

CRITICAL SUCCESS FACTORS FOR MALAYSIAN
CONTRACTORS IN INTERNATIONAL
CONSTRUCTION PROJECTS

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SCHOOL OF CIVIL ENGINEERING
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IN INTERNATIONAL CONSTRUCTION PROJECTS**

By

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ABSTRAK

Pada masa ini, banyak projek pembinaan semakin berkembang di seluruh dunia akibat krisis ekonomi global terkini. Untuk memenuhi keperluan awam dalam keadaan ekonomi semasa, Kerajaan Malaysia telah menghadkan pengambilan projek-projek sektor awam kepada "keperluan untuk memenuhi keperluan awam" memanjangkan hanya selepas itu menyempitkan jumlah projek domestik yang boleh diakses. Permintaan pembangunan yang besar di seluruh dunia telah menarik semangat syarikat pembinaan Malaysia untuk masuk ke dalam projek pembinaan antarabangsa. Oleh itu, kebanyakan kontraktor utama telah memutuskan untuk mengubah tumpuan mereka dengan melihat projek-projek antarabangsa di luar Malaysia bukan semata-mata untuk menjamin kesesuaian perniagaan mereka tetapi juga untuk survival jangka panjang. Walaupun beberapa kontraktor Malaysia berjaya menembusi projek-projek pembinaan antarabangsa, faktor-faktor kejayaan kritikal tidak jelas. Oleh itu, matlamat kajian ini adalah untuk menentukan Faktor-Faktor Kejayaan Kritikal Kontraktor Malaysia dalam projek pembinaan Antarabangsa. Kajian lepasas umum dan wawancara awal telah selesai dan hasil menunjukkan faktor kontraktor Malaysia dalam projek pembinaan antarabangsa. Kajian ini adalah berdasarkan kepada wawancara dengan pengurus projek, dan orang yang bertanggungjawab terhadap jabatan Antarabangsa CIDB. Mereka telah menubuhkan reputasi yang sangat baik dan kejayaan di seluruh dunia pada dekad yang lalu. Faktor-faktor kemudiannya dipamerkan dalam bentuk model ranking keutamaan AHP, yang memprioritaskan faktor kejayaan yang dibezakan dengan cara berturut-turut, dari yang paling sampai dengan yang kurang penting. Penubuhan model peringkat keutamaan seperti ini membolehkan para kontraktor di Malaysia tidak hanya mengiktiraf komponen utama atau faktor yang perlu dipertimbangkan sepenuhnya dan

diuruskan dan selain itu, mereka juga dapat menyediakan strategi mitigasi dan kontingensi yang sesuai sebelum memasuki pembinaan antarabangsa projek.

ABSTRACT

Currently, the construction projects are advancing gradually around the world as a result of the recent global economic crisis. In order to accommodate public needs within the current economic situation, the Malaysian Government has confined the acquirement of public sector projects to “necessary to meet public need” extends just subsequently narrowing the quantity of domestic projects accessible. A tremendous demand of development worldwide has picked up enthusiasm of Malaysian construction firms to go into international construction projects. Therefore, most major contractors have decided to change their focus by looking into international projects outside Malaysia not exclusively to guarantee the suitability of their businesses but also for long-term survival. Even though, some Malaysian contractors have managed to penetrate successfully into international construction projects, their critical success factors (CSFs) are absolutely obscure. Thus, the aim of this study is to determine the Critical Success Factors (CSFs) of Malaysian Contractors in International construction projects. A general literature review and initial interview was completed and results show on the CSFs of Malaysian contractors in International construction projects. This study is based on interviews with project managers, and the person in charged with CIDB International department. They have established an excellent reputation and worldwide success in the last decade. The CSFs are then exhibited in the form of AHP priority-ranking model, which prioritizes the success factors distinguished in successive way, from the most up to the less critical ones. The establishment of this kind of priority-ranking model enables contractors in Malaysia to not just recognize the key components or factors that should be completely considered and managed yet in

addition enable them to get ready appropriate mitigation strategies and contingency plans prior to entering into international construction projects.

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

The construction industry is a growing market. However, there are still some problems in Malaysia construction industries such as long period of work, lack of projects, complicated processes, various environment, financial intensity and dynamic organization structures that it needs to work on for improvements (Megan, 2018). In addition, international construction projects usually involve multi-national participants from different political, legal, economic and cultural background. Meanwhile, in Malaysia the construction industry is often justified as fragmented which is more into traditional process which involves clients that are disconnected from other task.

Going international can be viewed as a process of foreign market entry decisions through which a firm moves from operating solely in its domestic place to international markets. Many Malaysian contractors those involved in completing Malaysia's mega projects were found to have developed the competencies and capabilities required to expand their business internationally. Nowadays, Malaysia's competitive and saturated construction market has led many domestic firms to venture into international market. With fewer projects available locally, the bigger construction firms are penetrating international construction market. Taking advantage of global opportunities allows the Malaysian construction industry to reduce the effects of domestic market conditions and have better control over its own development. The preliminary study stated that majority of Malaysian

contractor were reluctant and not interested to contribute international project due to high uncertainty from political risk and insufficient financial resources (Kashan, 2015).

Besides that, the main barriers for Malaysian construction companies to entry international market were lack of finance and insufficient information to access market. For instance, the convergence of the Singapore-Kunming Railway with Malaysia's railway connectivity plans did took shape with the last leg of the double tracking being awarded to China Railway Construction Corp Ltd. (Alliance, 2016). Besides, Malaysian contractors encountered inadequate financial margins in Gulf projects due to inexperienced and novice in the region thus winning the contract with a lowest bidder (Rozlin, 2019). Therefore, there is a need for this research to determine the critical success factors for Malaysian contractors going into international projects.

Furthermore, it is important for Malaysian contractors to improve performance in order to cope with the work accomplishment structure, feedback effects on productivity and work quality and then take advantages of the opportunities from internationalization. Therefore, this research attempt to identify the statistics and performance of Malaysian contractors in international construction projects.

In this study, the Analytical Hierarchy Process (AHP) pairwise comparison method will be utilized to analyze the priority importance of risks for Malaysian contractors in international projects. This AHP will rank out the critical success factor of Malaysian contractors in international construction projects and thus the most critical success factor can be identified.

1.2 Problem Statement

With many opportunities in the international construction market, Malaysia construction companies are expected to enter the global market. Contracting and accepting project outside's one home country is usually considered as a high risk business. Mostly, it happened because of lack of adequate overseas environmental information and overseas construction experiences. In order to perform well in the international or global market deep and core understanding on the type of project management could lead to a project success.

Besides, Malaysia's economy is expected to grow continually this year, albeit at a slower pace, as the world continues to face torrid uncertainties, largely from economic isolation and possible trade wars between nations (Azreen, 2019). Malaysia posted a GDP growth of 5.9% in 2017 and analysts have projected the economy to grow between 4.7% and 4.9% this year. The market is expecting Malaysia to deliver a growth of 4.7% for 2018.

Moreover, the international trade and balance payments shows that growth of gross exports in the remaining plan period to be sustained at an annual average rate of 6.2%. This will be supported by firmer commodity prices and continued demand from trading partners. Current account of the balance of payments is projected to remain in surplus at RM39.9bil or 2.5% to GNI in 2020 compared with RM40.3bil or 3.1% to GNI in 2017. Higher surplus in the goods account amid continued deficit in the services and income accounts are expected to contribute to the increase in the current account surplus (Izwan, 2018).

In the Eleventh Malaysia Plan, 2016-2020, strategies are formulated to accelerate economic growth and promote towards an economy that will be driven by high-value and knowledge-intensive activities. The focus will be on quality growth, sectorial governance

reforms, and enhancing internationalization of products and services. A more cohesive and comprehensive approach to raise productivity will be implemented across national, industry, and enterprise levels. The ecosystem to stimulate private investment, innovation, and exports will be further improved. The Eleventh Plan will embark on game-changing strategies to spur economic growth such as intensifying innovation activities and developing competitive cities and regional economic corridors.

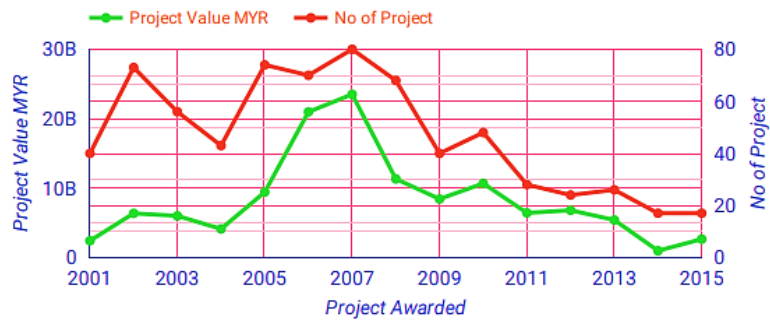


Figure 1.1: Data statistics of overseas projects awarded to Malaysian contractors (Source: CIDB Annual report 2015)

As the Malaysian contractors venture into international construction projects, the statistics increase smoothly, this shows that going internationally gives benefits to Malaysian contractors. Figure 1.1 shows the data statistics of overseas projects awarded to Malaysian contractors from year 2001 up to 2015. It was found that in the year of 2004 to 2007, Malaysian contractors had great opportunities in getting more international projects and it's clearly shows that the project values increases. This value has shown a very tremendous value in the range of statistics. Meanwhile, Figure 1.2 shows the overseas projects awarded to Malaysian contractors by scope. There are many category or scope of works of civil engineering fields such as highway, power plant, residential, mixed development, building, railway, water treatment system, road, structural frame, high-building, jetty, oil and gas,

airport, bridge, commercial building, and others. The highest value showed by highway scope which is one of the biggest project in construction.

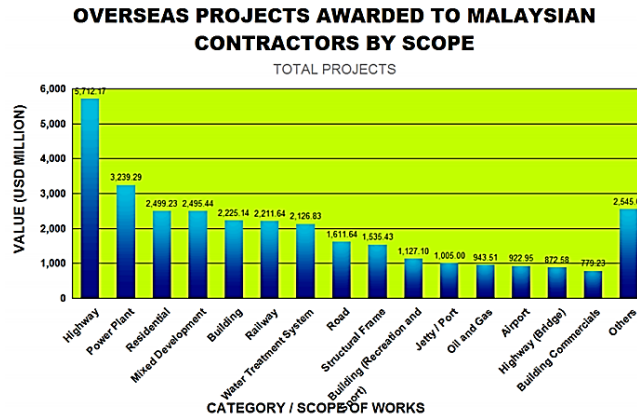


Figure 1.2: Overseas projects awarded to Malaysian contractors by scope (Source: CIDB Annual report 2015)

According to William (2012), contractors frequently see construction professionals whose experience on a previous, unsuccessful project has significantly colored their views on risk identification and ranking, resulting in a focus on the issues that caused problems on the previous project or in a previous jurisdiction, sometimes at the expense of other potentially important risk issues. Basically, there are many risks opportunities for contractors to be involved in international projects such as social stability. Effectively linked to political stability, social unrest and violence constitutes a genuine jurisdictional risk for some projects.

In addition, another risk opportunity is economic feasibility. Sufficiently, detailed financial modelling should be undertaken with respect to the likely costs and required equity investment, revenues, margins and after-tax profits that may be achieved. This analysis should consider any legal or economic barriers to entry and should be undertaken in

consultation with local professional assistance, particularly with respect to issues such as legal and economic barriers to entry, before significant resources are invested in a new market and of course before submitting a tender for any project in a new country. The other risk opportunities could be like tax, currency, insurance, national employments, cultural and religious risk and many more (Sachin, 2012).

Thus, this research is carried out to determine Critical Success Factors (CSFs) to ensure Malaysian contractors are fully prepared to go into international projects. Consequently, most major contractors have decided to change their focus by looking into international projects outside Malaysia not only to ensure the viability of their businesses but also for long-term survival. Although some Malaysian contractors have managed to penetrate successfully into international construction projects, their critical success factors (CSFs) are purely unknown.

1.3 Aim and Objectives

To determine the critical success factors for Malaysian contractors in international projects by addressing the following objectives:

- i. To identify the statistics and performance of Malaysian contractors in international construction projects;
- ii. To determine the critical success factors for Malaysian contractors going into international projects
- iii. To analyse the priority importance of critical success factors for Malaysian contractors in international projects

1.4 Scope of Study

The scope of this study focused on the critical success factors for Malaysian contractors in international projects. Basically, the common grade suitable to be used for all types of contractor are G7. G7 contractors hold a Grade G7 licence approved by the Construction Industry Development Board (CIDB) Malaysia which permits them to undertake civil engineering construction and building construction projects for an unlimited amount. The G7 is a collective of seven of the world's most industrialized and developed economies. Their political leaders come together annually to discuss important global economic, political, social and security issues in international market. Besides, the international projects that will be consider are buildings like industrial buildings and ware houses and the infrastructure work.

1.5 Significance of Study

Basically, this research is important for Malaysian companies both large and Small and Medium Enterprise (SME) to maintain long-term presence abroad building networks, gaining experience and establishing relationships so as to be able to continue to benefit from a thriving global construction market and not being overly reliant on the Malaysian market alone. Identification of issues and challenges of getting financing construction companies in undertaking construction projects overseas can be beneficial to the Malaysian contractors to manage their business in international projects. Through this study, it will enable Malaysian companies to expand their footprint overseas, accelerate their growth and exposure, build their brand and win overseas contracts, which can potentially generate more revenue for Malaysia in term of export of services to overseas. In long run, it will further contribute to

the national economic with the ability to sustain trade balance surplus, while improving the efficiency and services quality produced by Malaysian companies and SMEs matching with global standards.

CHAPTER 2

LITERATURE REVIEW I

2.1 Introduction

This chapter represents the literature review done for this study. The literature review is mainly focused on the general view of construction industry, the Malaysia Gross Domestic Product (GDP), roles and responsibilities of contractor and types of contractor. Besides, this chapter represent the globalization of construction, concept of internationalization and internationalization in construction which emphasis on internationalization in the Construction Industry Transformation Plan (CITP) 2016-2020 and also the International in CIDB. The statistic and performance of Malaysian contractors in international construction project is also presented in this topic. All the section stated are based on the past information and data research.

2.2 Overview of the Construction Industry

The construction industry is always changing and evolving. Every year new trends appear within the industry, from technological advancements to a stronger focus on sustainability. Basically, to run a construction company and want to make sure it stays ahead of the project, it can be useful to be aware of emerging trends that could prepare the contractors for the future. After all, many of the trends make construction work easier and more efficient, so if contractors aren't aware of them, contractors may find it hard to keep up with their competitors (Casey, 2018).

Construction project involved with many unique features such as long period of work, complicated processes, various environment, financial intensity and dynamic organization structures. In addition, international construction projects usually involved multi-national participants from different political, legal, economic and cultural background. In order for Malaysian construction companies to compete in the global market place, they have to equip and earn themselves with both technical and financial strength but yet the competition is very tough in bidding projects. Malaysian construction companies are forced to compete with the well-established players such as Singapore, Japan, Korean, United States, European and others which they have been in the market for a long decade. Malaysia government through their agency, Construction Industry Development Board (CIDB) is playing a crucial role in the paving access for the Malaysian construction companies into the international market.

2.3 Contribution of Malaysia GDP from Construction

Gross Domestic Product (GDP) from construction in Malaysia expanded to MYR 14517 million in the second from last quarter of 2018 from MYR 13530 million in the second quarter of 2018. Gross Domestic Product (GDP) from construction in Malaysia found the middle value of MYR 10484.26 million from 2010 until 2018, achieving an unequalled high of MYR 14517 million in the second from last quarter of 2018 and a record low of MYR 6464 million in the main quarter of 2010 (Trading Economics, 2019).

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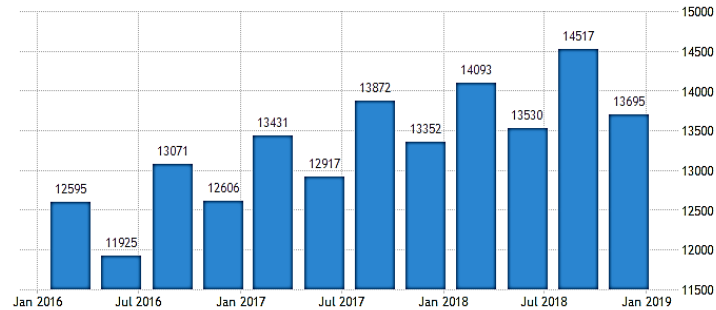


Figure 2.1: Malaysia GDP from construction (Source: TRADINGECONOMICS.COM, Department of Statistics, Malaysia, 2019)

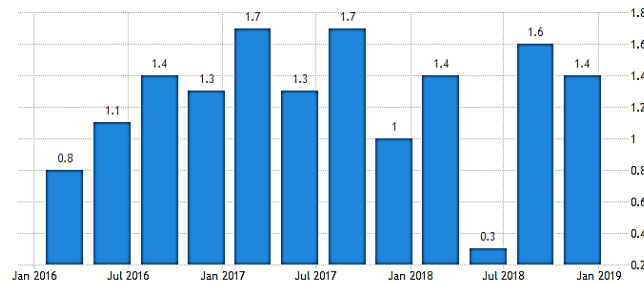


Figure 2.2: Malaysia Gross Domestic Product (GDP) Growth Rate (Source: TRADINGECONOMICS.COM, Department of Statistics, Malaysia, 2019)

The Gross Domestic Product (GDP) in Malaysia expanded 1.40 percent in the fourth quarter of 2018 over the previous quarter. GDP Growth Rate in Malaysia averaged 1.21 percent from 2000 until 2018, reaching an all-time high of 5.50 percent in the third quarter of 2002 and a record low of -5.90 percent in the first quarter of 2001. Malaysia is a developing economy in Asia which, in recent years, has successfully transformed from an

exporter of raw materials into a diversified economy. The largest sector of the economy is services, accounting for around 54 percent of GDP. Manufacturing sector has been growing in recent years and now accounts for 25 percent of GDP and more than 60 percent of total exports. Mining and quarrying constitutes 9 percent of GDP and agriculture 9 percent (Trading Economics, 2019).

The Gross Domestic Product (GDP) in Malaysia was worth US 314.50 billion dollars in 2017. The GDP estimation of Malaysia speaks to 0.51 percent of the world economy. Gross domestic product in Malaysia found the middle value of USD 87.25 Billion from 1960 until 2017, achieving an unequalled high of 338.06 USD Billion out of 2014 (Trading Economics, 2019).

2.4 Roles and Responsibilities of Contractor

A contractor is an individual who engages in the planning, developing and coordinating of activities which coincide with the building of structures. The contractor is an individual who manage the construction and ensures that all necessary measures are taken to result in the completed finished product. There are numerous duties where a contractor must finish once a day so as to ensure that the construction project is completed in a timely and right manner. The first duty of the contractor is to implement a plan in which to carry out the construction project. This extends anywhere from procuring workers to building up a well ordered course of events that the project will follow from start to finish (Exforsys, 2006).

Notwithstanding executing the construction plan, the contractor is responsible for hiring, supervising and, now and again, terminating employees who take a shot at the

particular undertaking with the contractor. Along those same lines of supervising the employees, the contractor must also take care of payroll with regard to the workers and engage in payroll functions or hire someone to do so for the contractor. The contractor is also responsible for obtaining materials for the project. Since construction projects can't be finished without the essential structure materials, it is dependent upon the contractor to gain products to manufacture the structures. This includes different types of correspondence with important material providers (Exforsys, 2006).

As stated by Exforsys (2006) there is another specific duty of the contractor is to acquire all necessary licenses and permits from relevant entities so that the building project can begin. These range anywhere from building licenses to zoning permits and there are numerous guidelines that identify these documents which each contractor must follow so as to participate in construction. The contractor should likewise do his or her research regarding relevant regulations and laws much the same as the construction process. There are many laws which state when, where and how a contractor and his crew should build in certain areas. These must be recognized and followed by contractors in order to complete the project in a law-abiding manner. Budget issues are another item which relate to the duties of a contractor.

The contractor must establish a budget for the construction project and follow that budget as closely as possible. This will allow the contractor to obtain supplies, hire workers and finish the construction in a cost-efficient manner. Lastly, the contractor needs to follow the specific building project closely and make changes when he/she deems it necessary to do so (Exforsys, 2006).

2.5 Types of Contractor in Malaysia

There are 7 specified registration grades for each category as set as below and a contractor is not entitled to undertake any construction project which exceeds the value of the construction work specified in registration grade. There are following Grades/Categories of CIDB License according to tendering capacity as shown in Table 2.1.

The G7 grade contractors are better positioned in terms of capacity to promote and develop industrialised building systems (IBS) in the country, said as to compared with G5, G7 have more capabilities to really make the IBS successful as it needs innovations, financial strength, mindset and willingness to take it forward. G7 contractors hold a Grade G7 license approved by the Construction Industry Development Board (CIDB) Malaysia which permits them to undertake civil engineering construction and building construction projects for an unlimited amount (Nathan et al., 2015).

Table 2.1: The Grades of CIDB (Source: CIDB Report 2012)

Grade	Descriptions
G1	Not exceeding RM 200,000.00
G2	Not exceeding RM 500,000.00
G3	Not exceeding RM 1,000,000.00
G4	Not exceeding RM 3,000,000.00
G5	Not exceeding RM 5,000,000.00
G6	Not exceeding RM 10,000,000.00
G7	No limit

2.6 Globalization of Constructions

Globalization, technological changes, intense competition, fluctuating interest of consumers, economic and political changes affect managers' decisions and encourage taking greater risks and applying appropriate strategies. Notably, growing internationalization and evolving globalization have become distinctive features of the economy. A phenomenon of internationalization has been inquired by various scholars in recent years. A thorough research has been focused on the international strategies of the firms, the factors, motives and the forms of internationalization (Aziz, 2014).

On the other hand, the distinctive methodologies intending to clarify conditions circumstances, which enable companies to use opportunities in the market and to gain competitive advantage over competitors, have been developed in the scientific literature. Small and medium size enterprises (SMEs) play a significant or critical role in the growth of any country's economy. Hence, internationalization of the SMEs is viewed as one of the important research objectives in the scientific literature (Aziz, 2014).

A large numbers of British contractors agreed the joint venturing with a foreign company is the most effective way in the process of making construction globally. But it is always influenced by others factors such as natural resources, climate, location, communication, infrastructure, culture and others. After all, the roles played by local government and chances occurred in the competitive development of an industry are very important (Ngowi, 2005).

The factors that influence globalization of constructions included economic growth, multilateral and bilateral trade agreements, innovative delivery methods such as Public-

Private Partnership and modularization, foreign aid, the complexity of international projects, and advances in information technology. Each of these key factors is an important force driving the internationalization of construction. The rapid growth in the global economy and the urgent demand for large and complex electronics and communication projects including infrastructure and industrial plants have forced the construction industry to go into global. Multinational contractors expand their operations and services to other countries to take advantage of the opportunities offered by the rapid growth in the global economy. Other reasons to expand contractor reach include stagnant domestic markets, a desire to spread risk through diversification into new markets, aspiration of higher profit margins, and competitive utilization of their resources (Ngowi, 2005).

The growth in Public-Private-Partnerships (PPPs) has fueled the internationalization of construction, especially in the last decade. The trend toward the internationalization of construction industry has been further reinforced with establishment of global organizations such as the World Trade Organization (WTO) and the International Monetary Fund (IMF). These organizations were formed primarily to aid countries in the liberalization of trade and commerce by facilitating trade negotiations (Shachmurove, 2007).

Bilateral and Multilateral Trade Agreements have had significant impact on the globalization of the construction industry in terms of size, structure and expansion. For example, the North American Free Trade Agreement (NAFTA) is a trilateral trade agreement between the U.S., Canada, and Mexico that was executed in 1994 for the purpose of removing trade barriers for the exchange of goods and services among these countries (Ahmad, 2018).

In many developing countries major capital-intensive infrastructure projects such as telecommunication, power, water, energy, and transport, are mostly financed by foreign aid. Foreign aid and international economic assistance remains a major financing source for many of the developing and post conflict countries. For example, Afghanistan alone received total foreign aid of \$7.3 billion in 2014 with \$ 1.3 billion contributed by USAID. Out of this \$289 million was spent on infrastructure development projects. International projects are generally very complex and sophisticated in terms of both management and construction. Furthermore, unlike domestic projects, international projects present unique challenges because of numerous variables including multiple ownership, differing financial provisions, diverse political ideologies, and the high level of risk associated with working in a foreign country (Grundy, 2015).

It has been widely acknowledged that the use of information technology and digitalization of construction processes enhances productivity, reduces project delays, and improves the quality and safety of construction projects. The developments in information technology (IT) and ease of global communication has remarkably enhanced the internationalization of the construction industry by the transformation of construction technology from one country to another. Technology can be a most powerful strategic weapon that enables both small and large construction companies to carve out a niche for themselves in global markets (Dennis and Bausman, 2018).

2.7 Concept of Internationalization Organizations

The researches linked to internationalization of the organizations are seen as the growing trend in scientific literature. Internationalization is an equivalent of the geographical

expansion of economic activities over a national country's border. The definition given by Welch and Loustarinen (2015), imply that internationalization is “the process of increasing involvement in international operations”. Thus, the organizations gradually and sequentially become involved in international projects. Some other scholars, inspired by resource-based view, claimed that internationalization is viewed as “the process of mobilizing, accumulating, and developing resources for international activities” (Ruzzier et al., 2006).

Broadly, in order to explain the complex phenomenon of internationalization, the scholars tend to support the integration of several theoretical approaches in order to get better understanding (Canabal and White 2008). The current research analyses objectives using Entrepreneurship theory, firm-specific competitive advantages taking help from the Resource Based View and Eclectic Paradigm theory, and home country-specific competitive advantages taking help from the Eclectic Paradigm and Diamond Model (Wong, 2010). Hence, an integrated approach has been used for the current study. The objectives for internationalization have been studied by numerous scholars. Some scholars are of the opinion that profitability is very important for firm’s survival and growth and in order to gain sound profit margin the firms are encouraged to internationalize (Aziz, 2010).

On the other hand, the process of the organizations’ internationalization has been broadly researched over the last four decades. The researchers clarified it as a result of the globalization of industries. Hence, domestic organizations can be subjected to an increased pressure to internationalize rapidly in order to respond to the actions from global competitors. A main, 2017 underlying premise adopted by the researcher is that domestic companies are driven into internationalization process even though they lack knowledge about international ventures.

Meanwhile, other researchers put emphasis on a changing state of the firm. For instance, Buckley and Ghauri, 2017 separate that the growth of the organization provides a background to internationalization. Hence, the interrelationships of internationalization and the development of the firm are emphasized. On the other hand, the researchers conclude that internationalization activities are different from domestic activities because “the yen tail exchange between firms located in different countries”.

Another view comes from Gregorio et al., (2008) who believed that the firms internationalize to exploit abundant market opportunities available across the borders and take full advantage of the assets or resources of the host countries. Gaining international experience, expanding the business networks, to diversify the risks and to counter the domestic business cycle are some other motives of internationalization (Rundh, 2007). As far as the firm specific competitive advantages are concerned, they can be too many as reported in the literature available on this very subject. Political leadership and a multicultural workforce were identified as additional home country-specific variables by Aziz and Wong (2010) in their study of international Malaysian housing developers. Rasiah et al., (2010) defined that the support from the home government is a key factor which aids the international expansion of domestic firms.

2.8 Internationalization of Construction Projects

International projects are characterized by any form of transaction taking place across national borders for the purpose of satisfying the needs and demands of individuals and firms (Gajendran et al., 2013). Ngowi et al., 2005 described international construction where a company, resident in one country, performs work in another country. Extensive

projects in housing, industry, transport and city development that followed the advent of modern construction materials formed the background of what emerged as modern construction industry. Most building construction remained in the hands of small and medium sized local contractors, whereas the major civil engineering projects which required much large scale operations and hence formed a launching pad for international constructions.

The first ever international construction company was built up by Pearson in Great Britain where the owner itself accepted a 1 million acre oil drilling concession in Mexico as part of the payment of his services (Sebesteyan, 2013). This situation is one of the examples which later become common among the large construction companies. The appearance of international contractors was the first move in the globalization of construction.

2.9 Emphasis of Internationalization in Construction Industry Transformation Plan (CITP) 2016-2020

CITP is set to transform the Malaysian construction industry to become a modern, productive and sustainable industry, capable of achieving sustained growth for Malaysia to compete in and outside the country. Following the adoption of CITP by the highest levels of national administration, CITP has been incorporated into the Eleventh Malaysia Plan (RMKe-11) to be in line with Malaysia's national agenda. CITP has been successfully launched on 10th September 2015 by the Prime Minister in conjunction with the International Construction Week (ICW 2015). CITP has been formulated to be one of the key enablers of innovation in the construction industry in this country.

There are 18 initiatives that have been set in the CITP and these initiatives will be supported through three enablers that have been identified for effective implementation; an effective industry collaboration, strong coordinating body, and sound governance. As part of the governance process, as many as 23 committees will be formed comprising one Ministerial Committee CITP (CITP-MC), four CITP Thrust Committees (CITP-TC) and 18 CITP Initiative Committees (CITP-IC). CITP-MC will be chaired by the Minister of Works and comprise of relevant ministries and agencies as well as industry leaders from the private sector.

The committee's role is to guide and monitor the implementation of the CITP at the highest level and formulate the necessary policies to handle obstacles in achieving the outcome CITP. CITP has also secured an allocation of RM47.6 million in the first Rolling Plan (2016-2017) 11th Malaysia Plan Budget. This is a clear indication that the Federal Government is concerned about the transformation of the construction industry in Malaysia and intends to trigger a significant change for the betterment of the citizen.

Based on the Construction Industry Transformation Plan (CITP) 2016-2020, there are four strategic thrusts which are quality, safety and professionalism; environment sustainability; productivity and internationalization. The first strategic thrust, quality, safety and professionalism will ingrain quality, safety and professionalism into the culture of the construction industry. The thrust aims to halve worksite fatalities and injuries by introducing a minimum standard for workers' amenities and increasing on-site safety enforcement. The thrust will increase the implementation of quality assurance and quality control assessments, and double the number of public projects that meet a minimum quality rating. It will also

improve Malaysia's Ease of Doing Business ranking by five percentage points by addressing regulatory obstacles.

The second strategic thrust, on environmental sustainability, will develop Malaysia's infrastructure to a sustainable standard. Malaysia aims to be a model for the emerging world. The thrust will ensure that all large infrastructure projects exceed sustainability requirements. The thrust will also support the nation's goal to reduce carbon emissions, by reducing the industry's carbon emissions by 4 Mt CO₂ per year. Meanwhile, the third thrust, on productivity, aims to double the industry's productivity, matched by higher wages. This will be possible through enhanced human capital development, adoption of technology and mechanization, and modernization of construction processes.

The last strategic thrust is the internationalization thrust will grow Malaysian champions who will lead the charge locally and globally. The thrust will develop more companies who will have high SCORE ratings and be able to earn G8 status. This can be realized by addressing gaps in financing and adopting international practices and standards. A total of 18 initiatives have been defined across the four strategic thrusts.

The internationalization thrust aims to develop Malaysian champions to lead the charge locally and globally. Key outcomes of the Internationalization Thrust by 2020 include 10 companies to achieve 5* SCORE rating, 50 Malaysian companies to earn G8 status, and 10 more construction-related companies exporting construction services in the global market. There are three critical issues to be addressed under the internationalization thrust:

- Increasingly competitive domestic market, especially with the presence of foreign players

- Limited access to enablers to support international expansion, including financing
- Limited number of Malaysian players participate in construction projects abroad

The CITP aspires to tackle these issues with three key Internationalization initiatives:

- Initiative I1: Internationalize construction practices and standards
- Initiative I2: Strengthen access to financing for Malaysian champions going abroad
- Initiative I3: Support consortia formation and strengthen overseas market intelligence

According to Tan Sri Dr. Ir. Ahmad Tajuddin Ali the Chairman of UEM Group Berhad & Construction Industry Development Board (CIDB) Malaysia, a number of Malaysian construction companies have achieved recognition abroad, winning and successfully delivering on a range of projects overseas, in this region, the Middle East and even in other parts of the world. This was achieved through the nurturing of capabilities and experience in undertaking major construction projects in the local market. Going forward, they need to continue to do more of this. They will see the marketplace becoming even more competitive and this will require our construction players to continuously enhance their skills and capabilities (CIDB, 2015).

According to Mr. Liew Hau Seng the Managing Director of IJM Construction Sdn Bhd, Market intelligence plays a very vital role in strategic decision making where it provides the needed information on opportunities and challenges. It gives us a competitive edge especially through detailed understanding of the constraints posed by the market or project. Besides, as stated by Dato' Srikandan / Managing Director / KPK Quantity