# AY 2012

# THE HUMAN RESOURCES DEVELOPMENT OF SMALL MEDIUM MANUFACTURING: COMPARISON BETWEEN HONG KONG AND JAPAN WRIST WATCH INDUSTRY

# POON SEE MAN, SIMON

Master of Business Administration

35102330-0

GRADUATE SCHOOL OF COMMERCE

WASEDA UNIVERSITY

C.E. PROF. Masakazu Sugiura

D.E. PROF. Reiji Ohtaki

D.E. PROF Hiroyoshi Umezu

# Acknowledgement

It has been a wonderful experience to write a master thesis, the time and energy to complete this paper was more than initially I had expected. This is perhaps due to my determination to not only just a paper submission for graduation, and also in hopes for providing some insights and contribution towards the Human Resources Management studies, especially in the field of training and development for SMEs.

First on my thank you list is my instructor, Professor Masakazu Sugiura. He is a very admirable professor, highly knowledgeable in the Management of People and Organization academic area, and business experienced from practical standpoint, a very well balanced professor indeed. His dedication to teach, and guidance in supporting zemi students to finish their paper, with the utmost patience has truly earned the respect from other zemi students. Sensei has built a strong "family culture" within this zemi class, so everyone developed long lasting friendships for many years to come. In addition I like to thank sensei's tireless efforts to liaise with Japan Watch and Clocks Association and Orient Watch Company in assisting my data gathering.

Second are the two honourable professors, Prof. Hiroyoshi Umezu and Prof. Reiji Ohtaki as deputy examiners. I would like to sincerely thank them for their teachings, and ideas shared during the course of my two years MBA program, which have directly and indirectly contributed to the completion of this thesis.

Here, I would also like to thank my zemi members. Mr Jeffrey Huang and Ms Angel To (both our zemi-heads) for their excellent leadership, and to the rest of my zemi classmates: Ms Vicky Lee, Ms Euri Uchiyama, Mr Chris He, and Ms Tzu Ying Lu for their wonderful and joyful learning experience shared in and outside of the classroom.

My special thanks to Mr. Sato Takao, for his kindness and interests in participating in research gathering for this academic research. His inputs were extremely useful and provided directional insights for further analysis and research. I also have to thank Ms Hanako Nakabo from

Orient Watch, for her effort and time in response to my questions, which provided profound detail towards this paper.

Not to forget, my heartfelt thank you to my dearest parents and beloved girl friend for their endless support, understanding, and motivation in the course of writing my paper.

# **Table of Content**

СНА	PTER 1.	INTRODUCTION	1
СНА	PTER 2.	SME & WATCH MAKING INDUSTRY OVERVIEW	3
2.1	DEFIN	ITION OF SMES	3
2.2	DISCU	SSIONS ON THE ROLE OF SMES AND ITS CHALLENGES	7
2.3	CHINE	SE SMES & THE ECONOMY LANDSCAPE	9
2.4	SMES I	N HONG KONG	10
2.5	SMES I	N JAPAN	13
2.6	WATC	H MAKING IN HONG KONG OVERVIEW	15
2	2.6.1 HISTO	ORY OF WATCH MAKING IN HONG KONG	17
2	2.6.2 ISSUE	ES EXPERIENCED IN HONG KONG WATCH INDUSTRY	22
2	2.6.3 TREN	IDS IN HONG KONG WRISTWATCH MAKING	23
2.7	GLOB <i>A</i>	AL DATA ON WRISTWATCH INDUSTRY	24
2.8	JAPAN	ESE CONTEMPORARY AND RECENT WRISTWATCH MAKING	26
СНА	PTER 3.	HRM & SMES LITERATURE REVIEW	28
3.1	HR & S	ME BACKGROUND	28
3.2	HRM &	CHINA	31
3.3	LITERA	ATURE REVIEWS	33
3	3.3.1 LEAR	NING	33
3	3.3.2 MOT	IVATION THEORIES: SELF-EFFICACY AND GOAL SETTING	37
3	3.3.3 HRD,	T&D ON ORGANIZATION PERFORMANCE BACKGROUND	38
3	3.3.4 TRAI	NING NEEDS IDENTIFICATION	40

3.4	RESEA	ARCH SCOPE AND FOCUS	43
CHA	PTER 4.	RESEARCH METHOD AND FINDINGS	45
4.1	.1 JAPAN	NESE WATCH AND CLOCKS ASSOCIATION (JCWA)	45
4.1	.2 RESUI	LTS FROM JCWA	46
4.2	.1 GRAN	ID GLORY MANUFACTURING LIMITED (GGML)	50
4.2	.2 RESUI	LTS FROM GGML	51
4.3	.1 ORIEN	NT WATCH	54
4.3	.2 ORIEN	NT WATCH INTERVIEW SUMMARY	55
СНА	PTER 5.	RESEARCH ANALYSIS	56
5.1	JCWA	ANALYSIS	56
5.2	GGMI	ANALYSIS	58
CHA	PTER 6.	CONCLUSION AND RECOMMENDATIONS	60
REFE	RENCES	5:	64
APPE	ENDIX		66

#### CHAPTER 1. INTRODUCTION

Change is constant, a company must constantly adapt to various external challenges to stay competitive, and beat out competition in the market. Only when company embrace change positively from inside out, it adopts the learning mentality and becomes a learning organization. Managers incept members of the company a desire to continuously find new methods to improve the organization's effectiveness (P. Senge, 1990). Organization learning is vitally important for companies, especially when business environment is rapidly changing.

SMEs have a vital role as the backbone for the economy, and have become increasingly important for Hong Kong, as China economy opens up with more industrialization in the past two decades. The privatization state-owned enterprises have led to a spiral growth of SMEs. It is believed SMEs do not provide formal training and development for their employees in general. However as findings from this paper suggest there are training and development (T&D) needs for the employees to assist them to do a better job.

The area of this research is human resource and development (HRD) within the context of SMEs, through the comparison between HK and Japan SMEs attempts to develop more understanding on the training and development situation within the manufacturing sector. This paper aims to develop insights on what factors would moderate the relationship between training and development and employee's competencies that affects SMEs success and growth.

I begin the paper with brief introduction of the SME manufacturing sector in Hong Kong and Japan, followed by the introduction of the research subjects Japan Clock and Watch Association, Grand Glory Manufacturing Limited (HK SME), and Orient Watches (Japan Watch company). This paper subsequently analyses the response results, and summarizes comments and answers from interviews. The findings were reviewed together to develop understanding on the type of environment that training requires for HK SMEs' employees to excel in their job, and provide insights for HRD practitioners to take note of when implementing HRD. The paper ends with limitation of the study and areas for further research.

### CHAPTER 2. SMEs & INDUSTRY OVERVIEW

This chapter starts with brief definition of SMEs, manufacturing, labour-intensive companies; it continues describing on the roles of SMEs in economy landscape in Hong Kong and Japan. It ends with the watch industry overview as the setting of this research paper.

#### 2.1 DEFINITION OF SMEs

There is no single definition or way to standardize what SME is, as the definition across the globe varies greatly to different regions and countries. Different indexes and measures are taken for defining what SME is. Indexes such as total assets, total turnover, aggregated investment in capital, production capacity, etc. The most common used index is the headcount (Dixon et al., 1991; APEC, 1997; OECD, 1998; Wilkinson, 1999) (see Table 1).

The importance of SMEs across the region is considerably different across economies. SMEs in countries like Taiwan, China, Japan, Thailand and Vietnam, contributes up to 70% of total employment, compared to that of Indonesia or Malaysia, which only contributes 40% of the total employment.

In the case of Hong Kong Special Administrative Region (HKSAR), the Government defines SMEs as follow: "A manufacturing with fewer than 100 people, a non-manufacturing business with less than 50 people in their offices." In this regards, "business" refers directly to any form of trade, craftsmanship, professional, calling or activities carried on for the purpose of gain, but not include in any club within the meaning of the Business Registration Ordinance, which provides services for the purpose of gain.

Country	Definition of SME	Measure
Australia	Manufacturing - less than 100 employees	Employment
	Services - less than 20 employees. Medium enterprises:	
	Manufacturing - 100-499 employees. Services - 20-499 employees.	
Canada	Manufacturing: small enterprises, less than 100 Employment and less	Employment
	than CDN\$5 million in sales.	Sales
	Small Medium enterprises 100-500 employees and between CDN\$5-20	
	million in sales. Services: small enterprises, less than 50. Employees	
	and less than CDN\$5 million in sales. Medium enterprises 50-500	
	employees and between CDN\$5-20 million in sales	
PR China	In general: small enterprises 50-100 employees; medium enterprises	Employment
	101-500 employees.	
Indonesia	Less than 100 employees	Employment
Japan	Mining, manufacturing, transportation, construction industries: Less	Employment
	than 300 employees or less than ¥100 million invested capital.	Assets
	Wholesalers: Less than 100 employees or less than ¥30 million invested	Industry type
	capital. Retailers, services: Less than 50 employees or less than ¥10	
	million invested capital. Manufacturing and other industries: less than	
	20 employees. Commerce and services: less than 5 employees	
Korea	Manufacturing - less than 300 employees, Won 20-80 billion of capital	Employment
	(assets) Mining, transportation - less than 300 employees.	Assets
	Construction – less than 200 employees	
	Commerce and other service business – less than 20 employees	
Malaysia	Manufacturing: up to 150 full time employees, annual sales turnover	Employment
	not exceeding RM25 million. Definitions are for Small Medium	Sales
	Industries. Different for Bumiputer* enterprises.	Shareholders' Funds
New Zealand	Up to 50 employees	Employment
Philippines	Small enterprises: 10-99 employees, and	Employment
	Between P1.5-15 million in assets. Medium enterprises: 100-199	Assets
	employees, and P15-60 million in assets.	
Singapore	Manufacturing - less than S\$15 million in fixed assets.	Employment
	Services - less than 200 employees, and fixed assets less than S\$15	Fixed assets
	million.	
Taiwan	Mining, quarrying, manufacturing and	Employment
	Construction industries - less than 200 employees, less than NT\$60	Capital
	million of invested capital. Service industries and others – less than $50$	Sales
	employees, less than NT\$80 million of sales volume.	
Thailand	Manufacturing: small enterprises, less than 50 employees, less than 20	Employment
	million baht of investment capital (not including fixed assets). Medium	Capital
	enterprises 50-200 employees, 20-100 million baht of fixed assets, 20-	Fixed assets
	100 million of invested capital (not including fixed assets).	
	Manufacturing: less than 500 employees. Non manufacturing: less than	Employment
USA	manufacturing. less than 500 employees. Non manufacturing, less than	1 ,
USA	US\$5 million in sales	Sales
Vietnam		Sales Employment
	US\$5 million in sales	

Table 1: World SMEs definitions in comparison (Source: APEC website; Cunningham, 2007)

Note1: Asset values were converted into local currencies.

<sup>\*&</sup>quot;indigenous peoples" in Malaysia.

Below shows summary profile of SMEs in East Asia (Source: Hall & APEC, 2002)

#### In terms of number of enterprises:

- 1. There are about 30 million SMEs in East Asia
- 2. They account for 98% of enterprises in the region
- 3. Most SMEs are in China (8 Million), Japan (5 Million), Korea (2.6 Million, which makes up 70% of the region

#### In terms of employment:

- 1. On average there are about 85 people for every SME
- 2. In developed economies there are only about 20 people per SME, but the ratio is above 100 in the developing economies, especially in China, Vietnam, Philippines and Indonesia
- 3. SMEs employ about 60% of the private sector workforce, and 30% of the total workforce
- 4. Over 95% of enterprises employ less than 100 people, and over 80% employ less than 5 people
- 5. SMEs contribute about 70% of net employment growth. SMEs provide about 80% of employment in the services sector, and about 15% in the manufacturing sectors
- 6. In developing economies, SMEs employ about 75% of people (below about \$15,000 USD per head income), and above \$15,000 the level is closer to 50%. Japan is a major exception Japan's SMEs employ around 80% of the workforce

#### In terms of output measures, Foreign Direct Investment (FDI) and exports:

- 1. SMEs contribute about 50% of sales, value added or output
- 2. The contribution varies from lows of 15% (Singapore) and 30% (Australia) to about 60% for most other economies
- 3. SMEs generate about 30% of direct exports (US\$930 billion in 2000), much less than the SME contribution to employment (about 60% to 70%) or output (about 50%).
- 4. SMEs contribute to indirect trade through supply chain relationships with other firms. SME contribution to total trade could rise to 50%.
- 5. SMEs generate about 50% of cases of FDI, but only less than 10% of value of FDI.
- 6. Korean, Japanese and Chinese Taipei SMEs contribute most FDI originating in the East Asian region.

The definition of manufacturing is more straightforward; it is a process, which involves tools and labour to produce goods for use or sale. The term may refer to a range of human activity, from handicraft to high tech, but is most commonly applied to industrial production, in which raw materials are transformed into finished goods on a large scale. Modern manufacturing includes all intermediate processes required for the production and integration of a product's components. The Hong Kong Government definition of SMEs manufacturing is companies that is less than 100 people employed, the human activity is with more than 80 per cent handicraft to transform raw materials, components into finished goods in a large scale. (Hong Kong Trade Development Council, 2012)

# 2.2 DISCUSSIONS ON THE ROLE OF SMEs AND ITS CHALLENGES

As globalization takes place, SMEs are continuously developing capabilities and capacities that will enable them to compete globally. They possess distinct advantages, such as flexibility in management, human network resourcefulness, and entrepreneurial spirit, strong ability to identify and seize business opportunities, customized products and services catered towards market niches. Despite SMEs face numerous barriers towards different types of development, such as their limited resources and access to finance, lacking economies of scale, relative high costs in utilization of information technology, lack information on other market opportunities, and as well as deficiencies in various others management capabilities. Due to the infrastructure of the companies' size, a more visible challenge would be the higher transaction costs for SMEs compared to larger corporations.

Key areas for SME capacity developments were emphasized and recognized at the APEC meeting in 1997. They were *access to 1) markets; 2) technology; 3) human resources,* 5) *financing, and 6) information.* These five major areas focuses on SMEs in building capacity, improving governance, reducing transaction costs, promoting further market liberalization, addressing non-tariff barriers, increasing internet access, and facilitating trade and investment are all directly relevant to improving the capacity of small businesses to exploit export market opportunities and for their regional growth.

From APEC's definition of "access to human resources": SME's human resources development is a comprehensive approach that includes: social structure and systems; bringing in broad educational reforms; entrepreneurship encouragement; professional business skills acquisition and innovation in the society; systems for continuation of self-

learning, on-going development and enhancement of human competency; suitable and appropriate governmental support programs. Especially for micro and small enterprise, a labor shortage and increasing labor costs, lack of skills in information technology is of major hindrance to the growth of SMEs. Human resources training in IT, which enables more efficient management of the business, workload sharing, development of markets. Lastly, language and cultural expertise, legal and logistical knowledge are of equal importance.

SMEs manufacturers have an important role to support larger business corporations. They are vital to fabricate industries such as in automotive, electronics, and chemical industries. SME manufacturers usually provide niche products and services that are proved costly to produce for larger corporations. Especially the subcontracting system in Japan, some parent companies encourages employees to go set up business and engage in a subcontracting relationship with the parent company, because often experienced SMEs employees knows the business very well and is able to keep production costs down. Nevertheless, SME faced many challenges that has been recognized by many research conclude into three major categories, 1) financial barriers, 2) human resources barriers, and 3) developing distribution network (Hiroki Kawai & Shujiro Urata, 2002).

#### 2.3 CHINESE SMEs & THE ECONOMY LANDSCAPE

The process of economical, political and market transformation in China for the past two decades has to high growth in number of SMEs establishments. Both academic and governmental research have documented an increasing trend of small privately owned companies and noted their importance towards the Chinese economy. By the end of 2006, SMEs counted for 99.8% of totally China's enterprises, 58% of China's GDP, 74.4% of industrial added value, 58.9% of social sales, 46.2% of tax revenue (China SME Club, 2007). Up till 2011, the Chinese SMEs have accounted for 60% of total national employment. (China Statistic Yearbook, 2011). Year on year, SMEs contribute to roughly 59% of gross domestic product (GDP), 50% of total tax revenue, around 68% of total foreign volume and up to 75% of urban employment.

This increasing trend due to the fact of cheaper white-collar labour supply from the layoffs workers from many large, and ailing state-owned enterprises in the past two decades (Anderson, 2003). These SMEs absorb large volume of workers. SMEs have become a more important source of employment as China reforms.

#### 2.4 SMEs IN HONG KONG

In a broad economic and commercial sense, HKSAR Government promotes free enterprises and free trade with minimal interference. Only products such as tobacco, alcoholic liquors, first registration tax for automobiles, almost all other products are at no import tariffs. HKSAR itself is also a WTO member, with its name as "Hong Kong, China". Therefore, HKSAR Government do not subsidised the local manufacturing as well.

The Manufacturing Sector: Hong Kong land prices are rising year on year due to the increasing population and the scarcity of land supplied. Manufacturing business has undergone huge transformation during the 1980's through out to 1990's in moving operations of machines and workers into Mainland China. SME manufacturing sector now comprises of mainly trans-boundary based, which combines value-added, technology-intensive manufacturing processes, and labour-intensive craftsmanship process in the Pearl delta-river region of the Southern part of Mainland China. Hong Kong manufacturing industry consists fundamentally of labor-intensive assembly. Manufacturing establishment's size has been decreasing over time, signifying the persistence of small production units. Establishments still remains in Hong Kong are mainly sweatshops.

The scarcity of resources in manufacturing stems from a number of related factors. Firstly, the labor force in 1950's was abundant compared with either land or capital. This was due to a large influx of immigrants as the Chinese foresee political turmoil as the communist gains power. Secondly, the economy's sole dependence on exports made it weak towards unexpected drops in markets. To contain risks, entrepreneurs of manufacturing business minimized their investments in capital equipment while

maintaining the flexibility of labor-intensive manufacturing. Thirdly, the largest share of Hong Kong's manufacturing employment has remained in apparel production, which resists the application of new technology to reduce labor inputs.

International trade policy has also influenced the shape of Hong Kong's manufacturing sector such as the garment industry was regulated through an international quota system. HKSAR government has restricted the amount of the garment to be reexported out of Hong Kong. On the other hand, many Hong Kong manufacturers were merchants thinking, taking cues from the consumer market itself, but not from the production processes. Traditional manufacturer's priority to employ top-notch manufacturing processes, whereby merchant manufacturers pay attention towards the market consumer preferences, getting the feedbacks and tastes of consumers, pushing their products towards the hands of consumers. (Amy K. Glamsmeier, 1994)

The below briefly summarizes of how Hong Kong manufacturers persist in labor-intensive productions. Firstly, labor-intensive production is flexible; producers could quickly change, recruit different skilled labor force to adapt to their product changes. Second, an elaborated subcontracting business helps to facilitate that rapid manufacture of a wide variety of products with minimal personal capital investment. The responsibility for capital investment falls on successive levels in the subcontracting hierarchy. In the industry that is dominated by small capital, such strategies is required for short term calculation, as small manufacturers have no control over product markets and have to respond quickly to market changes. Finally, such subcontracting ensures the flexibility for SMEs to act as buffers when market shifts unexpectedly. Entrepreneurs could almost shift towards a different industry when the profitability of the industry has eroded and thus catch another

wave of economic opportunity. This also ties with the "merchant thinking" of Hong Kong entrepreneurs where they seek quick return on their investments, which is three years on average. However, this structure was challenged during 1980s, intense competition for physical space resulted in a dramatic rise in land prices and boomed the land market. This led to dramatic rise in production costs; costs pressures were also experienced in labor market. The manufacturing sector then experienced labor shortages and rising labor costs, competitions from the other pacific countries intensified as they provide cheaper labor.

<u>The Service Sector:</u> The sector's GDP has increased from 68.3 per cent to 92.1 per cent from 1980's to 2009. This development has now made HKSAR one of the most service-oriented economies in the world. This growth was brought about by the provision of offshore production services, which in turn supported HKSAR's production operations.

Nevertheless, as the economy transform from a manufacturing to a service oriented, a sizable of the employment of labour in manufacturing and service sector are still by and large from SMEs, and especially hires their labour in throughout Southern and Northern China. Indeed, SMEs accounts for more than half the labour market in the private business sector. (HKTDC, 2011)

# 2.5 SMEs IN JAPAN

The belief of harmony, belonging to a group is a very important notion for the Japanese society. So this is also true for SMEs individual small business to participate in several business alliance, and is conscious of belong to a group. Though the ethnicity of Japanese and the religious teachings of "Confucianism" do not preach on entrepreneurship, Japanese SMEs of individual business ownership was relatively quite successful due the values of the religion has inspired, which are hard work, frugality and diligence (Petersen, 1971).

During the 1990s, SMEs are central backbone to Japanese economy, it was published by the "Economist", that SMEs represent 99 per cent of all the firms in Japan and employs over 75 per cent of the total working population. This is also due to the government incentive policy on tax, where business with annual sales ranges from 30 million yen to 60 million yen was exempted on tax credits, which attracted to the volume of establishments. Nevertheless, the more successful SMEs business owners grew due to the inter-firm linkages they had forming business alliances.

To understand the business relationships of SMEs in Japan requires a brief explanation of types of business alliance exists in Japan. They are keirestsu (系列、a diversified group of enterprises); and kyoudoukumiai (協同組合、a co-operative of small business). A keiretsu network consists of a group of large and small companies, each firm voluntarily cooperating with the others for mutual gain (Abegglen, 1958), their linkage is usually implicit. The keiretsu is similar to the zaibatsu (財閥; a financial clique) is a Japanese term referring to industrial and financial business conglomerates in the Empire of

Japan)in that a group consists of firms within different industries. A typical mix includes commercial banking; trust banking, insurance, mining, petrochemicals, steel, trading, heavy industry, optical, electric gas, and chemicals. A keiretsu has no holding company that dictates the actions of each member of the group. Rather than conglomerates, the companies are independent decision-making units that co-operate with other firms in their group. Keiretsu encourages divisional of labour even to extent of more than American industrial revolutionized production. A small firm could produce parts for various competing firms. The kyoudoukumiai are co-operative of small businesses, it is neither a joint venture nor a merger. Each kyoudoukumiai retains its ownership and management.

After 1989, the number of SMEs in Japan declined in manufacturing and distribution, but continued to grow in services, construction, real estate, and transportation and communications. This pattern mostly reflects the changes in the production structure from manufacturing and distribution to other services in the Japanese economy. These changes in production structure in turn can be explained by the corresponding changes in demand patterns and industrial policies. Looking at employment changes, it is interesting to note that manufacturing is the only sector that lost employees, as the number of employees in manufacturing declined from 9.9 million in 1989 to 9.6 million during 1996. This decline in the number of employees in manufacturing SMEs is attributable not only to a decline in the level of production but also partly to an increase in labour productivity, resulting from introduction of labour saving technologies. These increase in labour productivity raised interesting questions on whether of T&D had played contributing effect on Japanese SMEs at that time.

#### 2.6 WATCH MAKING IN HONG KONG OVERVIEW

From the sources of Hong Kong trade development council; there are 138 numbers of establishments related to watch making, which employs a total of 1,070 employees for activities in Hong Kong to June 2011.

Hong Kong's watches and clocks companies largely rely on OEM and ODM business. Order quantity for each model is usually small, so it's difficult for scale economy through automation. Manufacturers of complete watches and clocks remain labour-intensive.

A number of manufacturers had relocated the labour intensive processes to the Chinese mainland to reduce costs, but a number of manufacturers still maintain their production bases for higher value products in Hong Kong. With rising production costs on the mainland, the need for product upgrade becomes more compelling. Meanwhile, as buyers are increasingly quality conscious, more and more watches manufacturers have acquired the ISO 9000 certification to strengthen their quality management systems. The Hong Kong Watch Manufacturers Associations Ltd. has also strengthened the industry's intellectual property protection by running a "Watch & Clock Design Depository Centre", where members can store their product designs there and the centre will provide a third-party certification services for the copyright.

The Hong Kong watch industry represents a fairly low-technology sector made up of vertically shallow small firms, confined to the lower-price segments amongst the other main players in the global watch-making industry. There are basically no parallel companies matching to that of Swatch, Rolex (Switzerland manufacturers) or to that of

Seiko (Japanese manufacturers). The industry is much divided between noble watchmakers in Switzerland, large scale mid priced producers in Japan, and the low-end Hong Kong SMEs where they make watches in the Mainland China.

For sales channels, Hong Kong watch and clock exports on OEM basis, customers are mainly distributors in the US, EU and Japan. Little manufacturers have retail stores or selling their own brands. Sales to Southeast Asia, Mainland and other emerging countries are usually ODM designs with arrangements with department stores, shopping arcades, and aims to promote their own-brands in these markets.

#### 2.6.1 HISTORY OF WATCH MAKING IN HONG KONG

Hong Kong watch making business is relatively young as the industry began production of watches in accessories such as cases, bands and dials. Companies using the labour-intensive structure grew quickly into assembling mechanical watches (with imported movements from Japan, Switzerland, and other countries).

Going into the 1970s, advances in diode technology, Hong Kong watch assemblers moved into light-emitting digital (LED) display watches. This type of watches has dominated for a short period of time and declined until liquid crystal display (LCD) watches emerged later during 1980s, then dominated the HK watch making industry.

The emergences of LCD dominating the market during the 1980s was due to the fact of lower input costs and drastic U.S. competition amongst the semi-conduction producers drove prices down. Since LCD manufacturing requires simple and inexpensive equipment's, barrier to enter the market was low, hence drove margins even further as new players enters the competition. The introduction of Japanese production capabilities in the 1980s further drove prices down until the emergence of quartz analogue watches which gave a new breath the industry. For Hong Kong, like most other components, quartz analogue production in Hong Kong required foreign parts. With increment capital investment, the structure of the Hong Kong watch making industry had took some time to adjust.

Since 1980s, the quartz type watches has dominated the industry as a standard. The growth was astonishing reaching up to as 60 per cent of the value of total watch output by early in 1980s, reaching up as much as 84 per cent of the total value output for the watch

making industry in Hong Kong. During this period, other watch types such as digital has shrunk to 6.6 per cent, mechanical watches, which requires highly skilled labour and technical expertise, has diminished to 2.3 per cent. (Amy K. Glasmeier, 1994)

Despite being a follower in the technology trends, Hong Kong industry has been a forerunner in innovating and exploring watch parts, cases, bands and peripheral accessories. The case and band industry is well developed. Hong Kong exports finished products to major big watch producing countries such as Japan, Switzerland and the U.S. Surprisingly; upscale companies such as Cartier also use bands from Hong Kong. The renowned case and band segment in Hong Kong has developed its own technology leadership and has very little competitions during the 1980s. This unique development was aided by "Computer-Aided Design" CAD drawing designs and manufacturing of cases and bands. It allowed rapid model changes in the complex watchcases and bands, hence been able to adapt to rapid customer taste changes. The industry has hence amassed both know-how and capital, invested in this market segment. The accessory segment is also worth to note, which is also very well developed catered to watchmakers. A rarity that has existed is the battery production was fully automated, other numerous dial, electroplating, and button cell factories exists.

The growth rates topped at 25 per cent annually, which deflected Hong Kong manufacturers to maintain their production up till late 1980s. The international trade policy has helped cement the production to be remained in Hong Kong territory; however it has all changed when the trade law in Hong Kong has changed unilaterally. It was redefined to indicate the watch's origin would be determined by where the movement came from (Hong Kong Trade Development Council, 1993). The change allowed Hong Kong

manufacturers to use the label "made in Japan" or "made in Switzerland" on its watches. As a result, the re-export trend was seen to be significant. It has reached 42 per cent of watches export from Hong Kong in 1994. Approximately 23 per cent are assembled in China and re-exported from Hong Kong.

The Hong Kong manufacturers have operated mainly as OEMs during the 1990s for discount houses and retail outlets. They have manufactured to the specification of their customer requirements. Nowadays, things need to be changed significantly as many watch manufacturers move from their OEM business towards the development of the their unique styles. Gradually, the Hong Kong manufacturers are trying to sell consumers a watch that makes a fashion statement and clothing accessory. The variation of Hong Kong's trademark has a significant implication on the production of the watch making industry, as one manufacturer states that the automation that Japanese manufacturing praises on reduces the flexibility and creativity of design, which it lacked in the watch making where people appreciates handcraft items.

Table 2) Comparison of Japan & Hong Kong SMEs Manufacturing

	Japan	HK, PRC
Labor Skills Flexibility	Low	High
Manufacturing Automation	High	Low
Academic level	Higher	Lower
% of workforce in SMEs	70% of employment	90% employment
Job Tenure	Long Term	Short Term

As the industry steps into the 1990s, the watch industry has gradually merged with jewelry. The moderately prices watches with semi-precious stones and more upscale watch cases and bands are very successful in the lower end segment of U.S. jeweled watch markets. This new emergence had also built its channels to the upper priced Japanese markets as well. The variation of products born by this merger of two industries has change the landscape of traditional market segments. However the change is, the bottom line for the Hong Kong watch making industry is still primarily base on price competitions. This outlook for the buyers coming to Hong Kong pervades the industry overall, making highest quality built watches is priced very much below other comparable global brands. On watch prices, Hong Kong's Free On Board (FOB) prices are extraordinary low by world industry standards. The average price of a watch in during 1990s was about US\$3.00. Even for jeweled watches it costs a fraction compared to those manufactured in Switzerland. Minimum order quantity could be as low as 100, or even none for some companies.

The Hong Kong watches appeals more towards fickle customers, where the trend does not last more than one year. It is very hard for the manufacturers to estimate how the design style will last, as the end customers treat such watches as fashion items. Whatever the market changes at that time, Hong Kong watchmakers could cater responds to such rapid changes in design styles.

Foreign investments in Hong Kong: Overseas investments in Hong Kong comprise a relative less share of the total industry, approximately only 16 per cent of the employments were foreign-owned plants. Investments in watch manufacturing were even less, only 6%. Japan was the major foreign investor, more than 80 per cent of foreign capital invested in the Hong Kong watch industry.

Competitions for Hong Kong SMEs Manufacturer: The industry dominates the lower end segment, with no rivals for the market share in the price ranges for the products that it competes in. Before 1987, the yen has not appreciated as much as today, the major Japanese watchmakers, even for the technology driven Japanese companies such as Seiko sot low cost assembly plants in Hong Kong, Mainland China. They have utilized the low-wage flexible labor location sourcing for newer products, which is gaining importance as the yen has appreciated over time. Furthermore, the devaluation of neighboring Asian countries and Latin American countries boomed for Hong Kong watchmakers. While consumers have used to buy low-medium priced Seiko watch for its quality, the difference between Japanese and Hong Kong made products have actually eroded the Japanese products in the newer industrial countries.

As for the Swiss sector, they maintained control of the medium-high end luxury market. The medium-priced Swiss watches have benefited increased demand from the appreciation of the yen. In Asia, Swiss name watches benefits from quality and luxury equivalent notations. Even for the Japan market itself, consumers prefer the Swiss made watches in the upper medium price range products.

#### 2.6.2 ISSUES EXPERIENCED IN HONG KONG WATCH INDUSTRY

Labor: It was understood that the Hong Kong watch manufacturing industry establishes its ground on the labor-intensive operations to maintain flexibility. The decrease of labor supply was a major issue during that time. There was also lack of good talents from only two design schools from the local Universities. Hence led to the migration of production inwards to Mainland China, which led to other problems of quality controls and how to maintain low prices. This spatial offshore production further prevented manufacturers to invest in the equipment, as long as labor supply remains abundant in China.

Patent dispute: The structure of the industry in Hong Kong has prevented itself to introduce reputable brand names and move upscale. The flexibility to switch model production efficiently has discouraged the design and development knowledge needed to move up the ladder. Thereby, the Hong Kong production system implicitly encourage the manufacturers to buy and copy watch designs from elsewhere such as Europe and Japan, where as Hong Kong was openly accused as a counterfeiter of designs in the at the international Basel Watch Fair in Swiss. Nowadays, Hong Kong watch industry council and the Productivity Council has set up databases and publishes booklets to store and display developments of watch designs, and marketing, in effort to resolve the patent infringement disputes.

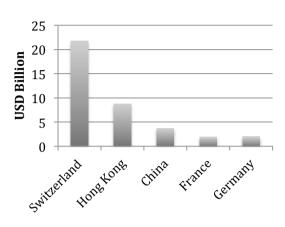
# 2.6.3 TRENDS IN HONG KONG WRISTWATCH MAKING

While Hong Kong remains a strong player in the global timepiece market. Competition has intensified with other emerging players from South Korea, and Singapore who has grown robustly over recent years. Hong Kong watchmakers are maintaining their competitiveness by increase efforts to move up the market by improvements in quality, enhancing design and production capabilities, as well as human resources training in practising quick response in customers in the global market by enhancing client relationship management.

#### 2.7 GLOBAL DATA ON WRISTWATCH INDUSTRY

Main Watch export countries 2011

Million	n units	Change in %
China	682.1	+2%
Hong Kong	402.7	-4%
Switzerland	29.8	+14%
Germany	14.5	+7%
USA	7.4	+21%
France	7.3	+13%



Source: Federation of Swiss Watch Industry, illustrated by author

Hong Kong is amongst the leaders import and export of complete watches and clocks in the world. The main watch exporters are Switzerland, Hong Kong, China, France and Germany. Japan was not included in the above data for exports as manufacturing facilities are mostly off shored contributing to exports and re-exports of other countries. Switzerland had maintained its leadership over 2011, exported an equivalent of US\$21.9 billion, a growth of 19.2 per cent. Followed by Hong Kong, which indicates from custom statistics data, a total of US\$8.8 billion dollars represents 19.5 per cent increase, highest growth amongst the main exporters. A large portion of this value is derived from reexports from other producers. In the third position is China, which shipped an equivalent of \$3.7 billion, increase of 15.5% compared to previous year. German watch exports rose sharply in 2011, recorded export of US\$2 billion, and variation of +16.6 per cent.

However, while exporting trends were similar, the average selling prices differed greatly amongst the countries. The report by China averaged around US\$2, identical to last year. Hong Kong noted US\$12, a one-dollar increase from last year. Japan company ex-

works prices fairing between US\$50 to – US\$150. Switzerland had the highest average price at US\$558, has been relatively stable in the past few years.

Again the main importer is Hong Kong, valued at US\$9.7 billion. Followed by USA totalled US\$4.8 billion dollars. Switzerland came in third as an important consumer of suppliers to support its growth in production and export volume totalled at US\$3.4 billions. Fourth was China, valued at 3.2 billion US dollars and fifth was Japan with an increase of 22.0% to 2.6 billion US dollars. (Federation of Swiss Watch Industry, 2011)

# 2.8 JAPANESE CONTEMPORARY & RECENT WRISTWATCH MAKING

The horological industry in became dormant during the Second World War II, since the manufacturing capacity was converted to military needs. Post Second World War II, the industry boomed due to government supports as a national industrial policy, to improve the production of quality watches and clocks, establishments of private-sector of technology research institute to induce domestic watch production quality competition.

The industry experienced a major technological revolution, where electronics watches came to play. The watches no longer require springs and pendulums to count time. Then the world's first quartz clocks and watches came – "Made in Japan", were first marketed during 1969. The quartz technology had greatly increased the accuracy of the timepieces. Mechanical timepiece had a time difference of around ten to one minute per day, whereas quartz only had plus-or-minus 20 seconds per month such technology by Japan manufacturers. The accuracy had improved almost one hundred times better.

The Japan watch and clock market has declined for three consecutive years since 2007. The market size in Japan has shrunk by 30.9 per cent year-on-year to JPY \( \)\frac{4}{4}0.5 billion. The slump was due to a major shrunk in the watch market in the retail end. The import of watch market has shrink by 36.4 per cent year-on-year of market size of JPY \( \)\frac{2}{2}83.5 billion on retail value basis. The was due to the sharp decrease of Swiss mechanical and Western import watch brands, which comprise of approximately 85 percent of the total import watch market. The demands in 2009 has decline from wealthy groups, strong brand oriented middle class group and wealthy visitors from overseas. In 2008, domestic brands in Japan were doing very well until 2009, which it had declined to 102.6 billion yen, down 17.6 per cent from the previous year (Watch and Clock Market in Japan, 2010).

#### 2.8.1 Japan two largest watch manufacturers Background

The precision products segment primarily involves the watch, optical device and factory automation products businesses. There are many SMEs companies and manufacturers rooted in the Nagano prefecture. Some of the larger counterpart such as Seiko & Citizen has base offices there. Seiko, now Seiko Epson's watch business bases on the technologies of spring drive, solar radio wave, and kinetic technologies. The company manufactures mid-range and high-end wristwatches under the Seiko brand name. Seiko Epson introduced revolutionary products over the history of horology evolution. They were the first to introduce wristwatches in Japan in 1913; they were also the industries pioneers to introduce quartz watches in 1969. Seiko Epson also develops and manufactures watch movements.

Other well established watches and clocks companies located in Japan, such as Citizen Holdings Co. Ltd. manufactures and sells wristwatches, wall clocks, jewelry, information and electronic equipment, industrial machinery, and other technology products in Japan. It operates in Asia, Europe, the Americas and other countries. Headquartered in Tokyo, Japan and employs about 17,987 people. It recorded revenues of JPY ¥296,857 million (\$2,968.6 million) during financial year ended March 2009, a decrease of 11.8% compared with 2008. The operating profit of the company was JPY ¥1,399 million (\$14 million) during 2009, a decrease of 94.2% compared with FY2008. The company recorded a net loss of JPY ¥25,807 million (\$258.1 million) in FY2009 compared with the net profit of JPY ¥12,189 million (\$121.89 million) in FY2008.

#### CHAPTER 3. HRM & SMEs LITERATURE REVIEW

This chapter introduces briefly human resources management (HRM) practices, and on human resources development (HRD) history, background, and academic research focused in the past. It continues to describe human resources management and training, and its relatedness with SMEs. Then further discuss into training and development definitions, and human behavioural learning is introduced. It ends with building the hypothesis and concepts concerned and put forward questions human development training and assumptions

#### 3.1 HR & SMEs BACKGROUND

Entrepreneurship and capabilities, managerial philosophies of the owner, technologies innovation in HR systems, nature of the industry all affects how HRM could impact on SMEs' performance; The number of employees is one of the key determining factors that differentiates the different HR practices and even HR systems adopted by large and small companies. Larger corporations are able to leverage on costs with economies of scale, using more complex HR systems, and the higher costs in adopting these systems, would be able to be covered by the increased revenue from higher productivity of their employees. In fact, HRM implementation by SMEs has also been found to have a strong effect on SMEs' performance; research has showed a strong positive effect of HR practices indirectly on profits. (L. Sels, S. De Winne et al, 2006). However, other researchers studying on the implementation of more complex HR systems' effect on increased revenue were actually not able to recover from the increased costs in executing them, and the research was limited in the scope of Belgian SMEs.

Many current researches on HRM in SMEs are done on a comparison done with large corporations. On the other hand, various other academics researched broad HRM practices and describe the use of different HR practices in small businesses (Cassell et al., 2002; Golhar and Deshpande, 1997; Hornsby and Kuratko, 2003). Others focus on one specific field of HRM, or even focus on a single evaluation of a HR practice, such as recruitment and selection (Bartram et al., 1995; Heneman and Berkley, 1999), compensation (Amba-Rao and Pendse, 1985; Brown and Medoff, 1989; Poole and Jenkins, 1998) and employee relations (MacMahon, 1996; Ram et al., 2001). Training and development (Black et al., 1999; Curran, 1988; Matlay, 1997; Storey, 2004), these researches were mainly focused in the west. Evidence about the influence of a set of HR development practices on SME's effect on firm performance; especially Asia, in China's SME manufacturing industry remains under-developed.

Other academic authors have studied various practices that had been developed from larger corporations to the extent for suitability of application within SMEs, in fact, much lesser attention on whether these HR practice had long been using in larger corporation will be practical to be applied for SMEs. It is not surprising that scholars do not pay their attention towards HR practices application in SMEs. As SMEs have different constraints, requires unique HR needs depending on their PESTLE landscape (Political; Economical; Social; Technology; Legal, Environmental) to select, develop, reward and retain talents. The volume of SME samples, which all makes it more difficult to research on. One of the issues that complicate the research is the generalization about the business climate for SMEs and their use of HR practices (Nadin et al, 2002). The ways that SMEs

operates are vastly heterogeneous increase the difficulty for study, with the characteristics of SMEs HRM summarized in below table 1.

Table 1) SMEs HR management and HR department Strengths and Weaknesses

SMEs	Strengths	Weakness
HRM Practices	<ul> <li>Pay more attention towards attracting talents;</li> <li>More flexible employment mechanisms and flexible salary systems;</li> <li>Flexible working environments and working time;</li> <li>Fewer levels of management with less overhead cost increasing efficiencies;</li> <li>Focus more on employee's communication and interpersonal emotions in the work place.</li> </ul>	<ul> <li>Lacks strong concept of HR, no systematic approach linking HRM with business strategies;</li> <li>Lack advance management tools;</li> <li>Constantly face retention and recruitment issues;</li> <li>Lack of coherence and continuity of enterprise training, suffer from skill shortages;</li> <li>Stringent on financial resources, no systematic link between performance management, rewards, and long term motivation strategies</li> <li>Lacking employee commitment towards SMEs</li> </ul>
HRM department	<ul> <li>Lean HR departmental structure, integrated to other departments for flexible decision making</li> <li>HR managers have versatile skills and responsibilities for many functions;</li> <li>HR managers good on coordination and other functions to improvement of overall efficiency.</li> </ul>	<ul> <li>Less or no independent HR department, dysfunction of management, rougher division of labour;</li> <li>Focus more on compensation, labour protection files;</li> <li>Lacks scientific HR management systems</li> </ul>

All in all, SMEs HR more focus on how to enable the company to stay alive and beating competitions, maintaining costs low with flexible staff is of more top priority for HRM in SMEs. The need to research on human resource management in SMEs is taking higher importance. As HRM a tool for recruiting, train and develop of talents, which are being recognized as an effective tool to achieve survival and success of their companies. The ability to manage a human resources efficiently in for business owners to not only to attract and retain high quality competent employees, and to empower is to add value to SMEs, sustaining competitive advantage of their companies in the long run. Though the importance of human resources management is emphasized, they are still largely neglected by SMEs management, and the owners.

#### 3.2 HRM & CHINA

In China, the understanding how the types of firm ownership and its economies opens up is necessary, as it is critical part for the corporations' performance and success. The economy from 1949 to 1979 has been planned by the communist government, major enterprise were state-owned, and employees working for them were described as "iron rice bowl" employment which ensured "jobs for life" or "cradle to grave" welfare policies. At 1979, as government changed to open open-door policy, the economy was reforming into a more individualistic market-oriented economy. A series of privatization of state owned enterprises (SOEs) has pushed human resources management practices from a state responsibility to be part of a strategic management of enterprise. After 30 years of economic reform and the first decade anniversary of China entering into the WTO, led to many changes in the HR management styles in China. The management landscape across the enterprises changed from a very homogenous structure (often blended with "socialist characteristics") to a more innovative management aim to improve efficiency and productivity. As SOEs unleash its control in the hiring, staffing and rewards systems, more enterprises are following and shifting its employment system from state-allocated agencies based to enterprise-based recruitment and selection from the labour market. The remuneration system also shifted to focus more on motivation and rewards compensation mechanisms that aims to improve the organisational efficiencies. There is more to discover for human resources development in the area of training and development for employees in fast growing countries like China.

Given the background on the SMEs and existing HR literatures on SMEs, there is an increasing importance of Chinese SMEs and their potential performance influence by HR practise and development tools; there are many benefits in studying the effectiveness of various HR practices adopted by SMEs in China. Additionally, information about the link between HR practices and small firm performance would be useful for both newly established Chinese privately owned companies and foreign SMEs currently operating in or planning to enter into China. SMEs would be able to understand whether there is benefit of devoting greater attention to HR development practices that can help them to achieve desired organizational outcomes.

With continuous liberalization of the Chinese economy from the 1980s and China into W.T.O., it is interesting to study on how SMEs' managers utilizes HRD to cope with such rapid economical changes in the Asia Pacific region. However, as large amount of variety exist in the HR practices, this ties with other evidence, which suggests HR practices tend to be fairly ad hoc in smaller firms (Marlow and Patton, 1993; Wagar, 1998), not to mention on the human resources development on the topic of T&D, which is often even neglected.

A group of HR practices namely "free market selection and recruitment", "performance-based rewards", "participation in decision-making process", and "training and development". These main groups of HR topics were generalized and assumed as major research areas key to Chinese SMEs (Zhu and Dowling, 1994; Zhu, 2006). "Training and development" (T&D) is the area of focus.

## 3.3 LITERATURE REVIEWS

The coming parts introduce, theories in learning, identification of training needs, brief discussion of training's relation to development. It provides a brief understanding into these areas before the research questions are laid out.

#### 3.3.1 LEARNING

To effectively design a T&D program for the organization, a HRD practitioner must understand the basic of human behaviour in learning. To train employees is to change ones' behaviour and be able to predict that behaviour, so if HRD practitioner wants to alter such behaviours, they must know how complex behaviour at work is learnt. The following would introduce the definition of learning, for a better understanding how training and development theories set in.

Learning is any relatively permanent change in behaviour that occurs as a result of experience. There are three components towards this definition. 1) It involves change; that could be good or bad, people could learn bad behaviours undesired by others. 2) The change must become permanent, one time changes could only be reflexive or a result of pressure, and thus could not be seen as learning. 3) Certain form of experience is required for learning; such experience could be acquired through practice or observation, or an indirect method such as reading. (Weiss, 1990)

Vicarious learning occurs when the learner learns behaviour by observing another person to perform the behaviour. If appropriate situation arise, the learner imitates the model's behaviour. Social learning theory also acknowledges through self-control people

can learn by themselves. Finally social learning theory emphasizes on the self-efficacy, which has powerful effects on learning because when people try to learn those behaviour that they believe will be able to perform successfully.

There are two popular learning theories in explaining our learning process in changing our patterns of behaviour illustrated in table 2.

Table 2) Summary of Operant Condition and Social Learning Theories

Learning Theories	Characteristics
Operant	• Behaviour is $f(x)$ of its consequences
Conditioning (B.F.	Employee learn to behave something they want, avoid to something
Skinner, 1971)	they do not want
	• Creating pleasing consequences of that behaviour will increase the
	frequency of such behaviours, and punishment would decrease
	likelihood of such behaviours
	<ul> <li>People learn to associate stimulus and response</li> </ul>
Social Learning (A.	Learning by observing happenings in the environment, told about
	something, and by direct experience, a cognitive process
Bandura, 1977)	• Behaviour is $f(x)$ of its consequences + existence of observational
	learning + importance of perception in learning
	• Vicarious learning; self control & self-efficacy takes the learner from the
	cognition of the process to the final behaviour
	• 4 process model: Attentional processes, learn from a model when we pay
	attention to critical features; Retention process, defines how well
	individuals could remember actions when model is no longer available;
	Motor reproduction process, after observation, one must convert the
	viewing into actions; Reinforcement processes, individuals is motivated to
	model behaviour with enough incentives

Source: "Understanding and Managing Organisational Behaviour, Jennifer M. George and Gareth R. Jones, Addison Wesley, 1999), illustrated by author

Further development to these two theories, reinforcement theory puts them into managerial tools in shaping behaviour for employees as follows:

Table 3) Schedules of Reinforcement theory and managerial examples

Reinforcement Schedule	Nature of Reinforcement	Effect on Behaviour	Example				
Continuous	Reward given after each desired behaviour	Fast learning of new behaviour but rapid extinction	Boss compliments				
Fixed-interval	Reward given at fixed time intervals	Average and irregular performance with rapid extinction	Weekly bonus				
Variable-interval	Reward given at variable time intervals	Moderately high and stable and performance with slow extinction	Pop quizzes				
Fixed Ratio	Reward given at fixed amounts of output	High and stable performance attained quickly but also with rapid extinction	Pays by piece rate				
Variable-ratio	Rewards given at variable amounts of output	Very high performance with slow extinction	Commissioned salesman				

Source: Stephen P. Robins & Timothy A. Judge, 2008"Essentials of Organization Behaviour", illustrated by author

When companies emphasize learning, individuals learning to perform desired behaviours contribute to overall organisation effectiveness. Organization learning takes process when managers instil in all members of an organization a desire to find new ways to improve effectiveness, (P. Senge, 1990). There were five central activities key to the learning organisation:

- "Encourage personal mastery or high self-efficacy": to strive for new methods and ways to do things, employees must strongly belief in that they are capable.
- "Develop complex schemas to understand work activities"; employees' needs to
  appreciate the ownership of jobs and how their behaviours would affect others in
  the organization.

- "Encourage learning in groups"; New discoveries takes place when groups brainstorming sessions
- "Communicate a shared vision for the organization as a whole"; members' needs guidance to understand the vision and goals of the company, so members could understand what they are striving for.
- "Encourage system thinking"; members of the organization needs to know their own actions and behaviours in teams would influence the organization as a whole.

## 3.3.2 MOTIVATION THEORIES: SELF-EFFICACY AND GOAL SETTING

Self-efficacy theory (Bandura, 2004) refers to an individual's belief that he or she is capable of performing a task. Less self-efficacy people gives up challenging tasks easily, high self-efficacy people will try their hardest to overcome the challenge.

Goal-setting theory is the effect of goals specified has on job or task's performance. In comparison to a vague goal, if people are given more specific goals, it acts as an internal stimulus, pushing the individual to out-perform him or herself.

Self-efficacy theory and goal setting go hand in hand to complement each other.

The joint effect is when managers set high achievable goals for high self-efficacy staff will have a better job performance; the staff will have a higher competency.

#### 3.3.3 HRD, T&D ON ORGANIZATION PERFORMANCE BACKGROUND

In the western world, training was recognized as wastage in the 18th century as labor was abundant and the labor costs were low. The attitude on training for the society changed with the introduction of machinery efficiency in the industrial revolution (Munsterberg, 1913). The labor force was discredited against the productivity of the machinery, and people started to recognize the need for training labor force to increase productivity as well. The necessity for military to select, enlist and train military personnel during the World War I also gave birth to the research for training. The continuation of research and training need were post war by the Industrial Training Acts of 1964 and 1973. The English government felt that skill shortage and inability to adapt to change give rises as a result of insufficient training (UK Government, 1964). From the definition of the UK Department of Employment at 1971, it is the systematic development of the attitudeknowledge skill behavior patterns required by an individual in order to perform adequately a given task or job. When this definition combined the meaning with development, a more specific T&D objectives is put forward: 1) develop the competences of employees and improve their performance; 2) help people to grow within the organization in order that, as far as possible, its future needs for human resource can be met from within; 3) reduce the learning time for employees starting in new jobs on appointment, transfers or promotion, and ensure that they become fully competent as quickly and economically as possible.

Training and development are closely related in academic literature. The term "training" is improving the current work skills and behaviour, whereas "development"

aims to improve the managerial capabilities in relation to future position or job. (Dowling et al, 1994). Training is a more narrow, specific and short-term meaning, while development is more broad, generic and long term. Other academic definitions for HRD like for Nadler, defines HRD as organized learning experiences provided by the employer, in a specified period of time for the purpose of increasing job performance and providing growth for individuals. For the past decade, workplace was seen as a site for education and training – an interest that generated a considerable amount of research (Boud and Garrick, 1999; Nijhof and Niuwenhuis, 2008). Workplace learning activities, and sometimes referred as "on job training activities" is viewed as a key factor behind productivity development, innovative capacity and competitiveness.

The most successful SMEs provide much more training than average (Competitiveness, 1996). Despite the emphasis on the importance of enhancing skill levels in small businesses, research into T&D in SMEs has been relatively neglected by research academics. And the critical difference for training to be successful lies in mainly attributed to the planning, execution, control, and evaluation of the training arrangements. It was discovered that the major distinguishing feature between high growth and low growth small firms was the education (MacRae, 1991), training and experience of senior managers. These studies and researches have common found that HRD plays a vital role for the success and growth in SMEs.

#### 3.3.4 TRAINING NEEDS IDENTIFICATION

There are four analyses to help identify and design the training needs for an organization. They are organization analysis, tasks analysis, person analysis and demographic analysis. (McGhee & Thayer, 1961)

"Organization analysis" is the identification of training needs alongside with corporate strategies. The training programs and plans must be executed in the same process as the business has planned. Such analysis was also confirmed by studies on productivity gaps could be closed between UK and Japanese companies by analysing their strategic view on the training policies (Brown and Read, 1984). Training needs should not be planned to benefit the individual and in turn it will benefit the organization, and training should bring value for the organization that will in turn benefit the individual (Hussey. 1985). The organization support for training activities should define the objectives of training where it should be linked to the objectives of the organization. Hence as soon as the direction and objective of an organization changes, the training and development objectives should follow accordingly.

"Task analysis" assesses the demands of respective job roles and the manner, in which they may be enhanced, enlarged, or otherwise modified to support organizational and individual goals. This will involve the collection of data about a particular job or group of jobs, examining: 1) job performance standards required; 2) knowledge, skills and attitudes (KSAs) required achieving these standards. Job descriptions may provide outlines of jobs, describing typical duties and responsibilities. Nevertheless it could change over time owing to the 1) establishment of new organizational priorities 2) modification and

enhancement of jobs by incumbents working towards personal career goals. Furthermore, job specifications may provide detailed lists of all identifiable tasks, typically stipulating the skills and attributes necessary to accomplish these tasks and defining the standards, which will determine satisfactory performance. Performance standards may be established and subsequently phrased as objectives for the job, thereby describing the conditions, targets, standards, and functional measures that represent job achievement.

"Person analysis" focuses on individual, questioning who would need training. Focusing on how well a particular individual fulfils the activities comprising his or her task role and identifying training interventions that address performance variances and promote employee development. Analysis should essentially consider not only the employee's current training needs, but also evaluate the skills required for horizontal job enlargement and vertical role integration.

"Demographic analysis" focuses in the area to identify the training needs of population of workers. For example, a survey found that younger age group (40-49), preferred management training, older age group (50-59), preferred technological training, while age group of 60 or above, did not show any interest in any types of training (Tucker, 1985). Another survey using factor analysis showed that first line supervisors has highest need in technical training (e.g. record keeping, communication); mid-level managers ranked human resources courses as most important (e.g. leadership, performance appraisals) and upper management ranked conceptual training (e.g. goal setting, company vision strategies) (Bernick, 1984).

Therefore, the relationship between organizational, task and individual objectives must be clearly recognized, and any methodology that focuses on a singular aspect must be reviewed thoroughly. In the business context of SMEs, the person analysis would be a better fit in finding out the right training and development needs for the employee. There is less number of employees in SMEs so it would be easier to deploy. The academic background of SMEs employees is usually more diverse than the larger corporations, which require entry-level positions to be university graduate students. Hence the training needs for each employee needs to be catered specifically to his/her needs.

#### 3.4 RESEARCH SCOPE AND FOCUS

SMEs' eminent need for a HR system is less than larger corporation. Also, SMEs more dependent on the competencies of human capital compared to bigger corporations. Hence more attention should be given to human resources development rather than for human resources management, human IT infrastructure hardware. Due to the limited availability of financial capital resources to SMEs, hiring the right employee and providing the right training development to build his/her competencies is especially important. It has been found that capital injected for training and development would have a positive effect for SMEs, and improve business performance (Jennings and Banfield, 1993).

This research analysis aims to provide insights in HR training and development by reviewing training and development theories, further suggests that Chinese SMEs gain direction on designing better T&D programs which directly or indirectly affects the growth of the organization. The comparison between the "training and development situation between Japan and Hong Kong SMEs is understood, and reviewed from how of employees' view how training and development practices could contribute to the growth of SMEs.

Plus this paper aims to develop an understanding whether "long term employment" would be a moderator for SMEs owners to put resources into T&D, through the comparison of the findings between Japan and Hong Kong. It would be interesting to observe such influences, as China transformed from SOEs employment to free-market employment context. While in the last century, Japan's mainstream enterprises carried job rotations, developed technical training and career development planning base on the notion of "long term employment" for an extended period of time.

Technical skills training cannot be avoided for any company from operational standpoint, but the assumption for Chinese SMEs manufacturing, it does not provide the sufficient support in management training and career development programs for its employees. Through the analysis of Japan Clocks and Watch Association (JCWA) and Grand Glory Manufacturing Limited (GGML), and Orient Watch (OW), the situation of employees' perception on T&D is investigated. More specifically, this research attempts to address the below questions:

- 1) What type of training is required for different level of employees? What is the correlation of employee's perception in training and development towards their perceived job performance?
- 2) How does HK SMEs employee perceive training and development? How strongly do employees believe training and development have effect on the success and growth of SMEs?
- 3) Would "long term employment" observed in Japanese society, set a critical environment factor in activating or moderating in training and development practices for SMEs (H1)?
- 4) What extent does motivation theories (self-efficacy & goal setting) effect on training and development (H2), and employee's competencies in SMEs (H3)?

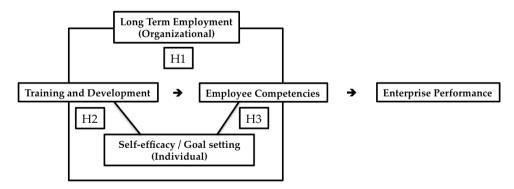


Chart 1) Organization & Individual effect on T&D, drawn by author

## CHAPTER 4. RESEARCH METHOD AND FINDINGS

Both quantitative and quality research methods were used in gathering research data. Questionnaires and face-to-face interviews were conducted with Grand Glory Manufacturing Limited (GGML), the Japan Watch and Clocks Association (JCWA), and Orient Watch. This chapter describes the market information gathering process, and provides a summarization of the findings.

# 4.1.1 JAPANESE WATCH AND CLOCKS ASSOCIATION (JCWA)

The Japan Clock & Watch Association (JCWA) was established in April 1948 as a voluntary organization for the development of the domestic horological industry. In November 1982, with the approval of the Ministry of International Trade and Industry (MITI), it was reorganized as an independent and non-profit incorporated association. A video call interview was conducted face to face with Mr Takao Sato, the General Manager in JCWA, in April 2012. The interview aims to understand the human resources training and development situation in Japanese manufacturing SMEs in watch industry. Mr Sato is very experienced in the watch and clocks industry; he also has overseas experience in working in Hong Kong during 2005. He is a Japanese and English bilingual, and interview was conducted in English. Five questions were asked surrounding the topic of human resource training and development.

# 4.1.2 RESULTS FROM JCWA

(1) For wristwatch manufacturing SMEs in Japan, how much effort (monetary /non-monetary) human resource departments puts into training and developing their employees? (腕時計の製造を行っている中小企業\*の人事部は、どの程度の努力を(直接お金がかかるもの・そうでないものを含め)従業員に対するトレーニングやディベロップメントを行っておられるのでしょうか。)\*香港では中小企業が作り、日本では大手3社と関連企業という関係があるので事情が異なるかも知れませんが、その辺も含め教えていただけますでしょうか。

Summary: Mr. Sato did not provide any numerical evidence available regarding to the small-medium enterprises. However, he did point out the big wristwatch manufacturing companies such as Citizen, Seiko, and Casio emphasize on the training and development practices. He further explained these companies do their best to hire new entry-level employees annually. This hiring process is a continuous process, no matter in bad or good the economy is, companies do their best to hire more or less employees. Hence training and development for these new employees is also a continuous process. It is very popular for these companies to have their own training and qualification systems. The process for new entry-level employees is they receive basic training from the human resources department, and most importantly is the "on job training", abbreviated by Mr. Sato as "OJT". It is very important part of the training that middle management and supervisors gives to newly onboard employees. Mr. Sato also mentions the above observation is accredited to the majority of Japanese society and companies still believes in hiring people for a very long-term. After certain number of years, these training qualifications and business experience would be recognized by internal systems and sometimes also by public organization.

(2) To what percentage of the productivity comes from human resources? What percentage comes from labor-intensive activities?

(生産性のどの程度の部分が人的資源から来るのでしょうか。 どの程度が労働集約型からきているのでしょうか。数字をと言われても困られるかも知れませんが、例えば化学が典型的な装置産業であるのと比べて、日本では時計産業はどの程度労働集約的かといったことを聞きたいのだと思います。あるいは日本では機械化が進んでおり、それほど労働集約的ではないといった事情もあるのでしょうか。 あるいは、大手3社と中小とでは異なるといった状況なのでしょうか。)

Summary: The power of Japanese manufacturing industry comes from the technology, and the capability to design lean manufacturing system, which provides the competitive advantage in terms of costs, making companies less reliant on human labour. So human resource is only one element towards to many factors that affects the productivity activities.

(3) For the wristwatch making business, what human resources development practices contributes most towards the growth of the companies? (腕時計のビジネスにおいては、どのような人材開発のプラクティスが、企業の成長に貢献しているのでしょうか)

Summary: Since OJT is very important for new entered employees, the skills and experience of the middle management, the trainer's capabilities are vitally important. The direct supervisor of the takes care of the new entry-level employee, the direct supervisor who is also the trainer, her/his management experience has important effect on the quality of the training. When employee performs their tasks with new technical skills, OJT takes places and new skills are then taught from the superior.

(4) There are many more subcontractors that supplies parts such as watch case, dial and mechanical parts for the bigger manufacturing companies, does these companies try to follow the bigger counterparts and offer similar training and development tools for the newly entry employees?

Summary: Bigger manufacturing companies in Japanese do a lot of business with smaller counterparts, that they call subcontractors (refer as SMEs). These subcontractors usually do not have the business experiences and educational training on the business and industry in comparison to their bigger contracting companies. To the understanding of Mr. Sato, these big companies invite small subcontractors once or twice a year to their office and offer training activities, to educate new knowledge and knowhow of the industry, in order to keep their subcontractors stay competitive in their products and services offering.

(5) What are the general challenges that Japanese watch making companies are facing and in specific what type of human resources training and development tools could help fight these challenges?

Summary: Due to domestic rising labor costs, many companies have shifted their production facilities to China in search for lower labor costs. The capacity of Japanese local manufacturing has now shifted to China and Hong Kong. The first challenge is the higher turnover rate Japanese companies experience in Hong Kong and China. Employees hired in Hong Kong and China tends to change jobs after one to two years, this is difficult for management to implement OJT. It is because employees left the company before the training is completed or even any experience is built up. So there is a risk in putting in resources to train new employees in foreign locations.

The second challenge for SMEs in Japanese's strong yen; in exchange to the Renminbi (RMB) has strengthened over the last decade, this post a lot of threats to SMEs when products are sold in yen and raw materials are paid in RMB if production or materials sourced in China. Third challenge is rising labor costs, facing implementation of the minimum labor wage policies in Southern China; If Japanese companies wish to shift their production facilities to other regions with lower labor costs, the challenge would be in the quality management, hence adopting the right "quality strategy" is very important. This leads to rising concern for management's capability to adapt its training needs to cater for new production region. To train people with a stringent quality mind hence becomes important for the company.

## 4.2.1 GRAND GLORY MANUFACTURING LIMITED (GGML)

The Grand Glory Manufacturing Limited (GGML) is a Hong Kong manufacturer SME of full range mid-level digital and analogue watches and a vast variety of electronic consumer products. With its strong manufacturing facilities set up and located in various places in Shenzhen, a special economic zones of the People's Republic of China. GGML supply quality-manufactured goods at extremely competitive prices to international customers. In particular, GGML's strength in the USA, Europe and South America markets. In Year 2009, the turnover was HKD \$107 million, and HKD \$89 million in 2010.

GGML believes they are in the best place for implementation of manufacturing activities, their niche: "GGML is one of the earliest Hong Kong business entities setting up their manufacturing bases in China, much earlier than the majority of the overseas manufacturing counterparts; their proximity and affinity to China; the invaluable experience gained over the years in their manufacturing operations in China and hence their strong relationship built up with suppliers. Therefore, they continue to employ their niche strategy to provide excellent value-added manufacturing OEM services to reputable customers and providing products at extremely competitive prices.

## 4.2.2 RESULTS FROM GGML

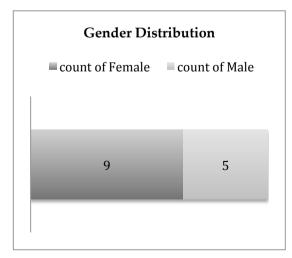
There were a total of 20 questionnaires conducted for this manufacturing company with a 70 percent response rate considering the 14 staff based in HK office. The respondents understood the purpose of the questionnaire and answered anonymously. Also the respondents answered each question individually and honestly.

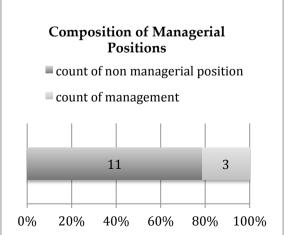
There are total of five male and nine female respondents. The average age of the respondents is thirty-eight years old. Three out of fourteen are managers whom manage over five employees. In terms of education background, eight respondents are from high school, five respondents are from college, and one respondent from master level. For the length of time working in company, four respondents has been working in the company for around six to one years, three respondents has been working for at least five to less than ten years, there are seven respondents with over ten years of working experience within the company.

Graphs shown below would give an illustration on the profile of the respondents.

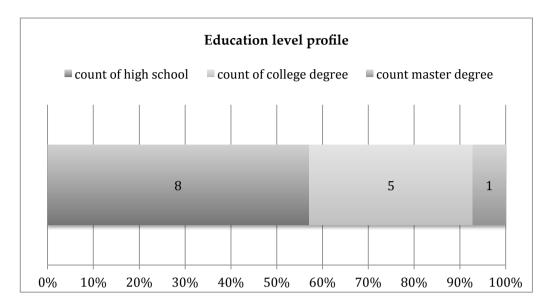
Graph A)

Graph B)

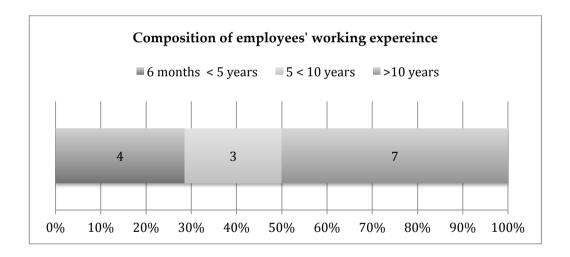




## Graph C)



## Graph D)



The Pearson analysis was carried out to find the correlation between the questionnaires questions (Appendix 1). This analysis method attempts to confirm the assumptions and questions addressed in chapter 3. Notations to short-forms; C: Competency; GS: Goal-setting theory; JS: Job Satisfaction; JC: Job Security; M: Motivation theory; P: Power & Politics; SE: Self-Efficacy theory; TC: Training & Development on Competencies; T: Training and Development.

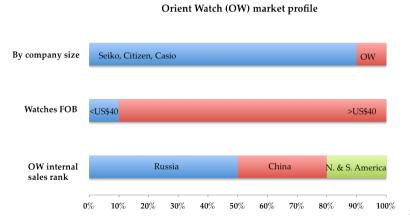
Table E) the full result of the average rating on the questionnaire responses could be below:

Question type	Question	Standard Deviation	Average rating		
JS	I like my job	0.89	3.8		
SE	I can fully utilize my potential in this job	1.22	3.4		
SE	I set challenging targets in my career	1.60	3.4		
	When it comes to difficult tasks, I think of different ways to overcome it		4.2		
SE	than to avoid it.	1.97			
	I am receptive to change, I like to learn and change my behaviour for a		4.1		
SE	better outcome	1.00			
JC	I prefer a stable career	1.30	4.0		
SE	I can achieve better than rest of my colleagues if I try hard enough	1.25	3.8		
JS	I have a good working relationship with my supervisor	1.04	4.0		
С	I fulfil my supervisor's expectations most of the time	0.84	3.6		
M	I am motivated in my job	0.97	3.8		
	There is very minimal power and politics in my job and it does not affect		3.6		
P	me very much	0.84			
	I understand my organization's goals and directions, so I know how to		3.4		
GS	contribute	1.28			
JS	I have enough leisure time with my current job.	1.05	3.8		
	There is reasonable guidance for career development in this organization		2.6		
T		1.08			
T	My company has basic training on industry, and business knowledge	1.07	3.1		
	I receive adequate training and development knowledge from the				
T	organization	1.12	2.8		
	Training and development is important, especially in labour intensive				
T	watch-making industry	0.86	4.1		
	With proper training and development guidance, anyone can be good at				
T	their job	0.73	4.3		
T	Most effective training and development is on job training	0.73	4.3		
TC	I like to change my behaviour, for better performance in my job	0.92	3.9		
	My competency increase with the help of training and development				
TC	programs	0.80	4.2		
T	My organization emphasize on training and development	1.17	2.9		
	Through training and development practices, it has a direct positive				
TC	effect on my job performance	0.77	4.1		
	My job performance is very important towards the organization's				
С	success and growth	1.22	3.4		
	Training and development is one of the most important human				
T	development practices to increase my job performance	0.78	4.0		
	My organization supports employees to take vocational training and				
T	development courses	1.28	3.4		
	The HR department in my organization plays an active role in training				
T	and development for employees	1.24	3.0		
	Training and development is a continuous process, which contribute to				
Т	long-term growth of the company	0.65	4.5		

#### 4.3.1 ORIENT WATCH

Orient Watch (OW) is a small Japan watchmaker, "SME" relative to larger competitors (Seiko & Casio). With headquarters in Japan, Mr. Shogoro Yoshida established the company, and he had started the stand watch initially, then wristwatch. Orient Watches' strength is producing own mechanical movement by themselves. They kept their appeal mechanical watch as Japan maker. The company is a "nicher", but offers good Japanese quality movement. Orient Watch's annual profit is JPY ¥155,000,000. Long time ago in Russia, Orient's brand awareness was number one with their merchandise coming from Asia to Russia. Orient has more fashion brand like Guess or Split, and more expensive brand like Swiss-maker. But Orient has big percentage of the market share in Russian than Seiko and Citizen at least.

Orient Watches' main product is mechanical middle range wristwatch with price range over USD \$40 FOB, and ships 13,000 pieces to US, but 90% of it are the very cheap line with FOB USD\$19-30, and these kinds of watches were sold in bazaar (*shoutengai 商店* 街). Orient Watches have not done any marketing in US so far. It would be very important to do for Orient for them to expand in the America market. The internal selling rank is 1) Russia 2) China 3) South and North America.



Source: OW, drawn by author

## 4.3.2 ORIENT WATCH INTERVIEW SUMMARY

With regards to the human resource, there are about one hundred people in the headquarters in Tokyo, with three staff in the human resource department. Over half of the employees are in their 40's age in the management level. All of the management level employees are at least university graduates. The subject of research, Ms Nakabo, who is a Sales Manager, has been working for the company a little over 5 years.

Regards to "training and development" related topic, Orient watch did not offer any T&D to its employees. She is the youngest employed compared to her colleagues and there is no official training received since she got on-board. Ms Nakabo mentioned "long-term" employment in Japan nowadays does not mean so much for the younger generation (still 20's). Regardless, Ms Nakabo stated if she gets promoted and supervises new subordinates, she is very willing to provide T&D for them. Ms Nakabo believes through a more formal on the job training (OJT), her subordinates could perform better.

## CHAPTER 5. RESEARCH ANALYSIS

This chapter analyzes the qualitative and quantitative data provided by JCWA and questionnaires results from GGML with the review from previous literature and theories, plus findings from Pearson analysis on GGML response questions.

# 5.1 JCWA ANALYSIS

Mr. Sato mentioned about big companies staffing strategy to hire fresh graduates yearly prove a lot of recruiting effort and resources for larger companies invested for new staff. This long-term driven strategy is executed regardless of the economy, so that there is a continuous inflow of new fresh graduates, with no working experience. These newly hired employees would require training and development before they become competent in performing their job task. Albeit the lack of quantitative data from Mr. Sato, the situation could be inferred from his comment on Japanese companies usually have their own qualification systems for the training they provide to employees in general.

Subsequently, Mr. Sato described Japan society has a unique "long-term employment" notion. It should be generally believed that this should act as a strong motivation for SMEs management to offer T&D. This also provides an assumption on Japan's companies behaviors and attitudes in implementing T&D, no matter large or SMEs would be more devoting to T&D, and career planning advices to their employees. The "returns" could be seen from the value of knowledge and experiences built and accumulated the in the employee's prolong employment in the company. This was the assumption as one of the environmental factors that affects HRD practitioners in SMEs to implement T&D.

Mr. Sato stated that "On Job Training" is one of the most significant HR development practices very important for the newly hired staff. The supervisor and the middle management of the company carry out OJT. In comparison to larger organizations, where training is the responsibility of the HR department, SMEs' training is done by the owner, or trained by upper management whom is abundant in business knowledge and industry experience.

There are regular training seminars and activities conducted annually by bigger enterprise for the subcontractors (SMEs). This provides an insight about the relationships between larger corporations and smaller enterprises. It reaffirms with the business-operating environment in Japan for SMEs, those chains of companies in similar lines of business form keiretsu (系列), and smaller SMEs form kyoudoukumiai. Such business alliances form strong bonds. Bigger corporations would share their resources, HR development resources in technical training are also shared to educate and train smaller subcontractors. Japan SMEs could also enjoy the benefits of economies of scale in training and development of their employees through such invitations the training seminars, lowering transaction costs, and decreasing the burden of internal capital for T&D, leaving more resources for possible of management training development.

From Mr. Sato reply to SME's general HRM challenges question, the costs of labor and higher turnover rate of the Japanese companies facing in overseas operations in Hong Kong and China, presents a general challenge for SMEs which are also challenges faced by HK SMEs staffing in mainland China, an internal struggle to allocate resources between recruitment, retaining and training new staff.

## 5.2 GGML ANALYSIS

The average rating in both "training on competencies" questions, (Q21 & Q23) are highly positive, 4.2 and 4.1. From this employees perceive training and development practices would have a direct effect on increasing their competence. There is also high rating of 4.5 on "continuous training" question (Q28), this figure was the highest average rating amongst all of the response, where employees believe T&D should be a continuous process. However rating for "competency on firms' success" question (Q24) is average. Employees did not see the linkage between their competencies towards the overall organization's success. Despite knowing T&D would aid employees to do a better job, managers were ill to react to such training and development needs as further explained in below.

The average rating for both "basic training from organization" questions (Q15 and Q16) is neutral, 3.1 and 2.8 respectively. In reviewing "training and development" question (Q22), the response rating's average is 2.9. When T&D in SMEs is specifically asked: "My organization emphasize on training and development", the average response was neutral with rating of 3. It does not incline to show any preference from the employee on GGML current training and development practices pose positive impacts on employees. When the "training and development" (T&D) (Q14 & Q16) question is asked from another perspective, they together scored a relatively lower rating compared with other questions, rating only 2.6 and 2.8 respectively, implying the employees believes this company is generally insufficient in guidance on career planning, training and development.

On the other hand, "goal-setting" (Q12) has a strong correlation (R²= 0.90) with "competency on firms' success" (Q24). This means the better the employee understands about the goals and direction of the company, the more important that employee would perceive on their contribution to the company's success.

Intrigue findings on relationships between "competency" (Q9), "self-efficacy (SE)" (Q2, Q3, Q4, Q5 & Q7), "goal-setting (GS)" (Q12), and "on job training (OJT)" (Q19). The relationship is illustrated in below Table 1. "Self-efficacy" positively correlates with "competency" (R²=0.72). "Self-efficacy" also positively correlates with "T&D" (R²=0.52). The higher employees believe they could fulfill their tasks, the higher they believe they could improve their competency through job training and development. However, "self-efficacy" & "goal setting" negatively correlates with "T&D's OJT" (R²= -0.1; -0.28). From this research analysis, it confirms the strong positive effects of self-efficacy towards T&D and on the effects employees' competency; however it is surprising that its effect on OJT is negative.

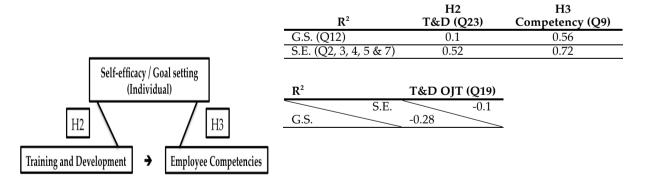


Table 1) Pearson correlations between SE, GS to T&D and Competency, by author's analysis

## CHAPTER 6. CONCLUSION AND RECOMMENDATIONS

This chapter combines research analysis. Subsequently, it derives how the study could provide recommendations for HRD practitioners for HK manufacturing SMEs.

SMEs in Hong Kong manufacturing face various challenges as they move into second decade of the twenty-first century. The labour market has become more volatile with rising labour cost in the region, competition for labour, as people job mobility has increased to switch jobs not only between industries, but also transnational across borders. This implies more challenges for the HRD practitioners and SMEs management when they design T&D programs. To develop HRD strategy and execute T&D are of most complex issues under HRM. Nevertheless, HRD should not be ignored nor under-minded, as pointed out from a research by Jennings and Banfield, resources invested into T&D for employees have positive effect for the SME's performance.

The ability to identify the environmental and organizational factors that incentivize SMEs to implement T&D could provide insights for further research. And to understand employee's perception on types of T&D using on increasing competencies critical to company's success is important for HRD practitioners in designing the right training tools.

The limits of the study notwithstanding are constrained to the three research subjects and comments from individuals representing them. It confines the representation of this research paper only to the Asia Pacific region.

Recommendation 1: Long-term employment is not a moderator in T&D implementation; hence it's an irrelevant concern for HK SMEs. From the observation of Japanese business alliance, the formation of keireitsu and kyoduokumiai could be a high potential environmental factor incentivizing SMEs owners to practise T&D.

From the research on JCWA comments from Mr. Sato, that long-term employment was suggested to be unique to Japanese organization hiring culture. This could be commonly alleged that Japan SMEs owners would be more incline to offer T&D to their employees. However, from GGML research analysis, overall half of employees in GGML have ten or more years of working experience in this company, majority of them believes they will work in GGML for a very long period of time, but they stated T&D is still insufficient. Additionally, according to Ms Nakabo, there is no T&D in her company management. She further mentioned long-term employment is not common for younger generation today. Long-term employment does not proof to be an environmental factor moderating SME's management in T&D implementation.

However, as seen from Japanese SMEs business alliance, such business-operating environment supports the SMEs with a low transaction costs competitive advantage. These relationships could be potential moderators for having a suitable training and development environment, which needs to be investigated further.

Recommendation 2: For middle management, SMEs owners should demonstrate leadership by setting goals in line with organization's business directions to increase employees' understanding of business goals. SMEs HRD practitioners could use "needs analysis" could use to identify the appropriate training needs.

From the research analysis on HK SMEs, "goal setting" correlates highly positive with "competency on firm's success", this has an important implication for HK SMEs owners or entrepreneurs lacking. It gives directional insight for HRD practitioners, they need to check employees' understanding towards overall company's business goals, visions in order to design better training programs to suit for these business goals.

SME management or HRD practitioners must take the initiatives to cascade down the company's business goals from top management to middle, and middle to entry-level employees.

From research analysis on Japanese watch organizations, "OJT" is both recognized by Mr Sato (JCWA) and Ms Nakabo (Orient Watch) as important HRD practices for companies when implementing T&D. Entry-level employees should be given sufficient technical training and develop their management skills. Herein SMEs, "needs analysis" becomes very effective for the direct supervisor or the management to identify the training needs of the individuals to design the T&D needs catered towards the capability of the individual and skills necessity required from the tasks.

Recommendation 3) Different levels of self-efficacy have different requirements on the types of training and development tools fit for increasing employees' competencies. HRD practitioners must understand the intensity of self-efficacy to design the best T&D tools.

From social learning and self-efficacy theory, and in GGML research analysis, the effect of self-efficacy towards T&D effect on competencies is found and applied. As self-efficacy show negative correlation towards OJT, the relationship of the intensity self-efficacy on T&D needs to be further investigated.

From the research analysis, employee with higher self-efficacy, OJT is perceived not to be useful to them. A probable explanation to this plausible finding if self-efficacy is too high, employees might feel they do not need to be trained, as they believe they are already capable of performing any given on the job training task, when high self-efficacy staff are over confident they could out-perform the task or job of the supervisor, so they do not think the OJT given by their direct supervisor useful. Before designing the structure of T&D, HRD practitioners should assess levels of self-efficacy to offer the right types of training in order to gain the maximum performance.

## **REFERENCES:**

- [1] A. Bandura. (1977). "Social Learning Theory".
- [2] A. Bandura. (2004). "Cultivate Self-efficacy for Personal and Organizational Effectiveness" in E. Locke (ed.), Handbook of Principle of Organization Behavior (Malden, MA: Blackwell), pp. 120-36.
- [3] A.R. Anderson, J. Li, R.T. Harrison and P.J.A. Robson. (2003). "The increasing role of small business in the Chinese economy, Journal of Small Business Management 41(3) 310–316"
- [4] Abegglen. (1958). "Small but not independent: SMEs in Japan"
- [5] Amy K. Glasmeier. (1994). "Flexibility and Adjustment, The Hong Kong Watch industry and global change"
- [6] Amba-Rao, S. C. and Pendse, D. (1985). "Human Resource Compensation and Maintenance Practices." American Journal of Small Business, Fall, pp. 19-29."
- [7] Bartram, Dave, Patricia A. Lindley, Linda Marshall and Julie Foster, (1995), 'The Recruitment and Selection of Young People by Small Businesses', Journal of Occupational and Organizational Psychology 68(4), 339–358"
- [8] Bernick, E. L. Kindley, R., Pettit, K.K. (1984). "The structure of training courses and the effects of hierarchy. Pub. Personnel Manage."
- [9] Black, Sandra and Lisa M. Lynch. (1996). "Human Capital Investments and Productivity', American Economic Review 86(2), 263–268."
- [10] Boud, D. and Garrick, J. (Eds.). (1999). "Understanding Learning at Work, Routledge, London"
- [11] Boyatzis, R. (1982). "The Competent Manager ± A Model for Effective Performance, John Wiley & Sons, New York, NY"
- [12] B.F. Skinner. (1971). "Contingencies of Reinforcemnet"
- [13] Brown, C., J. Medoff. (1989). The employer size-wage effect. J. Politi-cal Econom. 97 1027–1053."
- [14] China SME Club. (2007). "The status quo and statistics of China's small and medium-sized, China Small Business Club."
- [15] Cassell, Catherine, Sara Nadin, Melanie Gray and Chris Clegg. (2002). "Exploring Human Resource Management Practices in Small and Medium Sized Enterprises, Personnel Review 31(5/6), 671–693."
- [16] Dowling, P.J., Schuler, R.S. and Welch, D. (1994). "International Dimensions of Human Resources Management, 2nd ed., Wadworth, New York, NY"
- [17] Federation of Swiss Watch Industry, (2011), "The Swiss and world watch making industry in 2011"
- [18] Golhar, Damodar Y. and Satish P. Deshpande. (1997). "HRM Practices of Large and Small Canadian Manufacturing Firms', Journal of Small Business Management 35(3), 30–38"
- [19] Henemani, Herbert G. and Robyn A. Berkley. (1999). 'Applicant Attraction Practices and Outcomes among Small Businesses', Journal of Small Business Management 37(1), 53–74.

- [20] H.M. Weiss. (1990). "Learning Theory and Industrial and Organizational Psychology" in "Handbook of Industrial and Organizational Psychology, 2ed"
- [21] Hiroki Kawai & Shujiro Urata. (2002). "Entry of Small and Medium Enterprises and Economic Dynamism in Japan"
- [22] Hornsby, Jeffrey S. and Donald F. Kuratko. (2003). "Human resource management in U.S. small businesses: a replication and extension', Journal of Developmental Entrepreneurship 8(1), 73–92."
- [23] Hugo Munsterberg. (1913). "Psychology and industrial efficiency"
- [24] Information Services Department Hong Kong Trade Development Council, (2011). "Trade and Industry"
- [25] Jennings, P.L. and Banfield, P. (1993). Improving Competence in Small Firms. Paper presented at the 16th National Small Firms Policy and Research Conference, Nottingham: The Nottingham Trent University
- [26] Li Xue Cunningham, (2011). "SMEs as motor of growth: A review of China's SMEs development in thirty years (1978–2008)"
- [27] Luc Sels, Sophie De Winne, Jeroen Delmotte, Johan Maes, Dries Faems, Anneleen Forrier. (2006). "Linking HRM and Small Business Performance: An Examination of the Impact of HRM Intensity on the Productivity and Financial Performance of Small Businesses"
- [28] McGehee, W. and Thayer, P.W. (1961). "Training in Business and Industry, John Wiley & Sons Inc., New York, NY."
- [29] MacMahon, Juliet. (1996). "Employee Relations in Small Firms in Ireland: An Exploratory Study of Small Manufacturing Firms', Employee Relations 18(5), 66–80"
- [30] Macrae, D. (1991). "Characteristics of High and Low Growth Small and Medium-Sized Businesses"
- [31] Matlay, Harry. (1997). "The Paradox of Training in the Small Business Sector of the British Economy', Journal of Vocational Education and Training 49(4), 573–589."
- [32] Nijhof, W.J. and Nieuwenhuis, L.F.M. (Eds) (2008), "The Learning Potential of the Workplace, Sense Publishers, Rotterdam."
- [33] P. Senge. (1990). "The Fifth Discipline: (New York: Doubleday), The Art and Practisei of the learning organization"
- [34] Poole, M. and Jenkins, G. (1998). "Human Resource Management and the Theory of Rewards: Evidence from a National Survey, British Journal of Industrial Relations, 36(2): 227-47."
- [35] Stephen P. Robbins & Timothy A Judge, (2008). "Essentials of Organization Behavior, Ninth edition"
- [36] Tucker, (1985). "A Study of training needs of older workers: implication for human resources development planning. Public Personnel Manage"
- [37] UK Government. (1964). "Industrial Training Act"
- [38] Yano Research Institute. (2010). "Watch and Clock Market in Japan: Key Research Findings 2010"

# **APPENDIX**

# QUESTIONNAIRE

Thank you very much for taking the time to fill out this survey. The survey is about the study of human resources training and development's impact on the job performance in Small-Medium manufacturing companies. The conductor of this survey has no affiliation with your company/employer. Your response will remain fully confidential and only be used as data in an academic research, and it will not influence your employment in any way.

## Section I: This section collects some basic demographic information about you.

l: Age
□ 20 or younger □21~25 □ 26~30 □ 31~35 □36~40 □41~45 □46~50 □51 or older
II: Gender □ Male □ Female
III: Are you currently a manager? $\square$ Yes $\square$ No (Skip Q4)
IV: How many subordinates do you manage?
□ none □ 1-5 □ 6-10 □ More than 10 Other:
V: What is the highest level of education you completed?
□ High School □College/University/Technical Institute
□ Graduate School (Masters/Ph.D. Degree) □Other:
VI: How long have you been working in your current company?
$\square$ 6 months or less $\square$ 6 months~1 year $\square$ 1~2 years $\square$ 2~5 years $\square$ 5~10 years
□10 years or more

#### Section II

This part of the survey is to find out **how you view towards Human Resources Development**Training techniques influence on the job performance. Please think about each of the following statement as an independent situation/scenario. Use the following scale rate (circle one of the figures from 1 to 5) to what extent do you agree with each question.

## 1. Very Unlikely 2. Somewhat Unlikely 3. Neutral 4. Somewhat Likely 5. Very Likely

## Part A: General Questions

1. (JS): I like my job	12345
2. (SE): I can fully utilize my potential in this job	12345
3. (SE): I set challenging targets in my career	12345
4. (SE): When it comes to difficult tasks, I think of different ways to overcome it than to avoid it	12345
5. (SE): I am receptive to change, I like to learn and change my behaviour for a better outcome	12345
6. (JS): I prefer a stable career	12345
7. (SE): I can achieve better than rest of my colleagues if I try hard enough	12345
8 (JS): I have a good working relationship with my supervisor	12345
9 (SE): I fulfil my supervisor's expectations most of the time	12345
10 (M): I am motivated in my job	12345
11 (P): There is very minimal power and politics in my job and it does not affect me very much	12345
12 (GS): I understand my organization's goals and directions, so I know how to contribute	12345
13 (JS): I have enough leisure time with my current job	12345
14 (T): There is reasonable guidance for career development in this organization	12345

# Part B: Training and Development Questions

15 (T): My company has basic training on industry, and business knowledge	12345
16 (T): I receive adequate training and development knowledge from the organization	12345
17 (T): Training and development is important, especially in labour intensive watch-making industry	12345
18 (T): With proper training and development guidance, anyone can be good at their job	12345
19 (T): Most effective training and development is on job training	12345
20 (TC): I like to change my behaviour, for better performance in my job	12345
21 (TC): My competency increase with the help of training and development programs	12345
22 (T): My organization emphasize on training and development	12345
23 (TC): Through training and development practices, it has a direct positive effect on my job performance	12345
24 (C): My job performance is very important towards the organization's success and growth	12345
25 (T): Training and development is one of the most important human development practices to increase my job performance	12345
26 (T): My organization supports employees to take vocational training and development courses	12345
27 (T): The HR department in my organization plays an active role in training and development for employees	12345
28 (T): Training and development is a continuous process, which contribute to long-term growth of the company	12345

Section III: Please list your 3 main reasons for working in current small-medium	
manufacturing company.	

Most Important Reason:
2 <sup>nd</sup> most important reason:
3 <sup>rd</sup> most important reason:

Thank you very much for participating in this survey!

	JS	SE	SE	SE	SE	JC	SE	JS	С	M	P	GS	JS	T	T	Т	T	T	T	T C	T C	Т	TC	С	Т	T	T	T
JS	1.00	0.58	0.33	0.06	0.10	0.40	0.16	0.50	0.40	0.30	0.50	0.14	-0.13	0.23	0.02	0.18	-0.26	-0.25	-0.02	-0.21	0.07	-0.03	0.16	0.08	0.33	-0.32	-0.14	0.07
SE	0.58	1.00	0.74	0.18	0.29	0.29	0.32	0.73	0.68	0.73	0.09	0.73	-0.34	0.30	0.33	0.35	-0.43	-0.41	-0.41	0.24	-0.34	0.53	0.09	0.56	0.24	0.32	0.51	-0.19
SE	0.33	0.74	1.00	0.54	0.66	0.44	0.69	0.83	0.85	0.84	0.33	0.72	-0.09	0.21	0.39	0.43	-0.21	-0.16	-0.29	0.44	0.06	0.48	0.39	0.68	0.25	0.37	0.43	0.11
SE	0.06	0.18	0.54	1.00	0.70	0.61	0.86	0.46	0.57	0.54	0.10	0.49	0.35	-0.07	0.13	0.19	0.23	0.34	0.23	0.71	0.53	0.10	0.67	0.51	0.30	0.11	0.00	0.42
SE	0.10	0.29	0.66	0.70	1.00	0.77	0.88	0.67	0.77	0.57	0.31	0.28	0.31	0.45	0.57	0.63	0.08	0.18	-0.03	0.68	0.36	0.27	0.79	0.29	0.49	0.09	0.12	0.53
JC	0.40	0.29	0.44	0.61	0.77	1.00	0.71	0.51	0.63	0.42	0.35	0.09	0.28	0.22	0.28	0.42	-0.07	0.00	0.00	0.39	0.37	0.00	0.69	0.19	0.60	-0.14	-0.14	0.45
SE	0.16	0.32	0.69	0.86	0.88	0.71	1.00	0.59	0.72	0.53	0.21	0.44	0.25	0.17	0.36	0.40	0.03	0.16	-0.01	0.72	0.36	0.19	0.67	0.46	0.31	0.01	0.05	0.33
JS	0.50	0.73	0.83	0.46	0.67	0.51	0.59	1.00	0.88	0.76	0.44	0.46	0.00	0.41	0.55	0.66	-0.17	-0.20	0.00	0.49	0.18	0.44	0.58	0.37	0.57	0.12	0.24	0.34
С	0.40	0.68	0.85	0.57	0.77	0.63	0.72	0.88	1.00	0.84	0.46	0.56	0.08	0.27	0.46	0.48	-0.24	-0.07	-0.20	0.46	0.12	0.34	0.56	0.51	0.47	0.15	0.22	0.35
M	0.30	0.73	0.84	0.54	0.57	0.42	0.53	0.76	0.84	1.00	0.37	0.81	0.18	0.29	0.46	0.45	-0.05	0.09	-0.12	0.41	0.16	0.58	0.45	0.78	0.40	0.57	0.51	0.30
P	0.50	0.09	0.33	0.10	0.31	0.35	0.21	0.44	0.46	0.37	1.00	-0.09	0.43	0.27	0.29	0.32	0.18	0.05	0.18	-0.23	0.58	-0.06	0.32	0.06	0.35	-0.20	-0.29	0.49
GS	0.14	0.73	0.72	0.49	0.28	0.09	0.44	0.46	0.56	0.81	-0.09	1.00	-0.11	0.04	0.20	0.11	-0.12	0.05	-0.28	0.42	-0.16	0.60	0.10	0.90	0.00	0.65	0.63	-0.14
JS	-0.13	-0.34	-0.09	0.35	0.31	0.28	0.25	0.00	0.08	0.18	0.43	-0.11	1.00	0.33	0.42	0.41	0.63	0.59	0.59	0.30	0.79	0.04	0.52	0.06	0.37	0.07	-0.12	0.62
Т	0.23	0.30	0.21	-0.07	0.45	0.22	0.17	0.41	0.27	0.29	0.27	0.04	0.33	1.00	0.82	0.82	0.31	0.04	0.04	0.28	0.18	0.44	0.34	-0.07	0.36	0.12	0.29	0.27
Т	0.02	0.33	0.39	0.13	0.57	0.28	0.36	0.55	0.46	0.46	0.29	0.20	0.42	0.82	1.00	0.91	0.24	0.07	0.17	0.55	0.25	0.69	0.45	0.22	0.55	0.31	0.41	0.39
Т	0.18	0.35	0.43	0.19	0.63	0.42	0.40	0.66	0.48	0.45	0.32	0.11	0.41	0.82	0.91	1.00	0.11	0.08	0.27	0.58	0.31	0.62	0.66	0.12	0.70	0.23	0.33	0.47
T	-0.25	-0.41	-0.16	0.34	0.18	0.00	0.16	-0.20	-0.07	0.09	0.05	0.05	0.59	0.04	0.07	0.08	0.30	1.00	0.56	0.26	0.42	0.14	0.47	0.22	0.27	0.35	0.17	0.65
T	-0.25	-0.41	-0.16	0.34	0.18	0.00	0.16	-0.20	-0.07	0.09	0.05	0.05	0.59	0.04	0.07	0.08	0.30	1.00	0.56	0.26	0.42	0.14	0.47	0.22	0.27	0.35	0.17	0.65
T	-0.02	-0.41	-0.29	0.23	-0.03	0.00	-0.01	0.00	-0.20	-0.12	0.18	-0.28	0.59	0.04	0.17	0.27	0.42	0.56	1.00	0.26	0.68	0.05	0.47	-0.12	0.54	-0.06	-0.17	0.65
TC	-0.21	0.24	0.44	0.71	0.68	0.39	0.72	0.49	0.46	0.41	-0.23	0.42	0.30	0.28	0.55	0.58	0.11	0.26	0.26	1.00	0.23	0.49	0.67	0.37	0.43	0.29	0.34	
TC	-0.03	-0.34	0.06	0.53	0.36	0.37	0.36	0.18	0.12	0.16	-0.06	-0.16	0.79	0.18	0.25	0.31	-0.13	0.42	0.68	0.23	-0.13	-0.13	0.57	-0.01	0.37	-0.17	-0.39	0.66
TC	0.16	0.09	0.48	0.10	0.27	0.69	0.19	0.58	0.54	0.45	0.32	0.10	0.52	0.44	0.45	0.66	0.08	0.14	0.47	0.49	0.57	0.28	1.00	0.03	0.42	0.09	0.00	0.77
С	0.08	0.56	0.68	0.51	0.79	0.09	0.46	0.37	0.51	0.43	0.06	0.10	0.06	-0.07	0.43	0.00	-0.13	0.47	-0.12	0.37	-0.01	0.63	0.19	1.00	0.76	0.09	0.61	0.05
T	0.33	0.24	0.08	0.31	0.29	0.60	0.40	0.57	0.47	0.40	0.35	0.90	0.37	0.36	0.55	0.70	-0.13	0.22	0.54	0.43	0.37	0.42	0.76	0.16	1.00	0.73	0.01	0.75
T	-0.32	0.24	0.23	0.30	0.49	-0.14	0.01	0.12	0.47	0.40	-0.20	0.65	0.07	0.36	0.33	0.23	-0.11	0.27	-0.06	0.43	-0.17	0.42	0.09	0.73	0.15	1.00	0.10	0.09
T	-0.14	0.51	0.43	0.00	0.12	-0.14	0.01	0.12	0.13	0.51	-0.29	0.63	-0.12	0.12	0.31	0.23	-0.22	0.33	-0.17	0.23	-0.39	0.74	0.00	0.73	0.15	0.87	1.00	0.00
T	0.07	-0.19	0.43	0.42	0.53	0.45	0.33	0.34	0.35	0.30	0.49	-0.14	0.62	0.27	0.39	0.47	0.27	0.65	0.65	0.32	0.66	0.10	0.77	0.05	0.75	0.09	0.00	1.00
							d Clas						5.02	J. <u></u>	3.03	3.17	J.2.	3.00	3.00	3.02	3.00	5.10	J., ,	0.00	00	3.03	2.00	1.00

Pearson correlation results from Grand Glory Manufacturing Limited