD99 watch. The watch shows congratulation messages such as "Happy Birthday", "Happy Valentines' Day" that are pre-set to appear on the dial, and with a slight movement and a gentle shake, time would appear on the dial again. This particular model of watch received Red Dot Design Award and iF Product Design Award from Germany, and also Good Design Award from Japan. As first of its kind, DD99 helped o.d.m. gain international recognition. At its peak, o.d.m had offices in United States, France and Singapore.

2013 was a watershed for the watch industry. "The best time was between 2004 to 2012. When I saw Apple launching its smart watch, I sensed something and started scaling down." Seeing the business of traditional type of watch turning downwards, or into demise perhaps, he reacted promptly and made no hesitation. Besides, another reason behind scaling down was that one member of the four-person team left without any suitable replacement to follow.

During the downturn, nonetheless, Paul grasped the new opportunity with online shopping in mainland China – it was a market of 1.3 billion of population. He thus found three young people from the Mainland as business partners. He authorised mainland sales to them, whom had managed well: 80% of the sales are now done through e-shopping. And soon afterwards Paul let o.d.m., a creation of his own, to be run by these mainland business partners – with the consideration that his own daughters are less inclined to inherit the business, and that the watch business is not as dynamic as before: the low-to-middle end watches are being replaced by smart watches and smart phones. The markets in Europe and America are shrinking, and the cost for branding and promotion are getting higher and higher. Now he maintains 51% of shares of o.d.m., wishing that in the future perhaps there is a chance to rebuild the brand.

1978	Paul So founded "Paul So Co. L
1982	Renamed to Sweda, focusing m
1984	Set up the first factory in mainl
1989	The Shenzhen factory of Sweda
1995	The Group set up its second fa
1999	The Group launched o.d.m. and
2001	o.d.m. entered mainland China' department stores in Shenzhen
2003	o.d.m. made its appearance in
2005	o.d.m. set up its European head
2013	o.d.m. started online sales.

### TAKEAWAY

#### **Innovate Designs**

Prior to the launch of o.d.m., Sweda already had a well-developed design team capable of producing original designs for well-known brands. In 1999, Sweda officially started its own brand and earned various design awards with its stylish watches, built upon technological innovation and fashionable designs.

The greatest innovation of o.d.m. is the DD99 model that came out in 2004. It can display scrolling, pre-set messages such as "Happy Birthday" and "Happy Valentine's Day ." To have a look at the time, all it takes is a flick of the wrist or a light tap. This design is the winner of various major awards and it helped o.d.m. gain a lot of orders.

#### **Determination to Develop a Brand**

The transition from Original Equipment Manufacturing (OEM) to developing one's own brand entails a lot of obstacles. But Paul So persevered and developed his brand with a different mindset from that for production, eventually managing a successful transition.

While facing the doubts from existing clients who relied on OEM services, Paul was also under the stress to cover the cost after such heavy investment. Undeterred by such difficulties, Paul strove to convince his OEM clients that the scale of his brand was small and therefore it did not share the same market as theirs. On the other hand, he divided his employees into two teams focusing on their own brand and OEM services separately, compartmentalising the different mindsets and ways of operation.

#### **Timely Adaptations**

Paul So recurrently stressed that business died when there was no change, and he had been changing along the way in the past decades. From the production of gift watches to Original Equipment Manufacturing (OEM) and then further to setting up his own brand, as well as going from offline sales to online, he has been changing along with the society and the markets.

As the traditional watch business declined, Paul changed his method of sales, relying on the internet as the new platform, took a back seat and handed over the operation of his brand to his business partner. While waiting for the revolution in the watch industry, Paul has not broken his stride on the path of innovation, but is rather on his way to establish co-working spaces for incubating innovative industries.

Ltd." specialising in watch sales.

mainly on the production of gift watches.

land China.

la was officially set up.

actory in Dongguan.

d produced its own brand of watches.

a's market, setting up sales counters in famous n and Shanghai.

the international hall in Baselworld.

adquarters in Paris and entered the U.S. market.

### Chapter 01 Watch & Clock

### SwissTech Limited

### The Convergence of Timepiece Research and **Entrepreneurship**

How can an OEM-based company develop its ODM business? How to set the direction for scientific research? What restrictions are faced?

Liu Wai-man entered the watch business starting from 1981, began as an apprentice. He worked for a Hong Kong factory producing swiss watches and had learnt various craftsmanship there, as well as in Europe. The knowledge he gained from apprenticeship became the founding stone for SwissTech Limited, which he founded in 2005, where staff members are mostly colleagues whom Liu has worked closely with previously. SwissTech Ltd. specialises not only in OEM of watches, but also in ODM: it has designed for international brand, and it has been selected by Ministry of Industry and Information Technology of PRC to collaborate in the project of Beidou satellite (BDS) watches.

The project began in April, 2010, when SwissTech Ltd. was approached to help develop BDS watches for PLA. World-widely, there are 4 satellite navigation systems: GPS of the United States, GLONASS of Russia, Galileo of European Union and last but not least, BDS of China. SwissTech Ltd was asked to develop a watch that could exchange information with the Chinese satellites, and equipped with mountainclimbing, diving, coordinating functions and automatic time adjustment. The company had to start from scratch as a complete satellite navigation system requires at least 32 satellites but there were only 6 Chinese satellites being in use then. Regardless of the difficulty in obtaining data required for research and development, Liu decided to take on the job as he regarded such as a great opportunity and investment. Since 2017, the company provided 7,500 BDS watches to PLA per month. And now there are 28 Chinese satellites being in use and the whole system would hopefully be completed by 2020.

SwissTech Ltd has demonstrated how a company have prospered with their solid knowledge in production, research and development. Nonetheless, Liu expresses his concern with the disadvantages or limitations of Hong Kong in technological development: unlike in mainland China, where state-own enterprises received governmental support, and unlike local universities where researches are publicly funded, Hong Kong entrepreneurs have to pay huge capital and face high risk on research and development. Investment, complement and support from industry chain have been lacking, which impairs local technological development. The company had indeed once cooperated with Chinese University of Hong Kong to develop "HK clockwork" but the outcome was not satisfactory. Liu wishes that the government would give more support to the industry in the future.

1981	Liu Wai-man joined the watch &
1984	The first Seiko quartz watch ap the watch & clock industry struc
1992	The predecessor company of Sv
1997	The former company began the
2005	The SwissTech company demer
2010	Commissioned by the Chengdu and develop the Beidou satellite

### AKEAWAY

#### Master Production Knowledge and Technology to Become the Company's Strong Foundation. Learning by Living and Improving It

Liu Wai-man and his fellow juniors entered the industry as apprentices, following the masters of Switzerland, Italy and other places to learn the crafts and methods of machinery operation for further improvement.

They learnt about the parts production and assembly, movement assembly, and full watch assembly. Having experienced the operation of the entire production line, they mastered the operation of automatic lathes, precision stamping, and other machines. After he joined the predecessor company of SwissTech, he expanded the upstream production line and used his past experience to improve production methods of copper wire and magnets to increase plant capacity and reduce costs.

#### Scientific Research Can Be a Breakthrough from Simple Creativity

The research facilities and talents of Hong Kong are not as good as those in the foreign countries, many well-known brands have established exclusive technologies, yet we can still make use of simple ideas to improve existing methods. and look for areas that are undiscovered.

Originally Casio had already developed a single-entity product of the electronic display screen and hands, but Liu Wai-man and his team removed the second hand on the dial, showing the seconds only on the electronic display screen, the watch instantly became a brand new product. It is favoured by the American company Fossils and they sold five million pieces worldwide. Subsequently they continued to make more changes to the watch's electronic screen, such as to replace the colours and to report time with calligraphy.

#### Visionary Leadership as the Company's R&D Way of Direction

Liu Wai-man believes that if only when the full market research and evaluation are completed can the scientific research begin its step, it will be too slow as a start, so it is best when the leadership can quickly and accurately have the direction set and promote it with boldness and an adventurous spirit.

The production of the Beidou watch for the mainland is a project with high initial investment and high difficulty for technical support, and it is also affected by the mainland current situation. However, Liu Wai-man believes that this is a project worth investing, in 2010, he decided to invest 10 years to participate in the R&D and production of the project, and will be greeting the success of all 32 Beidou satellites being fully launched in 2020.

clock industry and became an apprentice.

peared in the market, bringing a major change to cture.

wissTech was established.

second phase of its R&D business.

rger was established

Ministry of Information Industry to research on te watch.



# **GARMENT MANUFACTURING** & FASHION



### Amenpapa

### Faith, Fashion and the Internet - Amenpapa's Entrepreneurial Transformation

How does one create a fashion brand with religious belief? Why did this local fashion brand transform into an e-commerce model?

Amenpapa was founded by Salina, Geoff and Leo, who are all Christians. The company began with a simple idea to spread the gospel through fashion. And it was like a weekend pastime to begin with: their fashion designer friends helped coming up with 10 T-shirt designs, then had 100 pieces of each design manufactured. These T-shirts were intended to be either given out as gifts or sold online. Surprisingly, it went well and with Cantopop singer Sammi Cheung wearing it, starting a trend that was to be followed by other celebrities, Amenpapa soon became an overnight phenomenon. International distributer like Havery Nickols and local retailer Bauhaus approached them for collaborations. Since then the three founders took the business more seriously; they even employed the first employee for the company.

It takes nonetheless more than "religion", being used as a jargon or otherwise, for their success. The design of their products, which blends Christian messages with a sense-of-humour, creativity and reflection, and at times connected to societal issues, is perhaps also the secret to their popularity. For instance, a seasonal design named "power of the tongue" was inspired by the biblical message of "the tongue is a two-edged sword". It is presented through a design that looks like ice-lollies from afar but knifes when closely examined.

Since the founders had considerable capital, and experience in marketing and branding, Amenpapa carried on very smoothly. In the first two years, clothes were being sold through other retailers. In 2012, Amenpapa started to have its own shops. At its peak, there were 7 shops and couple of dozens of points of sales all over Hong Kong. Leo, having a background in architecture and interior design, played a vital role here in obtaining strategic locations - such as the first shop at Silvercord. Their business also coincided with the policy of "mutli-travel" permit for some Mainland residents. It implies a sudden surge in number of tourists, from which their sales were hugely benefited.

This tendency however did not continue - from 2016 onwards, the company's business had been affected by the rise of e-shopping. Many of its shops closed down. What has been remained are a dozen of point of sales in Hong Kong and 60-odd points of sales worldwide through distributors. To respond, the company has been eager to develop its sales online: however, instead of putting a huge investment in online advertisement, it turned to cooperate with other brands or other media (i.e. we-media, self-media), the latter, which is content-based, helped building up the brand through certain specific readership. As of today, online trade takes up to 20% of the sales of Amenpapa, and the company expects that it will grow to 30% by the end of 2019.

2010	Official establishment of the br launching 10 crew neck shirts.						
2012	Opening of the brand's first reta						
2016	Commencement of its transfor store model and the switch to t						

### AKEAWAY

### Combing the Significance of the Brand with Social Reality and Fashion Design

Amenpapa combines its biblical story inspired designs with current social issues and uses interesting designs to convey love and blessings through the fashion platform and successfully relaunch its brand.

#### **Embracing New Digital Thinking**

On the e-commerce journey, the company had to learn new ways of thinking and explore a new business model that matched the company's development through the perspectives of design and marketing methods and through understanding the target audience's Internet habits and culture.

#### Following the Trend and Promoting Digital Marketing Strategies

After Amenpapa became aware of the decline of the traditional retail and wholesale business, Amenpapa actively transformed its business model and used various digital strategies to develop its e-commerce business. The company used online media content and shared its customer bases with partners to guide online to offline consumption and increase network traffic to gain a foothold in major online shopping platforms.

rand and its wholesale distribution business after

tail store in Silvercord in TST.

rmation with the downsizing of its traditional retail the e-commerce platform.

### Aussco Hong Kong Limited

### **Entrepreneur of an Old Industry**

Where can a traditional textile manufacturer with more than 50 years of experience add more value?

What strategies can be used to move it from the back end of the industry value chain to the frontlines of design and retail?

Known previously as Australia Knitting Factory Limited, a company founded by the Chow family in 1960, Aussco Hong Kong Limited is now run by the third generations of a family business. It is a traditional garment company having its factory in Dongguan, China, where 2000 workers were employed. Its major business has been OEM, serving international known brands. Nonetheless, the OEM model has been faced with two major challenges in recent years. One is the lack of growth in business. In the past, clients were introduced through connections. The company itself seldom got in touch with new clients, let alone engaging in promotion of any kind. Thus, orders from newer brands and younger designers becomes rarer and rarer. The second is that e-shopping has made trends in fast fashion more and more unpredictable. Sometimes a private fund would acquire a fashion brand and expand very rapidly through the e-shopping platform, only to come to a halt all of a sudden simply because the return is not as good as expected. As OEM, their position is very passive in the ecology of fashion industry. Hence Joanne and Jackson Chow, grandchildren of the founder, decided to reform the company once they took over the business in 2013.

In the past 5 years, Aussco Hong Kong has turned into a modernised enterprise in garment industry that focuses on research and development as well as marketing. With "re-engineering" and "commercial deliverables" being the central ideas in the reform, InDhouse, A Matter of Design and azalvo have been founded.

InDhouse was established in 2012 as the first step of reform. It is an independent research lab, which serves clothing factories, fashion brands and garment supplier. It specialises in the development of knitting technique, and often looks into forming collaborative relationship with clients. Though being independent by nature, it may also come to support Aussco when needed.

The second step was to get into retailing. A Matter of Design was established in 2013 in view of this. It is the agent for the home designs of BoConcept, a brand from Denmark, as well as furniture and lightings of the UK brand Tom Dixon. Through this effort, Joanne gets to know more of retailing, such as timing, adjusting to clients' shopping experience, or adopting augmented reality in sales.

The last step is to establish azalvo, a space of 15,000 sqf. for sharing fashion ideas. Clients may simply rent the place for exhibition, or work with the company for future collaboration. It encourages collaborations, brand and product promotion, and last but not least creativity. It aims at being an experimental space through which collaborations may be nurtured and actual products realised.

<b>1960</b> s	Chow founded Australia Knitting equipment manufacturing of pre
2006	Joanne returned from the UK an the company.
2012	The InDhouse independent R&D production technology R&D serv manufacturers, clothing brands
2013	Joanne and her younger brother company. In the same year, A M in the retail and distribution mar brands.
2017	des Voeux Partners was establis investment subsidiaries, gain in enterprise management.
2018	The company opened its busine itself as a fashion incubation pla company, and provided one-step

### TAKEAWAY

#### Business Ideas and Thinking must be Updated to Transform and Reform a Traditional Industry

Aussco operated its business with an entrepreneurial mindset and started up new companies with independent employees to gain experience in areas unfamiliar to the company, such as design, R&D, retail, enterprise management and shared work platforms, etc., so as to implement new elements, new ideas and new concepts.

Aussco established InDhouse, A Matter of Design, des Voeux Partners and avalzo. These companies operated independently of Aussco, focusing on design, retail, management and collaboration to enable Aussco to learn and practise new ideas.

#### **Old Industries Must Find the Right Niche to Rebuild Itself**

All creative ideas need a niche for their survival. Through gradual observation, one will find a "tipping point" that enables one to trigger changes or a reform, which can be used to update and transform the old industrial model.

Aussco hopes that the old industry can improve its production processes. Traditional factories can send their machines to InDhouse, and the design team can study the production processes and provide suggestions for factory development and its production equipment, as well as recommend new production processes.

#### **Entrepreneurship Requires a Sustainable Business Model**

All creative ideas must be supported by substantial business ideas. One must not design for the sake of it or focus only on part of the process. Companies must balance costs and benefits to keep an entrepreneurial business going.

In the avalzo co-work space, the team teaches its customers how to commercialise a creative idea. This includes teaching them to recognise the minimum order required for production, sales costs, and other considerations and expenditures, so that they can work out their income and deduct expenditures to get their gross profit margin and thereby adjust their production quantity to establish a sustainable business model.

- g Factory and its main business was the original emium sweaters in Europe. USA and China.
- nd took over the business development aspects of
- lab was established to provide design and vices to business services to clothing and fabric suppliers.
- r Jackson officially took over the operation of the latter of Design was established to gain experience rkets through the agency of Danish and UK home
- ished to manage a range of property and vestment experience and knowledge, and achieve
- ess in the avalzo shared work space, positioning latform to attract creative groups to join the p service support.

### Chun Au Knitting Factory Limited

### **Transformation of the Chicks Brand**

What changes were made to transform the brand from being a business that made clothes for other brands to becoming its own brand?

How does an 80-year old garment factory keep up with the times?

While its iconic "chick" logo may evoke the memory of many, the company behind the "Chicks", "Chun Au Knitting Factory Limited", is perhaps less known to the general public. The company is indeed one of the oldest of its kinds in town. Established in 1939, started with producing threads and knitwear to sell abroad as well as locally, it had managed to establish its own brand, "Chicks", during the postwar period. Today, baby clothing, children-wear and underwear of the brand are widely seen in malls and shops. For the company, much of its secret to success is about upholding its quality, establishing and promoting its own brand, as well as keeping up with the changeable world.

The image of a chick was first designed to project a wish for a more prosperous future. To those who were struggling after the wars, it somehow struck the chord. The wrapping paper of the "Chicks" was even seen being posted on the walls of some households as decorations. With a light and breathable feature, and yet economic pricing, products of the brand were well received. White undershirt with three buttons at the top was the most iconic design, with which men wore to go with Chinese clothing – as Bruce Lee did in some of his films.

The quality of source material has always been the company main's focus. It introduced shrink-proof and machine washable wool in the 1980s, and breathable thermo European fabric for underwear making in the 1990s. Meanwhile, until the 1990s, sales under the Chicks brand constituted a relatively small sector of the company's business. Most of the company's focus was still on the export, as it produced underwear, womenswear and childrenwear for other companies. The economic crisis between 1997 and 1998 however changed this tendency. Robert Tam, the third-generation owner of the company, then realised that the manufacturers with their own brands proved less vulnerable to economic downturn and consequences of order cancellations. With this in mind, he set to reform the Chicks brand to realise its potential to the full.

The first attempt was made in 2000 as the "Chicks" was redesigned to fit into a "cyberlook" – which was popular then. Such attempt failed as it had gone too far from the original image of the brand. A more comprehensive reform then took place in 2003, this time together with the brand consultants, cloth designer and interior designer. It was a reform not only on design, but also on logistic flows, pricing and marketing – which had been overlooked as direct contact with consumers was relatively limited in the past. Retailing places rose from 3 in 2003 to 28 up to the present as a result of that reform.

Now that the company is more focused on developing its own brand. From 2000 onwards, it has started to purchase registered fabrics (i.e. OEKO-TEX), to ensure pure, clean and good quality, instead of producing fabric of its own.

1939	Tam Yuek-wan founded Chun A
1950	Chun Au engaged mainly in exp and started a trend with its thre
<b>1970</b> s	Robert Tam took over the famil
<b>1980</b> s	Focus on OEM; introduction of wool underwear; development
<b>1990</b> s	Chun Au brought in European n underwear with warm and brea
2000	First brand transformation.
2003	Second brand transformation.
2016	Establishment of online shop a of the company.

### **AKEAWAY**

#### **Achieving Success with Quality**

For decades now, Chun Au Knitting Factory's outstanding control and continuous updating of its raw materials and production technology has been a guarantee of its excellent quality. Whether it was before or after the brand's transformation, Chun Au has always attracted a solid customer base with its excellent quality and affordable prices.

Chun Au has enforced strict controls over the quality of its raw materials. In recent years, it has outsourced its fabric production and made use of raw material certification systems to strengthen the quality management of garment materials. In addition, Chun Au has also introduced a seamless women's underwear that uses a new fabric with warm and breathable functions to increase the diversity of its products.

#### **Revitalising its Own Brand**

Having learned from the experiences and lessons of others during the economic downturn, Chun Au managed to adjust its business focus in time, re-launch its Chicks brand, and innovate its brand in all aspects.

With Chun Au's transformation and its focus on the development of its Chicks brand, the company opened more retail shops, engaged in cooperation with other brands, introduced a variety of clothing to match underwear sales, opened an online store, and fully promoted the sales of the brand.

#### Advancing with the Times

Chun Au has never paused on its journey to constantly innovate its raw materials, production technology, management methods, quality control methods, product management and sales channels, and has always advanced with the times.

Chun Au changed its production mode by outsourcing fabric production and sweater production, and implemented the "Just In Time" replenishment system and established its internal business information management system to effectively achieve the effects of flexible production processes, inventory, pricing, discounts, sales and online store operation integration.

Au Knitting Factory.

port and domestic sales, founded the Chicks brand, ree-button sweater.

ily enterprise.

f a shrink-proof, moth-proof and machine-washable of womenswear and children's wear.

materials and produced the "J-Fit Warmer" thermal athable functions.

and transformation of the internal business system

TML Apparel Limited (member of Grandion Group)

### **Standing Out with Process Design**

Apart from product design and research, how else do textile OEMs augment their value and transform their business?

How does one design and implement services that enhance customer experience and cater to their needs?

Alan Cheung and his ex-colleagues were originally from the senior management of Giordano Group, a local brand happened to close its production line in the 1990s. Hoping to enable affected staff members to continue working together, Alan and his ex-colleagues established TML Apparel Limited in 1996. The company began as an OEM in knitwear with its factory located in Chang'an, Dongguan, serving clients mainly from Southeast Asia.

Being well-experienced with management, the team is very alert to one of the main challenges for fashion retailers: how to make a precise estimation of stock needed when ordering? To tackle this, the "Just-In-Time replenishment system is established. Basing on shared data analysis (of which some of the company's partners were hesitated initially), such a system is able to make a precise prediction over the flow of stock; the factory then would make corresponding arrangement on acquiring source materials and on scheduling production line. All needed then is a confirmation from the client for actions. While the full cycle of replenishment might take around 90 days in a traditional setting, with the new system, the cycle is shortened to around 30 days, and in some cases even a week's time.

To further strengthen the company and to enhance supply chain efficiency, the company also developed its own design as well as made horizontal acquisitions. And all these steps were rewarded by the years from 2006 to 2008. Benefited from the free quota in EU, the company became the supplier of Zara, through which it made its expansion to the European market. In the year of 2008, during the Beijing Olympics, it entered the China market with T-shirts and souvenirs designed for Bossini, ESPRIT and I.T In those days, trade with the mainland took up around 60% of the company's business.

In 2015, the company extended its supply chain to Hong Kong, forming "To Make Locally" (TML) in Tsuen Wan to promote local creative production. Its in-house designers incorporate local elements in the designs (i.e. Wong Tai Sin Temple, Ocean Park, etc). Diversified Digital Printing Centre was also established to perform digital printing, enabling great efficiency and flexibility on prototyping and production. In short, TML combines innovative enterprise, design, smart production, cloud ordering system, digital production and retailing. With such a multidimensional business model as well as platform, the company has succeeded in creating its own brand, and venturing into Online-to-Offline commerce and customised order.

1996	Alan and other former senior ma Ltd. and concentrated its efforts
1999	Establishment of the company's Just-In-Time rapid inventory repl
2003	Upgrade and transformation: est well as horizontal mergers of pri
2006 2008	Opening up the European and do
2015	Return to Hong Kong and establi

### TAKEAWAY

### Designing the Supply Chain Process – Design for User Experience and Operating Efficiency

Reflecting on their many years of managing experience in Giordano's production department, the senior executives of Grandion analysed the situation and understood the real needs of clothing retail stores. Therefore, they decided that customer experience-centric improvements to the supply chain would be the company's core service and development direction.

Clothing retail stores are often faced with two challenges: determining the amount of inventory to hold, and working around the long restocking time. Grandion designed its core Just-In-Time rapid inventory replenishment system with these concerns in mind. The establishment of data sharing with customers and analysis of their inventory levels and replenishment needs made it possible to significantly shorten the restocking cycle, which not only improved customers' experience during purchase and delivery, but also reduced their business risks.

### Expanding into Larger Markets and a Broader Customer Base by Enhancing the Company's Design and Production Capabilities

Grandion originally specialised in the OEM production of knitted and woven garments. In order to build a customer base with more depth and breadth, the company proactively enhanced its creative design and production line capabilities, increasing its competitiveness in the market.

After establishing its Just-In-Time rapid inventory replenishment system, the company set up its product design department in 2003 and leveraged its powerful database to create graphic designs that suited the market. At the same time, it also acquired printing factories, embroidery factories and parts factories via horizontal mergers. In addition to allowing the company to provide more extensive services, this also enabled better protection of intellectual property rights and expedited the production and inventory replenishment processes. As a result, the company managed to win over Zara as its customer.

### Entering the Design and Customisation Market with Digital Cloud Technology

Well aware of the limited profitability of OEM production, as well as the inability of mass production to satisfy the needs and markets of some fashion designers, Grandion introduced digital and cloud technology to forge its way into the domains of retail and customisation.

The Diversified Digital Printing Centre of TML can print a variety of unique designs quickly and even accepts minimum orders of one item for production, which makes it extremely convenient for fashion designers to make wide range attempts. TML also set up its online platform and mobile application to tie in with this, and introduced vending machines in malls throughout Hong Kong Island and Kowloon for retail consumers to customise their own products and place orders.

anagers of Giordano founded Grandion Industrial s on knitwear OEM production.

s second factory with the maturity of the lenishment system.

stablishment of the product design department as rinting and embroidery factories.

omestic markets.

lishment of TML.

### Yuen Shing Group

### Building New Systems and Learning New Methods

What strategies can a machine-intensive dyeing and finishing factory use to achieve environmental protection goals?

With its headquarters in Hong Kong and production bases scattered among the manufacturers of China, what system can the Group use to effectively manage orders and its factories?

The origin of Yuen Shing Group could be traced back to the 1978-founded Soon Finishing Factory Limited and 1984-founded You Shing Finishing Factory (有成整染廠). The former was chiefly responsible for single processing such as rinsing, setting and after-boarding; while the latter involved in more complex production including that of cotton yarn and fabric dyeing. Being dyeing and finishing plants, they involved massive amount of water and that resulted in high emission; without advanced technology to keep that in control, production lines had to be relocated. Two production lines were opened in Dongguan and Kaiping eventually; and Yuen Shing Finishing Factory was officially founded in 1990.

Two main challenges that Yuen Shing Group has been facing are, first, the cost involved in environmental protection management, and second, intra-corporate communication. Alongside rapid economic growth, environmental awareness has risen in Mainland China in recent years. Waste, polluted water and gas emitted during the production process have become a financial burden, as the treatment of them would in turn increase the cost of production. In other words, the more emissions, the less efficient is the production. With this in mind, Ms. Jackie Ng, the second generation of the family business, brought in some reforms since she joined in. She has turned the plants from being solely OEM to one that also produces and sells their own products. These products are produced in product-lines that achieve environmentally friendly result by minimising waste and harmful side-products involved. For instance, in dyeing, the traditional dyeing bath is replaced by European model of continuous dyeing processes, which conserves energy and reduces wastewater. In terms of source materials, natural materials instead of polyester or nylon are used.

As of intra-corporate communication, like many others, the group is having its plants in Mainland China, while keeping its headquarters in Hong Kong, where orders are taken and decisions made. Ensuring effective communication between staff members of the two places is vital to an efficient operation. Cloud drive and digitalisation are brought in, and staff members have to learn to adapt to the new ways of operation and communication.

Last but not least, the group adopts a "blend-in approach" in investigating new products – instead of having a separate research team attending to that matter, views from staff members from sales, promotion and production are all taken into account. They often work as a team to collect responses from the market or exhibitions. Functional fabrics, such as those that are "breathable and water-resistant" or have "humidity control", are developed under such circumstances.

1978	Ng Wing-chi founded Soon Fini developed two main product lin
1981	The single-item processing line
1990	The more complicated fabric m Guanping.
2002	Jackie Ng joined her father's co

### **TAKEAWAY**

### Using the Company's Entry into Fabric Trade as an Opportunity for the Company's Transformation

Although traditional OEM production provided stable business, all the company had to do was satisfy its customers' demands and control costs in the quotation process. By starting to sell its own products, Yuen Shing further promoted the quality of its products and the company's improvements in environmental protection.

Yuen Shing managed to develop environmentally friendly and functional fabrics such as the "breathable and water repelling" and "moisture managing" fabrics, establishing the company's R&D capabilities and transforming its production processes during this process.

### **Environmental Protection Strategy of Reducing Wastes from the Source**

Yuen Shing started by changing its production systems and machines to reduce the pollutants generated in the production process, so as to greatly reduce the waste, wastewater and waste gases that need to be processed later, improve the efficiency of resource use and reduce the cost of waste discharge treatment.

It introduced a new cloth dyeing production line from Europe to replace traditional dyeing tanks. The new production lines do not need water during the colouring process and the water used to rinse the cloth could be recycled directly after use, which greatly reduced water consumption.

### Eager to Learn the Knacks of Using the New System without any Fear of Trouble

Although traditional factories have established habits and processes to handle orders and production, the technology in Europe and its neighbouring areas has always been improving. Yuen Shing was not afraid to relearn everything and actively introduced new machines and an ERP system to further modernise the company and achieve Industry 4.0 cloud digitisation.

After introducing a new European production line, the company has used several years to learn how to adjust the machines to make products that met its customers' requirements. Regarding enterprise management, the company also began to introduce digital and cloud systems, manage orders and supervise machines for real-time data sharing to make better preparations for business decisions.

ishing Factory, the predecessor to the company, and nes.

e was relocated to Dongguan.

manufacturing and dyeing line was relocated to

ompany and introduced a series of changes.



## **POWER TOOLS & HOUSEWARE**

### German Pool (Hong Kong) Limited

### Not Only Sturdy, but also Trendy

How to diversify product lines from a single business? How shall a traditional OEM company develop its retail market in mainland China?

German Pool (HK) Limited. was founded by Edward Chan in 1982, began with the production and sales of water heaters. From majoring in a single product, it then moved on to develop horizontally within ten odd years. It offers not only a hundred kinds of home appliances, but also kitchen fitting services. Since Edward's daughter, Karen, joined the company in 2006; the company has been adopting a contemporary approach in marketing through which it has successfully entered mainland China market.

Dated back to the 1970s, the domestic market for home appliances was underdeveloped. Many people had to boil the water and bring it to the bathroom for a hot bath, which was inconvenient. Edward then saw huge potentials in the market for water heaters. He began by opening a small family workshop in To Kwa Wan, Kowloon, building water heaters with German parts and Japan steel. He brought the successful products of his experiments to appliances store for sale, with little hesitation, it was widely accepted by the market. Water heaters become a necessity in everyday life and Edward got the first share of that market. In view of running the business in a larger scale and more systemic way, he officially founded German Pool Limited in 1982. Using German Pool as the brand he developed the first-generation storage water heaters together with a German company, and later on instant water heaters. Both have become the signature products of the company.

Edward believes that the trust of the consumers is the most important part for their development. "And since they have been using our heaters for a long time, having confidence in the quality of our products, they find it easier to accept other products such as range hoods and cookers." He explained the reason for waiting almost 10 years to move forward from a single type of product. As the company expanded horizontally, it could not afford to produce all products on its own, as that implies a very high risk. It has to find reliable OEM partners.

In 1999, taking the opportunity of offering built-in appliances, the company also expanded to cover the business of kitchen fittings.

As the company entered mainland China market, it targeted the middle-class consumers, who look for something not simply sturdy, but also refined and sophisticated. For this reason, from 2015 onwards, German Pool has repositioned itself to produce middle-to-high-end appliances, revolving around the idea of healthy and environmental living.

1975	Edward started a metalware workshop in To Kwa Wan.
1982	Established the German Pool brand.
1989	Set up factories in Zhuhai, which were subsequently re
1990s	Developed horizontally towards different product lines.
2002	Initiated the kitchen cabinet and show room business.
2006	Edward's daughter, Karen, joined the company as vice-(
2010	Began business in mainland China.

### TAKEAWAY

#### Expanding Inter-related Product Line from a Mono-business

German Pool had been focusing on producing electric water heaters since its foundation. It only began to extend its product lines after 10 years and entered the new business of kitchen cabinet design.

German Pool invented embedded homewares in 1999 that allows consumers to instil part of the device into the wall, leaving the control panel on the outside. When devising the promotion strategy of this type of product, Edward firmly believed that embedded homeware must be showcased alongside kitchen cabinet, in order to fully demonstrate the benefits of the products. Hence, they developed one-stop-service of homeware and kitchen cabinet design, opened their own showroom, getting in touch with retail consumers directly.

#### **Combining the Power of Franchise System and Online Stores**

The mainland market possesses its own unique culture and characteristic that is completely different from that of Hong Kong. Therefore, before German Pool inaugurated their online stores, Karen assigned her team to participate in various roadshows and exhibitions in China, gradually mapping their sales network and familiarising themselves with the mainland's market.

German Pool adopted the franchise system in 2010, scouting for ideal distributors in each county to serve as their local representatives, so as to minimise the pressure co-ordinating the national business from the Hong Kong headquarters and utilise the sales network of each franchise. This approach was met with huge success where almost 300 points of sales were established in a few years. Subsequently in 2015, German Pool made their debut on T Mall platform, recording an astonishing 7 million one-day-sales during the "Double Eleven Shopping Promotion".

#### **Designing Trendy Products for Targeting Middle-Class Consumers**

The major target group of German Pool in mainland China is the middle class, who are no longer attracted to homeware that is only stable and reliable. Thus, Karen and her team devoted much effort into analysing their consumption pattern and designing new products.

The market research led Karen to the conclusion that the middle class pursues a tasteful lifestyle. Therefore, concepts such as regimen, health, cooking trend, elegance etc, were integrated into the existing products and technology of German Pool. They designed series of middle-to-high class homeware, such as "The Sparkle Collection" and "3D Infrared Korean Barbecue Grill".

orkshop in To Kwa Wan.
rand.
h were subsequently relocated to Shunde.
different product lines.

ed the company as vice-CEO.

### Gold Peak Industries (Holdings) Limited

### A Multinational Industrial Group that Started with Batteries

How does a company fight the trend after the decline of an industry?

How does one employ designs to enhance brand value?

Now a multinational corporation in Asia, with business in the production and sales of batteries, electronic appliances, speakers and wire harness for automobile, etc., Gold Peak Industries (Holdings) Limited had 55 years of history. Victor Lo, chairman and the chief executive of the group, recalled that his father had regarded the popularity of semiconductor radios in the 1960s as an opportunity, and therefore opened a small factory in Tai Po producing batteries in 1964. Victor Law himself returned from Illinois Institute of Technology in 1972, with a degree in product design, took care of the family business together with his brothers. Since then modern management was introduced, and their traditional family business has gradually turned to an extensive multinational enterprise.

In the 1970s, having witnessed the decline in battery industry against the backdrop of pirate products from mainland China and the rise of production cost, Gold Peak moved to high-end batteries as well as developing the business of electronics. Since then business had made tremendous growth. The company became a Hong Kong listed company in 1984. It has also been a major player of the battery industry worldwide. Well-known brands of the companies include "GP Ultra", KEF and Celestion, they are the leading products of the battery and loudspeaker industry respectively. The production, research and development as well as sales network of the group now covers more than 10 countries worldwide.

One of its secrets to success, is that the group has become one of the first few who explored the mainland China market. Back in the 1980s, Hong Kong industries began to move their factories north because of the lower production cost. While many of them relocated simply in terms of production lines, and maintained their export oriented tendency in terms of sales, Gold Peak explored to sell its products to the domestic market of mainland China. It was also at this time, realising one has to have its own brand and distribution network to establish a position in the mainland market, that Victor ceased to rely on business generating from OEM, but decided to focus on developing their own brands.

Knowing the significance of product design, the group has been putting huge investment in research and development. For instance, GP ReCyko+ is a kind of chargeable battery released to respond to the trend of going green and sustainable development. Having pre-charged, consumers could use the battery instantly and would be able to recharge it up to a thousand times. In recent years, several design products have also been launched under GPDesign brand. "Beam Professional Torch", which won Red Dot Award from Germany, is one of the successful examples of combining the look and functionality.

1964	The company opened a battery
1972	Victor Lo joined Gold Peak Indu
1984	Gold Peak Industries became lis
1990	Victor Lo became the chairman
1992	The company acquired the old B
2005	The company acquired 21% of the was mainly engaged in manufact businesses, and owned commer rights. In the same year, the conmainly engaged in the production market.

### TAKEAWAY

#### **Enriching Brand and Product Value**

Victor Lo believes that in the face of market competition, manufacturers cannot continue to position themselves as a manufacturer of cheap products as their gross profit would be constantly pushed down. Instead, they must add value from all aspects and develop upward. For example, after the battery industry began to decline in Hong Kong in the 1970s, Gold Peak Industries decided to produce high-end batteries and expanded towards other businesses. After it acquired the British brand, KEF Acoustics, Gold Peak Industries strengthened the brand image of KEF's premium loudspeakers and gained market recognition through its leading technology and outstanding designs.

#### **Expanding the Business Scope**

From battery export to the development of the domestic sales in the mainland China market, and from manufacturing and distributing batteries to investing in speakers, electronics, automotive wiring and other industries, Gold Peak Industries' diversification of business across regions helped the company cope with industry challenges and regional economic changes.

factory in Tai Po.

istries.

sted in Hong Kong.

and chief executive of Gold Peak Industries.

British brand, KEF Acoustics.

the equity in Gerard Corporation, a company that cturing, printing, packaging and shipping ercial assets and forestry and agricultural land mpany acquired Bright Target, a company which on and sales of LED displays in the Chinese

### Konstar Industries Limited

### The Brand with 600 Patents on Manual Kitchenware

How to apply industrial designs in creating market-leading products?

How to protect and develop one's company in a market where piracy prevails?

Konstar Industries Limited was established by York Wang in 1993, producing manual kitchenware. Since its establishment, it has obtained as many as 600 patents for its inventions. The patents obtained not only safeguard the standing of the brand, but also become part of Konstar's core business together with licensing.

Before the establishment of Konstar, York had once cofounded a factory majoring in OEM of electronics. That experience made him come to the realisation of the passivity of OEM in the industry chain. Clients did not make full payment 60 days after ordering, while suppliers of parts and source materials demanded full payment within 30 days, a problem with cash flow often occurred, nearly every month. Their reliance on electric motors (which they were unable to produce themselves) implied that their business would have come to a halt once suppliers of electric motors raised the price or shortened the payment period during the lead time. There was even a time when electronics were priced by weight; and under such circumstances their products could be sold only with a price slightly higher than the cost of source material – in short, profit had been incredibly low. From then on, York believed that the only way forward is to have his own brand, something that could lead the trend, and not constrained by the industry chain.

He set to develop kitchenware as he believed that kitchenware would be long lasting and full of potentials. He was also cautious against electric kitchenware, as that would imply dependence on the suppliers of electric motors. He thus positioned Konstar as a brand specialising in manual kitchenware, wishing to stand out with its anew and unique functionality. York's heartful inventions are tailor made for each specific ingredient preparation process, such as peeling, chopping, mixing, slicing etc., providing an unprecedented experience with ease and convenience in the kitchen. His products thus met with great response from the consumers.

The success of Konstar implies that there would be piracy issues that York has to battle with continuously – and he makes no hesitations and exceptions on that matter. He often brings his case to court. He wants to give out a strong message that Konstar would defend its patents. On the other hand, designs of Konstar are also getting attention from many international brands. To respond to this, the "original patent manufacturing" model is adopted to enable patent sharing: a company can get into licensed agreement with Konstar to produce their own products with Konstar's patented designs with a 3% royalty payment and a promise that the trademark of York Wong would be printed on the packaging. This model enables Konstar to have a quicker return from new designs and patenting. Now "original patent manufacturing" constitutes half of Konstar's business.

<b>1970</b> s	York worked in relation to the cr
1986	With three other partners he est chiefly an Original Equipment M
1993	York founded Konstar Industries
2002	York was granted the title "Warr Intellectual Property Departmer
2005 2011	Konstar obtained "ISO 9001," "IS

### TAKEAWAY

#### Inventing Products with Unique Functions in Response to the Culinary Culture of Consumers

Chiefly producing manual kitchenware, Konstar designs and launches new products that suit the needs of a certain market through understanding the cooking habits of consumers of the said market. To ensure both the creativity and quality of a product, Konstar has also adopted strict quality control measures on raw materials and crafts.

In the 1990s, Konstar rolled out a turning slicer targeted at the European market, where healthy diets were so widely popular that even salads were treated as main meals. Taking meticulous care with the blades and the angles of rotation, Konstar launched a type of slicer which can slice ingredients such as cucumbers and potatoes into noodles that were 2 metres in length. Users can also freely replace the blade in use among the four others provided, depending on the length of the noodle they desire. Konstar upholds high standards in heat treatment and polishing of the blades, so that they will not easily fracture while enabling effortless utilisation.

#### Patents as the Capital for Expanding Businesses

Kitchenwares are often vulnerable to piracy, but Konstar's stringent and persevering efforts of applying for patents and bringing cases of piracy to courts have helped established its uncompromising image with a tough and defiant stand. Patent licensing has also in turn become a new business and source of income.

Konstar places much importance on application for patents for its products. To close any loopholes that may be exploited by pirates, it declares its rights on the detailed functions of the product and other possible ideas and now possesses more than 600 patents. Winning more than 130 patent cases, Konstar has been viewed as "even more ferocious than Disney" by experts in the industry. Putting patents sharing into practice, it allows the purchase and utilisation of Konstar-developed patents by other international brands with a royalty of 3%, developing a new business of Original Patent Manufacturing (OPM).

#### Creating the Enterprise's Sales and Management Models through Culture

Konstar has brought food culture and their products closely together, creating products with outstanding functions and fleshing them out with the depth of culture. The company also advertises their products through various culinary programmes. The "Konstar Spirit" has followed the lead of the "Hongqi Spirit", enriching the mental landscape of both the enterprise and its employees.

Konstar has composed "Tasty Recipes" to teach consumers ways to prepare ingredients and tailor-made meals with different products. York has even personally given a demonstration on the online cooking platform "Day Day Cook", the advertising of Konstar's merchandise facilitated by food culture. Operating his factory in the form of a small community, aside from looking after and teaching the workers, York has encouraged their diligent effort in work and sense of responsibility with the spirit of Hongqi: "to persevere and to strive, be confident and fearless."

creation of sculptures and model figures.

stablished Dorlop Industrial Limited, which was Manufacturer of household electric appliances.

es Limited and the eponymous brand.

rior of Intellectual Property Protection" by the nt.

ISO 9000," and "ISO 14001" certificates.

### Star Industrial Company Limited

### Seeking Change Amid Stability – The Third Generation of "Red A"

What new developments are possible when you put a 70-year-old brand together with a 3rd generation successor born in the 1980s?

How can a brand that was once a household name make its way into the lives of a new generation of Hong Kong people?

A household name for many, Star Industrial Company Limited has been established in Hong Kong for generations. The letter "A" in red, printed on buckets and water bottles, or the iconic red lamp shades commonly used in wet markets, had been their trademarks. The company is also known for producing a hundred thousand of buckets in response to the drought in 1963, with which residents collected water from the streets.

Yet the company's products reach not only domestic users, but also the industries, among them catering businesses and governmental departments have been one of the company's major clients as B2B service has become a significant part of its business by the 1980s. As a company having 70 years of history, Jessica Leung, Business Development Manager as well as the third generation of a family business, has a story to tell about her challenges.

"Look old-fashioned, having passed on to us from our father's or even grandfather's generation,' Leung recalled her first impression of some products when returning to Hong Kong from Taiwan to take over in 2010. "Do consumers today still want them?" Since then Leung and her team look for several reforms, including introducing two sub-brands, known as "Aware" and "Create", both designed by graduates from The Hong Kong Polytechnic University. The two labels target on younger consumers with fresher look and design.

Since online shopping has become popular, the company also develops its own platform for online shopping that incorporates with a newly designed ERP system that keeps track of any updates on stocks, flows, discounts and pricing. While there has not been a huge profit being generated from e-shopping, the brand is benefited from it in terms of exposure. The company's products are also available on local shopping platform such as HKTVmall.

Another challenge to the company is that, as environmental awareness is growing, its focus on a single type of source materials such as the plastic has become an issue. In response to such uncertainty with the plastic industry, Leung sets to diversify the services of the company by turning the company to kitchenware agent as well, thus hopefully offering a one-stop solution to the B2B clients in the catering sector. As of today, B2B remains a predominant part of the company's business, while B2C is on its way to be (re)developed.

1949	Leung Chi-hang founded Star B
1959	The company purchased a fact plastic products.
<b>1960</b> s	The company launched a series
<b>1970</b> s	The company launched a series plastic school bags and colour
1975	Leung Chi-hang's son Leung Ho
1980s	Leung Hok-lin and his wife expa supply special plastic products industrial sectors.
1990s	The company launched microw (1992) and rice cookers (1992)
2004	The company set up a "dust-fre products.
2010	Leung Hok-lin's daughter, Jessi Business Development.

### TAKEAWAY

#### Products, Sales Models and Management Models that Advance with the Times

In the 1980s, Star Industrial's main customers were corporate customers. In addition to maintaining the company's original B2B business over the past ten years, Jessica also developed new product lines, opened an online store and updated its internal operating system in an effort to re-enter the mass market and make Red A popular again in contemporary Hong Kong.

#### Leveraging its Existing Markets to Expand its Business

Star Industrial leveraged its existing customer resources to supply its customers with products of other brands while offering them plastic products. It provided the products to its customers as a bundled package and in doing so expanded the scope of its business and profits.

#### **Quality and Service**

An important reason Star Industrial could keep its existing customers is that it has always sold high-quality products and a full range of customer services.

Brush Factory that mainly produced toothbrushes.

tory on Tai Yau Street and switched to producing

es of imitation glass products.

es of children's products such as water bottles, rful tableware.

ok-lin assumed leadership of the company.

banded into the enterprise market and began to s to businesses in the catering, medical and

waveable cooking utensils, dim sum steamers ), winning the Governor's Award for Industry.

ee production room" to develop medical and plastic

sica Leung joined Star Industrial as the Director of

### Techtronic Industries Company Limited

### An Electric Power Tool Leader who Successfully Implemented Global Management

How does one account for the needs of different markets around the world while maintaining global competitiveness? How does one manage and design a global brand?

Techtronic Industries Company Limited was cofounded by Dr. Roy Chung and Horst Julius Pudwill in 1985. Started as an OEM for power tools, has expanded its market and production lines worldwide by acquiring well-known international brands for power tools, hand tools and vacuum cleaners since 1998. Hong Kong is now the headquarters of all of the company's design centres. Led by Leon Yoong, the Hong Kong headquarters strives to add value and localise their global products to fit into specific markets. The solid foundation in research and development, as well as design, help Techtronic Industries Company Limited become a leading company in global market for power tools.

Back in 1987, when the company was relatively small, it received an invitation from Craftsman, a known brand from United States, to design wireless drillers and screw drivers for an order of 1 million units. The success of this particular project built the reputation for the company and brought in more business opportunities, including an order of half a million vacuum cleaners; Techtronic had since then become the supplier for distributors of power tools and in 1988 a factory was established in Dongguang. In 1990 Techtronic Industries Company Limited became a listed company in Hong Kong.

The success came to some obstacles when, in 1998, orders from the United States went down dramatically following the financial crisis and economic recession. In response, Techtronic set to shift from being an OEM to a distributer that also develops its own products for a new market. It was done through acquisition. For Techtronic, acquiring a brand is more than purchasing a logo, but also the technology, and pre-existing market embedded in that brand—"we only acquire those who are at the top of their field." One may say, making use of the access gained from acquisition becomes part of their main strategy.

From 1999 until now, such strategy continues, and gradually brands and products gathered through acquisitions made up three main sections of the company's business; they are power tools, gardening equipment and floor care. In 2001 Ryobi's North American and European businesses in power tools was purchased, which is one of the most significant acquisitions for the company: a huge sum of money was involved. In 2003, two main brands for vacuum cleaners, Royal and Dirt Devil, and later on professional power tools brands Milwaukee and AEG, also became part of Techtronic's acquisition. Brands being in control through acquisitions offer a foundation for the company to further develop. The company manages these brands from a global perspective, followed with markets and product developments that address specific needs.

Through ambitious acquisition, globalised management, and precisive flow of design, Techtronic Industries Company Limited illustrates a successful story of a local small-and-medium-sized enterprise progressing into a worldwide brand.

1985	Roy Chung and Horst Julius Pu
1988	Establishment of the factory in
1999	Acquisition of its first floor care
2000	Acquisition of its first electric p RYOBI.
2005	Acquisition of the professional
2008	Built a 450-acre large new facto
2014	Acquisition of the mapping and

### TAKEAWAY

#### Buying Brands Globally to Acquire Products, Technology and Markets

Techtronic Industries is a company that originally engaged in Original Equipment Manufacturing that started acquiring various brands around the world since 1999. It used this simple and direct way to transform its business and started to design, research and develop technology and build its own brand, selling its products to the European and American countries.

Through its acquisitions, Techtronic Industries established three business segments: electric and hand tools, outdoor garden equipment and floor care. These brands had clear brand positioning and a strong market as well as some R&D technologies, which meant that Techtronic Industries didn't have to start from zero and could immediately seize a higher position in the market. This was an important strategy for the expansion of their territory.

#### Attacking the Specialised Markets of Each Brand

Although Techtronic Industries owned many different brands, it did not launch all its brands in every market. Instead, it focused on the specific market of each brand to target the characteristics and market demand for these brands, and in doing so, concentrated all its firepower on the expansion of the business of the respective brands.

Each brand had its own established market and brand characteristics when it was acquired by Techtronic Industries. For example, the floor care brand Vax was a popular traditional brand in European countries and especially the UK, so this brand was used to seize a greater market share in Western Europe after the acquisition; RYOBI's outdoor gardening power tools were large so this brand focused on the family market in the US because they had larger gardens. European houses generally had smaller gardens and most Asian families didn't even have a lawn, so the primary sales target of this brand was the American people.

#### **Reviewing Market Conditions to Make Designs that Add Value to Products**

Although most of the brands acquired by Techtronic Industries have a long history and outstanding technology, the design and research team of Techtronic Industries continues to make designs for these new products. In order to carry out some major strategic inventions, the design team needs to make minor adjustments for different markets to fine-tune them so that they are more outstanding and competitive in the market.

In the electric power tool market, consumers usually get three parts when they buy tools: the tool body, battery and charging equipment. The products on the market usually sell these three parts together as a package. However, as each product may have different specifications or configurations, consumers usually had to pay extra money to replace the whole set of equipment when they wanted to replace or upgrade a part. In view of this, after acquiring MILWAUKEE, Techtronic Industrials developed the M12 and M18 system platforms with its lithium battery technology. As all tools that shared these platforms could use the same batteries and charging systems, consumers only needed to buy a new tool body and plug it into the original platform to use a new tool, or they could simply replace a damaged part. This greatly improved the ease of using these tools and reduced consumer spending.

udwill founded Techtronic Industries together.

Houjie, Dongguan.

re brand VAX.

power tool and outdoor electric equipment brand

electric power tool brand MILWAUKE.E

ory – Asia Industrial Park.

d measurement tool brand EMPIRE.



## INTEGRATED PRODUCTS & SERVICE INDUSTRY





### Asia Animation Limited

### Animation in Asia: A New Chapter by a Second-Generation Toymaker

Why did a local traditional toymaker pursue a path of animation instead?

How does one change from advancing an inherited business to establishing a new area of development?

Gordon Chin, the CEO of Asia Animation Limited, has an interest in arts, creativity and toys since he was a child. As he grew up, he started drafting up designs for the toy products of his father's factory – M & C Toy Centre Limited, which has operated since 1979. These designs have also been benefited from the cult of action figures that Gordon studied, and associated fans club that he held, from which he got to know players' needs and responses directly. The company has especially been known for producing soldier figures that are popular worldwide. It is also authorised by military suppliers for producing military toys. From 2005 onwards, authorisation is given by PLA to produce Chinese solider figures.

While some of their products topped the global market in terms of number of exports, they are far from being benefited by branding. With this in mind, the father and son decided to establish a strong branding through animation. They found Asia Animation Limited in Hong Kong in 2002 and Puzzle Animation in Shenzhen in 2005.

Their first original animated series, AI Football GGO, was released in 2010. It was set out to be a popular animated series accompanied with toy products, as Gordon realised that there has been no associated toy products for animated series on sports (i.e. Captain Tsubasa, Slam Dunk, etc.) that were previously made, regardless of the high ratings of the latter. A specially designed and patented toy figure that synchronised with the release of this animated series is a footballer that may shoot the goal with adjustable angle and strength. Being broadcasted in more than 40 countries, the series was a success; it also brought up the sales figures of toys by a triple in South East Asian countries like Vietnam and Indonesia.

However, the idea of using animation to promote the sales of toys does not go as smooth as intended, for it is difficult to find suiting distributors for toys and for animated series in each country at the same time. Now that Asia Animation Limited is more focused on the sale of Intellectual Property, and on ensuring that distributors for both toys and animation are both secured before any integrated project as such is launched. For Gordon, the key to success is still a good story and characterisation, which almost guarantees high ratings on TV channels, which in turn promises the profitability of IP and associated items to follow, which often outperforms the sales of physical toys these days. The model of establishing animation IP is a good example of how a traditional family business could be renewed by introducing brand benefit and new growth.

1979	M&C Toy Centre Limited was es
2000	Gordon, the son of Chin, comple multiple production lines of toy
2001	They leapt at the opportunity br the series of soldier figures title
2004	Asia Animation Limited was acc
2006	An animated adaptation of Mr. released.
2007	<i>Sparkling Red Stars</i> , an animate August First Film Studio and dir
2008	<i>Storm Rider: Clash of Evils</i> , an ar released. In the next year, the al together with its eponymous to
2010	GGO Football was released.
2011	An original historical animation life in imperial palace, <i>Ori-Prince</i> subsequently.
2018	The second season of GGO Foo

### AKEAWAY

#### Insistence on the Path of Establishing Its Own Brand

M&C Toy Centre has always manufactured products for its own brand and never was an Original Equipment Manufacturer. To increase brand benefits, animation production was utilised to establish brand identification.

### **Updating Product Categories and Filing Gaps in Market**

In its early stage, M&C Toy Centre only produced toys for girls. In 1998, Mr. Y.T. Chin and his son Gordon began manufacturing toys for boys, improving and expanding product categories and simultaneously updating toys for girls. Since the September 11 Attacks, the sales of toys for boys, comprising chiefly action figures of soldiers, have soared. M&C Toy Centre has become the manufacturer that provides the largest number of types of military action figures accessories by obtaining licences.

#### From Traditional Manufacturing Industry to a Rising Business Mode

M&C Toy Centre's vision and emphasis regarding animation production quickly transformed from boosting the sales of toys to the operation of IP animations, and from building brand benefits of toys with animation to strengthening its IP animations with toys and series of derivative products.

stablished by Mr. Y.T. Chin in Hong Kong.

leted his studies and joined the company, creating ys for boys, in addition to the existing toys for girls.

rought by the September 11 Attacks and rolled out led "World Peacekeepers."

quired.

Tsai Chih-chung's comics, Gu Yu Xin Shuo, was

ed film adapted from classic Communist films by irected by Dante Lam, was released.

nimated film adapted from well-known comics, was animation *World Peacekeepers* was launched by series.

n targeting teenage girls and centring around the *cess*, was released, and its sequels were launched

tball was released.

### Chen Hsong Holdings Limited

### The Way to Success of an Injection Moulding Machine Manufacturer

How does a small machinery factory develop into one of the world's largest manufacturers of injection moulding machines?

How does one enhance a manufacturer's competitiveness in all aspects?

In 1958, with a capital of 200 HKD that the founder of company, Chen Chiang, worked hard to save, Chen Hsong Holdings Limited began as a small workshop called Chen Hsong Machinery Co Ltd. The year after, the factory launched the first locally made "two-colour extrusion blow moulding machine," with which the "water-melon ball (a kind of white-and-red stripe plastic ball well remembered in the collective memory of many Hong-Kongers)" was made. Mr. Chiang recalls that his invention was inspired by the ways in which two streams of water remain their distinctive colours after converging as he observes part of the Yangtze River.

In 1966, the company released Hong Kong first 10-ounce in-line screw-type plastics injection moulding machine, which received "New Product Award" from The Chinese Manufacturers' Association of Hong Kong. Since then "Chen Hsong" has become one of the leading brands in plastic injection moulding machine worldwide.

To triumph among competitors, Chen Hsong has adopted Toyotist "Lean Production" – which is to maximise production efficiency with lesser space and human resource. In particular, instead of separately putting lathes, grinders and milling machines in designated areas, now that these three sets of machines are put altogether in the same area, forming an "assembly island", in which parts went through various procedures of machining immediately one after the other. Such an arrangement saves the time and resources being spent in transporting various parts between different machining areas, thus accomplishing a "one-stop" mode of production. Previously, a full month was needed for the completion of 100 moulding machines. Now completion of one single machine is shortened to 40 minutes. Production efficiency is raised significantly by 30%, while space required goes down by 40%.

Chen Hsong has also been investing hugely in computerised management of the machinery procedure, among many, iChen® System is enhanced and equipped to an extent that clients are able to have access to the progress of each machining stage through their own computer at any time. The investment in enhancing information system has continued to offer greater convenience to respective clients.

As of today, to meet the needs of different clients, Chen Hsong Holdings Limited offers a wide variety of plastic injection moulding machines, ranging from high-precision micro injection moulding machines to large-scale two-platen injection moulding machines, from as low as 18 grams to as high as 106,081 grams moulding.

1958	Established the Chen Hsong fac maintenance, in Tai Hom Villag
1959	Launched the first two-colour e
1965	Started to manufacture injectio
1966	Invented the world's first 10 oz
1980	Established Chen Hsong Machi
1987	Established Chen De Plastics M
1990	Established the first ductile iror
1991	Chen Hsong Group was listed o
2000	Manufacturing commenced in t Park in Shenzhen.
2004	Established a European office i
2005	Established a North American o

### TAKEAWAY

#### **Technological Innovation**

Chen Hsong Group has always competed with its technology and has constantly researched and developed innovations. Many of its products were the first in the industry, which allowed the company to lead the market and the development of the industry.

#### Improving Production Efficiency

In 2006, Chen Hsong Group introduced Toyota's "lean production" model, which greatly accelerated production efficiency and increased production flexibility.

#### **Fully Meeting Customers' Needs**

After becoming aware of customers' production management needs, Chen Hsong Group, which manufactures injection moulding machines, invested more than \$20 million to develop an information-based workshop management system to enhance the competitiveness of enterprises while making things convenient for customers.

#### actory, which mainly performed mechanical ge with Tam Hsong with the principal of \$200.

extrusion blow moulding machines.

on machines.

screw injection machine.

inery Taiwan Co., Ltd. in Taiwan.

Machinery Factory Co., Ltd . in Shunde.

on factory in Hong Kong.

on the Stock Exchange of Hong Kong.

the 560,000 square metre Chen Hsong Industrial

in Warsaw, Poland.

office in Houston, USA.

### Funderful Creations Limited

### **Father of the Yellow Rubber Duck Starts Afresh** After 70 Years

What path of endeavour and struggle did one take to start from scratch and eventually become a toy tycoon? How does a product from 70 years ago spark brand vitality?

Known by the iconic little yellow duck, Funderful Creations Limited was founded in 2014 by L.T. Lam, a 90-year-old businessman who has been a veteran in local toy industry. Arriving in Hong Kong in 1945, Lam started his career by working in a newspapers stall at Central, and with the networking provided in such a location he also became the "agent" among customers. One of his earliest capital came from the commission from a property sale. And in 1946, learning about and realising the potentials of "plastics" from some magazines, he quitted his job at the newspaper stall and entered Yuen Hing Hong Co. Ltd, a well-established chemical plant, and suggested to the plant's owner to invest in plastics. With Lam's suggestion and leadership, Winsome Plastic Works was then founded in 1947. Noting that toys were then a luxury item, produced mainly in Japan, with celluloid nitrate as the material, which was breakable and flammable, Lam believed plastics would provide a safer option for postwar children. In 1948, the first lot of toys was casted, becoming the first lot of locally produced plastic toys. One may even regard these toys as forerunner of ODM: they set the prototype of three little duckies following a mother duck. Made from polystyrene, they have a rubbery texture, bright colour, and yet relatively less flammable. The cosy image of "mother-and-ducklings" and the bright yellow also seemed to offer comfort and hope to those who had suffered from wars. It was hugely popular since it had come to the market. It even replaced Japanese celluloid nitrate toy ducks overnight, registering the new page for Hong Kong toy industry.

Through merging, today's Forward Winsome Industries Limited came into being in 1960. Since then the company had been the leader of toy industry, functioning as OEM, producing toys for famous brands worldwide and had factories not only in mainland China but also Thailand. In 2011, to prepare for the launch of Toy Town, a book about the history of Hong Kong toy industry, Lam "reprinted" the yellow duckling as souvenir for guests. Surprisingly it was very well received. Lam therefore decided to bring the yellow ducklings back to the market with fresh elements, and founded Funderful Creations Limited. The body and facial expression of the duckling has been redesigned to look more contemporary, and has renamed as L.T DUCK, after the initials of Lam.

Now the branding of L.T DUCK goes beyond the toy industry. It has had cross-overs with others: for instance, it collaborated with Memorigin Watch to launch a special edition of L.T Duck tourbillon watches. Lam looks forward to further developing his businesses based on licensing and patent.

1924	Lam Leung was born in Hong K
1947	Lam joined Yuen Hing Hong & business in plastic materials.
1948	Lam started setting up Raymor Products Company, and Alice I
1960	Forward Winsome Industries L European and US markets.
1960s	Lam expanded his business int
1967	Lam opened a factory in Taiwa
<b>1970s</b>	Lam fully expanded the busine
1979	Production lines were relocate Dongguan, Nanhai and Lianzho
1988	The Hasbro Transformers serie
2014	Lam started a business from s Creations Limited.

### TAKFAWAY

#### **Restructuring the Business from OEM to Creation of an Original Brand**

When re-launching the yellow rubber duck, an embodiment of childhood memories, a professional design team was entrusted to develop the brand and renovate its image to keep pace with current fashion.

At the same time, Lam refused to be bound by the mindset of a toymaker and thought outside the box, placing the emphasis on branding effects. Through collaborating with different industries by licensing, his company rolled out a series of products and services.

#### **Insights into Market Demands**

From plastic materials to the production of toys, and then taking a further step to set up a factory in mainland China, Lam has always been highly perceptive about market demands and industry development, as well as daring and prompt to realise his visions.

#### Personal Integrity as the Cornerstone of Career

The representative of the first-generation industrialists in Hong Kong, the motto of Lam is "diligence, trust, honesty." It is with modesty, industriousness and integrity that Lam has, brick by brick, built his toy kingdom from scratch.

#### Kona.

Company Limited, which mainly conducted

nd Plastic Factory, Advance Plastic Factory, Forward Doll Fashions Limited one after the other.

imited was set up and it produced toys for

nto the production of auto accessories.

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es were launched in mainland China.

scratch for the second time and founded Funderful

### The Darts Factory

# **Transformation from a Screw Factory to a Brand of Darts**

How to develop a new brand and products with Core Technology?

How to create innovative products that meet the demands of the market?

The Darts Factory is derived from Shing Hing Group, a fastener trading company founded by Edward Tsui in 1977. The company acquired its first factory in 1987, becoming an OEM producing high technology fasteners for toys, electronics, cars and even spaceflights.

The Darts Factory was originally part of Shing Hing Group. Initiated by Jennifer Tsui, the second generation of the family business, who officially took over the group in 2013. Since then she has been keen on improving cost/benefit ratio, which includes eliminating potential corruptions, simplifying procedures, introducing more automation, and reducing redundancies. The number of staff dropped from 1,100 to 400 by 2018, in which 70% of the staffing is allocated to production and quality control, while 30% to management and sales.

Apart from continuing with the well-established business in fasteners, Jennifer also realises the importance of establishing the group's own brand, so as to take a more active role in the market and to maximise one's profit. In 2015, The Darts Factory was established in the view of this. Having an intense interest in darts as a sport herself, she discovers that there is a lot of potential in it. Not only that the design of darts has much in common with that of fasteners, but also that darts indeed require a high degree of personalisation: the sizes, strengths and routines of each individual player is different and darts of corresponding weight are thus required.

Back then, weight adjustable darts available in the market tend to either lengthen the end of the dart or add steel balls to the dart. Both are prone to have negative impact on the touch and performances: the lengthened end destroys the streamline design of the dart while the steel balls would rotate itself when thrown. Jennifer and her team therefore came up with the creative idea of fastener-shaped weights: a player can attach the weight to the dart barrel like fastening fasteners. Such design allows 5 weights to be attached in maximum, with an adjustability ranging from 15 to 18 gram. It is named as "Mu( $\mu$ ) Darts" and registered as a patent technology. It becomes the core products of The Darts Factory.

Another creative product is a portable, frame-changeable, and network connected dartboard named "Guz Board", which aims to enable the physical game to be virtual at the same time: connecting players worldwide through the internet.

In 2018, Jennifer detached from Shing Hing Group to divert her focus wholly on the development of The Darts Factory. Now, Jennifer and her team continue to promote darts as a sport, including forming couching clubs to training students in more than 100 schools locally. The education service not only takes up one-third of the income of the company, but also helps promote darting products to family users.

1977	Edward Tsui founded Shing Hing
1993	Edward opened a factory in Don
2009	Jennifer Tsui joined the compan
2013	Jennifer officially took over the
2013 2014	Jennifer searched for a viable di researching on and developing o
2015	The Darts Factory was establish

### TAKEAWAY

### **Revolutionising Management with an Enterprise Management Model**

Edward possesses characteristics of industrialists of the former generation and values human warmth and geniality, placing emphasis on interpersonal relationships in the factory and relying on relatives for managing the company. Upon entering the company, Jennifer fired employees with dissatisfactory performances, cleaning out the dead wood and boosting organisational efficiency.

10 years before Jennifer's entry, there had been incidents of members of management and employees abusing their powers for smuggling goods, reaping personal gains through procurement and snatching away clients. Regardless of blood relations, Jennifer laid off anyone who had violated the Company's Code, arranged the introduction of enterprise resource planning system and automated production facilities, and cut down on the number of employees from 1200 in 2008 to 500 in 2016, drastically increasing cost-effectiveness.

### Researching and Developing New Products from Technological Strength of the Factory and Pain Points in the Market

Jennifer wanted to steer Shing Hing in a new direction of developing its own brand and eventually decided on darts as the key product, as the sport shares core technologies with metal screws and with such technological strength she has resolved issues within existing darts products in the market. Darts have then become a competitive new product.

Darts are a personalised product since everybody requires a different weight depending on their respective physique, while darts with adjustable weights in the market were hardly of high quality. Jennifer grasped these pain points and hence manufactured added weights in the form of screws, which allow players to fix them to the barrel. She has gained a patent with this technology and come up with a comprehensive product line-up with complementary electronic dartboards, applications and wristbands.

### **Rebuilding the Image of Darts in the Market**

Darts are commonly perceived as a pub game, an indecent pastime in the eyes of many consumers and parents. On the other hand, Korean and Japanese brands have pre-emptively established their business in most pubs. Under such a condition, the Darts Factory has placed its emphasis on home users and promoted darts as a common sport.

Apart from pubs and places for public entertainment, the Darts Factory has set up an area for try-outs in the Mong Kok pedestrian zone. It has even offered training classes in more than 100 schools and fostered passion for darts in the next generation, conveying a message of darts being a proper sport through formal training.

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hed.

### The China Paint Mfg. Co. (1932) Limited

### Leading the Paint Market with a Comprehensive Product Line and New Technology R&D

How to adjust the production line to match the current state and needs of the market?

How to develop and research on the paint products with such a short life cycle?

The China Paint Mfg. Co. was established by Lam Kwan and Lam On in 1932, and had been playing a major role in Hong Kong paint industry. In the 1970s, it was passed to Paul Lam, the second generation of the family business, and since then various advanced technologies in paint have been introduced. From the 1990s onwards, both production lines and target market were moved to mainland China.

The paint industry is one that has a long history in Hong Kong. The Lams started their business first as a family workshop: the building had three floors, where the ground floor was for production, the second office and storage, the third living. Given the hazard created in the production process it was then moved to a field in Tai Kok Tsui. The factory there had only 6 employers and 1 machine to begin with; the men were responsible for production, and the women for packaging. Lam Kwan, a graduate from the Pratt Institute of Brooklyn, was a professional and skilled man. The factory chiefly produced metal paint and wood lacquer, and could reach a total production of 65,000 kg per month.

To begin with, the "Flower" brand was launched, which targeted at domestic users; in 1938, "Giraffe" was launched, targeting contractors and builders with professional wood topcoating and lacquer. "Toy brand" came out in 1983, offering non-toxic industrial paint for toys, electronics and appliances. These three products lines defined three different markets, each forming a significant part of the company's business.

To enable the company to benefit from advanced research and development, China Paint signed into various collaboration and mutual support deals with several paint companies abroad; this includes obtaining licensed container coatings from Goodlass Wall (now known as Jotun Goodlass) of the UK in 1989, among many others. For Paul, such collaborations provided necessary knowledge and technique for the company to move forward, in a quick pace than relying on its own research team.

In terms of sales, Paul believed that word-of-mouth marketing as well as having the right connections in the sales network are vital to success. In the 1960s, when sales were mostly done through hardware shops, 90% of Hong Kong hardware shops had China Paint products in stock. In recent years, given large-scaled homestores have become the place where people do their daily shopping, the company makes sure its Flower brand are available in stores like Pricerite. As for industrial paint, since orders are directly made, and often in huge number, sometimes the company has to have its staff members stationed at the clients' factories to provide necessary assistance.

1932	Lam Kwan and Lam On founded Castle Peak Road, and establish
1934	Moved to the workshop in Arran
1970	Representing China Paint, Paul I and returned to Hong Kong to he
1976	Established the research and de
1991	Changed its name to CNT Group Hong Kong Stock Exchange in th
1993	Factories moved from Hong Kor
2002	Set up the "Household Paint Col

### TAKEAWAY

#### Decentralising the "Three Major Brands" to Target Different Important Markets

The paint market can be broadly divided into two types: professional and amateur users, and different paints are required for different materials and surfaces. The three major brands "Flower", "Giraffe", and "Toy Brand" have thus been created to decentralise and complete the product line that addresses the needs of the market.

"Flower" focuses on home renovation for amateur users. "Giraffe" is mainly the wood paints and lacquers used by professionals such as foremen and renovation contractors. "Toy Brand" supplies non-toxic industrial paints that are widely applied in toys, electronics, and electrical appliances, thus covering the market demands for paint products. In addition, with word-of-mouth publicity and sales network, the company also produced the popular TV commercials such as the "Flower Songs", and products of the Flower brand too are available for sale in 96% of the hardware stores in Hong Kong.

#### Introducing Foreign Technology to Accelerate Product Development

Paul has signed technical cooperation agreements with a number of international companies to introduce the production technology owned by foreign companies to China Paint, which was to assist the pacing of product development and complement the knowledge required in the company, as well as to support the internal chemistry experiments within the company, making the most cost-effective products.

For example, in 2009, the company introduced a new technology of waterborne road marking satin finish paint from Dow Coating Materials in the United States to develop the "Flower Waterborne Road Marking Paint". Yet Paul emphasised that the formula was not everything, it is also necessary for chemists to go through repeated tests to find the coating process that matches the surface of different raw materials, and try to reduce the cost of production without affecting the core functions.

### Adjusting Production Lines and Business Cores Decisively to Cater to Market Changes

Although China Paint identified itself as a brand in the early years, and used it to directly face retail customers, paints have rarely been used as a trend-leading product, they are more like ancillary products. Therefore, the business development must closely follow the changes in the market in order to survive and grow. Paul decisively transferred both the plants and the sales market to the mainland, allowing the company to expand continually during the period of the industrial north shift.

China Paint originally set up factories in Kwun Tong and Sai Kung, with Hong Kong as the main market. However, after the industrial shift to the north, the production plants of the industrial raw materials ordered by customers were then in the mainland, naturally causing the processes of ordering and oiling to be carried out in the mainland too. In 1993, Paul decisively moved all the production lines to the north, which was close to the customers and effectively saved transportation costs. The direction of product research and development also primarily oriented towards the needs of the mainland market, and the sales volume increased 10 times compared with that in Hong Kong.

the China Paint Manufacturing Company on the hed the "Flower" paint brand.

Street, Mong Kok.

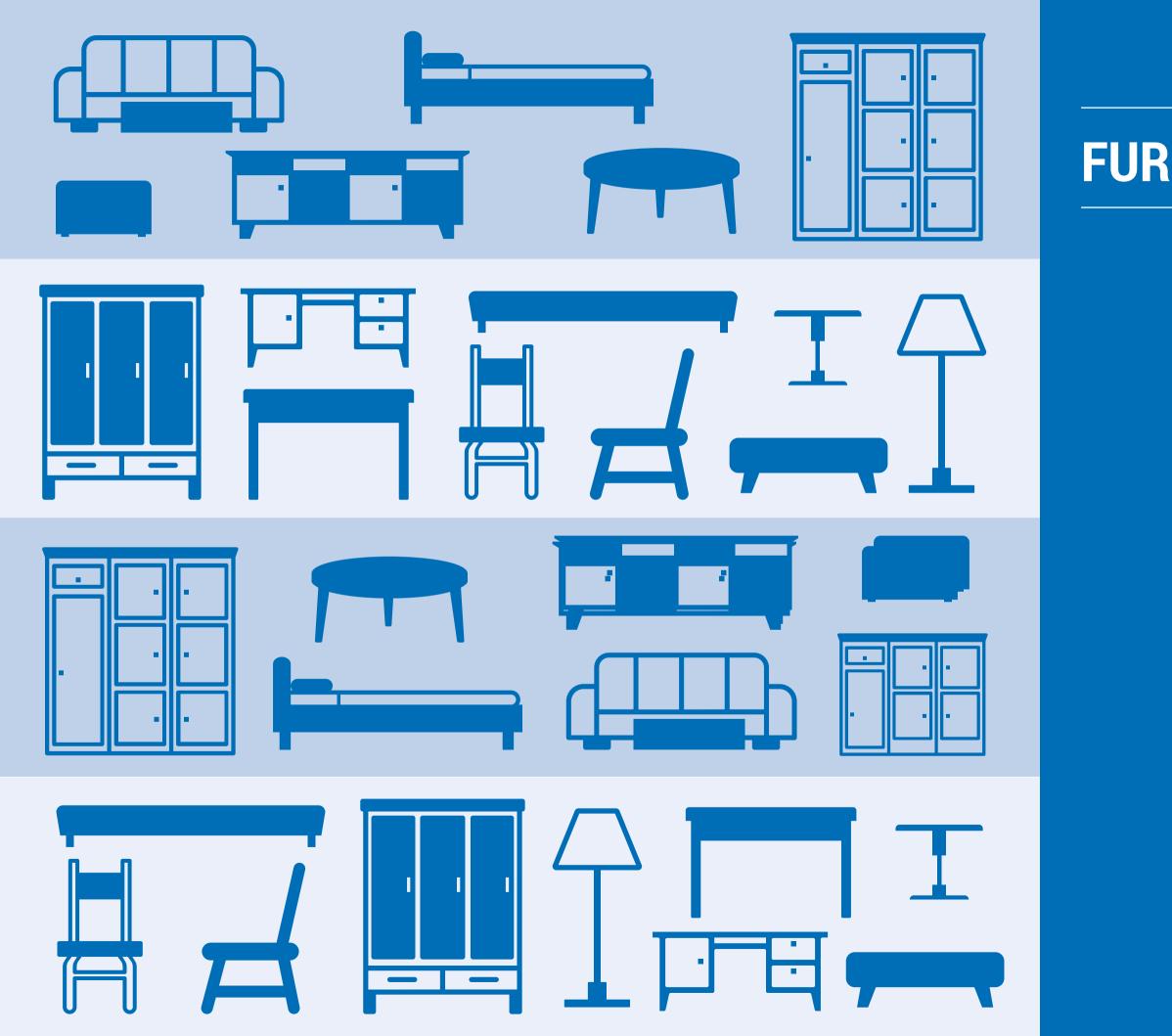
Lam worked as a technician at Sherwin Williams, elp at the family business with what he had learnt.

evelopment department.

p Limited, and be listed on the main board of the he same year.

ng to the mainland completely.

lour Service Centres".



# FURNITURE



### Arredamenti Company Limited

### The Sofa Enterprise in Possession of Two Original Brands

How to build two successful original brands in succession?

How does a Hong Kong brand enter the overseas market with made-in-China products?

Kelvin Ng, one of the co-founders of Arredamenti Company Limited, entered his father's furniture business in 1992 after his graduation. Having some experience in production, sales and source material merchandising, he realised that he was not enthusiastic about running a business likes his father's – an OEM gaining profits from overseas companies through mass production without having its own designs and brands. He had an idea of establishing a sofa brand (noting that Hong Kong designed sofas were then rather old-fashioned). He hence left his family business, and founded Arredamenti Company Limited with his wife Jane Tong.

In the early days, the company was on the one hand working as an OEM for American and European clients, while on the other hand adjusting American and European styled sofa to fit into Hong Kong market by re-sizing, and selling them in domestic market under the brand Giormani. In 2004, the company started to produce high-end sofas for WECO, a Germany brand. During this process, Kelvin came to know about designing a new product from scratch. As WECO was closed down in 2007, Kelvin seized the opportunity to sell his own products to the overseas distributors whom he had connections with; and Kelvin Giormani, a brand specially designated to the international market, was derived from such an occasion. Kelvin Giormani is later on introduced to Hong Kong as its market for high-end sofas becomes more sophisticated.

Giormani distinguished itself from the kind of sofas available on the market in the very beginning. One of its features is a mixture of leather and upholstery fabric. Patterns on fabric are colorful, flowery and attractive but fabric sofas had not been a popular choice in Hong Kong because of maintenance concern. Kelvin hence thought of mixing leather and fabric: the handles are covered with leather for its sturdiness while cushions are with fabrics for its attractiveness. Customers are able to choose and mix different patterns and materials. Giormani sharply stands out with such a unique mix of leather and fabrics and high degree of customisation. As for Kelvin Giormani, it has embedded in more design element in shapes and leather craftsmanship. Now, Japan is the largest overseas market for Kelvin Giormani.

In order to diversify its products, Arredamenti works with independent designers in various collections. Designers whom the company has collaborated with including Chocolate Rain and Freeman Lau, among others. While some of the more conceptual products (i.e. egg-waffle shaped sofa) might not be very saleable, it has a very satisfactory promotional effect.

1999	Kelvin Ng and his wife, Jane To
2004	Arredamenti worked as an OEM
2008	KELVIN GIORMANI, a brand offe established.
2010	Kelvin gained the title of "Hong
2016	KELVIN GIORMANI opened its f

### **AKEAWAY**

#### Grasping Various Market Positions in a Stratified Market

GIORMANI and KELVIN GIORMANI offer their respective unique designs, creating added values for products while building distinct brand images.

GIORMANI's characteristic coordination of leather and fabrics has shaped its vitality and vibrancy that entices customers. KELVIN GIORMANI's plastic arts and leathercraft have carved out a niche in the European middle-end market for the brand.

#### Highly Customised and Diverse Designs

Both GIORMANI and KELVIN GIORMANI offer a high degree of customisation in their products, adding to their respective exclusiveness. They also strive to produce more diverse, cross-sectoral pieces of work with other designers. Remarkable examples include the sofa series in collaboration with Michele Mantovani, an Italian interior designer and product designer, as well as the armchair created in joint effort with American designer Michael Wolk.

The great flexibility of production lines enables the processing of most customised orders independent of the development department. Even the lathe workers and the fabric cutters are familiar with the concept of customisation.

### **Establishing Distribution Channels through Dealers**

One of the vital conditions necessary for KELVIN GIORMANI's entry into the overseas furniture market is the establishment of distribution channels. The cooperation with overseas dealers has laid the foundation of the brand.

To assist overseas dealers with establishing footholds for KELVIN GIORMANI in the markets, Kelvin has unreservedly demonstrated to them the layouts of stores, promotional materials, product designs and the expression of the story of the brand in exhibitions every year, so that they may directly apply these to their respective domestic markets. Also, by guaranteeing that they are the sole agents for his products, Kelvin has put the dealers' minds at rest and directed their focus entirely to advertising the brand in the local markets. Building distribution channels through cooperating with overseas dealers has been the cornerstone for building an international brand.

ong, founded Arredamenti Company Limited.

M for WECO, a German high-end sofa brand.

fering mid-range to high-end products, was

g Kong Young Industrialist".

first showroom in Hong Kong.

### POSH (Hong Kong) Limited

### **Moving Forward**

How does one build the best office furniture brand?

Based on what commercial strategic considerations would one leave the company built by one's very own hands?

POSH (Hong Kong) Limited was founded by Eric Yim in 1995. In 2009 POSH was elected as "The best Hong Kong brand for office furniture" by Capital, and in 2010 listed as Hong Kong Top Brand by Hong Kong Brand Development Council.

Eric studied architecture in University of Manchester and had worked in the architectural design industry in the UK and Hong Kong. As a designer, he realised that the product design of his father's steel company (which has opened since 1950s) has some room to be freshened up. He therefore recommended himself to his father, and in 1991, reformed COSMOS file cabinet series and had them showcased at the furniture exhibition in Hong Kong. The series was well received: the look and size of the series were standardised and unified, and product information was somehow encoded in the serial number of the product. Such arrangement systematically integrated promotion elements in the product design. The series was available in black, other than beige and grey, the more conventional colours; the matching of materials (i.e. steel and wood- which was not so popular then) was also a highlight.

Afterwards Eric founded his workshop, named "Project Office de Sun Hing", from which the initials "POSH" derived. The team was constituted of only four persons. Eric himself was the designer, the sales manager and the project manager. By the late 1990s, POSH had many sales network in Hong Kong as well as the mainland. While the production line was in Dongguan, the Hong Kong head office took charge of sales and promotion. Other than selling products of its own brand, POSH had also been the agent of several overseas brands. Some clients eventually authorised POSH to produce their products to shorten the lead time, enhancing competitiveness. POSH's collaboration with Herman Miller started in this way. In 2011, Herman Miller officially acquired POSH, and Eric continued to be the CEO until 2014, after which he became the chief designer and consultant.

Eric describes the first generation of entrepreneur as "actioner" - often involved in the actual work himself. Yet he believes that when an enterprise reached a certain stage, one can rethink about one's identity. One might consider adopting the identity of an investor and from that particular perspective help a business to develop, or of an industrialist and from a broader perspective leading the advancement of a business as well as the associated industry. POSH has benefited from international network and the scientific and systemic operational flow of Herman Miller, and has developed well since acquisition, which Eric is very glad to see.

1992	Sun Hing Steel Furniture Ltd. se
1995	The brand "POSH" was register
1996	A franchise network of POSH w
1999	POSH became the agent for He
2002	POSH signed agency and produ
2004	Became business partners with
2008	POSH established a global stra other's distribution networks.
2011	POSH was officially acquired b
2014	Eric Yim left his position of Cha
2015	New production lines were set (India).

### TAKEAWAY

#### **Development of Enterprise through Designs and R&D**

POSH has been known for the infusion of its unique vision in its product designs. With the introduction of professional and systematised research and development processes after joining Herman Miller, POSH are set for further development in times to come.

POSH's distinct product designs utilising shared components have facilitated production, transportation, sales and after-sale services. Herman Miller's R&D team and the devising of operations system help conceive a more scientific and systematic product strategy, which in turn assists in manufacturing commodities and providing services with greater market influence.

#### **Building a Credible Franchise Network**

The franchise network in mainland China is the intangible asset of POSH, and one of the reasons behind Herman Miller's acquisition.

Back in the early years of POSH, Eric has been building the franchise network brick by brick, establishing trust and relations over long years of cooperation with franchisees. Eric pointed out that when choosing a franchisee, he placed the emphasis on building trust between individuals and understanding why they pursue a partnership, observing whether they could truly appreciate POSH as a brand and its products.

#### Assisting the Enterprise from the Perspective of an Entrepreneur

By agreeing to the acquisition of POSH by Herman Miller in 2011, Eric has made room for further development and a wider scope of business for POSH in the future.

Herman Miller's substantial resources in research and development has brought about more scientific and systematic operations in R&D. The establishment of factories and production lines for POSH products through Herman Miller Furniture (India) has greatly expanded the overseas market for POSH.

- et up Project Office de Sun Hing (POSH).
- red in both Hong Kong and mainland China.
- was established in mainland China.
- erman Miller.
- luction agreement with Pan Office and Allseating
- h Samas-Groep.
- ategic partnership with Herman Miller, sharing each
- ov Herman Miller
- airman and the CEO of POSH.
- up in the factories of Herman Miller Furniture

### Chapter 05 Furniture

### Profilia of West Germany (Far East) Limited

### The Composite Furniture Enterprise Arising from a Mattress Business

How to grow from an agent of German mattresses into a manufacturer of assorted furniture?

How does a forty-year-old furniture enterprise adapt to the market and keep on evolving?

May Leung is the CEO of Profilia of West Germany (Far East) Limited. Her father had been, since 1970s, the agent of Profillia, a brand producing mattresses made in then the West Germany, and in 1978 he officially founded Profilia of West Germany (Far East) Limited. In the 1990s, the mother company in Germany ceased to operate, Leung's family successfully obtained the trademark and started to operate Profillia by themselves. A development team and production line were founded in Jiangmen, mainland China; as time passes, their products have become more diversified, providing beddings, sofa, wood and iron furniture in addition to mattresses.

Mattresses made by Profilia have been known for their quality and sturdiness. In particular, steel made in Germany was known for its distinction, with that kind of steel wire being used for mattresses' springs, its firmness and durability could be guaranteed. In fact, Profilia of West Germany is the first brand in Hong Kong that introduced guarantee of mattresses for up to 15 years. To ensure the quality, up to the present day, the company makes its best effort to continue to use steel wire from Germany for its mattresses. The same kind of emphasis on distinctive quality has also been adopted to other types of furniture, in which the best materials are always used.

Since 1995, the production line in Jiangmen started to operate, and its production soon expanded into sofa, bedding, wood, and iron furniture. The company has become one of the few enterprises that produced various types of furniture. Indeed, in the earlier days, the company had attempted to have some furniture made through other factories; but the result was unsatisfactory. Leung's father's insistence on the highest possible quality implies that the company had to have its own craftsmen and production lines, so as to ensure the quality, as well as to allow some flexibility in terms of quantity – for out-sourcing production often requires a minimum order. The reputation of the varied and high-quality production had gradually established, to the extent that some local and overseas brands would outsource some production to them. Yet this took up only a minor sector of the company's business, for the majority is still producing their own products under its own brand.

In recent years, in addition to home users, more and more of their customers are from the business sectors (i.e. hotels, developers or cruises). Now that the sales made from the business sectors takes up as much as 70% of their overall sales.

In terms of business model, Profilia is also getting experimental. May chairs the Hong Kong Furniture & Decoration Trade Association; and recently she opens up a furniture shop called GUMM (initials for Give U More & More), in which not only products of her company, but also lamps, curtains and flooring from the members of the association are put on display. She also works with design houses in Shenzhen, producing 'pet furniture' that encourages the interaction of the pet owner and the pet. She likes such collaboration in particular for many designers that she knows have ideas but not so good at production and promotion, where her company's professional knowledge and experiences on these matters could come to aid.

1978	Profilia of West Germany (Far E
1995	The factory in Jiangmen was co
2007	Prolifia was awarded the "Best s of Small and Medium Business.
2013	The company also earned the H Development Council.
2014	The production lines were award Management System.

### AKEAWAY

#### **Quality Requirements**

Mattresses by Profilia of West Germany are made of the best materials with excellent durability, gaining recognition from both domestic and commercial clients. Quality is also the focus for other types of furniture.

Profilia of West Germany also launched the first sofa with safety certification in Hong Kong. Its leather exterior passes the allergy tests and the sponges inside are flame-retardant.

#### **Innovative Products**

While rolling out new mattress products, Profilia of West Germany has been expanding the business scope and manufacturing furniture including sofa and wood furniture.

The "Warm in Winter and Cool in Summer" mattress series and Far Infrared (FIR) mattresses have gained widespread popularity. Spine protection has also been added as a feature to sofas, adding to their values.

#### **Market Expansion**

The majority of customers of Profilia of West Germany, mostly domestic clients in the beginning, is now commercial clients, and the company is the supplier of mattresses and furniture in many hotels.

Profilia of West Germany offers free trial of mattresses for hotels, which have taken a liking to the products' comfort and durability. The company also responds to market demands, providing services of furniture customisation with 70% of the orders coming from commercial clients.

ast) Limited was established.

ommissioned.

SME's Award" by the Hong Kong General Chamber

long Kong Top Brand Award by Hong Kong Brand

rded the ISO 9001 certification for Quality

### Chapter 05 Furniture

### S&C Furniture Limited

### The Furniture Enterprise Persisting in Transitions and Upgrades

How does the furniture industry transform from OEM to Original Strategy Manufacturing (OSM)?

How to build multiple successful original brands?

Gary S. H. Lui has been in the furniture business for 30 years. After obtaining an architect license in Taiwan, he returned to Hong Kong, where he was born. He began by working in the area of interior design for a design house. The limited living space in Hong Kong inspired him to design multi-functional furniture. His design was well received. He therefore opened a furniture shop in North Point, and in around 1989, founded a factory in Surabaya, Indonesia. As Economic Reform was launched in mainland China, he established factories in Dongguan with OEM orders from Japanese distributors and international furniture chain. He founded S&C Furniture in 1997, and since 2016, established three brands: OMÓS, Hygge and Lohaspace.

In 2005, Gary set on his mind to shift from the OEM model – a model that he had relied on for years. This was triggered by a downturn in Sino-Japan relation between 2004-2005, during which the 'made in China' label posed a stark challenge for his business as one of his major clients was a Japanese company owning 400 shops. He realised that since his clients own the design, brand and techniques of the products; they could easily order from another factory. He began to approach Pricerite, which had by then 27 branches overall in Hong Kong. Gary offered to design furniture that suits the local market and have them sold through the latter. The proposal was warmly received, and their collaboration turned out benefiting both. Now that among 80% of the furniture from Pricerite was supplied by S&C Furniture.

This ODM model has become the core business for company, and by 2009 the company ceased to involve in OEM production. S&C Furniture has been so popular that, according to Gary, 50 thousands of Hong Kong family have bought furniture from them in the year of 2018; which outperformed IKEA Hong Kong, which also targeted at the popular market. Gary believes that the company's localised design is the key to its success.

Some years ago, a separate brand known as OMÓS was launched. This brand appeals to the younger generation with stronger environmental awareness. All wood used is certified wood. OMÓS branch is now opened on the South of Hong Kong Island; other branches would be opened in Morioka, and potentially Melbourne.

In 2018, Hygge came out as a brand that features North Euoprean design and yet fitting into the small living space in Hong Kong. As for pricing, it is in a range between Muji and IKEA.

To correspond with the rising trend of e-shopping, LohaSpace has been established recently. It targets at the low-end market. Though e-shopping now takes less than 10% of the whole business, Gary believes that there is a prospect of reaching the mainland market through e-shopping in the future.

1989	Gary Lui set up his first factory
1997	Gary founded S&C Furniture Lir
2004	A partnership was established Hong Kong.
2010	Furniture for the mass market v
2017	Omós, a furniture brand aimed
2018	Hygge, a furniture brand of Sca

### **TAKEAWAY**

#### **Transition and Upgrade of Business Model**

Starting as an Original Equipment Manufacturer (OEM), S&C Furniture Limited has then made the transition into an Original Design Manufacturer (ODM) and Original Brand Manufacturer (OBM), capable of independent development and creating its own brands. In recent years, S&C Furniture has been growing as an Original Strategy Manufacturer (OSM), exploring new business in the customisation of furniture designs and enhancing its competitive edges.

Since 2005, S&C Furniture has gradually abandoned OEM as a mode of production, and started designing and manufacturing furniture fitting for the local market, which was rolled out in the Hong Kong market through retail stores, primarily Pricerite. Starting from 2010, furniture for the mass market was launched under the brand of S&C Furniture. In the past three years, three original brands targeting different strata of the market were founded. The current projects have also advanced into the stage of OSM and will be bringing about innovation in ways of consumption and business models.

#### **Developing a New Brand from Needs of Users and Concepts**

Gary Lui first set eyes on the room for development in the market, followed by an in-depth research of the market and then the development of designs derived from concepts.

When manufacturing furniture for the mass market, Gary has taken note of the severity of waste of resources and subsequently discovered the niche market that values low-carbon and environmentally friendly lifestyles. This has led to the founding of OMÓS. After further affirming the customer base, he has conducted research on their lifestyles and spending habits, so as to find the suitable product strategies and marketing strategies.

#### **Emphasis on Research and Development**

S&C Furniture has invested heavily in designs as well as research and development, creating products of different types catering to respective markets.

In contrast to international brands like IKEA, popular furniture by S&C Furniture takes heed of the local environment and the domestic market's demand. Products are designed and developed by designers from Europe and Hong Kong, together with engineers from mainland China. The sizes and functions of the furniture are devised by local designers, while the aesthetics and the appearances, including shapes, colors, and textures are in the hands of European designers. Such cooperation ensures both elegance and practicality in the furniture.

in Surabaya, Indonesia.

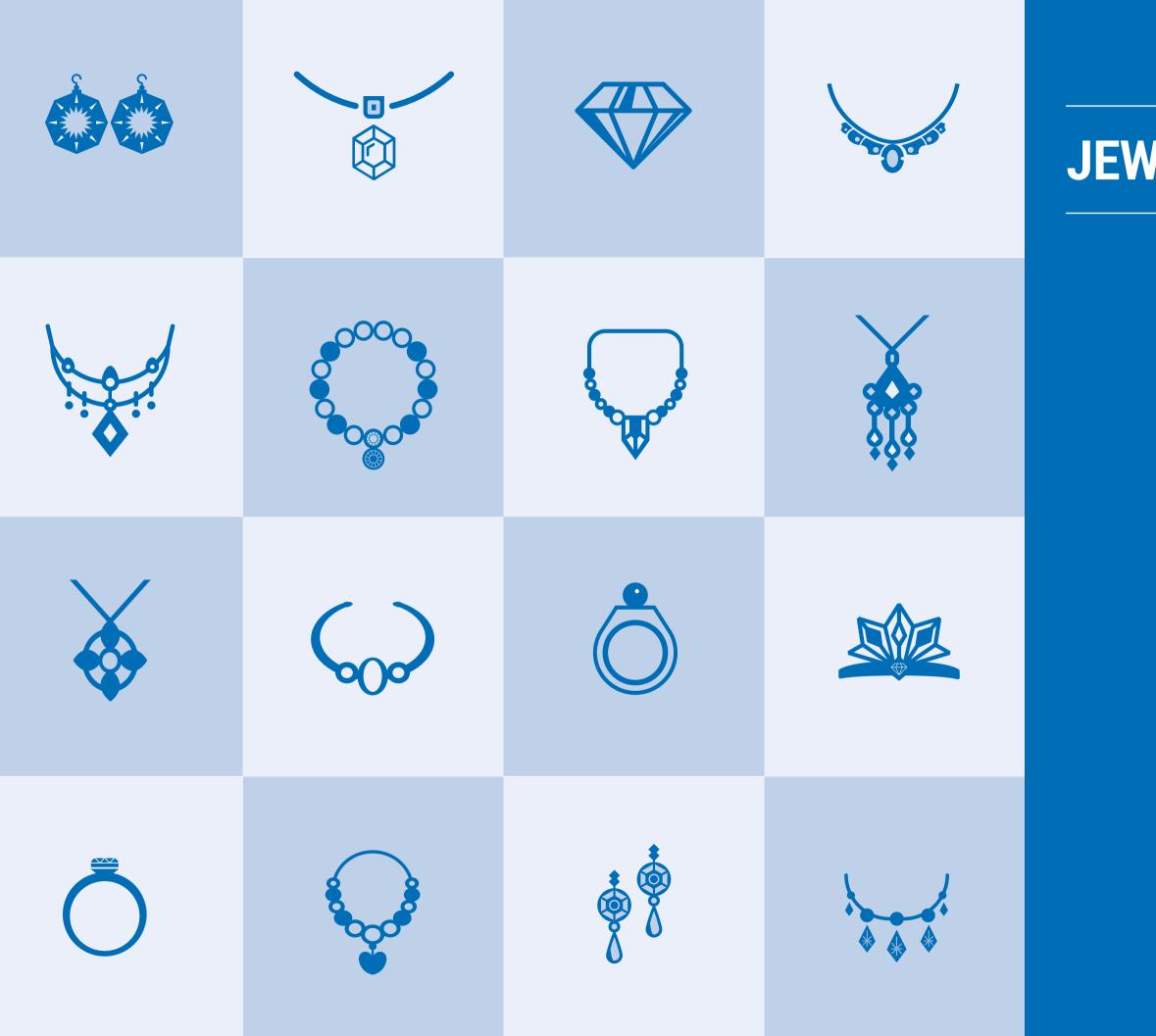
mited.

with the local furniture chain store Pricerite in

was rolled out under the brand of S&C Furniture.

at middle- to high-end market, was launched.

andinavian style, was established.





### Chapter 06 Jewellery

### Aaron Shum Jewelry Group

# Yesterday's Newcomer, Today's International Celebrity

How to engage in an entirely unfamiliar industry and bring about reform?

How to marketise a brand on an international level?

Aaron Shum is a legendary figure who started working in Saudi Arabia by the age of 21. Within two years' time, he began his wholesales and retailing business of souvenirs there. In 1985, he founded Aaron Shum Jewelry Group. With thirty years of hard work, his group transformed from a small jeweler to a well-known brand being showcased alongside famous brands at Baselworld.

Two unpleasant experiences in the late 1990s made Shum realise the importance of having his own brands. In 1997, he began to put all his focuses on the business of jewelry. In the course of doing so, he set to tackle the flaw within Hong Kong jewelry businesses, which was, having many famous chains that sold jewelry, but not even one famous brand that made jewelry. "In most occasions, you don't know which company from which a piece of jewelry is made by as you walk into those jewelers." He proclaims. And yet, unlike branded products of other types, such as watches and clothes, which may have labels being attached to the piece, and hence registering the brand, the only way a piece of jewelry can be recognised is by its design – ideally, a household signature design would help consumers recognise the brand just by the look of a piece. Shum hence tried to design a heart-shaped ring with three diamonds, which became an instant hit. However, without obtaining the patent right for this particular design, it was widely copied; and the name of Aaron Shum Jewelry Group behind such original design was gradually forgotten. This gave Shum a lesson on the importance of obtaining an exclusive technology and have such intellectual property protected.

With this in mind, in 2003, the group launched the landmarking Coronet – which highlights an exclusive technology of surrounding one bigger diamond with six smaller diamonds without using any prone. Coronet has 399 facets, 6 times more than 57 facets of average diamonds; and it achieves an impression of higher carat but remains relatively economic. The group later on established several other brands, including Icestrella (featuring the technology of assembling diamonds with bullet-proof glass) etc.

To have the products being showcased in Baselworld has always been the group's priority. And twenty years since participating in the Baselworld, the group managed, in 2005, to get into the Hall 1 alongside famous global brands such as Hermes and Dior.

Last but not least, although being well aware of the importance of branding, Shum also acknowledges its limitation, "The brand itself will not give you more business, it would help your business become familiar to more people; the confidence is what you might get. You still have to work hard on developing your business." In terms of future developments, Shum is working on sunglasses, handbags and mobiles with diamonds decorations, hoping that luxury products can be more affordable.

1980	Aaron Shum began his gifts trac
1985	Aaron Shum Jewelry Limited wa workshop in Knutsford Terrace,
1989	Relocated the workshop to Hun
1997	Allocated all focus and resource
2003	Founded the Coronet brand, acc
2015	Coronet successfully entered th

### TAKEAWAY

#### Accumulate Business and Production Wisdom through "On-The-Job" Experience

Although Aaron had years of experience with gifts trading business, he had never engaged in any Jewelry production activities before the establishment of Aaron Shum Jewelry Limited. Therefore, after its establishment, Aaron took part in every aspect of the business, learning the knowledge of Jewelry production and observing the shortcoming of the whole industry. These experiences inspired him to direct the breakthrough of the company.

In the early times of Aaron Shum Jewelry, Aaron would take up the procurement responsibility, selecting and purchasing Jewelry materials from Indian merchants in Tsim Sha Tsui. He would also spend time to learn the methodology of ring-making and machine molding. These efforts trained him to ascend from a newcomer to a veteran of the industry. Besides, from these experiences, he came to a realisation that there were only famous retails in the Hong Kong Jewelry market, but not famous brands, and the lack of knowledge on patent protection induced great loss to any local original design. As a result, Aaron set his heart to develop an exclusive jewelry brand.

#### Introduction of Exclusive Brand from Innovative Jewelry Cutting and Mosaicking Technique

Value-adding design was the primary strategy of Aaron Shum's team to develop their own brand. By researching on distinctive diamond mosaicking and cutting technique, they successfully invented a unique and charismatic diamond, which became the foundation of the success of the Coronet brand.

The design of the Coronet is a breakthrough on many past limitations of jewelry production. The clutchless-levitation technology allows six smaller diamonds to surround a centre prime diamond by mosaicking with perfectly carved pattern and platinum welding. This state-of-the-art, which has acquired the appearance and structure patent, produces a "carat-boosting" effect, allowing a 0.3 carat diamond to illustrate the glamour of a 1 carat diamond.

#### Make a Presence in the Global Market by Extraordinary Marketing Strategies

As a relatively young middle-to-small-size local jewellery brand, it was not easy for Aaron Shum Jewellery to attract the global attention. Hence, Aaron believes that stories and extraordinary means are required to make an impression on consumers. However, a perfect balance needed to be struck between daily life products and stunts for the sake of a sustainable development.

Aaron challenged the Guinness world records multiple times with jewellery. For example, he collaborated with local musician Mark Lui, rolling out a guitar embedded with 400 carat diamonds, which achieved the "Most Valuable Guitar" title, not long after, he collaborated with Hollywood superstar Jermaine Jackson and produced an electric guitar with 16,033 Swarovski diamonds, which won the "Most Jewels on Guitar" record this time. In the meantime, he crossovered with PRSR of China, designing a pair of sunglasses with the most diamonds, and Coca Cola, making a coke-bot-tle-shaped handbag with the most diamonds. Aaron concluded these efforts, not for the sake of generating revenue for the company, but for winning the trust of the consumers. In order for a luxury brand to move forward, more daily life products made with diamonds would be indispensable, such as handbags, phone cases and sunglasses etc.

ding business in the Middle East.

vas established in Hong Kong, launching a Jewelry v, Tsim Sha Tsui.

ng Hum and established a factory in Shunde, China.

ces onto jewelry business.

quiring patent for its appearance and structure.

he prestigious Hall 1 of Baselworld.

### Chapter 06 Jewellery

### Prince Jewellery and Watch Company Limited

# **Transformation from Retail** to Jewellery and Watch Brand

What strategies can a jewellery retail shop adopt to attract customers?

How to map out the pathway from retail to create a new brand?

Founded by Jimmy Tang in 1984, Prince Jewellery and Watch now has reached its 35<sup>th</sup> anniversary and become one of the top three watch retailers in Hong Kong. The company has been focusing on retailing. Yet in the past ten years, reform has been taken through acquisition and collaboration. Not only have the products become more diversified, but also some of them are now coming from its own brands.

It was the golden years for local watch and jewellery industry between 2008 - 2014. The multi-entry permits allowed more mainland visitors, who had high demand for watches. The financial crisis, which was a huge blow to many industries, had little impact on the consumption capacity of these group of customers. To grasp such an opportunity, since the multi-entry permit policy became official in 2003, Prince has been proactively opening branches. Geographically speaking, the strategy was to cover as many tourist hot spots as possible. In places like Tsim Sha Tsui and Causeway Bay, their branches are opened nearly at every street corner. In terms of pricing, a product is marked in a competitive price compared to its pricing in mainland, knowing that many of these tourists have a mentality of "earning back the travel expense". For instance, a watch marked at \$100,000 in the mainland market would get easily sold at \$70,000 in Hong Kong.

At the same time, Tang also started opening branches in the mainland. Its first branch was opened in Shanghai in 2011; later on, branches were opened in Guangzhou and Beijing. Tang explained that such strategy was to "attract more customers to come to Hong Kong," basing on the observation that word of mouth marketing is vital among mainland customers who care about the standing of a brand a lot. The sponsoring of "World Weather Forecast" on TVB had also been an effective way to maximise its exposure among mainland customers.

Until then, the core business of the company had been the sales of watches; jewellery constituted only a limited amount of the business. Yet to correspond to the interest in jewellery among mainland tourists, the company set to enrich its service on this aspect. In 2011, it acquired the local jewellery brand "Just Gold", venturing into the market of ladies' jewellery with the trademark, stocks, and staff of the former.

In 2012, with Emily Tang, wife of Jimmy Tang, joining the group, the company was more prepared to develop its own brand. In the same year, the company dished out its own brand. Peonia Diamond, into the market.

Now with more than 17 branches all over Hong Kong, Prince Jewellery and Watch Company demonstrates its strategic wisdom in the retailing business of jewellery, showing us a successful example of a general retailer becoming an exclusive agent for brand products.

1984	Jimmy Tang opened the first re Centre, Tsim Sha Tsui.
2003	Prince Jewellery and Watch beg
2011	Set up branches in mainland Ch
2012	Co-developed the "Peonia Diam Leo Schachter Diamonds.
2013	Spread out branches network to

### TAKEAWAY

#### Adjust Retail Strategies by Targeting Consumers' Psychologyy

Prince Jewellery and Watch was founded with a focus on retail business, which benefited from the Individual Visit Scheme in 2003 and the subsequent Multiple-Entry policies. Mainland visitors naturally became the major consumption group of all jewellery and watch shops, therefore Jimmy took hold of the opportunities to branch out and carry out unique strategies to attract customers.

Jimmy points out that location and convenience are the most crucial factors for the success of a retail business. He describes the consumption pattern of visitors as "buying wherever they go", thus branches must be opened along the frequent traveling route of foreign travellers. In the decade following 2003, he has opened multiple new branches along the major tourist area in Tsim Sha Tsui. On top of that, he believes that word of mouth has huge impact on the consumers' decision making. Therefore, since 2011, he has extended branches to Shanghai, Guangzhou and Beijing, increasing Prince's exposure in China, raising visitors' desire to shop at Prince.

#### Acquire Gold Jewellery Brand, Broadening Product Types and Customer Base

Prince Jewellery and Watch had been focusing on retail business, without producing their own brand and product. Hence, Jimmy made the decision to acquire Just Gold's trademark, staff and stock, allowing Prince to start selling their exclusive products, gradually introducing more jewellery products into its watch-led business.

Just Gold is a brand that focuses on designing and producing modern female gold jewelleries. To create non-traditional gold jewellery for modern time "true-women" is the crux of the brand concept. In its history, it has rolled out jewelleries of cartoon figures, echoing with the girly hearts of consumers, and has also dedicated immense effort on mixing and matching different texture and technique on jewellery production. It is a brand beloved by a wide range of female consumers, effectively attracting more and more female customers to Prince.

#### **Co-develop Diamond Cutting Technique and Brand with Renowned Supplier**

Jimmy co-developed the "Peonia Diamond" and "Peonia 88 Cut" technique with his partner, Leo Schachter Diamonds. This serves as the basis for Prince to launch their first exclusive products - the "Peonia Diamond" series.

Through partnership with Leo Schachter Diamonds, who has strong experience, technical capability and talents, Peonia Diamond is cut with an unprecedented angle and scale, granting each diamond 88 reflection surfaces and an almost-perfect-optical-balance that shows a uniquely glamourous effect. Designers have been coming up with multifarious jewellery series with the Peonia Diamond that are sold in Prince and Just Gold retail shops. This effort upgrades Prince from a pure retail business to a jewellery design and production business.

- etail shop of Prince Jewellery and Watch in Hankow
- gan to branch out in tourist hot spots.
- hina and acquired Just Gold from Henry Group.
- nond" brand and "Peonia 88 Cut" technique with
- to landmark shopping malls in the New Territories.

### QEELIN

### **The Chinese Jewellery Brand**

How did a designer from Hong Kong create the international luxury brand?

What are the branding strategies from a design perspective?

Dennis Chan is the founder as well as designer of Qeelin. A graduate in production design from Hong Kong Polytechnic University, where he got to know a group of famous designers who happened to be in Hong Kong, including Ken Shimasaki. He later received a scholarship to the UK, after which, he was invited to work in Shimasaki's company.

Always dreaming of having a brand of his own, Dennis left Shimasaki's company in 1989 to establish his own design house Longford. In Longford, he worked together with his wife in creating two original brands: Timestone and Livingear; both are the first batch of watches designed in Hong Kong for export. Their business was thriving between 1989 and 2000, receiving many international awards, though constantly being hampered by the issue of piracy.

Dennis paid his first visit to Dunhuang after the handover in 1997, where he was deeply impressed by Chinese culture as he saw the wall-painting from Tang Dynasty. He felt that Chinese culture has to be presented to the world in a contemporary way by modernising traditional art to fit into nowadays fashion context. He has identified and modernised many traditional icons and symbols to come up with 1000 designs in 7 to 8 years' time. His design was shown to the then CEO of Ebel, Guillaume Brochard, whom was overwhelmed by them. Brochard then resigned from Ebel and formed Qeelin together with Dennis.

In around 2003, Dennis spoke to the Hong Kong movie star Margret Cheung about his idea, the latter particularly liked the bottle gourd shaped jewellery from his design, and thus wore it to the Cannes Film Festival, in which she won the best actress. The gourd shaped jewellery on the best actress helped gain attention from media around the world, and Dennis, taking the opportunity, held the first press conference in Paris after the festival; he also put his bottle gourd shaped jewellery on display in the special counter in the prestige Hotel de Crillon.

Back then, he believed something with Chinese characteristic should be internationalised. For this reason, the first and second branches were opened in the fashion capital Paris. Soon, however, he felt a strong sense of injustice as he realised that many of his designs had been copied in his hometown Hong Kong. As IFC opened, he decided to have the first local branch opened there as well. Now that Qeelin has reached many places worldwide, in which 90 % of the sales are from stores, and 5% from counters at places such as airports. In 2012, Qeelin was acquired by Kering of France. And Dennis wishes that with such an international group as a platform, the business of Qeelin would grow even more.

1997 2003	Dennis Chan was inspired by th Dunhuang, after which he devoi
2004	The introduction of Wulu series were opened in the Jardin du P
2005	Opened the 2nd boutique in Ho
2006	Launched the Bo Bo series, whi boutique in Japan in Tokyo.
2007	Opened the 3rd boutique in Hor
2008	Launched the Qin Qin series, ar
2013	Merger with Kering Group.
2016	Opened boutique in Seoul.
2018	Opened boutique in Taipei and
2019	Became the first Chinese jewel Paris.

### AKEAWAY

#### **Unique Product Design**

The out-of-the-world design of Qeelin integrate traditional culture and contemporary art, infusing each products with a unique story – which is undoubtedly ascribed to the design ability of Dennis.

As illustration, the Wulu is the most classic one out of all the series. Besides the magical power that is commonly embedded in the Wulu in Chinese legend, the unique lines and curves of a Wulu is also adopted as the artistic concept of the design. This gives the jewellery an extraordinary shape and a seemingly Arabic number "8", which signifies fortune in the Chinese culture.

#### All-round Engineering of Brand Image

As the founder and leading-designer of Qeelin, Dennis designs holistically the branding strategy of Qeelin.

A perfect echo between the brand name, logo, window design, lighting, color, texture, music, perfume, uniform and in-shop-interaction has to be achieved. Qeelin also invests heavily in compiling and writing its brand's story and values, which helps the staff to further understand the image of the brand that they are promoting.

#### **Cooperation with Trusted and Capable Ally**

Dennis understands that to enter the international luxury brands circle, a partner with ample knowledge and network is indispensable. Through the merger with Kering Group, the development of Qeelin was accelerated thanks to the know-how and resources of the mother group.

Subsequent to the acquisition by the mother group, Qeelin has opened more retail shops around the world. The market information shared by the Kering platform also benefits the product and brand design works of Qeelin.

he traditional arts during his visit to Mogao Caves in oted 7 years to prepare and design products.

s marked the official launch of Qeelin; Boutiques Palais-Royal and IFC, Hong Kong.

ong Kong at Hotel Peninsula.

nich became the most beloved series, and opened

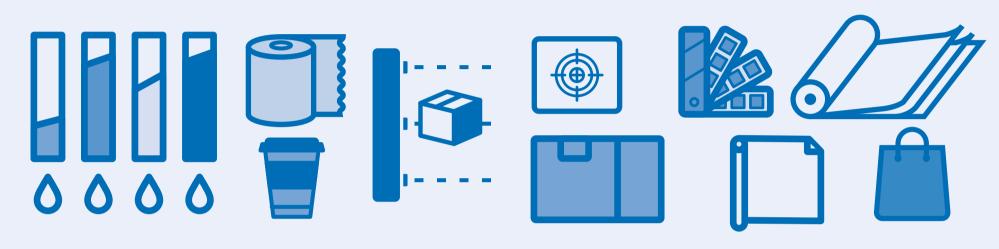
ng Kong at Harbour City.

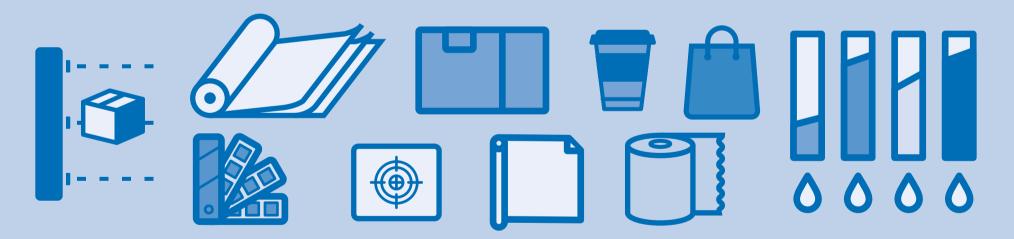
nd opened the fist China's boutique at Beijing.

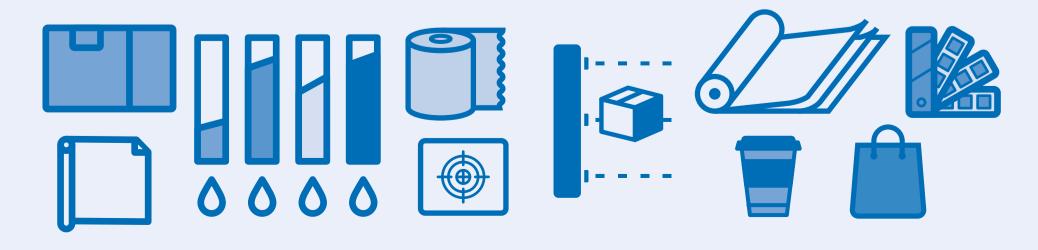
Kuala Lumpur, Malaysia.

llery brand to open a boutique in Place Vendôme,









# PAPER & RINTING

P



### Asia One Communications Group

### **A Printing Enterprise with Strategic Development**

Why did printing companies downsize rapidly after a period of rapid expansion?

How can printing companies start up their business and maintain growth in an era of industry decline?

By the end of 1990s, Hong Kong printing industry has passed its heyday, and yet Peter Lau and his wife resigned their posts from the bank to establish a small printing factory named Asia One Printing. More than twenty years have passed and Asia One is now playing a significant role in Hong Kong printing industry.

The past twenty years could be broken down into several phases for Asia One. In the first ten years, the company focused on the development and growth in the field, in which new machines were introduced and the scale of the business expanded continuously. It covered various steps in printing, including subtractive colour model, printing, binding and delivery. Market shares as well as reputation were well established in these ten years. Realising that printing is only one part of a communication cycle, and there are many tasks before and after printing—which profit is relatively higher than that of printing, Peter set to expand vertically.

The company rapidly expanded into design, photography, publishing, event organisation and souvenir in the following five years, with the attempt to offer diversified one-stop services. However, Peter also realised that the expansion had put a lot of stress on management, which barely had the capacity to handle all these derivatives, and the new businesses, which had taken up much efforts, could not see returns in a short run. More importantly, having his own design team implied that printing orders from other design houses would be lost, which indeed harmed their core business very much. So, in the following 5 years, Peter reduced supplementary business dramatically and put his focus back on printing.

To survive a very competitive printing industry, Asia One puts a lot emphasis on marketing and sales. Newsletters are used, several events such as book launch is organised to get in touch with potential clients. The company has a very strong team of sales to contact end-user directly. And with the idea of refocusing on printing, an "art triangle", that is, the publishing of art books, having an art book store and running a gallery, is established in order to give the public and the industry the impression of high-end and quality printing. His publishing house once published 20 art books in a year, which made it one of the most active publishers in art publishing in town. A bookstore focusing on photography and art is opened, and a gallery called AO Vertical is established.

Right now, commercial, financial and magazine printing each takes up around 30 odd percentages of Asia One's business. The rationale is to avoid being overdependent on one singular kind of printing so as to lower the risk. With an emphasis on strategic development, Asia One has experienced both expanding and shrinking phrases in its past twenty years, and is now marching onward strategically.

1997	Peter founded Asia One Printing
1999	Asia One Multimedia Limited wa
2002	Asia One Graphic Limited was fo
2007	Developed its business in the pu Product & Publishing Limited.
2008	Purchased Asia One Tower.
2009	Established the photography co
2011	Established Asia Premium Solut solutions.
2012	Opened the AO Vertical Art Spa

### TAKEAWAY

#### **Plan and Adjust Development Strategies**

Peter attached great importance to the planning of the enterprise's development path and regularly formulated and adjusted its development strategies.

After the vertical expansion of the business in the second phase had brought about negative effects, the company managed to downsize in time and refocused on printing itself. After observing that the natural growth approach would be difficult to carry out with the contraction of the market, the company acquired its competitors to increase its market share, expand its scale and achieve new growth.

#### **Focus on Marketing**

Asia One was established after the rapid growth period of Hong Kong's printing industry. In order to win over customers, Asia One proactively developed its marketing and sales business.

Asia One's basic strategy 20 years ago was brand building and it started off by sending newsletters to potential customers to attract them. In recent years, it has begun to use art-related businesses to rebuild its brand image and to create an image of high-end and high-quality printing for Asia One through publishing, bookstore and gallery operations.

#### **Reduce Risks**

Asia One's business share in different types of printing is relatively even. It does not rely too much on a particular category or customer, and in doing so, reduces its enterprise risk.

At present, Asia One's commercial printing, financial printing and magazine printing account for about 30% of its business respectively; no customer of Asia One accounts for more than 10% of its business.

#### J.

as established to provide graphic designs.

founded to provide extra output services.

ublishing industry and established Asia One

ncept store AO: The Photo Book Center.

tions Limited to provide one-stop gift and publicity

ce.

### Icicle Group Holdings Limited

# "Changing but not Changing": From the Printing Industry to Marketing

How did a printing company use its strengths to transform and make its way into another industry?

How does it stand out in the current advertising industry?

Established in 1998 by Alex Chan, Icicle began as a printing and packaging company. In the course of time, it repositions itself as a company specialising in "print management". Unlike conventional printing company, which has printing facilities of its own, the new business model adopted a "client-facing" approach, in which the company served as the agent between the clients and factories, facilitating liaisons and managing the flow. It helped locate the most suitable printing services in accordance with a client's need.

Conventional printing industry lacks flexibility: regardless of the quantity of print products, a printing factory tends to use the same sort of machines for production. Cost efficiency was low. The notion of print management is to compensate this shortcoming: it breaks the whole printing process into different parts and steps, then outsources individual part and step to the most suitable company. In this process a report is prepared to demonstrate the amount of human resources and capitals being spared. Icicle was the first company to adopt such a model of printing, which had not been fully accepted by market to begin with. Nonetheless, it signed into an agreement with an American bank in 2005, handling nearly all of the prints concerning marketing and promotion, and later on, the company even became the data handler for names, addresses, and classified data. The success of this project proved the workability of print management as a new business model, and established Icicle's reputation in the industry as well.

Tasks being given to the company gradually went beyond the realm of print management. Seeing it as an opportunity to further its business in marketing, the company set up creative and design departments. Icicle has eventually transformed from a print management company to a company of creative production. Bonnie Woo, daughter of Alex Chan, acquired the company in 2013 and made Icicle Group Holdings Limited a listed company on GEM in Hong Kong in 2017, furthering the development of the company in the direction of marketing and sales. Now that its brand design and marketing business has expended from product display to video production as well as digital marketing. In 2018, the company signed into a collaboration agreement with Open Influence. Developed by Amazon, Open Influence collects and analyses data concerning contents and subscribers of social networking.

To conclude, Icicle has seized the opportunities in the market during adjustments and expansions. It is an example of an old enterprise making use of its own expertise and pre-existing client network to transform itself and realise its potentials to the full.

1998	Alex Chan founded Icicle Globa Group.
2002	Bonnie joined her father's comp
2013	Bonnie bought out her father's o marketing business.
2017	Icicle Group was listed on the n
2018	The company started to use Op digital marketing business.

### **FAKEAWAY**

#### Making a Blank Space in Industry Services its Development Direction

At the very beginning, lcicle was a traditional printing business that was mainly engaged in letterpress and offset printing services, and later added digital printing to its services. It later discovered that the market lacked a printing management company, so it transformed its mode of operation to a printer-less printing management model.

A job to print monthly statements for a US-funded bank was the opportunity Icicle needed. After establishing mutual trust, lcicle contracted most of the paper printing of the bank and expanded the scale of its business. It then further developed into an intermediary role and matched customers with the most suitable and affordable supplier for them in its network after understanding its customers' printing needs.

#### Expanding into New Business with a Traditional Business as its Starting Point

In addition to acting as a bridge between customers and suppliers, Icicle also provides them with guality assurance management and last minute design alteration services. This aspect demonstrated the creative ability of the company's team and attracted existing customers to entrust more printing-related marketing business to lcicle, which eventually resulted in Icicle becoming a one-stop service provider.

Originally, Icicle was responsible for printing some red packets for La Mer during the Lunar New Year, but it provided La Mer with a new design because the original design did not conform to the tastes of Chinese consumers. Since then, Icicle has been responsible for La Mer's product designs, packaging designs, window display designs and digital marketing projects. Having noticed this, other companies also started coming to lcicle for its services.

#### Retaining the Company's Core Business as its Source of Funds and Marketing Strength

The printing business still accounts for more than 70% of Icicle's business, providing the company with the funds it needs for its transformation. Moreover, as packaging, commercial printing and marketing are closely related, lcicle has production and design capabilities that its competitors lack.

Many of Icicle's marketing plans are related to printing. For example, Icicle designed and manufactured cartons for Lady M's cakes and the wooden boxes for Andre Fu Living's Fargesia Eau de toilette product.

- al Print Management, the predecessor of Icicle
- pany as the business development manager.
- company and started to transform it into a
- main board of the Hong Kong Stock Exchange
- pen Influence's system and actively developed

### Chapter 07 Paper & Printing

### Print-Rite Holdings Limited

### **Feeding on the Old for the New**

In an era of declining commercial printing, which direction should the printing industry develop in?

What adjustments should be made to new and old businesses so that the company can continue to develop?

Founded in 1987 in Hong Kong by Arnald Ho, Print-Rite Holdings Limited is an enterprise specialising in the production, as well as research and development of printing consumable. Under Arnald's forward-looking and ambitious leadership, the group has been in the leading role of the industry: digital printing consumable was developed in as early as the 1990s, some ten years before digital printing became widely popular. In 2000, a research and development centre was established; and the company began to venture into the new areas of 3D printing and gallery. Print-Rite strives to maintain sustainability of the group by constantly investing in new businesses when the old ones are approaching their full potentials.

In 1980s, Arnald observed that while offices were starting to become more dependent on computers and printing in their daily operation, nearly all printing consumables were imported. Such he regarded as a great business opportunity. He first started producing printing consumable in Chai Wan in 1988; in the same year, he established a plant in Zhuhai. Since printing consumable is a kind of supplementary product in the industry, it has to be kept undated to correspond to the changes in machines, technology and and trend. The company first began with producing ribbons, and later on inks, inkjet printer cartridges, laser printer cartridges and toners, providing printing consumable for commercial printing had become their core business.

As a forward-looking entrepreneur, Arnald has also started developing consumable for digital printing as early as 20 years ago. Because of its advantages in terms of speed and price in comparison to the more traditional methods, digital printing has been first adopted by some in the knitting and fashion industry. Digital printing also produced 90% less waste than traditional methods, which in turn, suggests a sustainable way forward.

The group continues to consolidate its business through patent rights, research and development. In 2000 it co-founded a centre at Zhuhai Science Park; and in 2014, the company established a 3D printing brand CoLiDo. It produces 3D printers as well as 3D printing consumable, with the view that the two are mutually beneficial. It especially excels at FDM printing, which could be useful for medical purposes.

Arnald described his more developed, core business in printing consumable as a "Cash Cow", the profit that it generated could be used for investing in something new to keep the group growing. Artify Gallery, founded in 2012, run by his daughter Cherry Ho, could be seen as one of its kinds. In association with the gallery, there is also a brand called Artify Me, which sells products such as mobile cases and scarfs with images from the works of artists being showcased in the gallery. Since such products are made through digital printing, which is one of the core business of Print-Rite, the two businesses of seemingly very different natures come to collate here. And while the gallery provides content, the old business of printing offers possibilities in terms of technological support.

1981	Established A & J Office Service Limited.
1987 1988	Established Print-Rite Holdings
1999	Established the company's pate park in Nanping, Zhuhai in 2000
2012	Established the Artify Gallery an
2014	Established the 3D printing bran
2018	Co-established the "Guangdong, Innovation Centre" with the Zhul

### TAKEAWAY

#### **Capturing Trends and Develop Forward-Looking Industries and Projects**

Print-Rite actively sought out immature projects in the market and made these its long-term investments for the development of potential business segments to provide momentum for the company to move forward.

Print-Rite started investing in the production of digital printing consumables in the 1980s and caught-on to the market's requirements for products to have a "short-cycle, be cheap and be available quickly". Today, more than 20 years after investing in this project, Print-Rite has made great progress in its business with many industries such as textiles and interior design, and digital printing accounts for 20% to 30% of the Group's business. In recent years, the company has also further developed 3D printing and galleries.

#### Supporting the New with the Old and Having New and Old Industries Support One Another

Arnald believes that for the company to develop sustainably, it must develop new projects with its traditional core business as the source of its funds or else the company would eventually reach the limit of its development. Moreover, in the development process, the new and old projects could complement each other.

Print-Rite Holdings invested in, established and developed Artify Gallery and used its own business network to help the gallery search for suitable manufacturers to produce various peripheral products such as phone cases, silk scarves and environmentally friendly tote bags, which used art as a medium. Its 3D printing factory and team also had an art exhibition featuring only 3D printed art. This helped the printing business and art business to complement each other's development.

#### **Developing Patents and Promoting Product Technology Innovation**

Print-Rite established its patent research and development department in 2000 to focus on improving the quality and longevity of printers, and in doing so it improved customers' experiences. It has developed new printing technologies and the Group now owns more than 2,500 patents.

Print-Rite has improved the existing 3D printing technology, such as by improving the printing platform and coating to change the temperature of the printing platform and thus reducing the noise generated during printing, as well as to making it easier to extract the printed products from the platform. Print-Rite also develops new printing technologies, such as AMASS 3D metal printing; it uses composite printing materials and increases the printing speed to produce larger and more complex 3D metal products.

es Limited, the predecessor of Print-Rite Holdings

Limited and set up a factory in Zhuhai.

ent department and built a science and technology ).

nd the art consumables brand, Artify Me.

nd, CoLiDo.

I, Hong Kong and Macao 3D Printing Industry hai Free Trade Zone Management Committee.

### Starlite Holdings Limited

### **Forever Changing and Creating**

How can an enterprise deal with frustrations?

### How did an OEM printing company embark on the path of ODM and OBM?

Starlite Holdings Limited was founded in 1970, by Mr. Kwong Yu-lam, who used his saving and some money that he borrowed to purchase a used printer and rent a 16 sq.m. flat as he began a small business of envelopes and letterhead printing. How did such a small workshop turn into one of Asia's largest enterprises in the printing industry? The businesses of Starlite Holdings now cover confidential projects, packaging, children books, greeting cards printing, as well as ODM and OBM businesses. How did Starlite become a listed company from an initiative? And how does it respond to the challenges in the rapidly changing printing industry?

In the 1970s to 1980s, when many from the printing industry in Hong Kong refrained from investing given the undercurrents of the Hong Kong political situation, Starlite invested a huge sum in introducing the most advanced printing equipment from Germany to accommodate the demand for high guality packaging from Euro-American market. This was a bold and pioneering act, which many in the industry who were used to second-hand equipment gradually followed. It had also led to an advancement in the quality among Hong Kong printing industry and established the reputation for Starlite.

Since 1987, the company relocated its factories to mainland China as well as Malaysia; and in 1993, Starlite became a listed company in Hong Kong. The group has expanded rapidly ever since, especially with an acknowledgement that being solely engaged in the OEM of packaging would put the group in a very passive position. One such expansion was to become the sole agent of Hallmark in China. However, such a collaboration ended in 1999, as it had brought in considerable loss to the group. Chinese consumers were not used to sending out cards like the Western counterpart; and back then, the Chinese markets were scattered without centralised points of sales. The rising of e-cards also attributed to the failure.

Yet another attempt in the expansion was to be involved in the business of animation by obtaining the exclusive licence from Times Warner Brothers to run Looney Tunes Show in ten Asian countries. The business managed to break-even in a few years' time. Unfortunately, such collaboration also came to an end in 1999.

Above all, the project that had left the group to suffer most in this series of expansion in the 1990s was the paper recycling project. The quality yet expensive products that the group created simply could not compete with poorer quality but cheaper counterparts. In 1999, the group even recorded its first ever loss since it went public in the aftermath of the financial crisis. Fortunately, the group had not been involved in real estate investment and it managed to get back on track in a few years' time. In 2005, the group was selected by Forbes as one of the 200 best listed companies in Asia.

Highly technologised management and continuous effort in automation bring the company forward. To a relatively passive printing industry, Mr. Lam's strategy is to explore new markets in other areas, such as animation, 3D puzzles, and automation.

1970	Starlite Printers Ltd. was establ printing.
1986	Adopted new machinery and eq equipment from Germany and J business.
1992	Established a manufacturing fa subsequently resulted in huge i
1993	Became listed on the Hong Kon
2000	Starlite Printers (Shenzhen) Co. Computer-to-Plate systems (CT digital pre-press technology.
2002	Establishment of Starlite Printe customers in the eastern China
2005	Starlite Holdings Ltd was name Billion" company.
2012	Starlite successfully developed
2013	Starlite introduced its first 3D p
2014	Starlite introduced 8-colour UV
2016	Establishment of Qianhai Larse

### **FAKEAWAY**

#### The Hardships Encountered by the Enterprise on its Development Path did not Hinder its Continuous Innovation

Starlite Holdings encountered many hardships along the way and experienced failure in some of its innovation projects. Despite this, the company continued to invest more resources into improving its production equipment while continuing to develop new business.

Starlite had invested in pulp development as well as manga and animation production with no success. However, Starlite was not discouraged by its failures. It subsequently promoted the internal development of automated machinery, founded Team Green and Larsemann, and eventually managed to break into the market for 3D puzzles and automated machinery.

#### Exploring its Development Experience to Find New Business Ideas

Starlite operated its business and explored business opportunities across sectors and industries. The company's innovative measures were inspired by its accumulations and experiences over the course of its development and were used as the basis for development in new directions.

Starlite operated a printing business and tried its hand to invest in environmentally friendly pulp in its early years a strategy to expand into the paper raw materials market via its main industry. The company founded Larsemann to promote the development of the automated machinery market. This investment was based on Starlite Holdings' many years of experience in its self-development and implementation of automated production. Starlite Holdings marketed the relevant technology and experience and founded a new company to promote the relevant technology.

upment: introduced new machinery and Japan to support the development of its packaging

acility in Shenzhen, Guangdong Province, which investments in China.

ng Stock Exchange.

, Ltd became one of the first to install the P) in its premises, signifying an early entry into

ers (Suzhou) Co., Ltd to provide printing services to region.

ed by Forbes Magazine as an "Asian Best Under a

its first automatic rigid box machine.

printer: ProJet 3500 HD Max 3D.

printing presses with in-line UV varnishing.

emann Intelligence System (Shenzhen) Co., Ltd.

### Team Green

# **Wood Puzzles from a Traditional Printing Group**

How does a printing company achieve upstream development? What strategies did it use to develop new products and production technologies, and how did it find the right market?

Team Green was established in 2011, under Starlite Holdings Limited. Lead by Kwong Yu-lam, the Chairman and CEO of Starlite, with the industrial designer Alex Lee being the person in charge. It established its reputation with three-dimensional wood puzzles. The company later on set up a new production line for wood furniture. As of today, the company has sales channel worldwide. It is a good example of a traditional printing enterprise entering into new businesses.

Team Green was set up to compensate for the waning printing business of Starlite. Having been in the business of packaging and printing for 50 years, Kwong Yu-lam realised that there was no way forward for the old industry with intensifying competition and sinking profitability. The traditional printing business is further described by Alex Lee as being passively at the bottom layer of an industry chain, "If a product is sold for \$100, the retail shop probably gains \$40 out of it, the brand gets \$30, the supplier \$10, and we, as those providing packaging services, probably just a few dollars. One can see profits mostly come from the first (i.e. retailing) and the second (i.e. the brand) layers." He also stresses that the old industry must develop a new brand, "Unless a company has an absolute dominance in a specific technical area; otherwise, it has to continue to create value to move forward." The group therefore set to establish a new brand and new products to create a saleable IP.

Without a design department of its own, Lam decided to look for partnership among its existing clients – Alex Lee has two design firms, one specialises in educational toys, whose packaging had been contracted to Starlite for more then 10 years. In 2011, Lam and Lee formed Team Green together with a few designers from Lee's network. Alex's concept of design is more than outlook and patterns, as he believes that a powerful design should be sustainable and profit-generating, compliable with marketing, and having its production process being thought through. The team therefore handles not only product design but also production, marketing and sales.

The team's first attempt was 3D puzzles made with recyclable paper, but soon settled in wood puzzles after considering the cost and consumer experience. As for production process, it is highly digitalised. Designer creates drafts through software that could be transferred into readable file for production.

Alex believes that a successful design needs successful marketing. Their products were first launched in Japan with gender-neutral and universal designs such as piglets, kittens and puppies, which were well received, even elected as one of "2000 most favourite products in Japan" in a marketing survey. The second market that the group entered was Hong Kong, where sales now reaches two-thirds of the total sales in Japan. The Anglo-European market has now also been opened up with special editions made for several blockbusters such as Marvel Superhero series and Star Wars series.

2011	Establishment of Team Green.
2011 2013	Determining the direction of protection of protection.
2014	Set its sight on making Japan its Hong Kong market after it achie
2015	Launched its products in the Eur
2016 2019	Launched its second and third p
2019	Moved into a new factory in Suz

### TAKEAWAY

#### Promote Development through Innovative Brands and Businesses

Starlite Holdings' main business is in the area of packaging and printing, but the profit of these industries has declined as competition increased. To adapt to the changes, the company established Team Green and created new products, which enabled the company to move from the back of the supply chain to the front of the value chain.

Team Green operates a business that sells 3D puzzles and sells its products to retail stores directly. It occupies a favourable position in the supply chain and has a higher gross profit margin than traditional printed products, which can create more revenue for the Group in the long term. In addition, as many of its partners and customers had some connection to Starlite Group itself, Team Green's efforts also served to enhance the Group's customer network.

### Explore Consumer Preferences with Trial Products Before Determining the Product Direction and Market

As Starlite Holdings had little experience in product design and rarely reached out to retail customers personally, Team Green decided to test the consumer response to the products in the market to decide the direction of product development. They would then adjust the products based on previous data before deciding which market to launch the product in.

Team Green launched some neutral products, such as kittens, puppies and other small animals, to test the consumer response to this type of puzzle. They found that although the concept of the model was sound, the use of paper as the product material would create some marketing difficulties. Therefore, wooden plywood boards were used instead of paper, which ended up defining the concept of a wooden 3D jigsaw puzzle. In consideration of the fact that this product needed a market that had a demand for DIY and pursued quality, Team Green decided to launch this product in Japan. After the launch, localised products such as Himeji Castle and katanas were also released. The company then brought its products to other markets after that.

#### Learn and Master the Know-how of Manufacture

Team Green comprised mostly of designers, and its members didn't have much experience in the production of wooden products. Alex believed that the team needs to learn different technologies, builds exclusive production processes, and develops manufacturing know-how to ensure the quality and uniqueness of its products.

At the very beginning, Team Green's designer personally operated laser cutting machines to produce and design the bottom plate of the wooden puzzles. During this process, in addition to mastering laser cutting technology, they also acquired the know-how to the design and structural support of the joints. The team also built a fully automated, electronic production line that enabled computer monitoring of the whole process, from design to production.

#### oduct development and learning the required

ts first market and then returned to take on the eved great success there.

ropean and American markets.

#### product lines.

zhou.



### Café de Coral Holdings Limited

### **A Story of Fast-Food Chain with Broad Appeals**

How to cater to the eating habits and catering needs of different customers?

# How do eateries sustainably maintain and expand their market share?

Founded by Lo Kai-seong, Victor Lo Tang-seong, Lo Fong-cheung, Lo Kai-muk from the Lo family – who holds VITASOY International Holdings Limited – Café de Coral Holdings Limited was one of the earliest fast food chains in town. It combines food and beverages of both Western and Chinese types in prices affordable to the grassroots. In the past 50 years, the company has become a brand crossing organisation.

In 1969, the first Café de Coral was opened in Causeway Bay, opposite to two cinemas, where huge traffic of people appeared before and after screenings, the store attracted customers with smell from burger steaks on a grill at the shopfront. This reflected a high sensitivity to environment and customers in the very early stage as the enterprise began.

In 1972, the multi-floored Jordon shop was opened, in which the three main operating features were also established. First, a take-away counter was designated. The branch located at the very centre of traffic junctions and terminals, which implied that although there was a constant flow of people, not many of them would sit down to enjoy a meal given their fast-paced lifestyle. The take-away counter was installed on the ground floor to tackle this, and it helped double the business ever since. The second feature was menus and food preparation that could guarantee a quick delivery. This would include food that could been cooked or delivered rapidly and prepared in advance. Last but not least, it was the semi-self-service system that quickened the process of ordering and delivery; it also reduced the resources involved in managing waiters or waitresses. This nonetheless posed a problem for younger or senior customers, or physically challenged customers, who might find self-catering inconvenient; an adjustment was therefore made and services were provided upon request.

As more and more branches opened, to ensure the efficiency and consistency of food, a centralised merchandising system and a centralised kitchen were introduced in 1979. Since Café de Coral became a listed company in 1986, it ventured to expand to other areas of businesses. This includes providing catering service and running cafeteria in college campuses. Later on, this model of providing services to institutions has given rise to meal services for schools. By 2019, the group provides as much as 90,000 lunch boxes per day for students in the territory.

By now, as a comprehensive group, Café de Coral holds brands that are of both the fast food and the bistro type. From 1999 onwards, it acquired Super Super Congee & Noodles, Spaghetti House, Oliver's Super Sandwiches. This series of acquisitions brought in the group experience and skills from both Chinese and Western cuisines that in turn enhanced the compatibility of Café de Coral. The group later on creates two brands, namely Mixian Sense and Shanghai Grandmother Restaurant. Owning various brands is a strategy to occupy more of the market share by addressing customers of various types.

1969	Lo Kai-seong, Victor Lo, Lo Fong
1974	Branches spread to commercial
1979	Established the first central kitc
1985	Took advantage of the opportur dinnertime menu and launching
1999	Launched the "Luncheon Star" s
2013	Moved into the advanced factor

### TAKEAWAY

#### Adjust the Company Strategy for Different Diners with Three Core Concepts

In the course of development, Café de Carol has established the iron triangle concept of sales model, production model and consumption model. When it is applied to setting up branches in new areas, the direction for reform can be found as long as the adjustment is made among these three models, and in accordance with the differences in consumer habits and needs.

For example, when Café de Carol opened its branch in Ice House Street, Central, the original food menu was not suitable for the lunch expectations and needs of the Central elites. The business was poor back then. The staff of the branch hence re-examined the food, launching a series of sandwiches with exquisite and delicious filling. They also pioneered the meals of Café de Carol, and then set up a new take-away lunch box system. The employees who worked in Central could thus buy pasta and sets meals during lunchtime and returned to the office and parks nearby to eat, which exactly met the needs of office workers in Central.

#### Manage Product Quality and Give Room to Thrive with the Right Intensity

After the expansion of the branch network, Café de Carol set up a central kitchen as a step for centralised procurement and food processing. While standardising, Café de Carol still encouraged chefs to create new dishes to maintain the vitality of the group and to achieve the perfect balance between uniformity and freedom.

Café de Carol set up a central kitchen in Yau Tong in 1979, mainly responsible for the processes of food inspection, sauce cooking, meat thawing and dicing, and the prepared ingredients would be transported to individual branches for cooking. At the same time, a master menu was prepared so that the chefs of each branch would cook according to the methods of the head office. Yet, the head office had still reserved the free space for chefs. They could create brand new dishes outside the main menu according to the needs of the environment, and healthy competition between branches were encouraged. The motivation of chefs could be improved by regularly publishing the turnover and profitability of each branch.

#### Explore Diversified Business Models for Multidirectional Expansion of Market Share

The original business nature of Café de Carol is a fast food shop. After listing in 1986, it began to come into contact with different business models, thereby increasing the group's revenue. It also expanded its own food production, marketing and brand promotion capabilities through different business experiences.

Café de Carol started contracting catering services for organisations in the late 1980s. Chinese companies had the habit of "staff catering" for their employees. At that time, monopolisation of Hong Kong catering groups had not started yet, they could seize the market opportunity fully. By late 1990s, Café de Carol would continue to focus on "Luncheon Star" for the contracting lunch business of primary and secondary school students, using individual factories and the "cook-chill" technology to provide students with healthy and hygienic lunch. Last but not least, they also acquired different brands of Hong Kong Chinese and Western-style restaurants, learned about different alternative cooking techniques, using different food lines to attract different customers and expand the market share of Café de Carol in Hong Kong.

ng-seong and Lo Kai-muk founded Café de Carol.

al districts on Hong Kong Island.

tchen of Café de Carol in Yau Tong.

inity to enter the housing market, improving the g the Chinese-style set meals.

school lunch box catering scheme.

ory in Tai Po Industrial Estate.

### Hung Fook Tong Group Holdings Limited

## **Reforming Traditional Beverages to Trendy Icons**

How to revitalise a sunset industry into a trend again? How to break through from the limits of traditional business model?

In 1986, through handling the kitchenware business for his father, Donald Tse came to make the acquaintance of Wong Ching-fat, the founder of Hung Fook Tong. Donald began by designing stainless steel kitchenware for the latter, and ended up successfully persuaded him to develop Hung Fook Tong together. It was a very ambitious move – given herbal tea business was then regarded as a waning business.

While the 80s saw the popularity of fast-food stores like KFC, McDonald's, and drinks like Coca-colas, herbal tea stores lost its competitiveness. Most stores were run in the old way, in a small shop where one person sells tea and washes dishes at the front, with a chef boiling herbal tea back in the kitchen. They were seen as not so hygienic, and even old-fashioned by the younger generations. The tendency of having them run within family also implied that there were little changes or reforms. Yet Donald believed that the herbal tea business is one with huge potential. With an ambition to turn Hung Fook Tong to the "known-brand all over Hong Kong", he found innovative ways to modernise the business. In particular, he took two significant steps, which were introducing centralised kitchen and franchising.

As he gradually established the model of central kitchen that had the capacity of providing herbal tea for 7 to 8 branches, Donald opened more branches correspondingly. In 1990, he decided to adopt franchising: franchising stores were to sell products produced by the central kitchen under Hung Fook Tong's names. As business grew, the central kitchen was relocated and expanded throughout the years; it now situates at the Industrial Estate in Tai Po.

The financial crisis of 1997 affected them hugely, nonetheless. Business dropped by 70%. Reckoning that high rental prices and lower sales would not be to their advantages, Donald and his partner decided to sell their herbal tea in bottles in supermarkets. They also began to invest in the overseas market.

Then the main challenge was to be able to sell herbal tea "preservative-free" while keeping its freshness. Being able to achieve that technique was a breakthrough, and with greater portability their products went easily onto the shelves of supermarkets in Hong Kong, as well as in mainland, and the Chinese diaspora in the United States and Southeast Asia.

Besides, Donald also worked on the branding of Hung Fook Tong—giving it a warm, homelike and healthy touch; hot soups were also introduced. This helped free the business from the seasonal limitation of herbal teas (i.e. it sells well in Spring and Summer but not so well in Autumn and Winter). In 2016, an online shopping platform selling Hung Fook Tong products as well as other kinds of grocery was launched.

1986	The original owner Wong Ching- Donald Tse through kitchenware
1988	Established the central kitchen f Kowloon, and the New Territorie
1990	Adopted the franchising model a
1997	Developed the bottled herbal tea move towards the road of health
2014	Became listed on the main board
2016	The online platform of "Hung Fo
2019	Set up a new plant in Kaiping.

### TAKEAWAY

#### Coordinate Branch Expansion to Reform Production Model of Herbal Tea Shops

The traditional herbal tea shops used to operate in the form of front-panel kitchens, which consumed much space and manpower, making it difficult to ensure the quality of products at the branches. Hung Fook Tong established the central kitchen to supply products for all branches in Hong Kong.

Before the age of computerisation, the setting up of a central kitchen that ran by the electronic system for herbal tea making helped to centralise the processes of purchasing, inventory and cooking, reducing the required shop area and the human errors of medicine cooking. The products were then transported to the branches in Hong Kong, ensuring that Hung Fook Tong had enough capacity to produce products of uniform quality and supply for all branches in Hong Kong.

#### Excel in Observation and Experimentation to Break through Commercial and Technical Limits

Hung Fook Tong wanted to open more branches, but the company had limited capital, so observing the 7-11 convenience store approach, which is to expand through the franchise model; after the 1997 financial crisis, the retail business shrank, hence the development of bottled herbal tea technology to expand Hung Fook Tong's wholesale business and overseas market.

With 70% gross profit guaranteed to attract franchisees to join, it became the first herbal tea brand in Hong Kong to adopt a franchise model. At its peak, there were more than 50 branches all over Hong Kong. By playing hardball and taking the human wave tactics, over 700 workers were employed to experiment with the bottled technology of herbal tea, the company finally developed a sterile production line in late 1997, which allowed the wholesale business of additive-free herbal tea to enter the supermarkets and global markets.

#### Target Consumer Culture to Reform the Product and Sales Model of Herbal Tea

Products of the traditional herbal tea shops were never-changing, typically only the "Five Great Arhats". Hung Fook Tong transformed the brand from selling herbal tea to selling healthy products, with the launch of seasonal food and drinks, and also the trend-oriented sales model, the outdated herbal tea image has been reformed.

They also launched the "JIKA" series, seasonal herbal drinks, and innovative drinks to compete with other stylish drinks in the market. The Pompompum themed store, the online store "Hung Fook Tong Online", the Hung Fook Tong Food Truck, and the "Hung +" smart vending machines were also launched for consumers to try and enjoy the Hung Fook Tong products outside of the traditional store setting.

-fat established Hung Fook Tong, he got to know e business and the two became partners.

facility and expanded the branches to Hong Kong, es.

and invited franchisees.

a and opened up the wholesale business, began to hy products.

rd of the Hong Kong Stock Exchange.

ook Tong Online" was launched.

### Lee Kum Kee Company Limited

## A 100 Year-Old Family Business in Sauces

How to turn a Chinese sauce business into an international enterprise with hundreds of billions of assets?

How does the family business of 131 years bring about sustainable development and inheritance?

The formula for the special oyster sauce was believed to be accidentally found in now the Zhongshan province of Guangdong, China, backed in 1988, by Lee Kam-sheung. In 1902, Lee moved the family and his business to Macau, which was then the trading port for oyster sauce in the region. As the family business went to the second generation, it was relocated to the international trading port of Hong Kong, since then overseas business had been rapidly expanded. Lee Man-tat of the third generation, who joined the family business in 1954; had full control over the enterprise in 1972 and had led reforms ever since. Now Lee Kum Kee has five factories across Hong Kong, mainland China, Malaysia and Los Angeles, with a sales network reaching 100 countries all over the world.

Back in the early twentieth century, Hong Kong did not have the strong power of consumption for oyster sauce, which seemed to be a luxury for the working-class majority. The company therefore focused chiefly on the Chinese overseas market in North America. And since transportation took up considerable expense in the overseas market, products had to be marketed as high-end to maintain profitability. One may say, therefore, Lee Kum Kee triumphed the overseas market before returning to the Greater China region in the later twentieth century.

In order to remove the kind of limitations imposed on the company by agents that monopolised their sales to overseas market, from 1972 onwards, Lee Man-tat worked on to get into the North American market directly. It was an ambitious plan then. Strategically, he tried to occupy the sales network through inexpensive oyster sauces, and for that reason, a cheaper brand, known as "Panda" oyster sauces, was launched. He also allowed the grocery shops and supermarkets to settle payment after the products are actually sold, which was proved to be a popular arrangement particularly among smaller shops; through these a trusting relationship between the company and the North American clients were built.

To realise a market-oriented business model, the quality assurance department had become independent. A team of 20 odd staff members were assigned to work on product development. In the 1980s, the company ventured into the market of sauces other than oyster sauce market, and became the first local manufacture of sauces to obtain ISO 9002 certificate. In 2013, an advanced automated production model from Japan was adopted, which enhanced both quality and quantity. Today, the fifth generation has joined to manage the family business.

1888	Lee Kum-sheung pioneered the Oyster Farm.
1902	Lee Kum-sheung moved to Mac
1932	Lee Kum Kee moved its headqu
1972	The third generation Lee Man-ta
1983	Office opened in Los Angeles, (
1986	Office opened in Chinatown, Ne
1991	Factory established in the City of
1992	Lee Kum Kee cooperated with t Chinese herbal medicine health
1996	Lee Kum Kee built a production
2010	Office established in Canada; L aerospace recipe.

### TAKEAWAY

#### **Strategic Market Expansion**

Lee Kum Kee has shown a strong sense of strategy in overseas market expansion, using products of different positioning to match its market strategies.

In the early days, the high-end oyster sauce produced by Lee Kum Kee was expensive and more competitive for export overseas. Therefore, it first developed its overseas markets and then gradually expanded the local and mainland markets. In order to establish its own sales channels without direct conflict with the trading companies, Lee Kum Kee launched the more bargain oyster sauce, thereby seizing the overseas mass markets and gradually getting rid of its dependence on trading companies.

#### **Rigorous Pursuit of Quality**

Lee Kum Kee has always adhered to high standards of product quality, continuously improving the quality of products.

In order to produce the sauce, Lee Man-tat approached the food science and mechanical engineering professors of South China University of Technology to help design the sauce factory. Before the factory was completed, he had bought a small sauce factory in Hong Kong for the professors and members of the research and development team to experiment with the production process, and upon their success they moved to a new factory in the mainland. Strict production standards and quality control have made Lee Kum Kee the first sauce manufacturer in Hong Kong to receive the "ISO 9002 Certificate" from the Hong Kong Quality Assurance Agency.

#### Modern Family Management Model

In 2003, the Lee Kum Kee family established a family committee as a platform and decision-making body for family communication. They also formulated the family constitution as the basis of the family committee.

The family constitution mainly regulates the inheritance and transfer of equity, the employment of family members, and the division of roles between the board of directors, family committee, and management. Since then, the entire family has held a four-day meeting every three months to discuss the company business and share the recent family life.

oyster sauce and established the Lee Kum Kee
au with his family.
arters to Hong Kong.
t became chairman of the company.
alifornia.
w York.
f Industry, Los Angeles.
ne First Military Medical University to launch the product called "The Southern Lee Kum Kee".
base of over 10 million sq.ft. in Xinhui, Guangdong.

Lee Kum Kee was selected as the "Shenzhou 9"

### Yan Chim Kee Hong Kong Company Limited

## **Rebuilding an Old Business of a Hundred Years**

How to restart the century-old brand? How can the time-honoured brand rejuvenate to close the gap?

In 1915, Yan Lun-lap, the founder of Yan Chim Kee, started to make and sell coconut sweets and ice-cream along the streets. The reputation of these confectionaries built up years by years, and finally, in 1940, the first Yan Chim Kee store was opened on Caine Road. The ground floor was used as a shop counter, while the family lived on the floor above. The basement was used as a workshop. In the 1950s, the business was passed to Yan Choi-yuen, son of the older Yan. A multi-storeyed factory was built in Wong Chuk Hang; it was then the most sophisticated factory in the area. In the 1970s, the semi-automated production was turned into fully automated production, and as the business was passed on to Yan Kwok-kin, the third generation of the family, the production capacity had been hugely enhanced. At its peak, it supplied products to each of the local supermarket as well as to distributors in the United States and Canada. In the 1990s, when the land use of the factory was recategorised from industrial to commercial, following some new environmental policies, the production at the Wong Chuk Hang factory was put into challenge. There was a plan to go north to set up the production lines at Panyu in Guangdong. However, the plan was not realised. Even worse was that the company and the family went into financial disputes as a result of that failure. Following a court order of liquidation in 1999 all production was halted in 2006.

Wishing to rescue a family business that contains efforts of generations, Evelyn Yan, who is the ninth daughter in the family, came back to Hong Kong from the United States. She managed to reconnect with many old colleagues who came to her assistance, including an old chef who helped revitalised the hundred-year-old formula of sweet-making and locating a factory in Malaysia.

As business reopened, Evelyn launched the landmark products of the old days on the one hand, and new products on the other. In order to appeal to the younger generation, Evelyn found Keo Wan to renew the branding of the company. As the brand had little fame outside Cantonese market, Keo used purple, Japanese-styled packaging, a very different approach from the old packaging. And it was proven to be a huge success. As for sales, Evelyn and her elder sister took over the role from the distributor to build the sales network directly. There are basically three channels: first being the kind of supermarkets that target at those with high power of consumption like SOGO and CitySuper. Second, places like Wing On and Pat Chun, retailers with a stable group of senior consumers. Third being points of sales that target at tourists. There are also occasional pop-up stores.

They are on the way of exploring various channels, including on-line shopping (i.e. through Ztore and Amazon of the US) and collaborations with other brands.

1915	Yan Lun-lap started making and
1940	Yan Chim Kee opened a store a
1958	The factory in Wong Chuk Hang
2006	Yan Chim Kee discontinued its
2011	Evelyn Yan returned to Hong K

### TAKEAWAY

#### Preserving Tradition While Continuously Innovating

Yan Chim Kee preserved the traditional craftsmanship as much as possible, and restored the previous flagship products, while also developing new products and flavours to cater to the current consumer population.

The re-launched coconut candies follow the tradition in its selection of fresh and mature coconuts from Malaysia, with their production at a factory in Malaysia under the guidance of an experienced master. In addition to the century-old hard candies and soft candies, new flavours such as sea salt and ginger are introduced, which are welcomed by young customers.

#### Adding Brand Value with Packaging Design

The reopening business of Yan Chim Kee repackaged its products and brand image, while retaining the traditional elements, it also makes the brand more contemporary. The design innovation has attracted young customers and reopened the market.

The designer Keo Wan repackaged the products of Yan Chim Kee according to different occasions and target customers. For instance, with the consideration that Yan Chim Kee lacked local popularity, for the packaging designed for the participation in the Fujian Exhibition, he chose a packaging with a sharp purple of Japanese feel, contributing to the great sales of rice cakes at the show.

#### Promoting the Brand with Peripheral Products

Yan Chim Kee cooperates with different brands to launch food and other types of peripheral products. By replicated vintage daily necessities in the past, it responds to people's nostalgic sentiments and brings new customers to the brand.

Yan Chim Kee replicated the ceramic ice cream cups from the 1950s and 1980s. Popular among the young people, 500 sets of ice cream cups were sold out within three days, so that not only had more people known about Yan Chim Kee, but they also sold the flagship food all together.

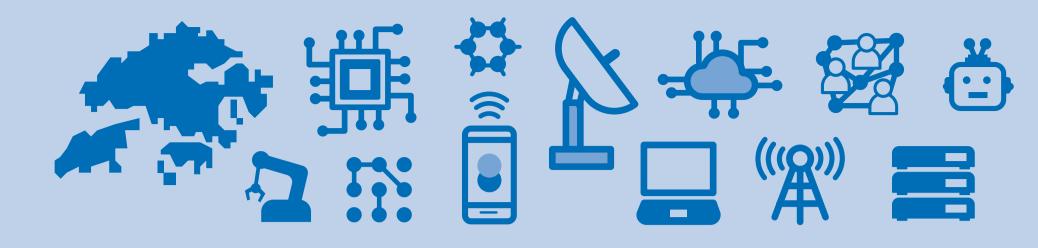
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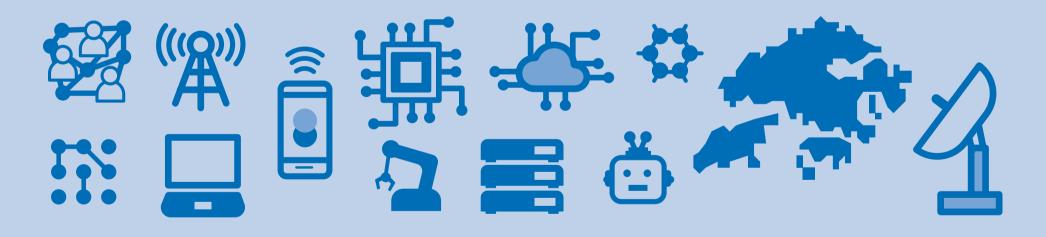
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production.

Kong to restart Yan Chim Kee.









# TECHNOLOGY



### Chapter 09 Technology

### 3Ds Technology Limited

# **A Technology Application Company** that Spearheads Development

### Why is it necessary to incorporate art into technology? How does one build a robust research team?

3Ds Technology Limited was founded by Edward Lam and Ben Wu in 2014. The company offers technological solutions to clients in holographic display, hologram box, projection mapping, interactive glass display, virtual assistant, etc. Edward believes that the distinctiveness of his company lies in the successful balance between technology, production and art.

Edward majored in Physics in his college, and with a keen interest in fine arts, he founded a design house when he was a university student. The design house was acquired by a listed company and Edward earned his first bucket of gold from it. He then involved in other kinds of businesses and yet none had survived the SARS outbreak in 2003. His investment suffered a heavy loss.

In the aftermath, Edward collected himself and returned to the design business, opening Moment Design Company Limited. It is a company speicalising in web design, graphic design, printing, branding and advertisements. He observed that the old media was shrinking, and clients' demands towards prints continued to drop. And vet on the other hand, with the rise of social media in around 2015, people were increasingly getting used to sharing their photos and 'checking in'. Exhibitions that were able to combine new technological elements and attractive design could easily attract crowd flow.

With his background in IT as well as art and design, Edward believes that he can make use of his advantages to create something new. Coincidently, Edward's secondary schoolmate Ben Woo was developing new technology in projection. In 2014 Edward and Ben cofounded 3Ds Technology to start a new direction.

"There is something that we cannot, and should not, do; such as producing hologram projecting machine. Because the entry level is high, and it is not an area that we are good at; besides, it requires a lot of equipment and investment. What we do, is more like offering solutions to clients, designing for them technological application that is at the same time beautiful and artistic, through which clients can market their brands, promote sales or even organise commercial events."

Instead of B2C, 3Ds Technology is keener in looking for business opportunities with local, mainland and overseas companies. For instance, 3Ds Technology will offer a solution to a developer who wishes to have the image of groups of fish swimming on the ceiling to bring out the ocean theme in a development. The company is also experienced with outdoor projection as well, which tends to be more challenging and has to be weather-proofed.

The reputation of the company is established through word-of-mouth; each successful project attracts additional potential clients. "There is a high demand in the market. We don't want to spend effort in looking for clients, instead we want to focus on our own projects. As long as we are good, people would appreciate that," Edward explains.

2013	Edward invested in the 3D holog school student Ben Wu as an an development company 3DHolog
2014	Establishment of 3Ds Technolog
2015	Received the "Hong Kong Award Design" by the Trade and Indust
2016	Manufactured Hong Kong's first tion for interactive VR games.
2019	Completed many projects such Gulliver Immersive Storytelling V Mega Slide, which is a giant ind Tsim Sha Tsui, etc.

### TAKEAWAY

#### **Observing Market Trends to Find Entrepreneurial Opportunities**

After recognising that the popularity of digitalisation, multimedia markets and social media will change the direction of the advertising design industry, the entrepreneur Edward leveraged his background in technology and art to establish 3Ds Technology Limited.

In the early years of his entrepreneurship, Edward's company engaged in a graphic design business. However, as he noticed that customers were spending less and less on traditional print media, and that the emerging interactive media was capturing the attention of customers and users, he transformed his company and eventually set up a new company to provide his customers with one-stop holographic projection, 3D hologram, projection mapping, interactive glass, and virtual assistant solutions, etc.

#### **Technology is About Both Function and Aesthetics**

3Ds Technology focuses on the application of science and technology as well as uses unprecedented emerging technologies for advertising media, promotion and marketing activities. However, in order to create an aesthetically pleasing experience, the application of technology must also be supported by a solid foundation in arts and crafts.

The technical elements of 3Ds Technology's application technologies, such as its 3D hologram, projection mapping, and machinery technologies, are supported by the beauty, texture, realism dynamism, rhythm and overall coordination of the relevant graphics. The Company emphasises that the application of science and technology must incorporate artistic concepts with aesthetics to create a better user experience.

#### **Establishing a Flexible and Robust Professional Technical Team**

3Ds Technology's team is project-based and consists of contracted consultants to draw upon the different technical expertise of its members. The Company's internal teams cooperate and support each other sincerely to work together harmoniously.

In order to retain technical talents, the Company uses a variety of contractual options to offer them project-based cooperation opportunities, consultancy contracts, full-time contracts and internal training opportunities. This flexible employment relationship allows the Company to absorb the technical talents that it needs and enables employees to participate in various tasks to improve their technical capabilities and create more opportunities for cooperation.

gram technology developed by the then-secondary ngel investor and established the research and ram.

gy Limited.

ds for Industries: Equipment and Machinery try Department.

st 4-metre wide hologram and large-scale installa-

as the projection mapping project at 1881, the Wall at Hong Kong Central Library, and the Happy loor slide across 3 floors at Donut Playhouse in

### Dunwell Group

# **Achieving Extraordinariness Out of the Ordinary**

What factors should one consider when investing in a business?

How to identify where to make a breakthrough in the existing technology?

Dunwell Industrial (Holdings) Limited was founded in 1993, by Daniel Cheng. Throughout the years, it develops advanced technology in the collection and recycling of used petrol and waste water. It has become the largest environmental business in the territory with its solutions and services being extended to mainland China as well as overseas market.

Returning Hong Kong from the United States, Daniel joined his father's company in 1983. He made the company focus on the productions of the steel parts that were widely used in VHS and floppy discs of 3M, Sony and Dell. However, noticing that making such useful parts did not guarantee much profitability, he was determined to invest in other businesses.

Daniel saw potentials in the environmental industry: given the pollution problem had become serious locally as well as globally, and yet neither Hong Kong government nor the market had a comprehensive scheme to respond. In 1993, he acquired a closed-down lubricant oil factory in Yuen Long to begin his adventure in the industry. It was not a simple task. It took him years to settle. In 1995, the company eventually obtained a license from the authority to handle Chemical Waste. And as new licenses were not released following a stricter policy being employed on petrol recycling since 1998, Dunwell and another company located in Tsing Yi became the only two companies that had monopolistic control over the chemical waste industry. Dunwell signed into agreements with influential power companies and petrol stations and handled nearly 90% of petrol waste from land.

Dunwell Enviro-Tech (Holdings) Limited was founded in 2000 to focus on the new type of recycling and environmental technology. This was a vital step for the sustainable development of the group. In 2001, it introduced the vibrating membrane system, a physical process of treating used oil. Within two years of experiment and adjustment, the team installed, in 2003, the first vibrating membrane system in Asia. This became the base of the group's VMAT Vibrating Membrane System, a system launched in 2006 that is 400 sq. feet of size but capable of recycling 5000 tons of used oils per year. This kind of system is not only in service in Yuen Long factory, but has also been sold to clients from Indonesia, Malaysia and the Philippines at around 10 million HKD per unit.

Meanwhile, the team also got involved in the treatment of waste water, and with nearly seven years of research and development, it launched Membrane Bio-Reactor (MBR) in 2008. One of their earliest clients is a famous hotel in Macau; the system also incorporates a product known as 'bio-toilet' – which has been widely installed in Hong Kong Country Park. Daniel believes that to ensure the success of the technology research and development, such project should be led by the highest management of the company, who would hold full accountability. Also, talents are important; so far the company has trained nearly 50 engineers.

1983	Daniel Cheng returned from the company in the production of s
1993	Investment in the closed down Industrial Estate.
2006	Researched and developed the Recycling System
2008	Researched and developed the System.

### **TAKEAWAY**

#### Expanding Business through Investment in the "Underdog"

Daniel said that when investing to expand your business, one should not be limited by the scope of one's own familiarity and should boldly choose a business with great potential to invest in. The potential business should have sufficient room for development, must continue to add value, and must not be easily replaced, very much like an "underdog" in horse racing.

The environment in Hong Kong and the rest of the world is continuing to deteriorate and the sewage discharge of cities is continuing to increase, but despite this, the government has no clear policy in place to reverse the situation. Daniel saw an opportunity for the environmental protection industry in this situation and believed that the demand for waste recycling business and technology would grow higher and higher; therefore, he invested in a closed down oil lubricant production plant in Yuen Long Industrial Estate, moving from the hardware industry to the environmental protection industry.

#### "Creating the Extraordinary from the Ordinary" as the Adopted R&D Strategy

Many environmental protection technologies have existed for many years in the industry and such technologies have indeed been able to handle a certain amount of waste. However, outdated technology consumes a lot of energy and produces unnecessary by-products during the recycling process, which reduces the overall recycling efficiency. In the process of contemplating waste oil and wastewater recycling, Daniel focused his team's efforts on improving existing technologies, and this became Dunwell's core strategy.

Dunwell's original lubricating oil plant used a high-temperature vacuum distillation machine to recycle used oil, but the technology of this machine had fallen behind the ages by nearly 50 years and has the disadvantages of high energy consumption, high heat generation and generation of many by-products. Therefore, Daniel led his team to replace this with a physics approach by introducing an improved over-frequency vibration film technology to efficiently treat waste oil in a low temperature environment. Later, a thin film biodegradation system was developed from traditional biodegradation technology and the thin film technology was used to improve the convention technology, which resolved the disadvantages of high energy consumption and high loss of fine materials.

### Leadership-guided Research and Development to Ensure the Complexity of Products and Safeguard Interests

The research and development of a company's technology must be led by the leadership of the company, and not shirked to its employees, for the company to be successful. As the products and technology researched and developed by the company are all extremely complex, there has been no need to apply for patents and the other competitors have no way to copy them.

Daniel pointed out that research and development has a great chance of failure. If an employee is responsible for leading research and development, they will usually take more conservative approaches to avoid taking the blame if the research and development fails. This is against the spirit of research and development. Therefore, the process must be led by the leadership of the company to take research and development down the right direction. Dunwell's products and technologies are usually the fruit of more than 1,000 experiments, which means that competitors usually can't copy the features of the products even if they can copy the appearance; even if they manage to copy the features, they cannot match the price; even if they can match the price, they cannot match the delivery terms. The company's perfect products and business have become the company's intellectual property's strongest line of defence.

e United States and joined Dunwell to lead the stainless-steel components for tape.

oil lubricant production plant in Yuen Long

award-winning Vibrating Membrane Used Oil

Membrane Bio-Reactor Wastewater Treatment

### Chapter 09 Technology

### ProVista Group

## Innovative Electronics Group Delving Deep into Daily Life

What factors should one consider when launching new high-tech products?

How should one devise a company's pathway for horizontal development?

ProVista Group was established in 1995 by Steve Chuang. It began with automobile security products that brought the company a good reputation. As an enterprise that focuses on innovation and technology, the group covers four main businesses: electronics for automobiles and RVs, products of solar energy technology and energy efficient technology, smart home products, and the support for start-ups. After his graduation from Hong Kong Polytechnic University, Steve continued his studies in electronics and computer engineering in the United Kingdom and later on completed his MBA in California, the United States. He regards Hong Kong as a suitable place to start up a business, given its being a meeting place of East and West, with flexible polices on imports and exports of capitals and goods. Steve believes that the process from conception to design, and to finally have a product launched in the market is a realisation of 'a dream comes true.' If a product can truly reflect what the consumers need, and fit into the market, it has a high chance of success.

In the 1990s, in response to the serious problem of car theft in American and European markets, Steve spent a year of research with his team to develop a practical DIY security system. Their design, which radically simplified automobile security system, became instantly popular. Three million units were sold in the international market. It also established the reputation for ProVista Group.

To align with this product line, ProVista launched automobile electronics, especially those for RVs – as RVs requires high use of electricity, their team also responded to this with energy supply solutions.

In 2009, ProVista Technology explored yet another product line: solar energy technology and energy efficiency technology equipment. Their group has been involved in the design and installation of solar panel and energy converter in enterprises of the Pearl River Delta, in the process of assisting them to go green. Corresponding to Hong Kong's inspiration for sustainable energy development, the group also helped build solar energy system in various buildings and schools.

In 2015, the group launched a new product line: ProVista Care. It addressed the technology market for the senior population in the mainland. The group collaborates with various institutions and enterprises to adopt AI and e-shopping in their products.

In 2018, noting that technology development is a prioritised business opportunity of the Greater Bay Area, it founded ProVista Inno Park in Dongguan, China. The park is a site to enable collaborations with universities, carrying out research and development on special projects, and turning the result from these projects into products in the market. It also provides support to the younger generations to start up their innovative businesses.

1995	ProVista Group was founded by
1996	A factory was set up in Donggua producing electronics products
2002	The business was expanded to monitoring and digital video rec
2009	ProVista Technology was estab systems and energy storage sys
2015	ProVista Care, a brand of geron
2018	ProVista Inno Park was founded cooperation.

### TAKEAWAY

#### The Enterprise's Continuous Horizontal Development to Sustain Growth

Steve points out that as a product matures, the evolution of an enterprise must be accomplished through expanding its production range and enhancing productivity, while a company clinging to the past will only be eliminated by the market eventually.

Back in 1996, ProVista Group had already built a well-equipped factory in Dongguan, continuously planning for and rolling out new product lines. After the success of the DIY all-in-one car alarm system, the Group has committed itself to the automotive electronics industry. In 2009, production lines for new power and energy-saving products were set up, and in 2015, in view of the mainland China market, a gerontechnology ecosystem was rolled out. As in 2018, ProVista Inno Park was established to foster innovation and support I&T development, serving as a one-stop platform for international technological innovation.

#### Understanding Consumers' Daily Habits to Facilitate R&D of New Products

Steve believes that I&T products should not only respond to market demands, but should rather originate from the practical issues in the daily habits of consumers and the culture of the entire society, which then determine the products' functions and the directions of research and development.

Years of living abroad have enabled Steve to lead the team and develop solar batteries and chargers with reference to the consumer habits and daily habits of a Western family. The energy storage system can still supply electricity for necessary equipment in case of power outages in the wake of natural disasters.

### Propelling Growth in the Enterprise's Products and Technologies through Proactive Initiation of Various Partnerships

The core technology of ProVista Group lies in the knowhow of automobiles and energy systems. Nevertheless, with an open attitude, the enterprise has pursued cooperation with other organisations, brought about technological integration, developed new products and ventured into new areas.

ProVista Care's smart gadgets for the elderly have adopted many technologies in areas such as cloud computing, artificial intelligence and Internet of Things (IoT), which are not the traditional strength of ProVista Group. For this reason, the Group cooperated with universities, independent research and development laboratories and other commercial organisations, and successfully rolled out products such as Smart Housekeeper and Smart A in a collaborative effort.

/ Steve Chuang.

an, researching and developing as well as for automobiles and SUVs.

the areas of closed-circuit television (CCTV) cording.

blished, researching and developing solar power stems.

technological products, was launched.

ed to cultivate creativity and seek opportunities for

Roborn Dynamics Limited

# **The Pioneer of Robotic Technology**

How does a technology start-up expand its market in Hong Kong, mainland China and overseas?

How was China's first 5G Motion Control Humanoid Robot born in Hong Kong?

Roborn Dynamics is a startup founded by Mark Mak and Eden Lu in 2017. Mark received his bachelor degree in computer science and engineering from the Hong Kong University of Science and Technology, and later a PhD from UC Berkeley. In 2009, he encountered Lu, who was then in the same class as he was taking a Masters in Business Management in Chinese University of Hong Kong. Lu has a background in business and worked on branding for big companies. What connected Mak and Lu was their interest in robots. They set to found a company together to develop motion control humanoid robot, with Lu being the CEO and Mark the Director of technology. Their company received 2018 Hong Kong Awards for Industries (HKAI) in Equipment and Machinery Design and 2019 ICT Startup Award Grand Award Winner.

While most conventional robots are controlled by AI, programme or remote, the kind of robots that Roborn Dynamics focuses on is controlled by the users who wear sensors to synchronise their own movements with the robot's. Although such kind of robots emerged in Japan, Korea and Germany as early as 2015, yet there have been certain limitations: usually a user has to put on sensors on all parts of his bodies, which often weighted heavily. To address this, their team managed to produce sensor that weights as light as 0.5 kg; and with their own formula, a user can wear only four sensors to control a robot. The robot's arm is highly flexible and with built-in camera connected to VR, a user can see what the robot actually sees to maneuver correspondingly.

To begin with, the idea of motion control humanoid robot is to appeal to the entertainment market – to offer a breakthrough alternative to more conventional game remote control. However, their robots are soon applied to industrial use, especially to handle dangerous items or to work in dangerous environment. Many of the overseas orders are from electricity company or bomb disposal service unit.

Other than launching the robots that they designed, the company also ensures that their motion control system has a high degree of adaptability to accommodate several popular robot brands in the market.

Their latest development includes collaborations with China Mobile and ZTE on 5G network connected robot, which made their company play a leading role in the area. Their company is also researching on robots that can work for elderly care: a robot physiotherapist can function in a way that an older patient can stay at home to receive treatment. Such robot can also collect information such as temperature and blood pressure and to work with other smart appliances.

2017		Roborn Dynamics was founded		
	2018	Motion Control ME-1 Robot wa Humanoid Robot, and received in Equipment and Machinery D		
	2019	Winner of the Hong Kong ICT A		

### TAKEAWAY

#### Leading-Edge Technology

With the motion control system as core technology, Roborn Dynamics has propelled the comprehensive development of robots and robot-related solutions in combination with technologies such as 5G, artificial intelligence, Internet of Things (IoT) and cloud computing.

Roborn Dynamics' independently developed Motion Control Robots are lighter and more flexible compared to robots of the same kind in the market. The exceptional compatibility of the motion control system has increased room for application. Improvement in the algorithm has cut the number of controlling sensors necessary for all operation down to a mere four. The robots currently in the market requires at least 20 sensors, which constitutes a bulky mass and difficult operation.

#### **Flexible Business Model**

Roborn Dynamics does not only offer standardised robots for sale, but also tailor-make robots with special functions according to the needs of clients as an ODM.

Another primary business is the sale of printed circuit board modules of the motion detection control system. With the hardware design layout provided by Roborn Dynamics, the client can find a local manufacturer for the robot or robotic arm, which can go straight into service after the installation of the PCB module.

#### **Innovative Application**

Roborn Dynamics' robots have started out providing entertainment for players and then transitioned into performing high-risk operations for commercial clients, and now again have ventured into new areas of application including elderly care. Continuous innovation has opened up possibilities in the market.

In the midst of development is the elderly care project, in which physical therapists operate robots to administer physiotherapy such as massage on the elderly. The robot can repeat the actions of physical therapists and lessen their burden. As for the elderly, they can stay at home and communicate with health professionals through the robot, whose sensors can measure the body temperature, blood pressure and heart rate of the elderly and upload the data to cloud servers, the realisation of ageing in place.

as launched, rolled out the 5G Motion Control I the 2018 Hong Kong Awards for Industries (HKAI) Jesign.

Winner of the Hong Kong ICT Awards: the 2019 ICT Startup Award Grand Award and the 2019 ICT Startup (Hardware & Devices) Award Gold Award.

### Chapter 09 Technology

### Tung Hing Automation Investment Limited

# A Distributor's Venture into Research and Development

How does one revolutionise the direction of a trade-oriented company?

How does one promote and manage R&D and investment in automation equipment?

Tung Hing Automation was founded in 1997 by Tony Po-tung Lim. Having its headquarters in Hong Kong, it is the largest Mitsubishi automation distributor in China, with distribution network all over the country. Roy Lim, the second generation of the family's business, joined the company in 2010, bringing into the business another aspect – which is to invest in the technology and development of automation. This step has brought the group forward in the industry of automation.

Tung Hing could be seen as prospering alongside the rising industry of automation in China – which records on average an increase of 30% every year until 2007. Began by distributing Japanese products, Tung Hing officially became the distributor of Mitsubishi Electric Automation in 1988. Branches were established all over China, until in 2008, the financial crisis gave the group a heavy blow, where the turnover dropped by 20% as many factories opted for Chinese over Japanese machines for economic considerations. This made the group realise its overdependence on distribution. With this regard, Roy Lim, was asked to return to Hong Kong to look out for new ideas for the group.

One of the great assets that the group had was the very skillful talents who had been nurtured over the years in the technical support department. These talents were selected and regrouped in Shanghai to form the core technical team in 2014. Then the group looked for the most polluted and dangerous process in an industry to develop an automation solution. Subnsequently, they targeted on the polishing process in watch cases. By 2016, an automation machine for it was launched. Due to the lack of competition then, the group had had a monopoly over this. The machine, which could be used in other production process as well, recorded the sales of more than dozens by 2018.

Lim wishes that automation would be applied not only to smoothen production process but to realise more down-to-earth ideas. For this reason, he took on the role of an investor, looking for potential products to support. For instance, the group worked together with a professor at Hong Kong Polytechnic University to launch HandyRehab; it is a robot arm that helps target patients to rehabilitate.

Although the machines developed by the technical team in Shanghai constitutes only 10% of the turnover, its gross profit can be as high as 50%, much higher than the 5-6% gross profit from the business of distribution. These development projects also keep the technical skills of the group at a very high level, which in turn help the group, as a distributor, to continue to earn the trust of Mitsubishi.

1988	Tung Hing became the official started expanding business in
2010	Roy returned to Hong Kong and
2014	Formally concentrated the Grou on product R&D.
2016	The technology team successf and launched its R&D and invest

### TAKEAWAY

#### Using the Company's Potential as a Basis for Change

When Roy returned to Hong Kong from the USA, he was given the heavy responsibility of finding a new direction for the Company's development. However, instead of immediately introducing new teams or technology to the Company, he patiently explored what already existed inside the Company and assembled a group of the Company's experts. After investing time and money into developing this team, this very reliable team became the basis for the Company's change.

Roy realised that as a distributor for Mitsubishi, the Company sold products and provided customers with technical support, guidance and machine maintenance. Therefore, many outstanding technical personnel of the Company were scattered throughout its branches in China. He concentrated these technical personnel in the Shanghai branch and had the head engineer train them for three years, eventually building a technical team that had excellent capabilities and got along with each other.

#### Making the Provision of Solutions the Direction of the Company's Technological R&D and Investment

After successfully developing and producing the automated polishing machine, Tung Hing's team gradually developed motor physics as one of its core technologies with the calculations for motors and mechanical motions as one of their strengths. In this way, they listened to their customers and learned about their needs in various industries and in their business and daily needs. If the Company needed to use any technology outside of its expertise, it would invest in other technologies and products with potential to facilitate its own R&D and production.

For example, a large group that engaged in food business wanted Tung Hing Automation to build them an automated production system for Industry 4.0, and wanted this system to be able to collect and analyse real-time production data to allow the management of the company to monitor the production status. Tung Hing Automation used its existing knowledge to build automated sensors to collect various data such as the temperature or humidity. However, power supply to the sensors was one issue that needed further consideration. As a result, Roy helped the customer find a technology from Israel that enabled semi-conductor coils to charge wirelessly through Wi-Fi, which solved wiring-related issues and other problems.

#### **Exclusion Research Method**

When the team developed new products and technologies, it would often encounter technical difficulties as there weren't any existing models to copy from. Roy took a pragmatic approach to this: after identifying the crux of the problem, the team would try out various feasible methods one by one with an exclusion method.

When the team developed the polishing machine, it found that pressure sensors and other technologies were incapable of enabling the automatic robotic arms to mimic the reaction speed of human hands. The delay created by the response determination caused the project to encounter a bottleneck in the final stages of its development. Roy and his team ruled out each possibility one by one and, after a long period of time, they finally found that the pressure on the polishing wheel and the maximum speed of the mechanical motor interacted with each other, and that they could measure and analyse the coefficient of the relationship between the two so that the mechanical arm could imitate the reaction speed of a human hand. In doing this, they managed to successfully break through the technological barrier.

distributor of Mitsubishi Electric Automation and China.

d joined Tung Hing Group.

up's technical staff in its Shanghai branch to focus

fully developed and produced polishing machines estment business.





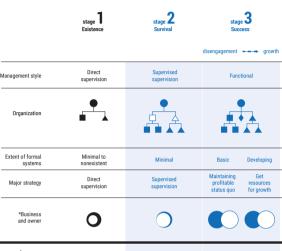
### **DESIGN TOOL KIT**

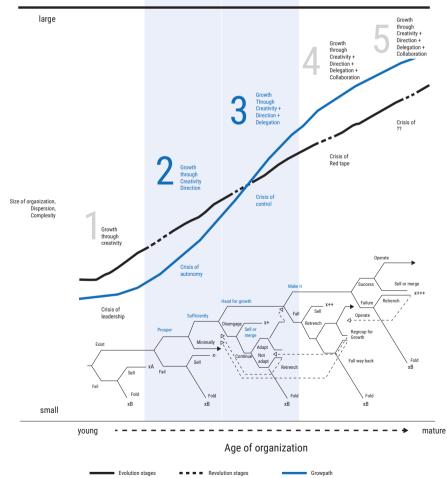
The initial goal of this toolkit is to encourage and facilitate the leadership of SME manufacturers to get a taste of design tools at certain stages of the business life cycle to redesign its model strategically through an assessment in the style of guerrilla research. The business model of the SME manufacturer refers to Original Equipment Manufacturer (OEM), Original Design Manufacturer (ODM), Original Brand Management (OBM) and Original Strategy Management (OSM); the said life cycle includes "existence", "survival", "success", "take-off", and "resource maturity" of the Five Stages of Small Business Growth. A transformation matrix of several business models and stages illustrates the beauty of the complex journey (Churchill & Lewis, 1983). Several design tools are suggested on each intersection for practical purposes and inspiration.

### A Strategy for Transformational Voyage

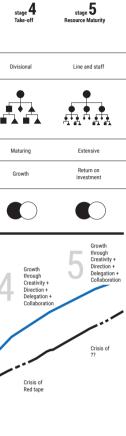
Designing effective business strategies is a complex journey. Beyond trading, the multiple facets of manufacturing business range from cultivating culture to developing new product-service systems, as well as the intriguing equilibrium of the organisation, process, resources and marketing (Li, 2019). The leaders would attempt to use the hand-picked design tools to enable a transformational voyage from OEM to ODM and further to OBM. The opportunity allows the executives and management to assess the business activities briefly and re-design their strategy step-by-step. This evolution would happen neither in a linear sequence nor at a moment of snapping fingers. An ideal and strategic transformation of the business activities leads the company toward the stage of OSM. Given that either OEM, ODM or OBM as the sole strategy or an integrated matrix portfolio of these regards can eventually become OSM, strategy always happens as a matter of the mindset rather than the use of a series of tools.

The Five Stages of Small Business Growth (Virginia L. Lewis & Neil C. Churchill)





Sell at a greater pr ents owner. Larger circle repre





The growth of small businesses can be divided into five stages (Churchill & Lewis, 1983). Covering the two stages from (2) "survival" stage to (3) "success" the toolkit divides

### Owner's resources

	Covering the two stages from small businesses into two di businesses). Two sets of exa	ses can be divided into five stands n (2) "survival" stage to (3) "sumensions (OEM > ODM > OBM mples are given on how designess) and transformation in th	iccess", the toolkit divides A and the growth of small gn strategy tools facilitate the	Uwner's resources	Existence to Survival	Stage II to III Survival to Success	Success to Take-off
Company's resources				Goals	Obtain customers, deliver the product/ service contracted for, remain alive then become a workable business entity	Survive, retain customers, generate enough cash to break even and to cover the repair of capital, generate enough cash	Avoid a cash drain in prosperous periods, gradually consolidate the company and marshal resources for growth
	Existence to Survival	Stage II to III Survival to Success	Success to Take-off		business entity	flow to stay in the business and to achieve finance growth, get the products sold as planned	
Financial resources	Limited capital (since the owner is the main supplier of capital)	Grows in profitability	Cash is plentiful, has true economic health	Operation ability	The owner performs all the important tasks	The owner is still synonymous with the business	The owner increasingly moves apart from the business
Personnel resources	Subordinates are of at least average competence	Limited number of employees supervised by a sales manager/ general foreman	Functional managers should be very competent, professional staff members are required	Managerial ability	The owner provides energy, direction and directly supervises	Some tasks are delegated to sales manager/ general foreman	Requires functional managers to take over certain duties performed by the
System resources	Systems and formal planning are minimal to nonexistent	Minimal (formal planning is cash forecasting)	Basic financial, marketing and production systems are in place		subordinates	and other employees, but neither of them makes major decisions independently, they carry out the well-refined orders of the owner instead	owner, the organisation gradually becomes decentralised and divisionalised
Business resources	No sufficient customer acceptance/ product capability	Has enough customers and satisfies them sufficiently to keep them, grows in size	Has sufficient size	Strategic ability	The owner considers whether the business can be expanded to a much boarder sales base	The owner considers the relationship between revenues and expenses	The owner hires managers with an eye to the company's future rather than its current condition



Stages description	Existence to Survival	Survival to Success	Success to Take-off		Existence to Survival
	The company is growing from a start-up phase that having a minimal system and formal planning, it is working towards a workable business entity-one that can generate enough cash to break even revenue and expense.	The company is starting to have an accomplishment that generates a large amount of revenue to susta in the business. It grows in size of employees and has succeeded in developing systems and formal planning. The company owner decides whether to expand the company as a platform for growth or keep itself as a profitable business.	The company is proliferating and i s financially able to support such growth. To achieve managerial efficiency of the business in its growing complexity, its owner may delegate his/her responsibility to employees.	Set of example 2: From ODM to OBM	The company tends to develop an original brand from original design created by its staff; for example; it may license other up and coming brand(s). The company may involve designers who are competent to make design decision relevant to situations, however still under the supervision of the business owner.
Set of example 1: From OEM to ODM	The company may start to hire designers to design for existing manufacturing equipment, aiming to create its original design; for example, these projects can be individual products. Designers involved at this stage may be in the novice level, who follow strict order and close supervision from the business owner.	The company may hire designers to design product for existing manufacturing equipment, aiming to create its original design; for example, it may develop product lines from existing market trends. The company may hire a team of designers in the advanced beginner level, who are able to follow instructions from supervisors with occasional exceptions on strict rules. For example, Yuen Shing Group transform from OEM textile manufacturing to an ODM of the same industry. On top of its OEM production, the group introduced fabric	The company may hire teams of designers to design product for existing or new manufacturing equipment, aiming to create its original design; for example, it may create original research and explore product lines that address new trends. The company may involveteams of in-house designers and design managers at the competent level, who can make relevant design decisions, or rely on consultancies that provide designers in a higher level of expertise.		

material trading to facilitate sales of their original design that develops environmentally -friendly production line and functional fabric .

#### **Survival to Success**

and may use the To achieve that, the designers who are proficient in seeing important issues and implementing appropriate design plans.

designing tourbillon watch to create an brand, Memorigin collaborates with products that align

The company wants to develop an original brand from the design created by its staff; for example, the company may be licensing more sophisticated brands experience from these brands to develop new brands for themselves. company may involve

For example, Memorigin leverages its advantage on manufacturing and original watch brand. On building this original various celebrities as designers to produce with their brand values.

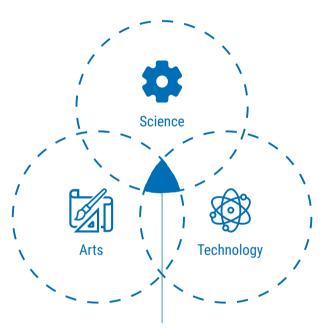
#### Success to Take-off

The company wants to develop an original brand by involving a mixture of strategy like developing a new brand or acquiring other brand(s). The company may involve in-house designers and design management staff, as well as outsourced design consultancies for designers with master and visionary competence - those who are able to innovate their domain knowledge to deliver strategic thinking.



The "three cultures of learning design" (Cross, 1982) embraces the inclusiveness and diversity of design. With a designerly approach, it is highly recommended the executive leaders to apply and adapt any borderless knowledge. It means multidisciplinary. Hence, the various subjects of these tools range from research methods in social science or sociology to management. The cross-disciplinary tools are curated to fulfil the context interrelated to the business transformation and design strategy of the SME manufacturers. The roadmap provides a user guide to the tools, including instructions and examples to transform among various paths of the business.

"Three Cultures of Learning Design" (Cross, 1982)

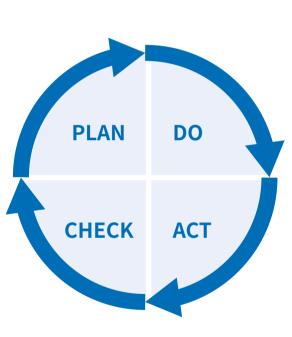


"Three Cultures of Learning Design"

	Arts	Human experience	Subjectivity, imagination, commitment, and a concern for 'justice'	Criticism, analogy, evaluation
_	Science	The natural world	Objectivity, rationality,neutrality, and a concern for 'truth'	Experiment, classification, analysis
1	<b>Fechnology</b>	The artificial human-made world	Technology: particality, ingenuity, empathy, and a concern for 'appropriateness'	Modelling, pattern forming, synthesis

# This toolkit explains design tools in a roadmap of four steps:

the Deming Wheel, Plan-Do-Check-Act (Deming, 1950), covers four steps for continuous improvement; at the same time, design tools can be categorised into these steps as well. Apart from explaining the four steps in principle, this toolkit includes concepts, attitudes, templates and canvas on the use of design tools under these steps.



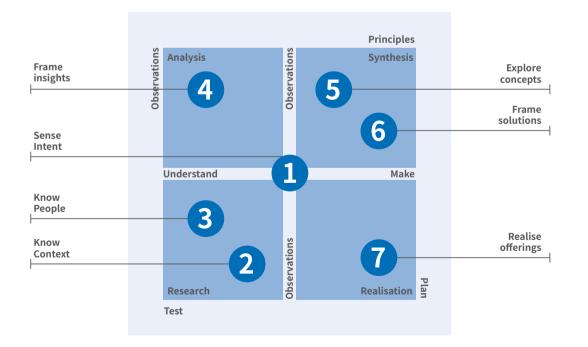
Deming stressed the importance of constant interaction among design, production, sales, and research and that the four steps should be rotated constantly, with quality of product and service as the aim. Deming's Shewhart cycle was modified slightly in 1951. The Japanese called this the "Deming wheel" (or Deming Circle). PDCA was made popular by W. Edwards Deming, who is considered by many to be the father of modern quality control; The four steps management method is described below, and each step involves different types of design tools.

Deming Wheel, Plan-Do-Check-Act (Deming Cycle (PDCA) (PDSA) Dr. W. Edwards Deming)

**Tool Kit** 

Kumar developed the model of the design innovation process with many years of studying innovation projects and applying four core principles - building innovations around experiences, thinking in systems, cultivating an innovation culture and adopting a disciplined but nonlinear and iterative process. The "2 x 2 map" illustrates the seven modes on four quadrants: "research", "analysis", "synthesis" and "realisation", which fall between poles of real versus abstract and understanding versus making. A creative and exploratory process requires fluidity in thinking and actions, while the model encourages users to move back and forth between modes.

> Seven modes of the design innovation process ("101 Design Methods: A Structured Approach for Driving Innovation in Your Organisation (Author: Vijay Kumar )")



	Description	Seven modes of the design innovation process	Design tools*
Plan	Scan for the existing state; Identify problem and opportunity; making a business hypothesis to test	<ol> <li>Sense intent</li> <li>Know context</li> <li>Frame insights</li> </ol>	A HMW (How-Might -We statement)
Do	Iterate and test potential solutions	<ul><li>3 Know people</li><li>5 Explore concepts</li><li>6 Frame solutions</li></ul>	<ul><li>B Personas</li><li>C Empathy map</li><li>D User Journey Map</li></ul>
Check	Study results from tests of solutions, review the validity of the hypothesis	<ul><li>5 Explore concepts</li><li>6 Frame solutions</li></ul>	<ul> <li>E Interview and Questionnaires (dos and don'ts; triangulation)</li> <li>F MVP (Minimum Viable Product)</li> </ul>
Action	Implement solutions, launch testified products/ services/ systems for the next cycle of innovation	Realise offerings	<b>G</b> Implementation pla <b>H</b> Brief

\*All design tools can be interchangeably applied at any stage with different intentions or objectives.

Tool Kit

### Plan | HMW (How-Might-We statement)

A "How-Might-We" statement is a short guestion that describes a challenge being tackled with a high-level approach to the solution. This method aims to provide a challenge statement that opens up many possible solutions in brainstorming. You will create a proper scope for a project. It is broad enough to offer a wide variety of possibilities and narrow enough to give a boundary for sensible innovation.

 40

 Middle

#### Input:

A problem [statement] broken down into actionable one

#### **Outcome:**

A question [statement] to draw the scope for a project

#### Steps:

- 1. Brainstorm actionable statements: to generate different versions of How-Might-We statements before you brainstorm solutions; to create the appropriate scope for a project and larger challenges that can be broken down into smaller actionable statements
- 2. Write an action word/phase: to find an action word (e.g. redesign and facilitate) or a verb phase that describes what is to be achieved in a project
- 3. Write a subject (the target stakeholder): to identify a subject to be impacted or influenced once the solution is generated
- 4. Write an outcome (the last part of HMW): to foresee a desirable outcome of the solution that may be created through the action taken
- 5. Write a technology (optional): to include the key technology / skill used to achieve the outcome
- 6. Write a technology (optional): to include the key technology / skill used to achieve the outcome



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### **Do | Personas**

Personas are user profiles that represent groups of target users / stakeholders of products / services / systems. As an overview, standardising the need of a group of users (profiles, characters, desires and needs) in the context helps to prioritise the problems and goals of solution for a creative process. You shall analyse the real data to identify the overlapping pattern(s) by synthesising. The real data includes but is not limited to a number of interviews from typical user type.

#### Input:

Interview, observation, behaviour study and patterns from the user research

#### **Outcome:**

Persona canvas provides a summary and visualisation of a typical group of users

#### Steps:

- user interview, observation and studying behaviour and patterns
- data
- 3. Create a persona: to put together the elements, including
- recognisable within a team
- characters, current desires and needs
- concern and motivation in facing the problem
- 4. Share the persona: to be shared among a creative team and an perspective throughout any discussions and process



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1. Review data: to collect data (typical problems) from real users through 2. Seek pattern(s): to organise data in different ways to find the overlapping (the common concerns or problems faced by a group of users) and various

a. profile photos, name, identity: a virtual identity for the persona to be

b. Description: age, gender, a summary of the background of the fictional

c. Problems: typical issues encountered by the character and his / her

organisation, so that the team involved in the project can share a common



Low **Do | Empathy map** 

An empathy map allows the readers to understand a user / persona. The map summarises the learnings from data collected from users / stakeholders through engaging with people. The aim is to understand the target users' perspectives and needs through empathy (observation and real interaction with the users). You will understand the key traits of users of the product / service / system.

#### Input:

Summary of observations from users includes what the user said, did, thought and felt

#### **Outcome:**

The insights allow designers to emphasise the user and understand the user's experience in certain products / services / systems

#### Steps:

- 1. Review on data: to review observation notes, photos, recordings, and information from the target users; to synthesise key observations
- 2. Write down what the users said: to write down keywords and significant auotes from the users
- 3. Write down what the users did: to describe the actions and behaviours of the users with drawings or photos
- 4. Write down what the users thought: to write down the thoughts in the users' minds, the reason / rationale behind the thoughts, the motivation, the goal, the expectations in their minds
- 5. Write down what the users felt: to write down the feelings of users that might be revealed from their body language, tone of voice and choice of words during observation or interview
- 6. Summarise users' need: to analyse the map and draw insights from unexpected or surprising observations



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### **Do | User Journey Map**

A user journey map covers all touchpoints in the interaction process or experience of a person with a product / service/ system through various channels in the interaction. This tool aims to provide an overview to understand a user's experience holistically over a period of time. You will identify the pain points of the experience from an individual user's perspective. The timeline on the map shall cover all channels that the individual relates to the product / service / system.

#### Input:

Interview, observation and behaviour study from a user

#### **Outcome:**

Findings and insights on pain points of user during an experience or area of improvements of a products / services / systems over a period of time

#### Steps:

- 1. Define the scope: to define the process through one single action or a high-level experience like interacting with a brand
- 2. Define the experience: to choose an interaction or experience to be visualised
- both physically and virtually
- individual action, motivation, goal, thought, feedback and feeling etc.
- and feedback, as well as feeling on a timeline of a defined period



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3. Choose a user: to focus on a target user (can be the same persona) 4. Create a list of touch points: to create a list of touch points that represent all interactions between the target user and the product / service / system

5. Collect data related to each touch point: to relate each touch point versus 6. Map all information on timeline: to create and visualise all the data by categorising the physical and virtual touch points, users' action, thought



Middle



### **Check | Interview and Questionnaires** (dos and don'ts: triangulation)

Interviews and questionnaires are useful to collect qualitative data to understand the user. One would benefit from asking semi-structured questions directly but not too directly with close-ended and leading questions. Questionnaires, as a printed list of questions, can be used in different channels - online and offline. Interviews and questionnaires aim to collect data as much as possible while you arrange the questions sequentially and logically. It always starts with general guestions to more specific ones. The answer sometimes triangulates another "answer(s)".

#### Input:

Question sets, screener (for shortlisting interviewees), list of interviewees, an interview plan, consent form (official document that allows the team to use the information disclosed during the interview)

#### **Outcome:**

The record of interview in the form of audio or video-recording, transcripts and organised data (such as charts and figures)

#### Steps:

- 1. Question sets, screener (for shortlisting interviewees), list of interviewees, an interview plan, consent form (official document that allows the team to use the information disclosed during the interview)
- 2. Define the objectives of the interview or questionnaire: to make a plan on what the scope of interaction or experience is to ask about and observe, a well-designed question set should align with the research goals
- 3. Find target respondents: to develop the criteria of a screener for recruiting and shortlisting respondents / interviewees by various methods - personal contacts, emails and random phone calls
- 4. Design the question set: to develop a list of questions and ensure the co-relationship of the question and the research aim (design problem)
- 5. Test the guestion set: to pilot the interview / guestionnaire to ensure those questions do not cause confusion
- 6. Conduct the interview / send the guestionnaires: to bring along adequate equipment to conduct the interview at a location that allows interviewees to stay focus
- 7. Analyse result: to find the results by organising data; to generate conclusion and insights that may inform the problem or area of improvement

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### Check | MVP (Minimum Viable Product)

Minimum Viable Product means the most simplified version of the product with the least feature to make the product workable. An MVP aims to validate the product and collect feedback at the minimum cost. After collecting and reviewing the users' feedback, the design can be improved without bearing a higher cost of full development. An MVP should carry the most important feature of the product but with minimum effort to make the product functional. You shall choose such a feature that aligns with the strategic goal of the business. It is important to let real users use the MVP, observe and collect their feedback.

#### Input:

Aligned strategic goals of product development. Specific feature or design problem to solve or validate

#### **Outcome:**

A product with enough essential features to validate design with early adopters or test users

#### Steps:

- need
- for product development
- the MVP so that it has enough functions to let users test on the MVP
- 5. Build the MVP: to build the MVP should be at low cost, however it still needs to be easy to use and engaging for users
- 6. Collect and review user feedback: to observe users and collect their validate the design idea or inform area of improvements



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1. Conduct market research: to know the need of users before identifying key features to test: to make sure the product carries features that fit the user

2. Consider design process and strategic goals: to identify the position of the MVP in the design process; to make sure it aligns with the strategic goals

3. List out the features of MVP: to identify essential product features to make 4. Express the idea: to communicate the idea of MVP among the team so that there is an alignment with the list of features being tested through the MVP

feedback on how to improve the product, review the feedback to see if they



G60 mins High Action | Implementation plan

The implementation plan, as a matrix, lays an actionable strategic roadmap out. The matrix aims to communicate well with stakeholders at different levels by various methods from initial stage towards to the "end" strategically. You will avoid misalignment between competencies and implementation goals. A well constructed implementation plan shall clearly include the innovation solution and map all specific actions and processes needed to all parts of the organisation.

#### Input:

A list of implementation goals, ways of communication, strategic plan and roadmap

#### **Outcome:**

A plan that identifies the timeframe, actions and resources needed to overcome a strategic challenge

#### Steps:

- 1. Review organisation strategy and innovation solution: to review proposed innovation solutions over three time segments (short-, mid- and long-term) and the planned board strategy
- 2. List out the change of context: to refer to earlier research that informs change of context, for example market trends and emerging competitors, find out how these contexts are adjacent to the three time segments and how the proposed solution responds to the change
- 3. Create a matrix of solution versus implementation challenge: to include different challenges:-

a. market (e.g. strategic positioning, relationship with partners), b. operation (e.g. process, communication and culture of organisation), c. management (e.g. leadership, team, schedule) and d. finance (e.g. ROI, revenue and profit growth)

4. Discuss and share with stakeholders: to discuss as a group to prioritise the challenges; to align resources and expense to overcome each challenge; to share plans with important stakeholders in the team and include their feedback

5. Create a master implementation plan: to compile all the information listed in the previous steps on a clear document sharable among the team

Please scan the QR code to download the toolkit's templates Action | Brief

A brief, as a communication tool, translates innovation solutions and plans to message and images and let various stakeholders (e.g. finance managers, market researchers or a design team) understand their planned actions. It is divided into three categories: the message, the intended audience and the medium through which the brief is delivered. A well constructed brief should be easy to understand from the perspective of the intended audience and be consistent among different teams. It should help build alignment within an organisation and improve communication.

#### Input:

Strategic plan, vision statement, list of intended audience and medium deployed

#### **Outcome:**

A communication plan identifying each group of intended audience that deploys appropriate communication strategy accordingly

#### Steps:

- core ideas that need to communicated
- different communication strategy from empathy, metaphor, analogy or out an implementation plan.
- plan for each team
- 4. Deliver the brief: to refine the brief based on feedback and roll out the action plan



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1. Review strategy plan and vision statement: to identify key messages and

2. Tailor the brief to intended audience: to address different audience using visualisation, so that every party is clear of their offerings and role to roll

3. Share the brief accordingly to different audience and collect feedback: to compile information into a sharable and clear document for each team, collect their feedback and make alignment to clarify the roles and action



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