# THE INFLUENCE OF STRATEGIC HUMAN CAPITAL ON ORGANISATIONAL PERFORMANCE OF MANUFACTURING ORGANISATIONS IN MALAYSIA

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# THE INFLUENCE OF STRATEGIC HUMAN CAPITAL ON ORGANISATIONAL PERFORMANCE OF MANUFACTURING ORGANISATIONS IN MALAYSIA

by

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# PENGARUH MODAL INSAN STRATEGIK TERHADAP PRESTASI ORGANISASI PEMBUATAN DI MALAYSIA

#### **ABSTRAK**

Kajian ke atas modal insan strategik dalam kalangan syarikat pembuatan Malaysia adalah sangat penting untuk pertumbuhan ekonomi. Ini adalah kerana dalam sektor pembuatan, penyerapan dan keupayaan pembelajaran teknologi adalah sangat terhad kerana ia dihalang oleh pekerja asing separuh mahir. Oleh itu, modal insan strategik adalah unsur yang sangat berguna untuk memastikan teknologi yang penting dan relevan diserap dan digunakan. Khususnya, kajian ini bertujuan untuk mengkaji kesan orientasi pembelajaran, konfigurasi sumber manusia dan modal sosial ke atas modal insan strategik dalam meningkatkan prestasi organisasi. Selain memahami faktor-faktor yang terlibat dalam penghasilan modal insan strategik, strategi pengetahuan sebagai pembolehubah perantara telah disemak sebagai elemen yang menguatkan hubungan antara modal insan strategik dan prestasi organisasi. Data dikumpulkan daripada 164 responden melalui borang soal selidik yang dirangka berpandukan tinjauan kajian dan dipra-uji oleh pengurus HR dan pakar akademik. Data telah dianalisa dengan menggunakan model persamaan struktur Smart PLS. Dapatan kajian ini menunjukkan bahawa orientasi pembelajaran, konfigurasi sumber manusia dan modal sosial memainkan peranan dalam modal insan strategik. Strategi pengetahuan menjadi pembolehubah perantara untuk hubungan antara prestasi organisasi dan modal insan strategik dan didapati bahawa aspek kewangan prestasi organisasi perlu diberi perhatian yang lebih. Kajian ini menyumbang dari segi teori dan praktikal terutamanya dengan mengenalpasti elemen yang mewujudkan modal insan strategik dan konstruk yang akan menguatkan hubungannya dengan prestasi organisasi. Batasan kajian telah dijelaskan dan cadangan untuk kajian masa depan juga dibentangkan.

# THE INFLUENCE OF STRATEGIC HUMAN CAPITAL ON ORGANISATIONAL PERFORMANCE OF MANUFACTURING ORGANISATIONS IN MALAYSIA

#### **ABSTRACT**

Research on strategic human capital among Malaysian manufacturing companies is very important for the growth of the economy. This is because in manufacturing sector, the absorption and learning ability of technology is very limited as it is hindered by semi-skilled foreign workforce. As such, strategic human capital is a very useful element to ensure that the crucial and relevant technology is absorbed and utilized. Specifically, this study attempts to examine the impact of learning orientation, human resource configuration and social capital towards strategic human capital in enhancing the organisational performance. Aside from understanding the factors that trigger strategic human capital, knowledge strategy as the moderator is examined as the element that strengthens the relationship between strategic human capital and organisational performance. Data was collected from 164 large manufacturers via survey questionnaire developed from related literature and pretested by HR managers and academic experts. The data was analysed using partial least square-structural equation modelling via Smart PLS. Findings indicated that learning orientation, human resource configuration and social capital plays a role in strategic human capital. Knowledge strategy moderates the relationship between organisational performance and strategic human capital and it is found that more attention is paid to the financial aspect of organisational performance. This study makes both theoretical and practical contribution by identifying the elements that

create strategic human capital and what construct strengthens its relationship with organisational performance. Limitations of the study were explained and suggestions for future study were also presented.

#### Chapter 1

#### Introduction

#### 1.0 Introduction

Chapter 1 presents the background of the study, which comprises the research background, research problem, research objectives, research questions, scope of the study, significant of the study and the structure of the following chapters.

#### 1.1 Background of Study

The study on strategic human capital started in the strategic human resource management literature and also the "the strategic factor market and resource-based theory literature within strategic management" (Brymer, Molloy & Chadwick, 2015). Human capital is often studied at the individual level. It is the stock of knowledge, skills, abilities and other characteristics of an individual (Coff & Kryscynski, 2011) and it should provide a certain economical value to the individual. Strategic human capital (SHC) provides economical value not only for the individual but also for the organisation. Strategic human capital has been linked to education from the strategy approach (Hatch &Dyer, 2004).

Human capital studied in the Malaysian context, especially among Malaysian government departments are often explained as a form of resource that presents sustained performance. Several terminologies on human capital are utilized amongst the studies concerning strategic studies and human capital. In reports from the Department of Statistics of Malaysia utilize different terms for human capital. Skilled workers and talents described in the 11<sup>th</sup> Malaysia Plan and the New Economic Model for Malaysia refers to individuals with "Higher Qualifications" that will provide sustainability. The Productivity Report (2016) mentions that human capital is

employed for sustained performance. The explanations for human capital, skilled workers, talents in these reports and studies are defined to allow sustainability and it reflects the definition of strategic human capital. Hence, this study submits that terminology associated with human capital, skilled workers and talent that is defined as a tool for sustainability, is strategic human capital.

Studies on strategic human capital is rather limited in the Malaysian scene even though human capital research in the Malaysian context has been sufficient, several scholars have investigated the impact of human capital on economic growth in the Malaysian context (Arphan & Yap, 2016; Muhamad, Sulaiman & Sanusi, 2012; Ismail, Kunasegeran & Rasdi, 2014; Samad,2013). Another limitation on the Malaysian scene is that despite there are several researches and studies on manufacturing, the majority of it focuses on manufacturing organisations among Small Medium Enterprises (SMEs) (Yusoff, Imran, Qureshi & Kazi, 2016).

Commonly, skills, talent, education and innovation represent human capital and it possesses the ability of achieving sustainable growth and development (Shakar & Aslam, 2015). With possession of the attributes mentioned above, strategic human capital can be viewed as an important player in a country's economic growth (Olimpia, 2013; Su &Yao, 2016; Florida, Lee & Gates, 2010). The notion of strategic human capital playing a role in growth has been postulated for some time. Scholars like Romer (1986) and Lucas (1988) have inferred that strategic human capital encourages long run growth (as cited by Maitra, 2016).

As strategic human capital plays a big part in economic growth, it inevitably plays a very important role in organisation performance. Similar to the economic growth aspect, scholars have found that a firm's performance is very much influenced

by the stock of human capital they possess (Hsu, 2008; Marimuthu, Arokiasamy & Ismail, 2009; Crook, Combs, Todd & Woehr, 2011, Mahsud, Yuki & Prussia, 2011; Brinkman, Dew, Grichnik, Haug & Read, 2012; Felicio, Couto, & Caiado, 2014; Samagaio & Rodrigues, 2016). Manufacturing organisations are not exempted from its dependency towards strategic human capital. A study conducted by the Economic Planning Unit (2014) has found that several manufacturing organisations in Malaysia have constrained growth due to the lack of talent.

That being said, it is presumed that the manufacturing sector itself depends on strategic human capital for development and growth. The sector on its own plays a role in the growth of an economy. The World Economic Forum (2012) and Deloitte (2016) reported that manufacturing is assisting the expenditure of GDP growth in countries especially developing countries. It has been factually a driving force of economy growth and presented several opportunities like providing learning and job opportunities, profiting from other sectors and encouraging technological progress (Naude & Szirmai, 2012).

Malaysia is no different from countries that rely heavily on manufacturing sectors for economic growth. As Ismail, Rosa and Sulaiman (2012) have stated, the manufacturing sector contributes heavily towards the growth of the economy especially through exports. Table 1.1 shows the contribution of the manufacturing sector towards the economy for the past four years.

Table 1.1 Manufacturing sectors contribution to GDP

No.	Year	Contribution towards GDP (%)
1	2012	23.2
2	2013	22.95
3	2014	23.0

Table 1.1. Continued

No.	Year	Contribution towards GDP (%)
4	2015	23.0
5	2016	23.0

Source: Economic Planning Unit (2016)

Despite having a slight increment in 2014 at a seemingly slow rate, the numbers have since been plateauing, hence causing the need for understanding what the foundations of strategic human capital are. Selvaratnam (2016) has suggested that high technology manufacturing sectors driven by quality human capital will propel the National Economic Advisory Council's (NEAC) target of achieving high income, developed nation status. The Eleventh Malaysia Plan has allocation for the development of human capital has shown its vitality. The need for strategic human capital to contribute towards the growth of the sector, albeit the slow progress, is further supported by the Global Manufacturing Competitiveness Index (GMCI), a study by Deloitte (2016), that investigates on the competitive ability of countries whereby Malaysia ranked 17 among the 40 countries investigated. The index shows that Malaysia does indeed have the potential to rise and improve its economy with the help of its manufacturing sector. The study by Deloitte (2016) has also projected that Malaysia will be able to improve its manufacturing sector and improve its ranking in the GMCI by year 2020. Table 1.2 shows the GMCI rankings for the top 20 countries in 2016 and its projected placing in 2020.

Table 1.2 2016 Global Manufacturing Competitiveness Index

	2016		2020 (Projected)
Rank	Country	Rank	Country
1	China	1	United States
2	United States	2	China
3	Germany	3	Germany
4	Japan	4	Japan

Table 1.2. Continued

	2016		2020 (Projected)
Rank	Country	Rank	Country
5	South Korea	5	India
6	United Kingdom	6	South Korea
7	Taiwan	7	Mexico
8	Mexico	8	United Kingdom
9	Canada	9	Taiwan
10	Singapore	10	Canada
11	India	11	Singapore
12	Switzerland	12	Vietnam
13	Sweden	13	Malaysia
14	Thailand	14	Thailand
15	Poland	15	Indonesia
16	Turkey	16	Poland
17	Malaysia	17	Turkey
18	Vietnam	18	Sweden
19	Indonesia	19	Switzerland
20	Netherlands	20	Czech Republic

Source: Deloitte 2016

Aside from finding the countries' competitive ability, the study by Deloitte (2016) has also found that the main driver in manufacturing competitiveness is talent, or in this study known as strategic human capital. The study remarks that human capital is an important component in driving the country's ability to compete in the world stage. Strategic human capital helps manufacturing organisations distinguish itself from competitors though easy adoption of technology and strong employee performance (Jin, Hopkins & Wittmer, 2010). Being part of the main drivers of an economy, human capital not only generate competitive advantage, it also sets the tone for global manufacturing landscape. Manufacturers who have the human capital and the ability to keep up with the current technology trends will have the upper hand in surviving the harsh competition.

Figure 1.1 shows the framework the Malaysian government has for improving the condition of the sector. Staying current in terms of skills and capabilities is

important and it allows the human capital to be strategic thus helping the organisations to achieve sustained competitive advantage.

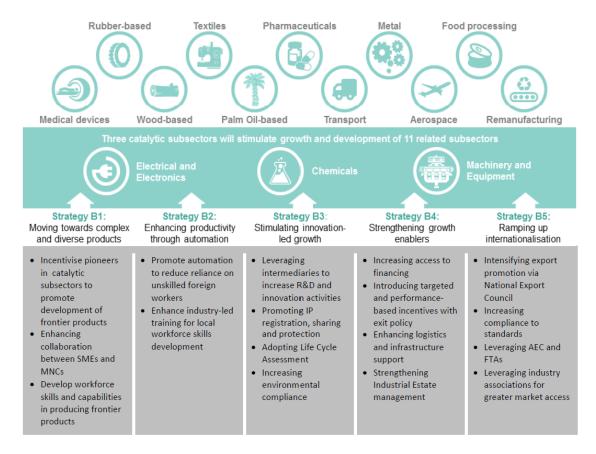


Figure 1.1 The Eleventh Plan Manufacturing Framework

Source: Economic Planning Unit

In the framework, it can be seen that the improvement of skills is a big part of the development planned for the sector. As shown in the framework, the goal is to stimulate and develop growth. The development of the sector depends heavily on strategic human capital as part of the framework has specified that industry training to enhance skilled workforce and to reduce dependency on unskilled foreign workers. Anwar (2008) has noted that the manufacturing sector in Singapore requires human capital to establish its growth.

Manufacturing contributes heavily towards the growth of the economy in spite of the focused attention on SMEs and the vision of it being the backbone of the

economy. The manufacturing sector should also be used to help achieve the Vision 2020. Being at the critical point of its economic development, it gradually becomes difficult for Malaysia to generate high rates of growth due to the competitive global economy (Muhamad, Sulaiman & Sanusi, 2012; Chandran & Devadason, 2017).

Strategic human capital and manufacturing comes hand in hand, one acts as an enabler to the other. Both of which are very important in the growth of the economy (Ismail et al., 2012). Ismail et al. (2012) findings can be taken as an example; the authors mentions that technology is a very important aspect in manufacturing however, the absorption and learning ability of new technology is very limited as it is hindered by semi-skilled foreign workforce. To ensure that the crucial and relevant technology is absorbed and utilized, strategic human capital is a very useful method or tool.

As found by Deloitte (2013, 2016) and Economic Planning Unit (2014) the performance manufacturing organisations in Malaysia has declined or has been stagnant and superior performance is yet to be achieved is due to lacking of strategic human capital. Looking at the contribution of the manufacturing sector towards the GDP of the country, it can be postulated that strategic human capital is one of the causes towards the limited increment of contribution.

With the notion that the limitation of strategic human capital is partly the cause for under achieving performance, the need to understand the factors or aspects that trigger strategic human capital, which will then improve organisation performance is required. Aside from understanding the triggers towards strategic human capital, the element that strengthens the relationship between strategic human capital and organisational performance should be verified as well. Knowledge strategy is

suggested and investigated in this study as a moderator between strategic human capital and organisational performance.

Antecedents are considered as investments by Wright, Coff and Moliterno (2014). The authors suggest education as an antecedent for human capital. Xu, Gao, Zhang, Zhang, Yu and Song (2016) has suggested for the investigation and confirmation of the mechanisms that lead to the configuration of strategic human capital. As Wang, Shieh and Wang (2008) stated, the lack of investments in human capital can lead to delayed performance of the organisation. The development of strategic human capital is a complex and elaborate course. Three entities are proposed as antecedents towards strategic human capital in this paper. Learning orientation, human resource configuration and social capital is expected to lead to the creation of strategic human capital.

Firstly, learning orientation is the firm's inclination towards employees getting education and knowledge. This aspect should influence strategic human capital as it contains one of the main criteria on human capital which is knowledge. In order to be acknowledged as strategic human capital, the individual should possess a certain stock of knowledge; and learning orientation is an activity that promotes knowledge creation and sharing (Calantone, Cavusgil & Zhao, 2002).

The second aspect will be human resource configuration. It is a set of human resource practices that can be changed or customized according to the organisation's activities in order to attain, preserve and develop employees. These set of practices are rather associated with strategic human capital in terms of development of employees. The development of employees adds value to the organisation by turning the capital

stock from human capital into strategic human capital, allowing the organisation to achieve sustained competitive advantage.

The last aspect that can aid the improvement of strategic human capital is social capital. a network of relationships (Castro & Roldan,2013) tends to allow individuals as well as the organisation to have the benefit of obtaining information and knowledge or help certainly. These associations can certainly facilitate with the improvement of strategic human capital in the organisation as it allows the exchange of information and possibly skills that are vital to the expansion of strategic human capital.

To be brief, this study tries to understand if learning orientation, human resource configuration and social capital holds an important role in the development and the enhancement of strategic human capital. These antecedents would be the elements that improve strategic human capital and later on, organisational performance.

#### 1.1.1 Strategic Human Capital in Malaysia

One factor that aided Malaysia's transformation is strategic human capital, which is an important player in a country's capability to participate in the fierce global competition (Kaur & Schapper, 2010; PricewaterhouseCooper, 2013). Shakar and Aslam (2015) have found that human capital is an important contributor towards the growth of the Malaysian economy. The country understands that the workforce is key to outstanding performance and is working towards producing the best human capital through education. Strategic human capital development is part of the strategic reform initiative (SRI) which is part of the economic transformation programme (ETP) and is essential in the transformation of the workforce (Muhamad, Sulaiman & Sanusi, 2012; Ismail & Abidin, 2014).

The current labour force in Malaysia according to Eleventh Malaysia Plan totals up to 14,191,300 individuals with 13,781,400 individuals having employment. A breakdown of the workforce is also presented in the report and is categorized into three categories according to the workforces' skill level. 28 percent of the workforce belongs to the skilled category, where as 61.9 percent of the workforce are semi-skilled and the balance of 10.1 percent of the workforce are employed in elementary positions, therefore being in the low skilled category. In 2015, an employee in Malaysia earned an average of RM 2312 on a monthly basis and employees in the manufacturing sector earned RM 2038 averagely (Department of Statistics, 2015). Workforce with tertiary education earns the highest among the workforce at RM 3854.

During the period of the Tenth Malaysia Plan, an increase of the labour force is seen with an average of 2.9 percent yearly. In 2017, the Department of Statistics reported that the labour force consists of 14952600 individuals. Out of this figure, only 28.1 per cent of the labour force have tertiary education. A majority of the labour force in Malaysia possesses only secondary education at 55.8 percent, which accounts for 8343551 individuals. Out of the total labour force in 2017, 502600 individuals which accounts for 3.4 percent, are unemployed.

Substantial achievements can be seen throughout the Tenth Malaysia plan in regards of human capital and the country's workforce. In the five years that the Plan was carried out, there is a decline in unemployment in the country with 1.8 million jobs created. The execution of the plan has also lead to an increase of female presence in the workforce as well as a healthy rise in preschool enrolment. Implementation of the plans, strategies that were created for the Tenth Malaysia plan as seen a fruitful outcome, however, there is always certain unyielding obstacles and not easily solved.

In the current SME Masterplan 2012-2020 (SME Corp, 2013), it is reported that human capital is one of the driving forces as well as the challenge that is hindering its performance. It is found that the labour force supply exists, yet the supply available is not ready for the industry as there is little understanding of industry perspective among the workforce. It is also found that strategic human capital is lacking of interest in training programmes to better themselves, which is something that limits the knowledge and skills needed for human capital to be strategic. Muda and Abdul Rahman (2016) explains that strategic human capital plays a vital role in supporting the limited physical resources the SMEs possess and its contribution to each stage of the business is key to improved performance.

As mentioned earlier, the Malaysian government understands that strategic human capital is necessary to reach its target of becoming an advanced nation. Strategic human capital is needed to help drive the economy with sustainable growth (11th Malaysia Plan, 2016). For the development of strategic human capital, four areas are focused on to ensure the production of labour force that will provide competitive advantage for the country. The Eleventh Malaysia Plan has allocations for labour market improvements, transforming Technical and Vocational Education and Training (TVET), enhancing skills through lifelong learning and improving quality of education. Collectively, these focus areas and their initiatives will help ensure the supply of human capital or talent complements the demand of the industry.

#### 1.1.2 Manufacturing Sector in Malaysia

Manufacturing sector has long been a contributor towards the economy of Malaysia, providing employment and playing a vital role in country's Gross Domestic Product (GDP). The sector started in 1960, with the production of tin and rubber and later widening its scope to assembling electrical and machinery goods in the 80's

(Bekhet & Harun, 2012). Its relevance and vitality can be established with figures of its contribution towards the economy. Manufacturing is part of the engine of growth towards the economy (Ismail et al., 2012) as it is the largest contributor to the total exports of Malaysia and is the second largest contributor to the GDP following the leader, service sector (11<sup>th</sup> Malaysia Plan; Strategy Paper, 2016-2020). The sector currently employs 1068116 individuals throughout the county with 259 industries in the sector (Department of Statistics,2018a) and has contributed an estimated RM 244.2 billion towards GDP (Economic Planning Unit, 2016).

The Federation of Malaysian Manufacturers (2016), categorizes organisations into three categories based on the number of employees. Small organisations consist of 5 - 75 employees, medium sized organisations employ 75 – 200 employees and organisations with more than 200 employees are considered large enterprises. 26.4 percent of the registered manufacturing organisations with the FMM belong to the large enterprises category. With 259 industries, the industries are categorized broadly in sub-sectors, which are domestic oriented, and export-oriented industries. A brief breakdown on the segregation is presented below in Table 1.3.

Table 1.3 Manufacturing Sub-Sectors in Malaysia

<b>Export-Oriented Sub- Sectors</b>	<b>Domestic-Oriented Sub- Sectors</b>
• Chemicals & Chemical Products	Basic Metals
• Palm Oil	Pharmaceuticals
Refined Petroleum	Machinery & Equipment
• Electrical & Electronics	Transport Equipment
• Textiles	• Food Products
Wearing Apparel	Other Non-Metallic Mineral
	Products
Wood & Wood Products	• Fabricated Metal Products
• Paper & Paper Products	• Beverages
• Rubber & Plastic Products	

Source: Productivity Report 2016/2017

Among the sub-sectors, three subs have been identified as National Key Economic Areas (NKEAs) that will potentially have multiplier effects towards their supply chain. The three are, electrical and electronics, palm oil and lastly, refined petroleum. As the three identified areas are categorized under export-oriented sectors, it is expected that the areas also contribute heavily towards the country's export income (Productivity Report, 2014/2015). Preliminary figures by the Ministry of Finance shows that in 2017, manufacturing has contributed RM 500447 million in exports.

Attributing to the resilient performance of the electrical and electronic industries (E&E), predominantly the semiconductor industries, the sector has grown at a fast pace, with sales value increasing, albeit a small increase in figures (Hooi, 2016). This subsector, electrical and electronics, is the second largest contributor to the manufacturing sector GDP share with an input of RM 75.3 billion (27.9%) in 2017 (Department of Statistics,2018a). The Economic Census (2016) reports that the manufacturing sector has 49101 establishments across the nation, where Selangor takes the lead with 10027 establishments and the state with the least establishments is Putrajaya with only 16 companies.

As a developing country, it would be difficult for Malaysia to expand without investments. The manufacturing sector has received an accumulated RM 28.1 billion for year 2015 and 2016 (MIDA, 2016a). In 2017, the manufacturing sector has received RM 21543 million in foreign direct investment, and RM 42141.8 million in domestic direct investment (MIDA,2018). The strong demand from the country's Association of Southeast Asian Nations (ASEAN) counterparts and Free Trade Agreement (FTA) has aided the sustaining growth and performance of the manufacturing sector in Malaysia.

Despite the sector receiving massive amounts of investments, there are researchers that have posited that the industry is gradually shrinking in terms of contribution towards the GDP, albeit it still being the second largest contributor. The manufacturing sectors' growth has been found to have slowed down and on the verge of being plateaued (Rasiah, 2011; Tan, 2013; Kam, 2014; Rasiah, Crinis and Lee, 2015).

The slowdown of the sector could gravely impact the economic growth of the country. Aside from the service industry being the largest contributor towards GDP, manufacturing also is an important contributor as mentioned earlier. The plateauing of manufacturing industries has affected GDP shares, growth rates, trade performance and productivity (Rasiah, 2011). However, high expectations are laid on the manufacturing sector. In 2017, the sector contributed an estimated 23 %, which is RM 268 781 million to the country's GDP (Ministry of Finance, 2018). In the Eleventh Malaysia Plan, the target-accumulated contribution from manufacturing is RM 1417.3 billion, with 82.8% share to total export amounting to RM 3677.9 billion. By the year 2020, manufacturing is expected to hold 18.2% share to total employment.

When Malaysia decided to transit from an agricultural focus to manufacturing in the late 1980s, it marked the start of the country's high economic performance (Karim & Ahmad, 2012). During the implementation period of the First Industrial Master Plan (IMP1), 1986-1995, sizeable improvements in the manufacturing sector began. In order to ensure that manufacturing sector will provide a large contribution to the economy growth, the Malaysian Industrial Development Authority (MIDA) was established (MIDA, 1996 as cited in Karim & Ahmad, 2012). The function of this authority is to promote and obtain investments from both domestic and foreign sources to encourage the growth of the sector.

Manufacturing is important to the Malaysian economy as it is a provider of employment and as mentioned above, a contributor to the country's GDP. Employment is very necessary as it as it is a chain reaction that will indirectly influence the other subsectors. Manufacturing is closely related to several other sectors of the economy that causes magnified consequences (Herman, 2016). As Hooi (2016) explains, improved job prospects provided by the sector leads to a better living standard. Herman (2016) also mentions that the manufacturing sector is the "engine of economic growth and development".

Looking at the Global Manufacturing Competitive Index conducted in 2016, and comparing it to the latest index, manufacturing abilities in Malaysia has fallen from the 13th spot to number 17. The limitation of human capital, especially strategic human capital, in the manufacturing field is one of the reasons causing the decline of manufacturing competencies (Deloitte, 2013, 2016). As explained above, it is very crucial for the present study to understand on the factors that are able to influence strategic human capital and subsequently to investigate the impact of strategic human capital on performance. The lack of strategic human capital affects performance and this is undeniable. However, there can be several aspects that can aid in the improvement of the state of strategic human capital and in this study, these aspects are known as the antecedents towards strategic human capital. To improve strategic human capital and later on the overall performance of the firm, three entities are inferred to aid with the improvement. Learning orientation, human resource configuration and social capital are introduced as antecedents towards strategic human capital in this study.

#### 1.2 Research Problem

The manufacturing sector is currently experiencing a restrained growth. Rasiah et al. (2015) posit that the manufacturing sector is embarking on premature deindustrialization due to lessening contribution of the manufacturing sector towards the GDP, despite it still being the second largest contributor. Another aspect of the industry slowing down is through its employment history. In 1990, the sector had a 20 percent share of total employment in country, and 23 percent in 2000. By 2010, the figure unfortunately dropped 6 percent to 17 percent (Karim & Ahmad, 2012). The Department of Statistics (2016) also reported that the manufacturing sector contributed to 16.9 percent of employment in 2016. This can indicate that the industry is not progressing well as planned despite indications of small progress.

# 1.2.1 Lack of Investments to the Suitable Channels in Strategic Human Capital to Enhance Performance

Investments in the development to strategic human capital has been held back due to the declining global growth which also caused a labour market skill mismatch (Koen, Asada, Nixon, Rahuman & Arif, 2017). Additionally, the current state is that the supply of programmes to improve strategic human capital is currently streaming to the wrong channels (Critical Skills Monitoring Committee, 2016). The supply for these improvement methods are more than the demand as the supplies are leaning towards channels that are much unneeded. Koen et al. (2017) found that the attention paid on education to improve strategic human capital is not misguided, however, it is excessive. The prevailing methods to identify the channels that require investments are ill-suited (Critical Skills Monitoring Committee, 2016), consequently, the suitable channels that are meant to build strategic human capital are not identified properly.

Hence, it is suggested that attention be paid to other forms of resources to secure and develop strategic human capital especially resources that is possibly existent in the organisation. Human resource configuration is proposed here as Boon, Eckhardt, Lepak and Boselie (2017) have suggested to investigate how this construct could affect strategic human capital. Also, as it concerns organisation's values, outlook, position, inclination towards the development in the organisation (Calantone et al.,2002), learning orientation is proposed in accordance to Zulkarnain, Abdullah, Said and Alam's (2016) findings that organisations in manufacturing sectors pay attention to learning orientation. Lastly, social capital being a resource that is readily available in an individual and organisation (Marzuki, Ahmad, Hamid & Ishak,2014), is a proposed element as a resource to yield strategic human capital.

Alongside the lack of investment to the proper channels for strategic human capital, the performance of organisations in manufacturing field has been decreasing. The Industrial Production Index (IPI) is an amalgamated indicator that measures the real production output of manufacturing sector. As presented in Table 1.4 below, the performance of manufacturing in Malaysia has not been stable one, and has yet to experience a steady growth in 2018. Despite the sector is experiencing growth at a certain period, it is also affected with reasonably large drops in production figures along the way. The unstable performance of the manufacturing sector could be attributed to the limited availability of strategic human capital that is caused by the limited or misconstrued investments. Chandran and Devadason (2017) has posited that there could be inadequate supply of strategic human capital to keep up with the new technology in the industry.

Table 1.4 Industrial Production Index (IPI)

Month (2017)	Index
June	111.8
July	113.1
August	113.0
September	113.7
October	115.5
November	113.9
December	113.7
Month (2018)	Index
January	115.7
February	104.4
March	114.0
April	111.6
May	115.1

Source: Adapted from Index of Industrial Production May 2018 (Department of Statistics Malaysia, 2018b)

#### 1.2.2 Strategic Human Capital Insufficiency in Malaysia

Malaysia is currently facing a shortage in human capital (Yahya & Kaur, 2010). Being the third largest economy in Southeast Asia and the aim to achieve vision 2020 (Ismail, Kunasegaran & Rasdi, 2014) has contributed to the country's dire need for strategic human capital. However, these needed talents have been leaving the country causing the lack of manpower to achieve goals. In 2010 alone, approximately 5 percent of the Malaysian population left the country (Ismail et al.,2014). The outwards flow of skilled workforce has been rapidly increasing (Tan, 2014b) and this is part of the reason that is hindering the desired growth of the manufacturing sector and possibly the economic growth of the country. Highly skilled Malaysian workforce has always been the fundamental requirement for the country to achieve its goal of being a high-income country by the year 2020. There are also millions of jobs in manufacturing organisations around the world that cannot be filled due to lack of suitable human capital with the necessary skills (World Economic Forum, 2012). Both the Tenth and Eleventh Malaysia Plan have emphasized on the production and development of human capital through education. Table 1.5 shows a survey done by the World Bank

that shows the spread of Malaysians who left the country to work in other regions around world.

Table 1.5 Malaysian Brain Drain Spread around the World 2010

Country	Brain Drain
Singapore	121662
Australia	51556
United States	34045
United Kingdom	16609
Canada	12807
Brunei	10208
New Zealand	6708
Other Countries	22962
Total	276557

Source: World Bank (2010)

Ghazali, Kusairee, Tan, Yasin and Yasoa (2015) have cited that multibillion dollar investments have been lost in Penang due to the shortage of strategic human capital and Samad (2013) also adds that the lack of strategic human capital has led to hampered economic corridors. Figure 1.2 shows the limited investments received compared to the vast amount of investments given to foreign recipients. The statistics compiled from the United Nations Conference on Trade and Development (UNCTAD), the flow of investments received seems to be tremendously lower than the amount of investments given of Malaysia.

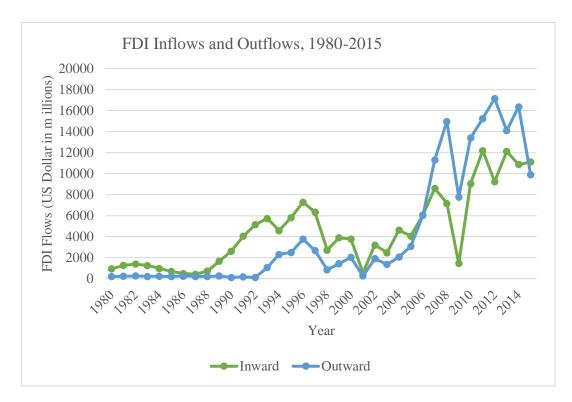


Figure 1.2 FDI Inflows and Outflows Source: Compiled from UNCTAD (2017)

These has caused for realization that the economic progress of the country's economy cannot rely on unskilled labour anymore (Shakar & Aslam, 2015) as greater industrial and technological growth has been obstructed by social reliance.

# 1.2.3 Lack of Strategic Human Capital in Manufacturing Organisations to enhance Performance

Manufacturing in Malaysia concentrates on the "assembly, testing, design, and development involved in component parts and system production" (Deloitte, 2016). The elements that are focused on by Malaysian manufacturers allow it to reinforce the high- tech sectors. However, the lack of strategic human capital or talent, is holding back the improvement or the growth of the sector (Deloitte, 2016).

Selvaratnam (2016) has found that Malaysia is experiencing a shortage of quality human capital. Manufacturing organisations have been a source of employment

and the Economic Planning Unit (2016) has also reported that the manufacturing sector is the second largest employing sector after the service sector. Malaysian manufacturing sector currently does not possess the knowledge to compete in the production of "high end knowledge-based skill-oriented activities" nor the ability to compete in low cost production (Kam,2016). When an employee has the knowledge regarding technology, problem-solving and creativity, it allows the manufacturing organisation an added advantage to be able to compete in industry (Youndt, Snell, Dean & Lepak, 1996; Jin, Hopkins & Wittmer, 2010).

The growth of the manufacturing sector is considered as vital to the growth of the country and Arphan and Yap (2016) as well as the World Economic Forum (2012) have mentioned that human capital plays a role in growing the manufacturing sector. The reducing number of strategic human capital that has the ability to provide sustainable competitive advantage to the organisation has been part of the reason the growth of the sector is stationery. Rasiah (2014) similarly suggested that the performance of the manufacturing sector in Malaysia has descended as there were limited focus on the refining of human capital. With human capital, the organisation is able to utilize its resources quickly and improve management practices that will strengthen the employees' performance (Jin et al., 2010). The need for human capital is vital, however, the need for strategic human capital is slightly overlooked. Human capital does indeed play a role in the establishment and growth of the firm; however, strategic human capital could be the one that will provide the organisation with its added value of sustained competitive advantage. Ghazali et al. (2015) has pointed out that organisations that set up in the country not only require skilled employees, they also require technical expertise that can distinct the organisation from others.

As found by Rasiah et al. (2015), the low performance of Malaysian manufacturing organisation is due to the lack of strategic human capital and that organisations that manage to hire quality and strategic human capital have benefited greatly. The absence of strategic human capital in the operation of the organisation can lead to the underachievement (Wang et al., 2008) where the organisation does not meet its full production potential. When strategic human capital is not present for the organisation's disposal, there are possibilities that there are certain requirements that cannot be met.

There are several possible reasons as to the inadequacy of strategic human capital. It can be due to the organisation's commitment or preference towards acquiring knowledge. The learning orientation of the organisation allows employees to either gain knowledge and skills or become strategic human capital or to maintain at their current state and contribute no improvement. The combinations of HR practices, human resource configuration, that enables employees to improve themselves and elevate their abilities from a mediocre employee into a form of human capital that can provide sustainable competitive advantage can be part of the reason why strategic human capital in manufacturing organisations are lacking. Having insufficient social capital, or relationships between peers of the industry might also lead to poor performance of the strategic human capital that inevitably impacts the performance of the organisation.

#### 1.3 Objective of the Study

The study is conducted to explore whether learning orientation, human resource configuration and social capital plays a role in prompting strategic human capital. And, the relationship between strategic human capital and organisational performance is also investigated, as well as if knowledge strategy strengthens the relationship between the two variables. Hence, the study attempts to meet the following objectives:

- To examine the role of learning orientation (commitment to learning, shared vision, open-mindedness, intra organisational knowledge sharing) on strategic human capital.
- ii. To examine the role of human resource configuration (commitment, productivity, compliance, collaboration) on strategic human capital.
- iii. To examine the role of social capital (structural, resources, relational) on strategic human capital.
- iv. To investigate the relationship between strategic human capital and organisational performance.
- v. To assess the moderating effect of knowledge strategy in strengthening the relationship between strategic human capital and organisational performance.

#### 1.4 Research Questions

Based on the objectives of the study, the research questions below were developed:

- i. Does learning orientation (commitment to learning, shared vision, openmindedness, intraorganisational knowledge sharing) play the role as an antecedent towards strategic human capital?
- ii. Does human resource configuration (commitment, productivity, compliance, collaboration) play the role as an antecedent towards strategic human capital?
- iii. Does social capital play (structural, resources, relational) the role as an antecedent towards strategic human capital?
- iv. What is the relationship between strategic human capital and organisational performance?

v. Does knowledge strategy strengthen the relationship between strategic human capital and organisational performance?

#### 1.5 Scope of the study

The subjects approached in this study are learning orientation, human resource configuration, social capital, strategic human capital, knowledge strategy and organisational performance. This study focuses on verifying the role of learning orientation, human resource configuration and social capital as the antecedents towards strategic human capital. Human capital carries the knowledge and skills that make the organisation stand out from its competitors, here, the study tries to determine if the firm's inclination towards education, HR practices and connections lead to the forming of strategic human capital.

This study also tries to understand the effect strategic human capital has on the performance of the organisation and whether or not it is affected by the methods used to enhance knowledge in the organisation. Human resource managers are the targets of this study as the managers are the individuals who interact with employees and also organisation goals and guidelines. For this study, the human resource managers of the organisation are the target respondents, as they are the key informants of the organisation, and they are from the sample size of large manufacturers registered in the Federation of Manufacturers Malaysia.

#### 1.6 Significance of the study

This study attempts to add to the body of knowledge on the antecedents of strategic human capital, its relationship with organisational performance and knowledge strategy as an enhancer of the relationship. First, the study proposes three subjects, learning orientation, human resource configuration and social capital, as the

precursors to strategic human capital. Secondly, the relationship between strategic human capital and organisational performance is investigated. There have been studies investigating on human capital but limited studies have ventured into investigating strategic human capital, which is what this study focuses on. Lastly, the study wants to inspect whether knowledge strategy enhances the relationship between strategic human capital and organisational performance. By orchestrating on these variables, the significance of this study is divided into two aspects; theoretical contribution and practical contribution. Each aspect is discussed as follows.

#### 1.6.1 Theoretical Contribution

In aspect of theoretical contributions, this study attempts to extend the view on Resource Based View (RBV), Human Capital Theory (HCT) and Dynamic Capabilities. First of all, using RBV as the underpinning theory, the study seeks to develop a cohesive theoretical research framework that synthesizes learning orientation, human resource configuration, social capital, strategic human capital and organisational performance. RBV explains that a firms' resources can attribute to sustainable competitive advantage (Barney,1991). The study tries to understand if these variables are able to integrate several types of resources -tangible, intangible resources, intangible capabilities- and provide methods and products according to market needs (Hou & Chien, 2010) that allows for sustained competitive advantage. Additionally, HCT, as it is defined as an investment to improve the "skills, experiences and knowledge" of the individual by the organisation and the individual (Jackson, Schuler and Jiang, 2014), is integrated in this study to support the investments on the antecedents of this study in the formation of strategic human capital.

Hence, knowledge on learning orientation, human resource configuration, social capital, strategic human capital, knowledge strategy and organisational