# DEVELOPMENT OF INTERNATIONAL STRATEGIC PLANNING FOR MALAYSIAN CONTRACTORS

Ms. Nur Soleha Binti Abdul Rahim

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Engineering Program in Civil Engineering

Department of Civil Engineering

Faculty of Engineering

Chulalongkorn University

Academic Year 2012

Copyright of Chulalongkorn University
บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR)
เป็นแฟ้มข้อมูลของนิสิตเจ้าของวิทยานิพนธ์ที่ส่งผ่านทางบัณฑิตวิทยาลัย

The abstract and full text of theses from the academic year 2011 in Chulalongkorn University Intellectual Repository(CUIR) are the thesis authors' files submitted through the Graduate School.

# การพัฒนาแผนกลยุทธ์ต่างประเทศสำหรับผู้รับเหมาก่อสร้างมาเลเซีย

นางสาวนูห์ โซลฮา บินติ อับคุล ราห์ฮิม

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิศวกรรมศาสตรมหาบัณฑิต สาขาวิชาวิศวกรรมโยธา ภาควิชาวิศวกรรมโยธา คณะวิศวกรรมศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2555 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

	PLANNING FOR MALAYSIAN CONTRACTORS				
Ву	Miss Nur Soleha Binti Abdul Rahim				
Field of Study	Civil Engineering				
Thesis Advisor	Assistant Professor Vachara Peansupap, Ph.D.				
Thesis Co-advisor	Assistant Professor Noppadon Jokkaw, Ph.D.				
Accen	ted by the Faculty of Engineering, Chulalongkorn University in				
-	the Requirements for the Master's Degree				
THESIS COMMITTI	3E				
(Assoc	ciate Professor Tanit Tongthong, Ph.D.)				
	External Examiner				
(Wasa	porn Techapeeraparnich, Ph.D.)				

Thesis Title DEVELOPMENT OF INTERNATIONAL STRATEGIC

นูห์ โชลฮา บินติ อับดุล ราห์ฮิม : การพัฒนาแผนกลยุทธ์ต่างประเทศสำหรับ ผู้รับเหมาก่อสร้างมาเลเซีย (DEVELOPMENT OF INTERNATIONAL STRATEGIC PLANNING FOR MALAYSIAN CONTRACTORS) อ.ที่ปรึกษาวิทยานิพนธ์หลัก : ผศ. ดร.วัชระ เพียรสุภาพ, อ.ที่ปรึกษาวิทยานิพนธ์ร่วม : ผศ.ดร.นพดล จอกแก้ว, 161 หน้า.

การก่อสร้างระหว่างประเทศทำให้เกิดโอกาสสำหรับผู้รับเหมาจากประเทศมาเลเซียใน การมีส่วนร่วมกับโครงการในต่างประเทศ อย่างไรก็ตาม การก่อสร้างในต่างประเทศมิให่เรื่องง่าย สำหรับผู้รับเหมาของประเทศมาเลเซีย โดยกลยุทธ์ที่เข้มแข็งและเหมาะสมเป็นสิ่ง ที่มีความจำเป็น ต่อการประสบความสำเร็จใน การก่อสร้าง ต่างประเทศ ดังนั้นงานวิจัยจึงมี จุดมุ่งหมาย เพื่อเสนอ แผนกลยุทธ์ที่ เป็นไปได้ สำหรับผู้รับเหมา ของประเทศมาเลเซียในการดำเนินงานโครงการก่อสร้าง ในต่างประเทศ งานวิจัยเริ่มต้นจากการทบทวนจุดแข็งและจุดอ่อน รวมทั้งโอกาสและภัยคุกคาม (Strength, Weakness, Opportunity, Threat : SWOT) ของผู้รับเหมาจากประเทศมาเลเซียที่มี ประสบการณ์ในการดำเนินงานโครงการระหว่างประเทศ วิธีการศึกษาในงานวิจัย นี้ใช้เทคนิคการ ส้มภาษณ์แบบเชิงลึกกับ กรณีศึกษาของ บริษัทที่มีประสบการณ์ในการก่อสร้างระหว่างประเทศ จากนั้น งานวิจัย ทำการสำรวจด้วยแบบสอบถามและการอภิปรายแบบโต๊ะกลมกับหน่วยงาน ภาครัฐและเอกชนในประเทศมาเลเซีย ผลการศึกษาชี้ให้เห็นว่าจุดแข็งหลักของบริษัทจากประเทศ มาเลเซียคือการมีประวัติผลงานเดิมที่ดี ในขณะที่แรงงานให้ผลผลิตต่ำเป็นจุดอ่อนหลัก นอกจากนี้ การขยายตัวของเศรษฐกิจในประเทศที่กำลังพัฒนาเป็นการเพิ่มโอกาสในการเข้าร่วมโครงการใน ต่างประเทศ อย่างไรก็ตาม การคอรัปชั่นในประเทศเจ้าของโครงการเป็นสิ่งที่ส่งผลกระทบต่อการ เข้าไปมีส่วนร่วมในโครงการต่างประเทศ ดังนั้นผู้รับเหมาจำเป็นจะต้องเตรียมตัวให้ดีก่อนที่จะเข้า ร่วมโครงการก่อสร้างระหว่างประเทศเพื่อให้แน่ใจว่าโครงการจะประสบความสำเร็จ นอกจากนี้ งานวิจัยเสนอแนะกลยุทธ์เช่น การรวมตัวกับบริษัทท้องถิ่นในรูปแบบ กิจการร่วมค้า การรับสมัคร วิศวกรที่มาจากประเทศเจ้าของงานเพื่อมาทำงานให้กับบริษัทมาเลเซีย และการทบทวนสภาพ การเงินของบริษัทลูกค้า

ภาควิชาวิศวกรรมโยธา	ลายมือชื่อนิสิต
สาขาวิชาวิศวกรรมโยธา	ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก
ปีการศึกษา2555	ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์ร่วม

# # 547 05145 21: MAJOR CIVIL ENGINEERING

KEYWORDS: STRATEGIC PLANNING/ INTERNATIONAL CONSTRUCTION/ SWOT ANALYSIS

NUR SOLEHA ABDUL RAHIM: DEVELOPMENT OF INTERNATIONAL STRATEGIC PLANNING FOR MALAYSIAN CONTRACTORS. ADVISOR: ASST. PROF. VACHARA PEANSUPAP, Ph.D., CO-ADVISOR: ASST. PROF. NOPPADON JOKKAW, Ph.D., 161 pp

International constructions provide the opportunity for Malaysian contractors to participate in overseas project. However, it is not an easy task to get involved in the international construction market. In order to become a successful company, a proper and strong strategic planning is needed. Therefore this study aims to suggest the potential strategic planning for Malaysian contractors to operate in overseas project. The research begins with reviewing the strengths and weaknesses as well as the opportunities and threats of the Malaysian contractors that have been involved in the international construction projects previously. The methodologies adopted for the study are in-depth interview with the companies' representatives followed by the questionnaire survey and round table discussion with government and private bodies in Malaysia. The result shows that having good track records from previous project is one of the main strengths. Meanwhile, the low labour productivity is the main weaknesses. Moreover, the strong economic growth of developing countries increases the opportunities for the Malaysian contractors to penetrate in overseas projects. However, corruptions in host country influence their involvement in overseas construction. Thus, contractors need to prepare themselves before penetrate into the international constructions in order to ensure the successfulness of the projects. Furthermore, this research suggested several international strategies such as formation of joint-venture with local companies, recruitment of engineer from host country to work in Malaysia and review of client financial standing

Department:Civil Engineering	Student's Signature:
Field of Study:Civil Engineering	Advisor's Signature:
Academic Year:2012	Co-advisor's Signature:

#### **ACKNOWLEDGEMENTS**

Firstly, I praised to Allah for giving me the strength, patience and a lot of support from everybody around me to complete this research. During this entire progress of this research I have been learning more on Malaysia construction industry and gaining a lot of useful information. This knowledge is really helpful since the constructions in other countries are growing and offer more opportunity to Malaysian contractors.

I hereby would like to express my sincere appreciation and deepest gratitude to the following persons for their support during the research. To my advisor Assistant Professor Dr. Vachara Peansupap and my co-advisor Assistant Professor Dr. Noppadon Jokkaw, thank you for the guidance, advices, encouragement, patient and endless support. My deepest gratitude is extended to everyone who been involve directly or indirectly in my research and enable me to conduct the interview and questionnaire survey. Thank you for the guidance, knowledge and time they spend to share their experience as much as they can. Not forgetting to my friends for their valuable friendship, helps and encouragement for making life abroad bearable. I extend my special and lovely thanks to my family for their endless love, support, encouragement and time. Lastly, I would like to thanks AUN/SEED-Net scholarship for the willingness to support my studies for 2 years in Chulalongkorn University, Thailand.

Thank you.

CONTENTS	Page
ABSTRACT (THAI)	iv
ABSTRACT (ENGLISH)	V
ACKNOWLEDGEMENT	vi
CONTENTS	vii
LIST OF TABLES	X
LIST OF FIGURES	xiii
CHAPTER I INTRODUCTION	1
1.1 Significance of Research	1
1.2 Problem Statement	2
1.3 Research Objectives	4
1.4 Scope of Work	4
1.5 Research Methodology	5
1.6 Research Output	6
CHAPTER II LITERATURE REVIEW	7
2.1 Malaysian Construction Industry	7
2.2 International Construction and Globalization	13
2.3 Issues of International Construction.	16
2.3.1 Strengths and Weaknesses	16
2.3.2 Opportunities and Threats	17
2.4 Strategic Planning	17
2.4.1 Strategies of Business Model	18
2.4.1.1 SWOT Model	18
2.4.1.2 SPACE Model	20
2.4.1.3 Porters Five Factor Model	21
2.4.1.3 Porters three Generic Strategies	21
2.5 Development of Strategies	23
2.6 Application of SWOT Analysis	28
2.6.1 Foreign Firms works in Local Country	28
2.6.2 Local Firms works in Oversea	32

	Page
2.7 Research Gaps	36
CHAPTER III METHODOLOGY	38
3.1 Research Strategy	38
3.2 Research Design	41
3.2.1 The Survey Strategy	41
3.2.2 The Strategic Planning Development	42
3.2.2.1 The TOWS Matrix: A Conceptual Model	43
3.3 Research Methodology (Phase I)	47
3.3.1 Literature Review	47
3.3.2 Data Collection	48
3.3.2.1 Interview Session	50
3.3.2.2 Questionnaire Survey	50
3.3.3 Analyzing Data	51
3.3.3.1 SWOT Analysis	51
3.4 Research Methodology (Phase II)	52
3.4.1 Development of Strategic Planning	52
3.4.1.1 Round Table Discussion.	53
3.4.1.2 Comparison with Previous Research Strategies.	53
3.5 Summary of Chapter	54
CHAPTER IV SWOT ANALYSIS OF MALAYSIAN CONTRACTORS IN	
INTERNATIONAL CONSTRUCTION PROJECTS	55
4.1 Interview Session	55
4.1.1 Profile of Respondents	55
4.1.2 Ranking of Strengths, Weaknesses, Opportunities and Threats	57
4.1.3 Perception of Experienced Malaysia Contractors in Overseas	60
4.2 Questionnaire Survey	63
4.2.1 Profile of Respondents	63
4.2.2 Ranking of Strengths, Weaknesses, Opportunities and Threats	66
4.3 Round Table Discussion	72

	Page
4.4 Results and Discussion	73
4.5 Discussion of Mean Value based on Each Country	99
4.6 Summary of Chapter	101
CHAPTER V STRATEGIC PLANNING OF MALAYSIAN CONTRACT	TORS IN
INTERNATIONAL CONSTRUCTION PROJECTS	105
5.1 Lists of Potential Strategic Planning for Malaysian Contractors	105
5.1.1 Suggested Strategies from Round Table Discussion	105
5.1.2 Strategies from Previous Research	107
5.2 Matching of Round Table Discussion Strategy with SWOT of Malays	ian
Contractors	109
5.3 Additional Strategy from Previous Research	110
5.4 Summary of Chapter	111
CHAPTER VI CONCLUSION AND RECOMMENDATION	121
6.1 Conclusion	121
6.2 Limitation of Study	124
6.3 Recommendation	125
REFERENCES	127
APPENDICES	131
Appendix A Data Collection Part I	132
Appendix B Data Collection Part II	154
BIOGRAPHY	161

Table 2.1 Gross Domestic Product (GDP) by Sector 2010-2012 (at constant 2000	
price)	8
Table 2.2 Statistic of Registered Contractors in Malaysia	8
Table 2.3 Total Number of Projects handles by Malaysian Contractors in Overseas	9
Table 2.4 Total Number of Company and Country involved in Overseas Project	9
Table 2.5 Example lists of Internal Environmental Factors	16
Table 2.6 Example lists of External Environmental Factors	17
Table 2.7 The SWOT Matrix	18
Table 2.8 Summary of Vietnamese A/E/C Firms SWOT	28
Table 2.9 Vietnamese Firms Response to Threats	29
Table 2.10 Summary of Chinese Consulting Firms SWOT	29
Table 2.11 Strategies Adopted by Chinese Consulting Firms	30
Table 2.12 Summary List of CICCs	31
Table 2.13 Summary of Land Developers SWOT	31
Table 2.14 Risk identification hierarchy for overseas construction projects	33
Table 2.15 Risk faced in India	35
Table 3.1 Relevant Situations for Different Research Strategies	40
Table 4.1 Profile of Respondents and Firms	56
Table 4.2 Profile of Projects in Overseas	57
Table 4.3 Overall Results for Strengths / Weaknesses	59
Table 4.4 Ranking of Strengths	60
Table 4.5 Ranking of Weaknesses	60
Table 4.6 Ranking of Opportunities	60
Table 4.7 Ranking of Threats	60
Table 4.8 Perception for Strengths of Malaysian Contractors	61

	Page
Table 4.9 Perception for Weakness of Malaysian Contractors	62
Table 4.10 Perception for Opportunity of Malaysian Contractors	62
Table 4.11 Perception for Threats of Malaysian Contractors	62
Table 4.12 Profile of Respondents and Firms	64
Table 4.13 Profile of Cases in Overseas	65
Table 4.14 Ranking of Strengths	67
Table 4.15 Ranking of Weaknesses	67
Table 4.16 Ranking of Opportunities	68
Table 4.17 Ranking of Threats	68
Table 4.18 Overall Mean Value from Questionnaire Survey	69
Table 4.19 Strengths	72
Table 4.20 Weaknesses	72
Table 4.21 Opportunities	72
Table 4.22 Threats	72
Table 4.23 Company's Strengths	73
Table 4.24 Company's Weaknesses	74
Table 4.25 Company's Opportunities	74
Table 4.26 Company's Threats	74
Table 4.27 Ranking of Strengths	98
Table 4.28 Ranking of Weaknesses	98
Table 4.29 Ranking of Opportunities	98
Table 4.30 Ranking of Threats	98
Table 4.31 Summary Results for India	102
Table 4.32 Summary Results for Thailand	103
Table 4.33 Summary Results for United Arab Emirates	104
Table 5.1 List of Strategies from Previous Research	108
Table 5.2 List of Strategies from Round Table Discussion	110

	Page
Table 5.3 List of Additional Strategies	110
Table 5.4 Four-quadrant Matrix	112
Table 5.5 Proposed SO Strategies	113
Table 5.6 Proposed WO Strategies	117
Table 5.7 Proposed ST Strategies	118
Table 5.8 Proposed WT Strategies	119
Table 5.9 Proposed Strategies for the ambiguous Opportunity / Threat	120

LIST OF FIGURES	Page
Figure 1.1 Number of Overseas Projects handled by Malaysian Contractors	3
Figure 1.2 Project Value handled by Malaysian Contractors	3
Figure 1.3 Research Methodology	5
Figure 2.1 Category/Scope of Projects handled by Malaysian Contractors in	
Overseas	9
Figure 2.2 Projects Involved by Malaysian Contractors in Overseas	10
Figure 2.3 Ongoing Projects handled by Malaysian Contractors in Overseas	11
Figure 2.4 Foreign market entry decision process	15
Figure 2.5 The SPACE Model	20
Figure 2.6 Porter's Five Factor Model	21
Figure 2.7 Matrix of the ports in the East Asia area under the SWOT analysis	23
Figure 2.8 Quantified SWOT analysis and the strategic matrix	24
Figure 2.9 Application of the TOWS matrix to Winnebago	25
Figure 2.10 SWOT dimensional strategic planning	26
Figure 2.11 SWOT(S) of OREDs in Guangzhou real estate market	27
Figure 3.1 Model of the Scientific Method	39
Figure 3.2 Research Strategies	40
Figure 3.3 Strategic Planning Process	43
Figure 3.4 Process of corporate strategy and the TOWS analysis	44
Figure 3.5 Interaction Matrix	46
Figure 4.1 Number of Project handled by Malaysian Contractors in India	78
Figure 4.2 Number of Project handled by Malaysian Contractors in UAE	79
Figure 4.3 Number of Project handled by Malaysian Contractors in Thailand	80
Figure 4.4 United Arab Emirates Inflation Rate	87
Figure 4.5 India Inflation Rate	88
Figure 4.6 Thailand Inflation Rate	89
Figure 4.7 United Arab Emirates Interest Rate	90

	Page
Figure 4.8 India Interest Rate	91
Figure 4.9 Thailand Interest Rate	91

#### **CHAPTER I**

#### INTRODUCTION

#### 1.1 Significance of Research

International construction is another way for contractors to explore the new market. In 2010, the United States, China, Japan, Germany and other six countries has been listed out as top ten countries with the highest gross domestic product (GDP) and attracted majority of world's direct investment (World Bank, July 2011). The GDP values show the pattern of economic growth in each country and provide the opportunity for foreign firms to seek contracts and make high profits.

However, the decision to enter the international construction market requires a considerable amount of effort aimed at collecting sufficient information to provide a sound basis on which to develop a business strategy. The development of business strategy is to ensure that the management is committed to and agrees with a company's direction to achieve the successfulness of the company.

In Malaysia, international construction is not a new phenomenon. Contractors are encourage to participate in overseas construction projects because of the high competition among local contractors and subjected to a limited number of construction projects (CIDB Malaysia, 2008). Some consultants or contractors in Malaysia seek the opportunity to obtain overseas contracts for the purpose of expanding their career in the construction market.

Comparing to other foreign companies like United State, Japan, China and others, Malaysia can be described as a young player in the international construction market. In order to emulate these well-known giant players, a maturity period is needed to bring up the Malaysian construction companies. The competition in global market is very tough even though Malaysian construction

companies have a strong base in both technical and financial strength. Malaysia government agency such as Construction Industry Development Board (CIDB) plays an important role in providing support to them in entering the international market.

Meanwhile, the language, culture and legal system in each country might be different. These kinds of business operating environments need to be faced by Malaysian contractors before and while conducting the project. Thus, the strong strategic planning for Malaysian contractors handling overseas project must be identified. This strategic planning can be used as a guide for new comer's namely contractors who are interested to join international construction.

#### 1.2 Problem Statement

Since 1986, Malaysian contractors had involved in the overseas projects. According to the updated report by Construction Industry Development Board (CIDB) Malaysia on 1<sup>st</sup> September 2011, there were 574 completed projects and 94 ongoing projects around the world. Majority of the projects are in the ASEAN countries (247 projects). The interest of knowing the number of projects shows that Malaysian contractors have put a high effort to seek the opportunities in participating to a lot tenders in international projects. Figure 1.1 and Figure 1.2 below shows the number of projects and the project value for each year handled by Malaysian contractors from year 1986 until 2011.

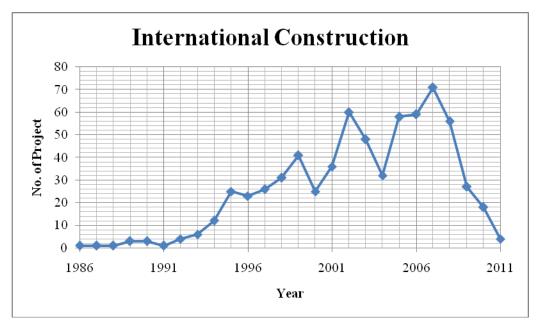


Figure 1.1: Number of Overseas Projects handled by Malaysian Contractors (CIDB, Sept. 2011)

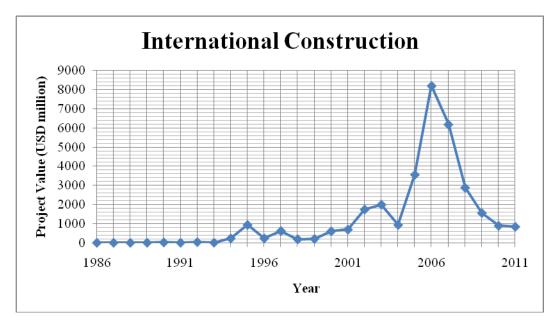


Figure 1.2: Project Values handled by Malaysian Contractors (CIDB, Sept. 2011)

As mentioned before, handling an international project require a strong strategy in order to perform well in managing the whole project. Even though Malaysian contractors have completed more than 100 projects; the exact business strategy to success in overseas arena is still unidentified. The identification of the

business strategy to operate in the overseas construction may help more contractors to understand and prepare themselves during their involvement.

#### 1.3 Research Objectives

The objectives of this research are:

- 1. Identify Malaysian contractor's strengths, weaknesses, opportunities and threats (SWOT) in the international construction market.
- 2. Develop the potential strategic planning to assist Malaysian Contractors to further improve their competitiveness when expanding their careers overseas.

#### 1.4 Scope of work

The scope of this study focused on the strengths, weaknesses, opportunities and threats of the companies which may perform a strong strategic planning in pursuing international construction project with the consideration on the following aspects only:

- 1. The data was collected from respondents who had experienced in handling overseas construction projects.
- 2. The project can be either ongoing or completed within last 5 years.
- 3. The respondents involved in the interview and questionnaire sessions are those who had experienced in handling international projects.
- 4. The study also concerning on developing potential strategic planning for local contractors in preparing themselves to penetrate in the international market.

## 1.5 Research Methodology

Figure 1.3 shows the brief methodology for this study. This study went through four stages (two phases) to develop potential strategic planning. The stages are literature review, interview sessions, questionnaire sessions and SWOT analysis.

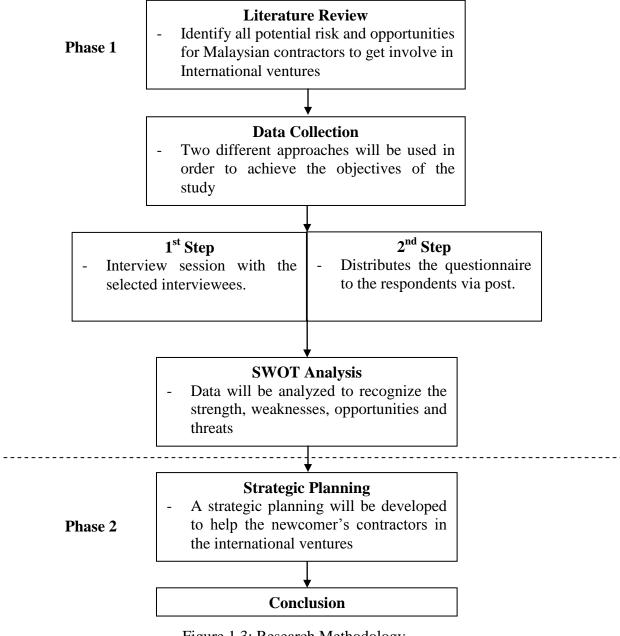


Figure 1.3: Research Methodology

# 1.6 Research Output

- 1. Identifying the strength and weaknesses of Malaysian construction firms.
- 2. Identifying the opportunities and threats from the internal and external environment when operates in overseas construction.
- 3. The strategic planning which can be used by Malaysian construction firms to operate in overseas projects.

#### **CHAPTER II**

#### LITERATURE REVIEWS

This chapter provides a brief overview of Malaysian construction industry; international construction and globalization; issues occur in international construction; models of business strategy; development of strategic planning; application of SWOT analysis and research gap for Malaysia contractors to understand the situation in international arena. Several researches and studies on international projects had identified the problems that might be occurred when handles construction projects in overseas. These generally help newcomers to gain information before pursuing project in overseas.

#### 2.1 Malaysian Construction Industry

Construction industry is one of the main contributors to Malaysian Gross Domestic Product (GDP). Referring to Table 2.1, the construction sector contributed 3.3% (2010) and 3.2% (2011) towards the nation's total GDP, and it is expected to continue contributing 3.2% for year 2012 (Malaysian Economic Report, 2011-2012). Therefore, the construction industry can be described as part of a substantial economic driver for Malaysia (CIDB News, 2011).

The latest CIDB News 2011 stated that in 2011 there were 62,064 registered contractors including lowest grade G1. The statistic of registered contractor in Malaysia up to Mac 2011 is shown in Table 2.2.

Table 2.1: Gross Domestic Product (GDP) by Sector 2010-2012 (at constant 2000 prices)

	Change (%)			Share of GDP (%)		
	2010	2011	2012	2010	2011	2012
Agriculture	2.1	4.7	4.1	7.3	7.3	7.2
Mining	0.2	-2.4	2.5	7.0	6.5	6.3
Manufacturing	11.4	4.5	4.5	27.6	27.5	27.2
Construction	5.1	3.4	7.0	3.3	3.2	3.2
Services	6.8	6.4	6.5	57.7	58.4	58.9
Less: Undistributed FISIM	5.8	6.4	6.2	4.1	4.2	4.2
Add: Import duties	9.6	13.2	1.6	1.3	1.4	1.3
GDP	7.2	5.0-5.5	5.0-6.0	100.0	100.0	100.0

Table 2.2: Statistic of Registered Contractors in Malaysia (CIDB News, Mac 2011)

Grade	Total	
G1	32,040	
G2	7,725	
G3	10,072	
G4	2,655	
G5	3,773	
G6	1,422	
G7	4,377	
Total	62,064	

All contractors who completed any construction works in Malaysia need to register with Construction Industry Development Board (CIDB). These companies shall be guilty under Construction Industry Development Board Malaysia Act 1994 (Act 502) when they conducted any construction works without being registered with CIDB. The registered companies will obtain and gain priority to involve in overseas construction missions organized by CIDB.

CIDB is one of the government bodies besides Malaysia External Trade and Development Corporation (MATRADE) in Malaysia which involved in marketing the construction services in foreign country. Many of Malaysian construction companies started to expand their business internationally due to the opportunities offered by the global economy.

As been reported by CIDB in their webpage, Malaysian contractors involvement in the global market up to September 2011 shows that they were successful in acquiring 688 projects of various categories with a value of 28,429.05USD million. Table 2.3 clearly stated the number and value of projects handles by Malaysian contractors. Meanwhile Table 2.4 shows the number of company and country involved by Malaysian contractors.

Table 2.3: Total Number of Projects handles by Malaysian Contractors in Overseas (CIDB, Sept. 2011)

Status	Number	Project Value (USD million)
Completed projects	574	17,200.33
On-going projects	94	11,228.72
Total	688	28,429.05

Table 2.4: Total Number of Company and Country involved in Overseas Project (CIDB, Sept. 2011)

Item	Number
Number of Company	113
Number of Country	49

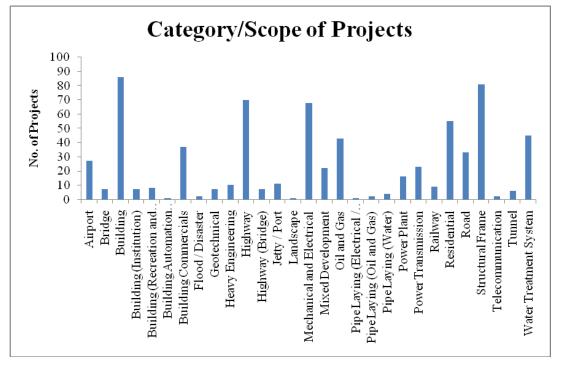


Figure 2.1: Category/Scope of Projects handles by Malaysian Contractors in Overseas (CIDB, Sept. 2011)

Most of the Malaysian contractors were involved in public utilities infrastructure as well as building projects including residential. Figure 2.1 represent the category/scope of projects mostly involved by Malaysian contractors in overseas. The highest number of project is related to building construction followed by structural frame, mechanical and electrical, and highway. The tabulation of percentage for projects handles by Malaysian contractors in overseas as shown in figure 2.2. ASEAN contribute the highest percentage for Malaysian contractors to go globally. Meanwhile, Middle East contributed 21% followed by South Asia Continent (20%), others (17%) and Africa (6%).

# **Overseas Projects**

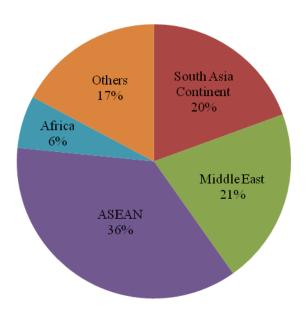


Figure 2.2: Projects Involved by Malaysian Contractors in Overseas (CIDB, Sept. 2011)

Recently most of the ongoing projects handle by Malaysian contractors held in India. India is one of the countries with a healthy economic growth. According to a report by Intenational News and Views Corporation (2011), Malaysian and Indian governments has signed a Memorandum of Understanding (MoU) to strengthen bilateral ties between the two countries. These give a clearer path for

Malaysia contractors to perform in India especially in road development and management in order to support the country's healthy economic growth. According to Ramayah, Mohamad et al. (2010), the companies start to expand their business to the physically closest country. They claimed that Malaysia and India share several common political and social affinities. Figure 2.3 shows the number of ongoing projects handled by Malaysian contractors in overseas.

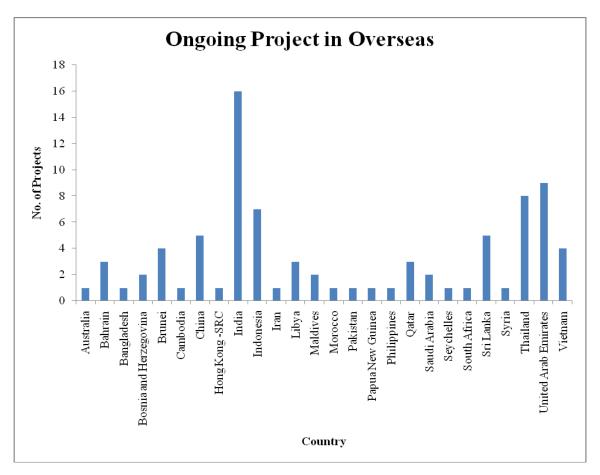


Figure 2.3: Ongoing Projects handle by Malaysian Contractors in Overseas (CIDB, Sept. 2011)

In 2007, Construction Industry Development Board (CIDB) has submitted a strategic master plan in order to drive further improvement of the construction industry and enable it to be competitive globally. Construction Industry Master Plan (CIMP) was carried out by the government in assisting the development of construction industry in Malaysia. It is also intended to ensure the improvement of

quality and productivity along the entire construction industrial chain in order to support the nation's overall economic growth.

Therefore, CIMP has identified eight (8) critical success factors which help in achieving the successfulness of Construction Industry vision. Those factors are productivity, quality, human resource, knowledge, innovation, environmental-friendly practices, industry sustainability and professionalism. The basis for the CIMP's main recommendations is formed based on seven (7) strategic thrusts which have been identified in order to achieve the goals. The strategic thrusts are:

- Integrate the value of construction industry network in order to improve the productivity and competency;
- ii. Strengthen the image of construction industry;
- iii. Strive to achieve the highest standard of construction environment practices;
- iv. Develop the ability of human resource in the construction industry;
- v. Adopting the new construction methods which are develop from the innovation of research;
- vi. Leverage the use of technology in the construction industry; and
- vii. Benefit from globalization including the export of construction products and services.

Even though the CIMP introduced by CIDB focused on improving Malaysian construction industry internally, the implementation of this plan will provide benefits to the contractors itself. However, the key issue of conducting this research is related to international construction. Therefore, this research need to be conducted to identify the potential issues related to the international construction.

#### 2.2 International Construction and Globalization

International construction can be described as performing construction work at another country which is outside their country of origin. Before deciding to undertake projects in overseas, it is important to develop the business strategies and finds the effective ways to enter the market in order to achieve successful project completion (Yean Yng Ling, Ibbs et al., 2008).

International construction firms always face great challenges and difficulties to remain competitive in international markets (Korkmaz and Messner, 2008) as well as they need to understand the new culture, avoiding unstable politics situation and to manage the communications between them and clients (Kangari and Lucas, 1997). According to Korkmaz and Messner (2008), firms must achieve a deep understanding of their dynamic environments and develop their business strategies accordingly in order to remain competitive in international markets.

Globalization plays a major role that influenced the construction firms to expand their business into international construction markets. There are several ways of entry mode which construction firms used in expanding their businesses internationally such as through lone operation, operation through subsidiary (Gunhan and Arditi, 2005), licensing and franchising, exporting and strategic alliances (Yean Yng Ling, Ibbs et al., 2008). It is very important to choose the right entry mode because it will determine the survival of the company (Andersen and Strandskov, 1997).

Lone operation normally happens when contractors agree to handle each aspects of the project without any support from another country. A strategic alliance is another option of entry mode where two firms agree to share resources, rewards or risks to start new ventures. Firms can be considered as wholly owned foreign subsidiaries when their constructions in foreign country do not have any direct involvement of local firms.

According to Ahmad and Kitchen (2008), Malaysian contractors normally choose the international joint ventures, strategic alliance, contractual agreements and exporting as the entry mode choice for investment in international expansion. This is due to the reasons that this strategy is easy to establish, less risk involved and flexible.

Domke-Damonte (2000) have stated that the sustainable competitive is generated when the company choose the effective entry mode strategy when penetrate into a foreign market. This will help the firm in identifying its resources in the long run.

The decision to move into a foreign market should be approached in a logical manner to ensure correct motives apply and that real market potential exists. Figure 2.4 provides the framework to enable such complex decisions to be taken (Howes and Tah, 2003).

After using this approach, the type of entry mode can be identified and the strategic management should be performed. This will indirectly helps newcomer's contractors to identify the potential problem which might be faced and provide a strong management in order to have a successful project in international arena.

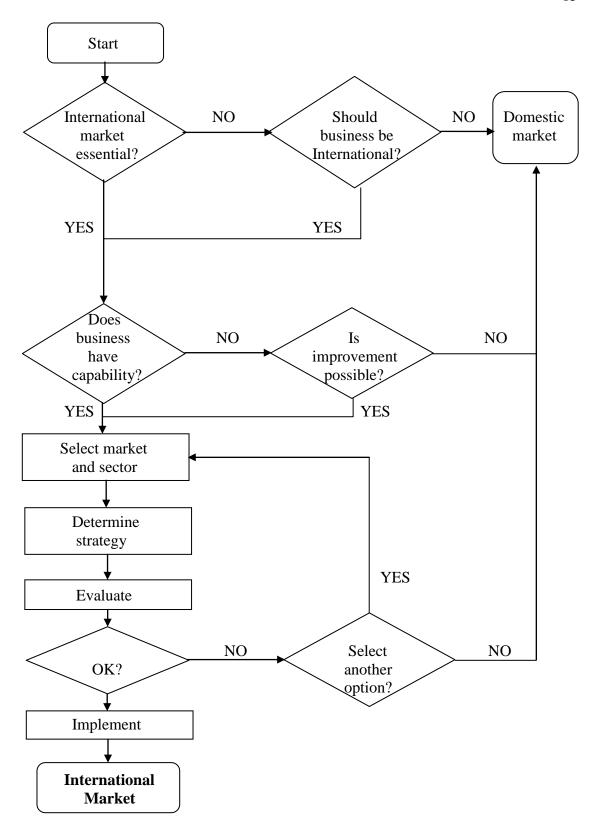


Figure 2.4: Foreign market entry decision process (Howes and Tah, 2003).

#### 2.3 Issues of International Construction

According to Yates (2007), even though the globalizations increase the opportunities for firms to operate in overseas, it also creates the challenges which occur throughout the construction process. The issues of international construction come from internal or external factors which were examined through the variables of strengths, weaknesses, opportunities and threats.

Internal environment can be described as an overview of the strength and weaknesses of the company which affecting the ability of the organizations to make a profit. Meanwhile, the overview of the opportunity and threats represents the external environmental forces of the company. Normally, firms do not have any influenced on these factors.

## 2.3.1 Strengths and Weaknesses

Table 2.5: Example lists of Internal Environmental Factors

Capital and inefficiency in a management	Ghani, Nayan et al. (2010)
Difficulties to find local ski workers	Ghani, Nayan et al. (2010)
Sophisticated technology	Ahmad and Kitchen (2008), Ghani, Nayan et al. (2010)
• Experience in complex proj	ect Yean Yng Ling and Yu (2009)
Relationship with host cour	try Lu, Li et al. (2009)
Hardworking	Lu, Li et al. (2009)
Ability to make and carry o	ut decisions Tan and Ghazali (2011)
• Experience in international	markets Ahmad and Kitchen (2008)
Project management ability	Yean Yng Ling, Vu Min Chau et al. (2009)
Contractors experience	Tan and Ghazali (2011)
5 1 1 11 20 1	
<ul> <li>Decision making effectiven</li> </ul>	ess Tan and Ghazali (2011)
<ul><li>Decision making effectiven</li><li>Contractors cash flow</li></ul>	Tan and Ghazali (2011)  Tan and Ghazali (2011)
	` ′

#### 2.3.2 Opportunities and Threats

Table 2.6: Example lists of External Environmental Factors

Develop new market	Ahmad and Kitchen (2008)	
Liberalization of industry	Ahmad and Kitchen (2008)	
Competition in domestic market	Yean Yng Ling and Yu (2009)	
<ul> <li>Business opportunities</li> </ul>	Ahmad and Kitchen (2008)	
Distance from Malaysia	Ahmad and Kitchen (2008); Ghani, Nayan et al. (2010)	
<ul> <li>Host government regulations</li> </ul>	Ahmad and Kitchen (2008)	
Host country political situation	Ahmad and Kitchen (2008)	
Good infrastructure	Ahmad and Kitchen (2008)	
• Strong support from the government	Lu et al. (2009)	
Construction materials	Ghani, Nayan et al. (2010)	

Therefore, the identification of factors which might influence the decision to involve in international construction market need to be determines. It can help the newcomers in developing strategic planning before participating in the international construction market.

#### 2.4 Strategic Planning

According to Korkmaz and Messner (2008), environmental forces have a great influence on the decisions of each firm to develop the strategic planning. Strategic planning can be described as a process of guiding members of an organization in achieving the future mission by developing the necessary procedure and operations (Goodstein, Nolan et al., 1993).

Strategic planning helps the organization to develop, organize and utilize a better understanding of the environment, industry or arena in which it operates. Therefore, business managers have to examine the internal and external environmental factors which influence the operation of the firms.

For a newcomer contractor, it is difficult to identify new risks in a new environment due to lack of adequate overseas environmental information and overseas construction experience (Zhi, 1995). Thus, it is important to identify and control these risk factors and construct a strong strategic planning.

#### 2.4.1 Strategies of Business Model

There are several management tools adaptable to identify the strengths and opportunities in developing the strategic planning that could provide an additional decision aid to validate current assumption.

- SWOT Model
- SPACE Model
- Porter's Five Factor Model
- Porters Three Generic Strategies

#### **2.4.1.1** SWOT Model

Table 2.7: The SWOT matrix

The SWOT matrix	Strengths (S)	Weaknesses (W)
Opportunities (O)	SO Strategies	WO Strategies
Threats (T)	ST Strategies	WT Strategies

The SWOT model is the most basic techniques to evaluate the strengths, weaknesses, opportunities and threats of enterprises (Yean Yng Ling, Vu Min Chau et al., 2009). It provides a basic listing which can be called as raw material of conditions both inside and surrounding the company.

Strengths and weaknesses refer to the internal conditions of the firm. Strengths are normally related to the advantages owned by the company which can be exploited on the market. Meanwhile, weaknesses represented the limitations or constraints which hinder the progress of a company in a certain direction.

Even though the external environmental forces do not give any influence to the firms but the identification of these factors helps to prepare the firms itself from any circumstances. Opportunity is an area of need in which a company can perform profitably and threats is a challenge need to be posed by a company to defense their marketing action. A good company always treats challenges and threats as an opportunity to establish themselves at the higher level as well as to gain significant profit increment.

According to Dess, Lumpkin et al. (2008), opportunities and threats could be factors either in the general environment or in the competitive environment. There are six segments of the general environment which are demographic, sociocultural, political/legal, technological, economic, and global. The changes in these segments can have a dramatic effect on a firm. The competitive environment consists of industry related-factor and has more direct impact than the general environment. Porter's five factors model are normally used for identifying the competitive environment.

#### **2.4.1.2** SPACE Model

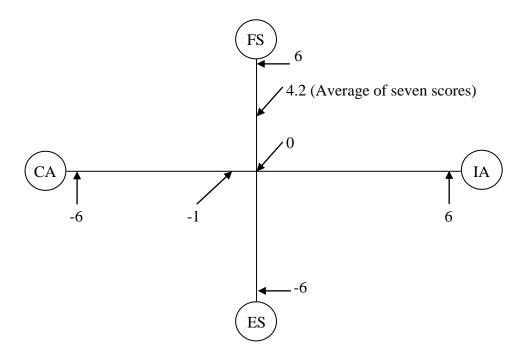


Figure 2.5: The SPACE Model

SPACE model still covers the external and internal environmental factors and bring them together in a four-dimensional figure but the way of implementing the analysis factors are different from the SWOT model. According to Mohamed, Ann et al. (2010), SPACE considered two dimensions for each factors of external and internal group. For external factors, there have industrial attractiveness (IA) and environmental stability (ES) dimensions. Meanwhile, for internal factors, there have financial strengths (FS) and competitive advantage (CA) dimensions.

This model proposed a full extension of X and Y axis together with positive and negative scale range which is differ from SWOT model (2 by 2 matrixes). At the end, a space created and the quadrant with the largest space will be the dominant strategy.

#### **2.4.1.3** Porter's Five Factor Model

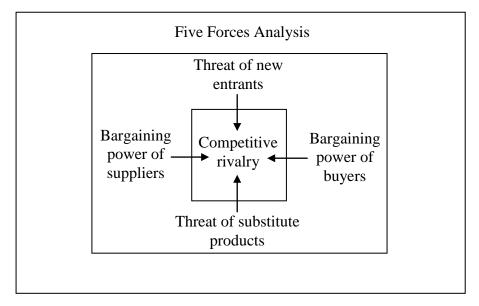


Figure 2.6: Porter's Five Factor Model

This model is the most commonly used analytical tool for examining the competitive environment. It describe the competitive environment in terms of five basic competitive forces which are the threats of new entrants, the bargaining power of buyers, the bargaining power of suppliers, the threat of substitute products and services, and the intensity of rivalry among competitors in an industry.

This model helps to access on how to make an improvement of firm's competitive position with regards to each of the five forces. At the end, it will help to decide whether the firms should remain in or out an industry.

## **2.4.1.4** Porters Three Generic Strategies

Porter's generic strategies were used by most researcher and be adapted to the construction industry. Porter proposed three main business strategies consists of cost leadership, differentiation and focus (Korkmaz and Messner, 2008; Yean Yng Ling, Ibbs et al., 2008; Yean Yng Ling, Vu Min Chau et al., 2009; Yean Yng Ling and Yu, 2009). A firm must

perform their activities efficiently compared to its competitor and at the same time provide the best price to help their firms in gaining market share. Differentiation strategy in terms of developing a unique attributes product which is valued by the customers and it is better than other competitors. Focus strategy concentrates on the best way to achieve their goals in terms of cost advantage or differentiation.

Overseas construction projects have more uncertainties, especially in terms of external risks, mainly because of the large size of projects and the international issues involved (Zhi, 1995). The internal factors need to be matched with the surrounding before choosing the best and effective alternative strategy to be implemented.

Therefore, this study has chosen SWOT model to investigate the internal and external environmental forces before developing the strategic planning. Despite its apparent simplicity, the SWOT approach has been immensely popular for a number of reasons. First, it forces managers to consider both internal and external factors simultaneously. Second, it emphasizes on identifying opportunities and threats, making firms to act proactively rather than reactively. Third, it raises awareness about the role of strategy in creating a match between the environmental conditions and the firms' internal strengths and weaknesses. Finally, its conceptual simplicity is achieved without sacrificing analytical rigor.

However, SWOT also has its limitation. It could not show how to achieve a competitive advantage. It can only help in raising awareness about important issues but failing to lead to the kind of action steps needed to enact strategic change. Therefore, this analysis is relying more on SWOT model to stimulate self-reflection and group discussion on how to improve their firm and position it for success.

## 2.5 Development of Strategy

SWOT analysis can be used to develop the basis of the Grand Strategy Matrix (GSM) which consists of four quadrants according to their categories (Chang and Huang, 2006).

Chang and Huang (2006) did the research by focusing on the concept of assessing the competing strength of each container port in East Asia and suggested an adoptable competing strategy for each. Figure 2.7 shows the results after conducting the SWOT analysis.

This research use GSM approach in order to identify the position of enterprise in the competition. Figure 2.8 shows the proposed strategic planning suggested for each of the analyzed port.

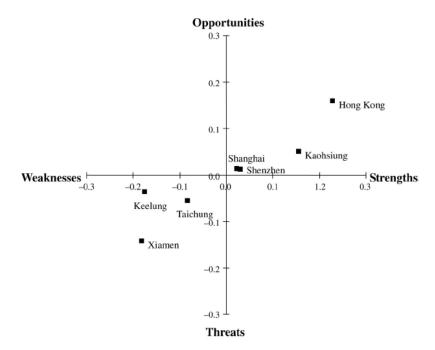


Figure 2.7: Matrix of the ports in the East Asia area under the SWOT analysis (Chang and Huang, 2006)

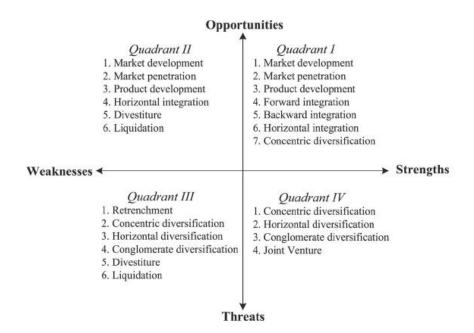


Figure 2.8: Quantified SWOT analysis and the strategic matrix (Chang and Huang (2006), Source: adapted from Christensen et.al)

The up rise part in the ordinate represents the external environment (opportunities and threats) meanwhile the transverse part represents the internal environment (strengths and weaknesses).

The first quadrant represents the strength and opportunities of the firms. Firms in the first quadrant are able to use their strengths to develop and adopt the strategies.

Firm which stands in the second quadrant are those have the opportunity in developing new market but on the weak side of competition. They need to improve their weaknesses to increase the competitive strength.

Those firms with a low competitive strength and feel as if they are facing threats from the other competitors will be in the third quadrant categories. In this case they have to focus on the most favored markets so that they are able to defense themselves.

The last quadrant are representing the firm who possess competition strength but facing greater threats than opportunities. Each quadrant represents its own meaning which help the firm to identify their abilities before penetrating into international construction.

The other concept of developing a strategic planning was applied by Weihrich (1982) using TOWS matrix. The finding might be similar but the process is different. He did a research by applying this concept to Winnebago Industries Inc. which located at Forest City, Iowa. The results of the research are shown in Figure 2.9.

	Strengths:  1. Identifiable Corporate Name With a Good Reputation 2. Good Service and Warranty 3. Established Dealer Network With Good Dealer Relations 4. Extensive Research and Development Capabilities 5. Automated, Economical Plant 6. Manufacturing of Most Parts for the Motor Home	Weaknesses:  1. Vulnerability Because of Single-product Company 2. Concentration on Higher Priced Units 3. Heavy Investment in Toolmaking Raising Costs of Model Changes 4. One-plant Location 5. No Preparation for Transition from Family to Corporate Management
Opportunities:  1. Demand for Smaller RVs 2. Development of International Market 3. Demand for Low-cost Modular Housing (FHA Subsidy for Mortgage Loans)	SO:  1. Emphasize Smaller, More Efficient Motor Homes (O <sub>1</sub> S <sub>1</sub> S <sub>2</sub> S <sub>3</sub> S <sub>4</sub> S <sub>5</sub> S <sub>6</sub> )  2. Expand into Foreign Markets (O <sub>2</sub> S <sub>1</sub> S <sub>4</sub> )  3. Diversity into Modular Housing (O <sub>3</sub> S <sub>1</sub> S <sub>4</sub> S <sub>6</sub> )	WO:  1. Develop and Produce Smaller RVs(O <sub>1</sub> O <sub>2</sub> W <sub>1</sub> W <sub>2</sub> ) 2. Build Smaller Plants in Different Parts of the Country and Abroad (O <sub>1</sub> O <sub>2</sub> W <sub>4</sub> )
Threats:  1. Gasoline Shortage and Higher Prices of Gasoline 2. Slackening Demand for RVs 3. "Trade-up" Creates Secondary Market 4. Increased Competition (GM, Ford, International Harvester, VW, Toyota) 5. Impending Safety Regulations	ST:  1. Diversify into Farm Equipment, Railroad Cars (T <sub>1</sub> T <sub>2</sub> T <sub>3</sub> S <sub>1</sub> S <sub>3</sub> S <sub>4</sub> S <sub>5</sub> ) 2. Consider Diesel Engines for Motor Homes (T <sub>1</sub> S <sub>4</sub> ) 3. Make RVs Safer in Anticipation of Safety Regulations (e.g. Visibility, Flame Retardant, Crash Resistant, Brakes) (T <sub>4</sub> T <sub>5</sub> S <sub>6</sub> )	<u>WT</u> :  1. Sell the Company (T <sub>1</sub> T <sub>2</sub> T <sub>4</sub> W <sub>1</sub> W <sub>4</sub> W <sub>5</sub> )

Figure 2.9: Application of the TOWS matrix to Winnebago (Weihrich, 1982)

Apart from trying to use the strengths to rectify weaknesses, overcome threats and exploit the opportunities as proposed by TOWS Matrix, Leung, Hui et al.

(2011) has develop the SWOT dimensional analysis to integrate the four dimensional of a SWOT in formulating strategic plans using a holistic approach (Figure 2.10).



Figure 2.10: SWOT dimensional strategic planning (Leung, Hui et al., 2011).

This study has formulated the strategic plans for overseas real estate developers (OREDs) in Guangzhou in respect to each of the characteristics found in the four dimensions and the results are shown in Figure 2.11.

Therefore, one of these concepts can be applied in this study in order to identify the position of Malaysian construction industry in terms of strengths, weaknesses, opportunities and threats in international construction which is focus on local contractors venture out from Malaysia. This is a foundation for the development of strategic planning.

SWOT(S) dimensional planning of OREDs in Guangzhou	S (Strengths)	W (Weaknesses)
	$S_1$ – advanced management concept with clear objectives and organizational structure $S_2$ – high-caliber human resources to produce advanced product design $S_3$ – more stable and diverse channels for fundraising $S_4$ – more advanced information system $S_5$ – experienced in organizing large-scale promotion with unique brand image	$W_1$ – difficult to recruit experienced local professionals $W_2$ – less guanxi with local practitioners and officials $W_3$ – insufficient understanding of consumers need $W_4$ – limited land bank due to government sensitive to ORED land speculation and protectionism of local people
O (Opportunities)	SWOT(S) dimensional planning of OREDs	
O <sub>1</sub> – Guangzhou is one of the most open cities with least entry barrier O <sub>2</sub> – ample opportunities for large-scale infrastructure projects and property development at Guangzhou being the national strategic city O <sub>3</sub> – promotion of home-ownership and subsidized housing T (Threats)	$S_1W_3O_1T_1$ – build up a team of experts which can closely monitor the policy change and know the guoqing to help the developer to adapt to new changes $S_2O_2$ – concentrate on one's own strength to build leading-edge development with unique living concept in commercial housing $S_2O_3$ – participate in local government projects such as subsidized housing construction in form of Public-Private Partnership (PPP) $S_3W_1W_2O_3$ – establish localized management team which help lower the operation costs and build up guanxi for business development through the use of attractive remuneration package $S_3W_2T_3$ – acquire quality land in light of the recent financial crisis with lowered land price	
$T_1$ – government intervention policies with tight development control $T_2$ – fierce competition with domestic developers of high market power $T_3$ – impact of the global financial tsunami has not been totally eliminated	S <sub>3</sub> W <sub>2</sub> T <sub>2</sub> – build up market power through horizontal and vertical integration in form of joint venture, merger and/or acquisition S <sub>4</sub> W <sub>3</sub> O <sub>2</sub> – acquire knowledge of market conditions and understand consumers' need through research conducted by local consultancy and estate agencies S <sub>5</sub> O <sub>2</sub> T <sub>2</sub> – enhance the competitive advantage through word-of-mouth and market penetration W <sub>3</sub> O <sub>2</sub> O <sub>3</sub> – conduct through feasibility study as different market segments have different expectation and affordability for residential housing W <sub>2</sub> W <sub>4</sub> O <sub>3</sub> O <sub>4</sub> – establish partnership with local developers/market players in large-scale/spectacular development using complementary strengths, not necessarily competitors in some occasions	

Figure 2.11: SWOT(S) of OREDs in Guangzhou real estate market (Leung, Hui et al., 2011)

## 2.6 Application of SWOT Analysis

The SWOT analysis can be explained in two ways which is the local construction firms which operates in overseas and the foreign construction firms which operate in local country. The detail information will be explained in the next section.

## 2.6.1 Foreign Firms works in Local Country

In the globalization era, most of the developed countries are trying to expand their business and exploit the opportunities in the local country. In order for local firms to maintain their market share, a proper preparation of themselves is required. Several researches have been done in identifying the SWOT of local firms to compete with the foreign companies. Ling, et.al conducted the SWOT analysis of domestic architectural, engineering and construction firms in Vietnam and the results are shown in Table 2.8. They also provide ways on how the firms should respond to the threats of the foreign competition (Table 2.9).

Table 2.8: Summary of Vietnamese A/E/C Firms SWOT (Yean Yng Ling, Vu Min Chau et al., 2009)

	Internal	External
Favorable	Strengths	Opportunities Vietnam's WTO membership
	<ul> <li>Familiarity with local cultures and industry practices</li> <li>Labor advantages</li> </ul>	<ul> <li>Increase sales volume</li> <li>Acquire knowledge in advanced design and construction technology</li> <li>Export service to overseas</li> </ul>
Unfavorable	<ul> <li>Weaknesses</li> <li>Lack of knowledge in advanced design and construction technology</li> <li>Lack of experience in complex projects</li> <li>Lack of project management ability</li> </ul>	<ul><li>Threats</li><li>Construction market share reduced</li><li>Foreign firms competitive advantages over domestic firms</li></ul>

Table 2.9: Vietnamese Firms Response to Threats (Yean Yng Ling, Vu Min Chau et al., 2009)

Rank	Strategy
1	Restructure organization
2	Invest in research and development (R&D)
3	Provide higher quality service
4	Explore overseas markets
5	Form joint-ventures
6	Rely on government
7	Reduce profit margin

In July 2009, Ling and Yu did the same analysis for consulting firms in Shenzen, China. The summary results are shown in Table 2.10 and the way on how the firms should respond to the weaknesses, opportunities and threat are also provided in Table 2.11.

Table 2.10: Summary of Chinese Consulting Firms SWOT (Yean Yng Ling and Yu, 2009)

	Internal	External
Favorable	Strengths  - Low operation costs - Familiarity with local cultures and industry practices	Opportunities China's WTO membership Increase construction revenue Learn from foreigners Improve service standards Increase export opportunities
Unfavorable	<ul> <li>Weaknesses</li> <li>Inferior design and/or technical ability</li> <li>Lack of experience in complex and megaprojects</li> <li>Unfamiliar with modern project management techniques</li> <li>Lack of general management abilities</li> <li>Poor financial capacity</li> </ul>	Threats - Fierce competition from domestic Chinese firms - Fierce competition from foreign firms entering China's construction industry

Table 2.11: Strategies Adopted by Chinese Consulting Firms (Yean Yng Ling and Yu, 2009)

Rank	Strategy
1	Form joint ventures with foreign firms
2	Provide higher quality service and output
3	Reform organization
4	Explore overseas markets
5	Reduce profit margin

Lu, Li et al. (2009) also conducted a research on strengths, weaknesses, opportunities and threats (SWOT) analysis for Chinese International Construction Companies (CICCs) in the global market. By analyzing these factors, it is possible to produce a clear picture of internal and external conditions of CICCs. CICCs are emerging as one of the strongest contenders in the global construction market among competitors from U.S., U.K., Japan, and other several European countries. The results obtained from the analysis are shown below (Table 2.12).

In Malaysia, the SWOT analysis has been conducted for private land developers by Ghani, Nayan et al. (2010) and the finding of the critical internal and external factors that affect firms strategic planning are identified (Table 2.13). They found the main factor which contributes to the strengths of the firms is the financial resources and the weakness is related to the firm's management. Meanwhile, the opportunities gain by the firms operated in Malaysia is the government supports and the threats are related to the bureaucratic procedures which have to be faced by the firms in order to get the plan approval and certificate of fitness.

Table 2.12: Summary List of CICCs (Lu, Li et al., 2009)

Strength	Weaknesses
- Low cost/good value for money	- Relatively low management
<ul> <li>Abundant cheap manpower</li> </ul>	capacity
- Hard working	- Lack of experience for
<ul> <li>Plenty and cheap construction</li> </ul>	sophisticated project procurement
materials available	- Low ability to create financial
- Good relationship with Asian and	solutions for clients
African countries	- Relative low ability to manage
<ul> <li>Booming home market</li> </ul>	sophisticated projects
<ul> <li>Strong support from government</li> </ul>	<ul> <li>Limited extent of using ICT</li> </ul>
	<ul> <li>Weak in professional services</li> </ul>
Opportunities	Threats
- Booming international	- Intense competition in the global
construction market	construction market
<ul> <li>More open global construction</li> </ul>	<ul> <li>High nontariff barriers</li> </ul>
market	- Sophistication of management and
<ul> <li>Increasing ODI by Chinese</li> </ul>	technologies
companies	- Increasing trend toward providing
<ul> <li>Chinese construction industry's</li> </ul>	integral service
reform toward international	- Intense competition for talent
practice	people
<ul> <li>Increasing collaboration and</li> </ul>	
partnering among international	
competitors	

Table 2.13: Summary of Land Developers SWOT (Ghani, Nayan et al., 2010)

Strength	Weaknesses
- Sources of fund	- Weaknesses in managing the firm
- Organizational structure	- Problems in capital and financial
<ul> <li>Location of project</li> </ul>	management
- Firms good image	- Difficulties in finding local skilled
- Firms management	workers
- Firms objective	- Lack of experience and technical
- The usage of current technology	skills
	- Lack of knowledge in technology
Opportunities	Threats
- Government participation and its	- Bureaucratic procedure involved in
pro-active involvement	getting certificate of fitness and
- Joint-venture programs (domestic	getting plan approval
and abroad) and mergers of firms	- Increase in prices for building
	materials due to instability in
	economy
	- Changes in technology and the
	surrounding of real estate industry
	- Stiff competitions among firms

#### 2.6.2 Local Firms work in Overseas.

The SWOT Analysis can also be used to analyze the local firms who are encouraged to works in overseas. Gunhan and Arditi (2005) did a SWOT analysis for international markets and found that the most important company's strengths are track record, specialist expertise and project management capability. The findings show that the most important threats are loss of key personnel, shortage of financial resources, and inflation and currency fluctuations.

They also found the most important opportunity available in international works such as increased long term profitability, the ability to maintain shareholders returns, and the globalization and openness of the market. Thus, it is very important for contractors to adopt more effective and comprehensive evaluating methods to identify problems and innovative ways of delivering successful projects (Al-Tmeemy, Abdul-Rahman et al., 2011).

Zhi (1995), had categorized the potential risk (threat) factors that affect overseas projects generally, although different projects may have different potential risk factors. Risk identification hierarchy for overseas construction projects is shown in Table 2.14. The prime factors to be considered during the market evaluation will include:

- Need and potential;
- Financial and economic consideration;
- Political and legal factors;
- Socio-cultural forces;
- Degree of competition;
- Freedom to trade;
- Codes and practices;
- Life cycles

Table 2.14: Risk identification hierarchy for overseas construction projects (Zhi, 1995)

Project Risk	Project Risk Related Problems		
Ü	Related Flobletis		
Nation/Region Political Situation	<ul> <li>War</li> <li>Revolution</li> <li>Civil disorders</li> <li>Inconsistency of government policies</li> </ul>		
Economic and Financial Situation	<ul> <li>GNP decrease</li> <li>Incompatible GNP per capita</li> <li>Interest rate fluctuation</li> <li>Inflation rate increasing</li> <li>Currency exchange rate fluctuation</li> <li>Tax rate increasing</li> </ul>		
Social Environment	<ul> <li>Language barrier</li> <li>Religious inconsistency</li> <li>Culture tradition differences</li> <li>Insecurity and crime</li> <li>Pestilence</li> <li>Bribe and corruption</li> <li>Popular in informal relationships, brotherhood</li> </ul>		
<b>Construction Industry</b>	•		
Market Fluctuations	<ul><li>Demanding decreasing</li><li>Structure changes</li></ul>		
Law and Regulations	<ul> <li>Incompatible arbitration system</li> <li>Complex planning approval and permit procedures</li> <li>Import/Export restrictions</li> <li>Constrains on employment and materials availabilities</li> <li>Monetary restrictions</li> </ul>		
Standards and Codes	- Wonetary restrictions		
Contract System	<ul> <li>Inconsistencies in design/construction</li> <li>Differences in safety and health-care</li> <li>Pollutions and nuisances</li> </ul>		
	- Nonstandard contract form		
	<ul> <li>Differences in legal relationships between partners</li> <li>Unfamiliar with contract conditions for claims and litigations</li> </ul>		
	- Differences in defective liabilities		
	- Special local requirements		

Table 2.14: Risk identification hierarchy for overseas construction projects (Zhi, 1995)

Project Risk Related Problems	
Company	
Employer/Owner	- Unclear requirements
-F7	- Funding shortage
	- Disadvantaged contracts
Architect	- Unclear detail design or specifications
	- Unfamiliar with local standards and codes
	- Lack of interaction with construction method
Labor and Sub-	- Direct labor disturbance
contractors	- Unfavorable sub-contractors
Materials & Equipments	- Unfavorable sub-suppliers
	- Default supply of materials, equipments and plants
Internal	- Cash flow unbalance
	- Human resource shortage
	- Affecting other projects
	- Productivity decreases
Project	
Defective Physical	- Natural force
Works	- Poor design
	- Lack of proper construction techniques
	- Damages by human errors
	- Defective materials
	- Difficulty in quality control
Sahadula Dalay	Incomplete design
Schedule Delay	- Incomplete design
	<ul><li>Late construction site possession</li><li>Bad weather</li></ul>
	- Unforeseen ground conditions
	- Disturbances in labor, materials supplying
	- Inefficient communications/co-ordinations
	merrerent communications/co ordinations
Cost Overrun	- Unclear boundaries of works
	- Inaccurate estimation
	- Inadequate insurance
	- Labor/materials price fluctuations

These findings are supported by journal written by Ling and Hoi (2005) entitled risks faced by Singapore firms when undertaking construction projects in India. They found the main risks that international AEC firms face in India is similar to the general risks listed by Zhi, H. (1995). It can be categorized into four main risks which are:

- Political and social risks
- High cost of financing
- Fluctuating currency exchange rates
- Huge cultural difference between foreigners and Indians

They also make a recommendation for foreigners who undertake projects in India to respect local culture and practices, be flexible, extremely patient and should not try to change Indians way of working. This study help foreign firms to be better prepared and devise plans to manage and mitigate the risks. The information's found by Ling and Hoi (2006) can be summarized in Table 2.15.

Table 2.15: Risks faced in India (Ling and Hoi, 2006)

Project Risk	Related Problems
Natural and Human	- Weather systems (hurricane, typhoon, flood, etc.)
	- Geological systems (earthquake, volcanic eruption,
	geotechnical issues)
Political	- War
	- Civil disorder
	- Industrial relations actions that affect the progress
	of the project.
	- Expropriation
	- Force majeure
	- Delay in approvals
	- Corruption
	- Change in law
Social	- Criminal acts
	- Civil torts
	- Substance abuse
Economic	- Materials supply
	- Labour supply
	- Equipment availability
	- Inflations
	- Tariffs
	- Fiscal policies and exchange rates

Table 2.15: Risks faced in India (Ling and Hoi, 2006)

Project Risk	Related Problems
Financial	- Interest rates
	- Credit ratings
	- Capital supply
	- Cash flows and rentals
Legal	- Contract clauses
	- Regulation and codes
	- Building procurement
Managerial	- Productivity
	- Quality assurance
	- Cost control
	- Human resource management
Technical	- Design failure
	- Equipment and system failure
	- Estimation error
	- Collision and accidents
Cultural	- Differences in religion, culture and custom

## 2.7 Research Gap

There are several researches discussing about Malaysian Construction Industry but the finding about the SWOT analysis for Malaysian contractors in international construction has not been conducted. According to the research conducted by Ghani, Nayan et al. (2010), their main focus is the land developer in Malaysia. The study analyzes the critical internal and external factors that affect strategic planning of the foreign firms operating in Malaysia.

Another studies which has been conducted by Tan and Ghazali (2011) regarding the critical success factors for Malaysian contractors in international construction projects using analytical hierarchy process (AHP). This research is focused on the success factors when performing project in overseas.

Ahmad and Kitchen (2008) also conducted a research for Malaysian construction firm and stated that the entry mode choices is depends on the internal and external environmental factors. The result shows the most chosen entry mode by Malaysian contractors and motives for investment in overseas.

By referring to the previous works, the conclusions can be made in order to conduct this research. First, Ghani, Nayan et al. (2010) focused on the foreign firms who work in Malaysia. Second, Tan and Ghazali (2011) are worked more on the critical success factors using AHP without providing any strategic planning point of view. Lastly, Ahmad and Kitchen (2008) conducted on the entry mode choice for investment.

Therefore, this study is conducted in order to obtain the information regarding the internal and external factors which might influence the involvement of Malaysian contractors in overseas and develop the potential strategic planning for preparing themselves before penetrating into the international projects.

#### **CHAPTER III**

#### **METHODOLODY**

This chapter gives an overview of the available approach for conducting a research and selecting the most suitable methodology to be used in the study. It also explains on how the study will be carried out in order to fulfill the study's objectives.

The study required an appropriate methodology to conduct the research in order to identify the level of agreement in each factor based on the opinion from the participants and apply suitable tools in developing the strategic planning for Malaysia contractors in performing international projects.

In achieving the objective of the research, a quantitative methodology is found to be the most suitable approach for this study. This methodology is usually used by most of the researchers who were in the construction management field.

## 3.1 Research Strategy

Research can be defined as a systematic investigation used by the researchers in order to develop the new body of knowledge (Oxford Dictionaries, 2012). Research can lead to the finding of new knowledge and contribute to the changes around the world. All of these knowledge were developed through one process that greatly influenced by human factors called scientific method (McCuen, 1996).

According to Stone (1978), there are several steps in performing scientific method which are: (a) the observation of the facts or phenomena that occur in the real world; (b) performing the explanation of the occurring phenomena, using inductive processes (a process of moving from specifics to generalization); (c) generate the predictions of the facts or phenomena which might occur in the real world, using deductive processes (a process of going from general statements to

more specific assertions); and (d) verification of these predictions through systematic and controlled observation. A model of the method is shown in figure 3.1. The concept of scientific method presented is the process used in this study where the information obtained is based on the real world working environment.

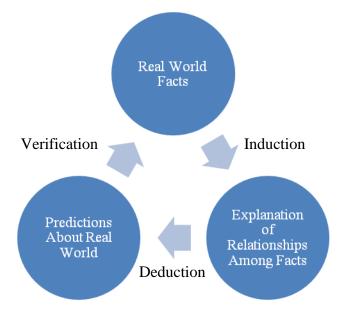


Figure 3.1: Model of the Scientific Method (Stone, 1978)

Figure 3.2 shows several approaches for research strategies which can be applied by the researchers in achieving their objectives.

This type of research strategies was also explained by Yin (2003) which stated that the strategy chosen for conducting a research is depend on three conditions. The conditions are:

- 1. Types of research question posed
- 2. Extent of control an investigator has over actual behavioral events
- 3. Degree of focus on contemporary as opposed to historical events.

The form of research question in data collection process could specify the suitable strategy to conduct a research. Table 3.1 shows the relevant situations for various research strategies which can be applied in the research.



Figure 3.2: Research Strategies (Stone, 1978)

Table 3.1: Relevant Situations for Different Research Strategies (Yin, 2003)

Strategy	Form of Research	Requires Control of	Focuses on	
	Question	Behavioral Events?	Contemporary Events?	
Experiment	how, why?	Yes	Yes	
Survey	who, what, where,	No	Yes	
	how many, how much?			
Archival	who, what, where,	No	Yes/No	
analysis	how many, how much?			
History	how, why?	No	No	
Case study	how, why?	No	Yes	

For this research study the objective is to identify what are the factors contribute to strengths, weaknesses, opportunities and threats of Malaysia contractors in international construction market and the list of SWOT factors found are used in developing the strategic planning on how to assist Malaysian Contractors to further improve their competitiveness in expanding their careers overseas.

According to Yin (2003) there are three research approaches that can be used in this study which are experiments, history and case study. However, the most

suitable approach to answer those entire objectives for this study is case study. This is due to the ability of the case study in dealing with the several evidences such as artifacts, observations, documents and interviews.

To conduct the research, the data collection method selected is surveying (interview followed by questionnaire), which will identify the SWOT of Malaysia contractors in international construction market. Finally, the strategic planning will be formed by combining some of the factors which might be useful for Malaysia contractors in improving their careers overseas.

## 3.2 Research Design

This research study is designed with two phases. The first phase focused on evaluating strength, weakness, opportunity and threat factors, in which Malaysia contractors have been experienced on international construction project. The second phase is related to the development of potential strategic planning for operating at international construction project. The details are as below.

### 3.2.1 Survey Strategy

Interview and questionnaires are two types of technique that can be used in survey strategy in order to obtain information directly from the participants who involve in the research.

In this study, both techniques are used for data collection process. Interview will be made to collect preliminary data from contractor's class G7 who have experiences in handling international projects and questionnaire will be used to gather information regarding individuals' agreement for each factors obtained from the interview sessions.

The survey will also collect the exact field experiences from the company's representatives who were involved in international construction projects and the

projects can be either ongoing or completed within the last five years. The targeted respondents for interview session are project managers.

## **3.2.2** Strategic Planning Development

Planning can be defined as the process of establishing objectives and choosing the most suitable means for achieving these objectives prior to taking action (Goodstein, Nolan et al., 1993). Meanwhile, strategic planning is defined as the process that guiding members of an organization envision its future and develop the necessary procedures and operations to achieve that future.

According to Weihrich (1982), the process of developing strategic planning may be varied but the concept of the framework can be built as a reference. There are several processes for making a strategic planning which are:

- 1. Identifying the inputs for the organization to achieve their goals when participating in this area.
- 2. Preparation of the enterprise profile.
- 3. Identification of the present external environment.
- 4. Preparation of a forecast with predictions of the future environment.
- 5. Preparation of a resources audit with emphasis on the company's internal weaknesses and strengths.
- 6. Development of alternatives strategies, tactics and other actions.
- 7. Evaluation and choice of strategies.
- 8. Consistency testing.
- 9. Preparation of contingency plans.

These steps are shown in Figure 3.3 to illustrate the full conceptual application of the framework.

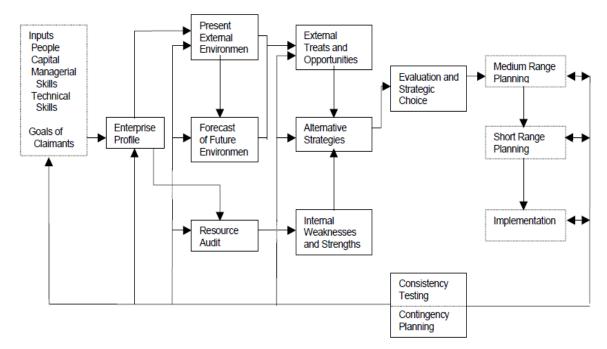


Figure 3.3: Strategic Planning Process (Weihrich, 1982)

Weihrich (1982) also proposed new conceptual framework called TOWS analysis for analyzing the external and internal environmental factors of the organization to facilitate matching the threats and opportunities with the weaknesses and strengths.

# 3.2.2.1 The TOWS Matrix: A Conceptual Model

According to Weihrich (1982), there are six necessary steps in developing a strategic planning. The process of corporate strategy and the TOWS analysis are shown in Figure 3.4.

Step 1: Prepare an Enterprise Profile: (a) the Kind of Business; (b) Geographic Domain; (c) Competitive Situation; (d) Top Management Orientation								
Domain; (c)								
	Step 4: Prepare a SW Audit in: (a) Management and							
	Organization; (b) operations; (c) Finance; (d) Marketing;							
	(e) Other							
	Step 5: Develop	List Internal	List Internal					
Internal	Alternatives	Strengths (S):	Weaknesses (W):					
Factors		(1)	(1)					
	Step 6: Make							
	Strategic Choices							
	Consider Strategies							
	Tactics, Action							
	Step 1 to 6: Test							
	for consistency.							
External	Also Prepare							
Factors	Contingency Plans							
	(Step 7)							
Step 2: Identify and	List External	SO: Maxi-Maxi	WO: Mini-Maxi					
Evaluate the	Opportunities (O):							
Following factors:	(Consider Risk							
(a) Economic	Also)							
(b) Social	(1)							
(c) Political								
(d) Demographic								
(e) Products and	T' / E' / 1	ST: Maxi-Mini	WT: Mini-Mini					
Technology	List External	S1: Maxi-Mini	W 1: Mini-Mini					
(f) Market and	Threats (T):							
Competition	(1)							
Step 3: Prepare a								
Forecast, Make								
Predictions and								
Assessment of the								
Future								

Figure 3.4: Process of corporate strategy and the TOWS analysis (Weihrich, 1982).

The WT Strategy (mini-mini). This is the strategy where the company has to plan for reducing and minimizing both factors external (threats) and internal (weaknesses) which may positioned the company to be in a precarious position in the industry. In fact, this might probably bring the company to a liquidation stage

but there are other choices that can be decided. Therefore, a company such as a firm may have to fight for its survival.

For example, client financial resources will cause a problem if a company lack of financial funding. Financial play a major role in construction projects. Everything related to financial might affect the construction projects if it is not well managed. Therefore, a company should review on clients' financial standing before signing any contract.

The WO Strategy (mini-maxi). The second strategy is where the company has to plan for minimizing their weaknesses and maximizing their opportunities. For this stage, the firms may found some opportunities in the external environment but due to the lack of internal organization, it might prevent the firms to take the advantage of market demands.

For example, lot of opportunity offered and there is a high demand in construction for developing country such as India, Myanmar, and Sri Lanka but due to the lack of knowledge on host country law and regulation made them to hold the desire to involve in international construction. Therefore, a company could be more focus on favorable market that are planned to venture and learn about the host country before venturing to that country.

The ST Strategy (maxi-mini). This strategy is based on the strengths of the organization that can deal with threats in the environment. The company has to plan for maximizing the current strengths and minimizing the external environmental factors which might influence the firms in penetrating the international construction.

For example, the company with a stable financial status as well as having a high experience in conducting large scale project but the political situation in the host country might influence the firms in selecting the projects. Therefore, sending a group of experts to review the policy changes and political situation of host country might give more information before deciding to participate in those countries.

The SO Strategy (maxi-maxi). This is the stage where the firms are able to perform in international projects when it can maximize both internal and external factors. The firms can be more motivated if they are able to use their strengths and grab the opportunities in overseas to expand their business effectively.

For example, the firms have a strong base in the technological advantage and the opportunities of a new emerging market in Indonesia, Myanmar and Sri Lanka gives the chance for the firms to penetrate into those countries. Therefore, it is possible for them to develop a new market or diversify their business territory to that country.

The matrix, shown in Figure 3.5, is an example of one approach in identifying the combinations of relationships between two factors which, in turn, may become the basis for strategic choices. The symbol '+' indicates a match between the strengths of the company with the external environmental factor (opportunity), while '0' indicates a weak or nonexistent relationship.

For example, experience in overseas project (S1), knowledge in large-scale projects (S2), financial stability (S3), having good track records from previous projects (S4), relationship with key player in host country (S5) are the strengths of the firms. The economic growth of developing countries (O1), equipment, material and labor supply in host country (O2), and similarity in standard system (O3) are the opportunity offered by host country.

Strength Opportunity	<b>S</b> 1	S2	S3	S4	S5
O1	+	+	+	+	+
O2	+	+	+	+	0
O3	+	+	0	+	0

Figure 3.5: Interaction Matrix

Analysis of Figure 3.5 indicates that strength no.1, no.3 and no.4 can be matched with all opportunities. Similarly, all strength can be utilized to exploit opportunities No.1. For the other three strategy (WO, ST, WT), the same tables can be used to analyze each of the relations.

## 3.3 Research Methodology (Phase I)

There are two steps of research methodology implemented in phase I which are:

- 1) Literature Review;
- 2) Data Collections; and
- 3) Analyzing Data (SWOT Analysis).

#### 3.3.1 Literature Reviews

The aims of literature review are to analyze the current knowledge and develop the main purpose of conducting this research. It also helps the researcher to understand about the previous works which has been done. In addition, the research gaps can be identified in order to helps the researcher to scope their own research topic and helps to seek a new knowledge by conducting the research. Furthermore, it also helps to develop the concept of the research that will be conducted by designing and generating the specific hypotheses to be tested.

The activities of this stage include:

- o Gaining a clear understanding of the previous research work.
- o Determine the objectives of the research study.
- Identify the research gaps between previous work and current research proposed.
- Extract information for the interested study area including the internal and external environmental factors affecting international construction projects, SWOT analysis, and Malaysian construction industry.
- Develop the possible questions that may be asked during the survey regarding the problems identified and creates the questionnaire to gather more

information about the issues. The sources of information for creating the questions include journal publications, books, magazine articles, international agendas and reports.

o Generate the methodology for the research.

Therefore, six important sections were being developed under the literature review where the first section explains about the Malaysian Construction Industry. This section provides the overview information about the involvement of Malaysia contractors in overseas projects. The second part of the section defines the international construction and providing several ways to operate business internationally.

Meanwhile, the next section is more focus on the project objectives which can identify the strengths, weaknesses, opportunities and threats of Malaysian contractors by listing out the issues associated with international construction. The section is continued by reviewing the strategic planning form by previous research and followed by providing the flow to perform strategic planning when the decision to penetrate into overseas market has been made.

The last section is related to SWOT analysis which has been conducted from the previous research. The purpose of the literature review was to help the author on the general overview of the study. The literature study was done through reading and searching the subjects from books, journals, international and local conferences papers, and publications which are related to this study.

The literature review hence, provides guidance to questionnaire preparation, which is discussed in the following section.

### 3.3.2 Data Collection

The next methodology applied in this research is data collection process where the survey is used to gather the information regarding the strengths, weaknesses, opportunities and threats of Malaysian contractors in performing project in overseas. The results obtained from the literature review and survey will be used in developing the strategic planning for Malaysia contractors in improving their competitiveness in international projects.

This stage includes the following activities:

- Understand the internal and external environmental factors found from the previous research and further investigate the listed factors whether it is relevant to the conducted research study.
- o Data collection process via interview.
- Identification of the strengths, weaknesses, opportunities and threats of Malaysian contractors.
- Managing the pilot survey to obtain the preliminary data in order to verify the effectiveness of the questions and the possibility in conducting this research. This process helps the researcher to get feedback from the respondents so that the improvement of the data collection process can be made and the required time for the respondent to complete all of the questions can be identified. Therefore, the final product of the survey can be improved.
- The process of pilot survey involve participant who have experience in handling international projects. The mean results of each factor will be used to rank the factors accordingly.
- o Identify the most chosen factors by the respondent.
- Questionnaire survey involve participant that having projects in specific country. The sampling was selected based on top five countries which are United Arab Emirates, India, Indonesia, Thailand and Vietnam. The company should have either on-going projects or completed projects around year 2007 until 2011 in order to identify the SWOT factors of Malaysian contractors.
- O Distribute the questionnaire survey. A questionnaire was created from the results of pilot interview. It was used to gather individual's opinions and level of agreement on each variable which has been chosen by the interviewee. The participant must have experienced in conducting project in overseas as a

- project managers or project teams for at least the past five years. The survey will examine the mean value from each variable.
- Summarize the strengths, weaknesses, opportunities and threats according to their priority.

#### 3.3.2.1 Interview Session

The data collection process was started with the face-to-face interview with the representative of the companies who have working experience in conducting projects in overseas or locally. A letter has been sent out to the possible respondents to get the agreement and make an appointment with them. The interview was conducted in order to identify the list of strengths, weaknesses, opportunities and threats of Malaysian contractors in international construction.

Interview is the most effective way of getting information. A short discussion can be made to clarify the private views of the interviewees. The question consists of two parts, in which Part A involved the general information about the respondents and Part B consists of list of SWOT from the previous research. This part needs the respondent to identify which factors might contribute as a SWOT of Malaysia contractors.

Respondents with experiences and knowledge in handling projects are important to classify the factors which might influence the successfulness of the projects. The possibility to get the person in charge of the ongoing projects might be difficult but the letter has been sent to them either. The interview can be made if they are agreed to participate in the study.

## 3.3.2.2 Questionnaire Survey

A set of questionnaire survey need to be distribute to the selected respondents in order to collect some data. The results obtain from the interview session will be use to develop the questionnaire survey. The surveys are conducted to evaluate those factors in each category based on the respondents' experience. The questionnaire consists of two sessions. First section involves with the general information about the respondents' background. The second section needs the respondents to indicate the level of agreement for the listed factors associated with the construction projects.

Respondents comprise from various levels of management who involved in the construction process. The results will be analyzed in order to rank the most factors which might contribute to SWOT of Malaysian contractors in the international construction.

## 3.3.3 Analyzing Data

## 3.3.3.1 SWOT Analysis

This stage includes the data analyses obtained from the questionnaire sessions. The data will be analyzed according to the five likert scale. The respondent was asked to fill in whether each factor is their strength/weakness or opportunity/threat and rank the level of agreement on each statement. The factors are analyzed by adding the level of agreement for strength and weakness by using positive sign for strength and negative sign for weakness. The same way of analyses will be use for opportunity and threat. The scale can be scored as:

- 5 Very High Agreement
- 4 High Agreement
- 3 Moderate Agreement
- 2 Low Agreement
- 1 Very Low Agreement

The scoring will considered the mean value of the each statement without considering the number of respondents.

Factors	Strengths				Weaknesses							
Tactors	1	2	3	4	5	-	1	2	3	4	5	-
1.	a	b	c	d	e	-	f	g	h	j	k	-
2.												

The mean value was calculated using the summation of total respondent agrees on each statement. The formula is shown below:

Mean value = 
$$\frac{[(1xa) + (2xb) + (3xc) + (4xd) + (5xe) + (-1xf) + (-2xg) + (-3xh) + (-4xj) + (-5xk)}{(a+b+c+d+e+f+g+h+i+k)}$$

In this study, there are four-teen respondents (6 respondents for interview session and 8 respondents for questionnaire survey), therefore, a list of ranked for S, W, O, T of Malaysian contractors can be analyzed and summarized.

## 3.4 Research Methodology (Phase II)

This phase explains on the development of strategic planning conducted in this study.

## 3.4.1 Development of Strategic Planning

The round table discussion has been conducted in this section in order to identify the potential strategic planning which can be applied by Malaysian contractors in order to venture out from Malaysia. The strategies will come from the opinion of participant during round table discussion and previous research conducted by other researches.

There are several research has been referred such as Lee, Jeon et al. (2010); Zhao, Shen et al. (2009); Yean Yng Ling and Yu (2009); Mohamed, Ann et al. (2010); Li (2009); Yean Yng Ling, Ibbs et al. (2008); Yean Yng Ling, Vu Min Chau et al. (2009); Leung, Hui et al. (2011).

Normally the previous research just suggested the list of strategies without matching with the S, W, O, and T factors to form four-quadrant matrix. Therefore, this research is trying to develop the potential strategies by forming four-quadrant matrix.

#### 3.4.1.1 Round Table Discussion

Round table discussion will be conducted in order to gain a deep understanding about the situation in overseas construction. The objective of the round table discussion is to share some experience with Construction Industry Development Board (CIDB), Masters Builder Association Malaysia (MBAM) and EXIM Bank representatives when venturing to overseas construction project.

The output of the round table discussion will be the list of several strengths, weaknesses, opportunities and threats of Malaysian contractors and suggested potential strategic planning that been implemented by current contractors involve in oversea project as a reference for newcomers to prepare their own strategic planning.

## 3.4.1.2 Comparison with Previous Research Strategies.

The outputs from round table discussion regarding the suggested potential strategic planning are compared with the previous research. The additional strategies obtained from the previous research will be list out and the suitable strategies are chosen to be match with Malaysian contractor's strengths, weaknesses, opportunities and threats.

This step will produce the strategies suggested from the round table discussion and additional strategies from the previous research. The strategies will be matched with the ranked S, W, O and T of Malaysian contractors to form a four-quadrant matrix.

List of Strategies	SO	ST	WO	WT
1. Bid on BOT projects	<b>√</b>			
2. Joint-ventures with host country contractor	√	√		√
3. Provide training program			√	

Therefore, the final output will be the list of potential strategies arranged in the four-quadrant matrix. This is the easiest way for the newcomers to use as a reference when planning their own strategies.

Factors	Strengths	Weaknesses
Opportunities	SO Strategy - Bid on BOT projects - JV with host country contractor	WO Strategy - Provide training program
Threats	ST Strategy - JV with host country contractor	WT Strategy - JV with host country contractor

## 3.5 Summary of Chapter

This chapter explained the methodology procedure applied during the research. The preferred methods are interview, questionnaire surveys and a round table discussion. The methods were ideal because to gained more information regarding Malaysian contractors, whom had been involved and experienced in international construction. In addition, the results were obtained from the first phase of methodology is used to perform a strategic planning as a guideline for newcomers to prepare their own strategy before venturing in the international construction.

#### **CHAPTER IV**

# SWOT ANALYSIS OF MALAYSIAN CONTRACTORS IN INTERNATIONAL CONSTRUCTION PROJECTS

This chapter aims to identify the strengths, weaknesses, opportunities and threats of Malaysian contractors when operated in international construction projects. The results was collected and analyzed from interview session, questionnaire distribution and round table discussion. Based on the collected results, the identification of strengths, weaknesses, opportunities and threats from Malaysian contractor viewpoint can be determined. The analyses of results are arranged into tables. Therefore, the analysis of Malaysian contractors' strengths, weaknesses, opportunities and threats can be identified.

#### 4.1 Interview Session

The interview session will involved both quantitative and qualitative data analyses. Quantitative part is to identify the strengths, weaknesses, opportunities and threats from the listed factors and qualitative part is from the opinion and experiences discussed during the interview session. The gathered information will be used in the next data collection process to support the findings.

## 4.1.1 Profile of Respondents

In total, 6 respondents finally agreed to participate in the study. The profiles of interviewees are shown in Table 4.1 and 4.2. The interviewees had a minimum of 8 years of experience in the construction industry. All the interviewees were personally involved in overseas project undertaken by their firm. The core capabilities of the interviewees are residential, building and infrastructure construction (interviewees labeled as R1, R2, R3, R4, R5 and R6). Interviewees can freely give their opinion and sharing their experience when getting involve in overseas construction project.

Table 4.1: Profile of Respondents, Firms and Projects

Code	Designation	Experience in industry (yrs)	Firm's operation in overseas (yrs)	Type of Projects	Ownership of Facility	Experience entry mode
R1	Project Manager	16	15	Residential	Government	Wholly owned and Local Thai Companies
R2	Head Business Development	15	10	Residential	Government	Wholly owned
R3	General Manager for Technical Support	23	13	Residential, Township	Private	JV with the developer
R4	Country Manager	8	3	Infrastructure	Government	JV with local
R5	General Manager of Technical Division	23	7	Building	Government	Wholly owned
R6	CEO	15	8	Residential, Township	Government, Private	Wholly owned

Code Respondents Location of Projects Thailand **C**1 R1 C2R2 India C3 India **C**4 R3 **United Arab Emirates** C5 Indonesia C6 Pakistan **C**7 **R**4 Saudi Arabia **C**8 Qatar **C**9 **R5** Saudi Arabia C10 **United Arab Emirates R6** 

Table 4.2: Profile of Projects in Overseas

Referring to Table 4.1, it shows that the companies C2, C5 and C6 using wholly owned as the entry mode. Apart from that, companies C3 and C4 prefer to form a joint-venture. However, company C1 chooses both type of entry mode when participating in overseas construction project.

# 4.1.2 Ranking of Strengths, Weaknesses, Opportunities and Threats from Interview Session

The questions for interview session were developed based on the previous research studies which conducting the similar research related to SWOT Analysis. It aims to identify the strengths, weaknesses, opportunities and threats of Malaysian contractors who participate in international construction. Calculated overall results are shown in Table 4.3.

The primary data collection was started with the interview session with the respondents who have experience in conducting international construction projects. Having good track records from the previous project are seen as one of Malaysian construction firms' strength. Gunhan and Arditi (2005) also mentioned that track records are the most important in specialist engineering contract, project management contracts and large contracts. Meanwhile, the weaknesses seen by the respondents is the workforce cost to operate in overseas.

Apart from strengths and weaknesses, the interviews also focused on the opportunities and threats of Malaysia contractors faced in international constructions. The most voted opportunity is obtaining a strong support from the government to participate in the international construction.

However, the highest percentage chosen by the respondents for the threats are inflation and currency fluctuations, interest rate, foreign competitor in host country followed by host government law and regulation. Identification of these factors might help to ensure the successfulness of the projects and prepare themselves before penetrate into the international construction. Therefore, the list of rank for each factors are shown in Table 4.4 until Table 4.7.

Table 4.3: Overall Mean Value from Interview Session

Factors		Level of Agreement										
		R2		R3			R4		R5	R6	Sum	Mean
Strengths	<b>C1</b>	<b>C2</b>	<b>C3</b>	C4	C5	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>C9</b>	C10	Sum	Mean
Loyal to client	4	4	4	4	4	4	4	4	3	5	40	4.00
Contractors financial status	4	3	5	5	5	3	3	3	5	3	39	3.90
Experience on large-scale and complex projects	3	5	3	3	3	3	3	3	5	5	36	3.60
Having good relationships with other countries	4	3	4	4	4	3	3	3	3	5	36	3.60
Having good track records from previous project	4	3	-4	3	4	5	5	5	5	5	35	3.50
Project management capability	4	4	-3	3	5	4	4	4	5	5	35	3.50
Capability to joint-ventures with other contractors	4	5	4	4	4	4	-4	3	4	4	32	3.20
Contractors experience in overseas project	4	5	4	3	3	2	2	2	5	2	32	3.20
Ability to get valuable information	4	3	2	1	2	4	4	4	3	3	30	3.00
International network with overseas company	4	4	4	2	4	3	3	3	-4	2	25	2.50
Technological advantages	4	4	4	4	4	-3	-3	-3	3	3	17	1.70
Weaknesses	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	<b>C5</b>	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>C9</b>	C10	Sum	Mean
Workforce cost	-3	-3	-5	-5	-5	4	4	-3	4	2	-10	-1.00
Opportunities	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	C5	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>C9</b>	C10	Sum	Mean
Strong support from the government	3	4	4	4	4	3	4	4	4	2	36	3.60
Threats	<b>C1</b>	<b>C2</b>	<b>C3</b>	<b>C4</b>	C5	<b>C6</b>	<b>C7</b>	<b>C8</b>	<b>C9</b>	C10	Sum	Mean
Inflation and currency fluctuation in host country	-4	-3	-4	-4	-4	-5	-5	-5	-2	-4	-40	-4.00
Interest rate increases	-3	-3	-4	-4	-4	-5	-4	-4	-2	-4	-37	-3.70
Foreign competitor in host country	-3	-4	-3	-3	-3	-5	-5	-5	2	-5	-34	-3.40
Host government law and regulations	-4	-2	-4	-5	-5	-3	-3	-3	-5	4	-30	-3.00
Cultures and industry practices	3	-3	-4	-4	-4	-5	-5	-5	-3	3	-27	-2.70
Corruption in host country		-4	-4	-2	-4	-3	-3	-3	2	-5	-23	-2.30
Project owners financial resources	-4	3	-5	-5	-5	-4	4	4	-4	-5	-21	-2.10
Equipment, material and labor supply in host country		-3	-3	-3	-3	-3	3	-3	-3	3	-19	-1.90
Project distance from Malaysia	3	-3	-4	-4	-4	-3	-3	-3	4	3	-14	-1.40
Host country political situation	-4	3	-3	-3	-3	-4	4	3	5	5	3	0.30

Table 4.4: Ranking of Strengths

No	Factors	Mean
1	Loyal to the clients	4.00
2	Contractors' financial status	3.90
3	Contractors experience on large-scale and complex projects	3.60
4	Having good track records from the previous project	3.50
5	Project management capability	3.50
6	Capability to joint-ventures with other contractors in host country	3.20
7	Contractors experience in conducting international project	3.20
8	Able to get valuable information of the overseas construction projects	3.00
9	Having the international network with overseas company	2.50
10	Level of technological advantages of your company comparing to other companies in Malaysia	1.70

Table 4.5: Ranking of Weaknesses

No	Factors	Mean
1	Workforce cost	-1.00

Table 4.6: Ranking of Opportunities

No	Factors	Mean
1	Strong support from the government	3.60

Table 4.7: Ranking of Threats

No	Factors	Mean
1	Inflation and currency fluctuations of the host country	-4.00
2	Interest rate increases	-3.70
3	Foreign competitors in host country	-3.40
4	Host government law and regulations	-3.00
5	Differences of cultures and industry practices	-2.70
6	Corruption in host country	-2.30
7	Project owner's financial resources in overseas project	-2.10
8	Equipment, material and labor supply in host country	-1.90
9	Project distance from Malaysia	-1.40
10	Host country political situation	0.30

## 4.1.3 Perception of Experienced Malaysia Contractors in Overseas

Table 4.8 to 4.11 shows the summary of perception and experience shared by the contractors on several factors during the interview sessions which took around 45 minutes to 1 hour conversation. The totals of 10 sets of data are obtained from 6 respondents.

Table 4.8: Perception for Strengths of Malaysian Contractors

Str	rengths:	
	Mean	Respondents Perception
1.	Loyal to the clients $(\bar{x} = 4.00)$	<ul> <li>All of the data set agree that Malaysia contractors are loyal to the clients</li> <li>Malaysian contractors are loyal to their client and trustworthy. This has been mention by CIDB representative when having a short discussion related to international construction</li> <li>Being loyal to each of the responsibility given also increase the opportunities for them to penetrate in overseas projects</li> </ul>
2.	Contractors financial status $(\bar{x} = 3.90)$	<ul> <li>All of the data set agree that they have a strong financial status to be involved in the overseas arena</li> <li>It has been explained by one of the respondent that the company should have strong financial status to participate in the international construction</li> <li>This also been supported by another respondent by mentions that even the company obtains some funding from the financial institutions but the company should have enough capital to start the project</li> </ul>
3.	Contractors experience on large, complex projects $(\bar{x} = 3.60)$	<ul> <li>All of the data set agree that they have experience in large-scale and complex projects</li> <li>It has been explained by one of the respondent that the company has been involve in power plant project in India and building works in United Arab Emirates</li> </ul>
4.	Having good track records from the previous project $(\bar{x} = 3.50)$	<ul> <li>9 out of 10 data set agree that having good track records is one of the criteria for them to success in overseas</li> <li>It has been proven by one of the respondent which mentions that the project has been completed and delivered in time</li> <li>This factor also been supported by another respondent which saying that even they face a lot of problems with the client, they will make sure the project been delivered accordingly because it will affect their reputation if they fail to do so</li> </ul>
5.	Project management capability $(\bar{x} = 3.50)$	<ul> <li>9 out of 10 data set voted that project management capability is the strength for them to participate in overseas project</li> <li>One of the respondents' mentions that they are capable to organize themselves with reliable credibility's to satisfy the standard, specification and needs of the clients</li> </ul>

Table 4.9: Perception for Weakness of Malaysian Contractors

We	eakness:	
	Mean	Contractors Perception
1.	Workforce cost $(\bar{x} = -1.00)$	<ul> <li>6 out of 10 data set voted that workforce cost is the weakness while conducting international projects</li> <li>It has been mentioned by one of the respondents that the price of the labor might lower the opportunities for Malaysia contractors due to the cost is much higher than Malaysia</li> <li>This is one of the criteria that should be aware and taken into account</li> </ul>

Table 4.10: Perception for Opportunity of Malaysian Contractors

<b>Opportunity:</b>	
Mean	Contractors Perception
1. Strong support from the government $(\bar{x} = 3.60)$	<ul> <li>All of the respondents agree with this point and mention that Malaysia government giving a full support for the contractors to get involve in overseas projects</li> <li>CIDB Malaysia is one of the main drivers for Malaysia contractors to participate in overseas.</li> <li>One of the respondents stated that mostly the projects are</li> </ul>
	driven by CIDB Malaysia

Table 4.11: Perception for Threats of Malaysian Contractors

Threats:	
Mean	Contractors Perception
1. Inflation and currency fluctuations of the host country $(\bar{x} = -4.00)$	<ul> <li>All of data sets agree that this factor contribute as a threat when involve in overseas projects</li> <li>It has been mentioned by one of the respondent that even though the foreign exchange is not that high for some country but the rises of inflation rate will affect the financial resources of the contractors</li> </ul>
2. Interest rate increases $(\bar{x} = -3.70)$	<ul> <li>All of data sets agree that this factor contribute as a threat when involve in overseas projects</li> <li>One of the respondent mentions that anything related to the financial will give effect to your company whether it is foreign exchange or interest rate in that country. If the country have economical problem the interest rate might be increase</li> </ul>

Based on the quantitative and qualitative data gathered from interview session, the preliminary trend of factors can be identified. The output from general point of view could led to the understanding of situation occur when conducting international projects.

However, in order to find more supportive information related to strengths, weaknesses, opportunities and threats, questionnaire survey has been distributed to the corresponding company. The discussion and explanation on each questions answered by the respondents are attached in the appendix A.

#### 4.2 Questionnaire Survey

The main objective for conducting questionnaire survey is to identify more information for Malaysian contractors' strengths, weaknesses, opportunities and threats. The companies involved in United Arab Emirates, India and Thailand from year 2007 to 2011 is required to participate in the questionnaire survey. Out of 20 questionnaire mailed to the selected respondents, a total of 8 replied where the data collection are included in data findings. These questionnaires will be used to support the previous data findings through the interview session that has been conducted earlier.

All of the respondents have the working experience in international projects undergo by their firms. The results are explained in the following sections.

## 4.2.1 Profile of Respondents

The profiles of participants are shown in Table 4.12 and 4.13. Most of the participants had experience more than 5 years in international construction. All of the participants were personally involved in overseas project undertaken by their firm (respondents labeled as R7, R8, R9, R10, R11, R12, R13 and R14).

Table 4.12: Profile of Respondents and Firms

		Experience in international	Commons an anation in		
Code	Role in organization			Experience Entry Mode	
Couc	Troic in organization	construction (yrs)	overseas (yrs)	Experience Entry Wode	
	~	- 10	1.0	Wholly owned	
R7	Senior Manager	5-10	>10	Joint-venture	
R8	Head of Department	>10	>10	Wholly-owned	
Ko	Tread of Bepartment	>10	>10	Joint-venture	
<b>D</b> 0	GT 0	<b>5</b> 40	<b>7</b> 10	****	
R9	CEO	5-10	5-10	Wholly-owned	
R10	Head of Department	>10	>10	Joint-venture	
	1				
R11	Project Manager	5-10	5-10	Joint-venture	
KII	1 Toject Manager	3-10	3-10	Joint-venture	
D 4.0		1.0	10	Wholly-owned	
R12	Executive Director	>10	>10	Joint-venture	
				Joint-venture	
R13	General Manager	<5	<5	Joint-venture	
1110	Constant Manager				
D14	Cananal Managan	> 10	> 10	Laint wantum	
R14	General Manager	>10	>10	Joint-venture	

Table 4.13: Profile of Cases in Overseas

	T		Table 4.13. I forme of Cases in	O VOIDOUD		
Code	Respondents and Firms	Location	Category	No. of project	Total Value (mil USD)	Latest project
C11	R7	United Arab Emirates	Building	3	90.1	Mar 2007 - Sept 2009
C12	R8	United Arab Emirates	Building, Mixed Development	7	811.7	Jul 2009 - Feb 2010
C13	R9	United Arab Emirates	Building, Building Commercials	3	363.6	Jan 2010 - Jul 2012
C14	R10	Bahrain / Qatar	Facilities (Bridge, Highway, Airport)	4	1,439.19	Nov 2006 - Feb 2011
C15	R11	United Arab Emirates	Structural Frame, Mixed Development	2	160.41	Sep 2007 - Dec 2009
C16	R12	United Arab Emirates	Mixed Development, Building	2	547.88	Jul 2008 - Oct 2009
C17	R13	United Arab Emirates	Mixed Development	2	334.98	Mar 2008 - Sep 2010
C18	R14	Thailand	Residential, Road, Building Commercial.	26	435.65	Jan 2011 - Apr 2012
C19	R8	India	Building, Mixed Development, Facilities	26	1,116.56	Dec 2009 - Feb 2012
C20	R12	India	Highway	2	174.00	Oct 2003 - Feb 2005

# 4.2.2 Ranking of Strengths, Weaknesses, Opportunities and Threats from Questionnaire Survey

The questions for questionnaire survey were developed based on the previous research and interviewees point of view during interview session in order to identify the strengths, weaknesses, opportunities and threats of Malaysian contractors when involve in international construction. The overall mean results are shown in Table 4.14 to Table 4.17.

According to the Table 4.14, the top five factors seen as the factors for Malaysian contractors' strengths are having good track records from previous project, advanced construction technology, knowledge in large scale project, management skill and loyal to clients. Knowledge on large scale, good track records and project management capability are also identified as top five factors for strengths during interview session. It can be said that Malaysian contractors having a projects skills and capable to organize themselves when venture to the other country and fulfill the given commitment. It makes their firms having a good reputation.

However, there are only several weaknesses found from the listed factors in questionnaire survey. The factors have been agreed by some of the respondents as their weakness. The factors are lack of skill labor workers in host country, lack of cheap manpower in Malaysia and low labor productivity (Table 4.15).

Apart from that, government involvement in overseas construction projects, economic growth of developing countries, increase of investment development projects in host country are seen as the top opportunities for Malaysian contractors to venture out from Malaysia followed by project owners financial resources. Therefore, a good research should be done properly before penetrating in any particular country in order to identify the opportunity offered by those countries.

For threats, highest percentage chosen by the respondents is corruption in host country followed by current inflation, foreign competitors and current interest rate in host country as shown in Table 4.17. The calculated results for overall mean are shown in Table 4.18.

Table 4.14: Ranking of Strengths

No	Strengths	Mean
1	Having good track records from previous project	4.92
2	Advanced construction technology	4.29
3	Knowledge regarding large-scale construction	4.10
4	Project management skill	4.05
5	Malaysian contractors are loyal to the clients	3.92
6	Experience in overseas construction projects	3.86
7	Capability to joint-ventures with other contractors	3.83
8	The current status of providing full package in handling project	3.67
9	Status of having talented people in handling projects	3.67
10	Financial ability	3.57
11	Relationship with key players in other countries	3.52
12	Ability to manage sophisticated projects	3.50
13	Experience in complex project	3.50
14	Knowledge on host country regulations	3.33
15	Current channels for sourcing construction information	3.14
16	Ability to create financial solutions for clients	3.07
17	The status of having skill labor workers from Malaysia	2.93
18	The status of workforce cost	1.14

Table 4.15: Ranking of Weaknesses

No	Weaknesses	Mean
1	The current status of seeking cheap manpower in Malaysia	0.64
2	The status of having skill labor workers in host country	0.38
3	Labor productivity	0.21

Table 4.16: Ranking of Opportunities

No	Opportunities	Mean
1	Government involvement in overseas construction projects	3.83
2	Economic growth of developing countries	3.71
3	Increase of investment development projects in host country	3.57
4	Projects owner's financial resource in current overseas project	3.45
5	Political situation of host country	3.36
6	Geographic environment of host country	3.17
7	World trade organization (WTO) agreement	2.90
8	Cultures and industry practices in host country	2.83
9	Project distance from Malaysia	1.17
10	Current economic growth in Malaysia	1.00

Table 4.17: Ranking of Threats

No	Threats	Mean
1	Corruption in host country	-2.42
2	Current inflation in host country	-1.45
3	Foreign competitor in host country	-1.24
4	Current interest rate in host country	-0.86
5	The differential of contracts law prepared by rival foreign	-0.62
	construction companies	-0.02
6	The status of involving manufacturing company in securing projects	-0.29
7	The current status of seeking cheap manpower in host country	-0.17
8	Equipment, material and labor supply in host country	0.24
9	Current status of collaboration and partnering among international	0.86
	competitors	0.80
10	Host government and regulations	0.88

Table 4.18: Overall Mean Value from Questionnaire Survey

Eastons								Le	evel of A	greem	ent						
Factors	United Arab Emirates										Thailand			India			Total
Strengths	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Proven good track records from previous project	4	5	5	5	N/A	N/A	N/A	19	4.75	5	5.00	5.00	5	N/A	5.00	5.00	4.92
Advanced construction technology	3	4	4	4	4	4	4	27	3.86	5	5.00	5.00	4	4	8.00	4.00	4.29
Knowledge regarding large- scale construction	4	4	4	5	5	4	4	30	4.29	4	4.00	4.00	4	4	8.00	4.00	4.10
Project management skill	4	4	4	5	5	3	4	29	4.14	4	4.00	4.00	4	4	8.00	4.00	4.05
Loyal to clients	3	3	5	4	N/A	N/A	N/A	15	3.75	5	5.00	5.00	3	N/A	3.00	3.00	3.92
Experience in overseas construction projects	4	4	3	3	5	3	3	25	3.57	4	4.00	4.00	4	4	8.00	4.00	3.86
Capability to form Jointventure with others	3	3	4	4	N/A	N/A	N/A	14	3.50	5	5.00	5.00	3	N/A	3.00	3.00	3.83
Providing full package in handling project	-3	3	4	5	5	3	4	21	3.00	5	5.00	5.00	3	3	6.00	3.00	3.67
Having talented people in handling projects	4	3	4	5	4	4	4	28	4.00	4	4.00	4.00	3	3	6.00	3.00	3.67
Financial capability	3	4	3	5	5	3	3	26	3.71	3	3.00	3.00	4	4	8.00	4.00	3.57
Relationship with key players in other countries	4	3	3	5	5	2	3	25	3.57	4	4.00	4.00	3	3	6.00	3.00	3.52
Ability to manage sophisticated projects	4	4	3	5	5	4	3	28	4.00	3	3.00	3.00	4	3	7.00	3.50	3.50
Having experience in complex projects	4	4	3	5	5	4	3	28	4.00	3	3.00	3.00	4	3	7.00	3.50	3.50
Knowledge on host country regulations	3	3	3	3	3	3	3	21	3.00	4	4.00	4.00	4	2	6.00	3.00	3.33
Channels for sourcing construction information	4	3	3	4	3	3	4	24	3.43	3	3.00	3.00	3	3	6.00	3.00	3.14

Table 4.18: Overall Mean Value from Questionnaire Survey

Footows								Le	evel of A	greem	ent						
Factors	United Arab Emirates										Thailar	ıd	India			Total	
Strengths	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Ability to create financial solutions for clients	0	3	2	5	4	2	3	19	2.71	3	3.00	3.00	3	4	7.00	3.50	3.07
The status if skill labor workers from Malaysia	-3	3	3	3	4	4	2	16	2.29	4	4.00	4.00	3	2	5.00	2.50	2.93
The status of workforce cost	3	3	3	3	4	4	4	24	3.43	-3	-3.0	-3.00	3	3	6.00	3.00	1.14
Weaknesses	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Cheap manpower in Malaysia	N/A	-3	2	2	-3	2	3	3	0.43	3	3.00	3.00	-4	1	-3.0	-1.50	0.64
Skill labor workers in host country	4	3	4	3	-4	3	2	15	2.14	-4	-4.0	-4.00	3	3	6.00	3.00	0.38
Labor productivity	3	3	4	3	-4	3	3	15	2.14	-4	-4.0	-4.00	3	2	5.00	2.50	0.21
Opportunities	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Government involvement in overseas projects	4	3	2	1	5	2	4	21	3.00	5	5.00	5.00	3	4	7.00	3.50	3.83
Economic growth of developing countries	-4	4	3	5	5	5	4	22	3.14	4	4.00	4.00	4	4	8.00	4.00	3.71
Investment development projects in host country	4	4	2	5	4	5	2	26	3.71	3	3.00	3.00	4	4	8.00	4.00	3.57
Project owners financial resources	4	3	3	5	4	4	-3	20	2.86	4	4.00	4.00	3	4	7.00	3.50	3.45
Political situation of host country	-4	3	3	5	5	3	3	18	2.57	4	4.00	4.00	4	3	7.00	3.50	3.36
Geographic environment of host country	4	2	2	4	-4	3	3	14	2.00	4	4.00	4.00	4	3	7.00	3.50	3.17
World Trade organization (WTO) agreement	4	3	2	4	3	3	0	19	2.71	3	3.00	3.00	3	3	6.00	3.00	2.90

Table 4.18: Overall Mean Value from Questionnaire Survey

Е. /								Le	evel of A	greem	ent						
Factors	United Arab Emirates									Thailand			India			Total	
Opportunities	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Cultures and industry practices in host country	3	2	2	5	-4	3	3	14	2.00	4	4.00	4.00	3	2	5.00	2.50	2.83
Project distance from Malaysia	4	-3	3	4	N/A	N/A	N/A	8	2.00	5	5.00	5.00	-2	N/A	-2.0	-2.00	1.67
Current economic growth in Malaysia	4	3	2	2	5	3	2	21	3.00	-3	-3.0	-3.00	3	3	6.00	3.00	1.00
Threats	C7	C8	C9	C10	C11	C12	C13	Sum	Mean	C14	Sum	Mean	C15	C16	Sum	Mean	Mean
Corruption in host country	-3	-5	-5	4	N/A	N/A	N/A	-9	-2.25	N/A	N/A	N/A	-5	N/A	-5.0	-5.00	-2.42
Current inflation in host country	-4	-4	3	4	-4	3	3	1	0.14	-4	-4.0	-4.00	-4	3	-1.0	-0.50	-1.45
Foreign competitor in host country	-4	-3	3	4	-4	3	3	2	0.29	-4	-4.0	-4.00	-3	3	0.00	0.00	-1.24
Current interest rate in host country	-4	-3	3	4	4	3	3	10	1.43	-4	-4.0	-4.00	-3	3	0.00	0.00	-0.86
Differential of contracts law	-4	3	3	3	-4	3	-3	1	0.14	-5	-5.0	-5.00	3	3	6.00	3.00	-0.62
Involvement of manufacturing company	-3	3	0	0	4	2	2	8	1.14	-4	-4.0	-4.00	2	2	4.00	2.00	-0.29
Seeking cheap manpower in host country	0	2	2	4	-4	1	2	7	1.00	-4	-4.0	-4.00	2	3	5.00	2.50	-0.17
Equipment, material and labor supply in host country	4	-4	4	5	-3	3	3	12	1.71	-4	-4.0	-4.00	3	3	6.00	3.00	0.24
Collaboration with foreign competitor	4	3	2	4	4	4	4	25	3.57	-4	-4.0	-4.00	3	3	6.00	3.00	0.86
Host government law and regulations	3	2	2	5	4	3	3	22	3.14	-3	-3.0	-3.00	3	2	5.00	2.50	0.88

#### **4.3 Round Table Discussion**

Round table discussion has been conducted on 29 January 2013 in order to support the data collection progress. Experiences from Construction Industry Development Board (CIDB), Masters Builder Association Malaysia (MBAM) and EXIM Bank representatives are gathered to get more information about Malaysian contractors when venturing to overseas construction project.

During the round table discussion, several strengths, weaknesses, opportunities, and threats have been list out by the participant to describe about Malaysian contractors who are involved in international construction project. The listed factors are shown in Table 4.19 to Table 4.22 below.

Table 4.19: Strengths

No	Factors
1	Knowledge regarding large scale and complex construction.
2	Financial capability.
3	Experience in overseas construction projects.
4	English language.

Table 4.20: Weaknesses

No	Factors
1	Lack of knowledge on host country law and regulations

Table 4.21: Opportunities

No	Factors
1	Government involvement in overseas construction projects
2	Standard system

Table 4.22: Threats

No	Factors
1	Foreign competitor in host country
2	Culture and language barrier

The participants also make an explanation and give some example of the listed factors in order to support their statement. Therefore, the summary of the discussion and explanation are described in the next section.

## 4.4 Results and Discussions

The results obtained from the interview sessions, questionnaire survey and round table discussion was compared with the previous research and other sources (CIDB webpage, company webpage, journals, papers, company report and so on) in order to conclude the main strengths, weaknesses, opportunities and threats of Malaysian contractors. Table 4.23 and Table 4.26 show the factor that has similarities in referred sources related to Malaysian contractors.

Table 4.23: Company's Strengths

No	Strengths	Interview and Round Table	Questionnair e Survey	Secondary Sources
1	Having good track records from previous project	✓	<b>√</b>	<b>√</b>
2	Advance construction technology	✓	<b>√</b>	
3	Knowledge regarding large-scale construction	<b>√</b>	<b>√</b>	<b>√</b>
4	Project management skill	√	<b>√</b>	√
5	Loyal to the clients	√	√	N/A
6	Experience in overseas construction projects	√	√	√
7	Capability to joint-ventures with other contractors	<b>√</b>	<b>√</b>	<b>√</b>
8	The status of providing full package in handling projects **	N/A	<b>√</b>	
9	Status of having talented people in handling projects **	N/A	<b>√</b>	
10	Financial ability	√	<b>√</b>	<b>√</b>
11	Relationship with key players in other countries	√	√	√
12	Ability to manage sophisticated projects **	√	√	
13	Experience in complex project	<b>√</b>	<b>√</b>	<b>√</b>
14	Workforce cost ***	N/A	√	
15	English language **	√	N/A	√

Table 4.24: Company's Weaknesses

No	Weaknesses	Interview and Round Table	Questionnaire Survey	Secondary Sources
1	Skill labor workers in host country **	N/A	√	√
2	Cheap manpower in Malaysia **	N/A	<b>√</b>	<b>√</b>
3	Labor productivity **	N/A	√	<b>√</b>
4	Workforce cost ***	√	N/A	

Table 4.25: Company's Opportunities

No	Weaknesses	Interview and Round Table	Questionnaire Survey	Secondary Sources
1	Government involvement in overseas construction projects	√	<b>√</b>	<b>√</b>
2	Economic growth of developing countries **	N/A	✓	<b>√</b>
3	Increase of investment development projects in host country **	N/A	<b>√</b>	√
4	Projects owner's financial resource in current overseas project ***	N/A	✓	√
5	Political situation of host country.	√	✓	<b>√</b>
6	Geographic environment of host country **	N/A	✓	
7	Cultures and industry practices in host country ***	N/A	✓	<b>√</b>
8	Project distance from Malaysia ***	N/A	✓	<b>√</b>
9	Standard System **	√	N/A	√

Table 4.26: Company's Threats

No	Threats	Interview and Round Table	Questionnaire Survey	Secondary Sources
1	Corruption in host country.	√	√	<b>√</b>
2	Current inflation in host country	√	√	<b>√</b>
3	Foreign competitor in host country.	√	√	√
4	Current interest rate in host country.	√	√	✓

Table 4.26: Company's Threats

No	Threats	Interview and Round Table	Questionnaire Survey	Secondary Sources
5	The status of involving manufacturing company in securing projects	N/A	<b>√</b>	
6	The current status of seeking cheap manpower in host country	N/A	✓	
7	Equipment, material and labor supply in host country	√	✓	<b>√</b>
8	Current status of collaboration and partnering among competitors	N/A	<b>√</b>	
9	Host government and regulations	<b>√</b>	<b>✓</b>	<b>√</b>
10	Projects owner's financial resource in current overseas project ***	√	N/A	√
11	Project distance from Malaysia ***	√	N/A	<b>√</b>
12	Standard System **	<b>√</b>	N/A	<b>√</b>

Remark: \*\* is the additional factor mention by some of the interviewee.

Remark: \*\*\* is the factor has difference result from questionnaire and interview.

The discussion on several factors that has at least one informative source (interview and round table or secondary sources) is explained below. This is based on three (3) countries involved which are United Arab Emirates, India and Thailand.

#### **Strengths:**

1. Having good track records from previous project.

Having good track records has been identified as one of the main strength of the companies to maintain their presence in overseas. From the questionnaire distribution, all of the respondents were highly agree that their company have good track records from previous project. During the interview session, R1 mentioned that reputation of company is important to get involved in construction line. This is because the owner or bankers will look at the company reputation. It

is also supported by Hamdan and Adnan (2009) which state that the Malaysian contractors strengths for the venture lie in its excellent track records.

Referring to C14 company webpage, it stated that "with amazing track record and proven expertise in construction has garnered us a repute as the leader in turnkey and Build-Operate-Transfer infrastructure development in Asia and the Middle East regions". C18 company webpage also state that their company has the ability to serve a fast track construction and having an impressive delivery records.

#### 2. Advanced construction technology.

Having advanced technology in construction is one of the advantages to operate in overseas. According to R1, due to the labor issues in Thailand, the company has implemented the use of technology in order to reduce the number of staff needed to develop the projects. Pre-fabrication (pre-cast concrete), cast-insitu with system formwork modulations, hybrid structural system and smart interactive solution such as Building Information Model are some of their specialist.

This factor is also agreed by R3 during the interview session. The respondent mentions that their company has Industrialized Building System (IBS) factory and using Building Information Modeling (BIM) for construction. However, the respondent R5 state that they do not use any advance technology but believe that the company should have strong engineering team to run the project. Therefore, having an advance construction technology can be one of the strength to the company in coping the weaknesses.

3. Knowledge in large-scale construction, ability to manage sophisticated, experience in complex project and project management skill.

During the round table discussion, the MBAM representative mentioned that Malaysian contractors have been exposed to the large-scale and complex project since early year 1990's internally in Malaysia. There have a lot of construction project being involved such as highway, high-rise building, Kuala Lumpur International Airport (KLIA) and quiet a number of infrastructure projects.

This statement is also been supported by EXIM Bank representative. She states that in terms of skill set apparently, the industry players are very good in construction.

Table 4.13 has listed the latest contract period handled by Malaysian contractors in overseas and the range of contract period are between two (2) to six (6) years, assumption made that the projects are quite large due to the longer time period. It is also stated by Hamdan and Adnan (2008) that the projects involved by Malaysian contractors were considerably quite large due to the average contract period ranging from two (2) to ten (10) years and there is no project less than one (1) year of contract.

The ability to manage the large-scale and complex projects indirectly led to the improvement of project management skill. Therefore, all of the respondents are highly agree that project management skill is one of their company strength to be in international venture.

#### 4. Malaysian contractors are loyal to the clients.

According to the short discussion with Construction Industry Development Board (CIDB) representative, he has mentioned that Malaysian contractors are loyal to their client and trustworthy. It is also been supported by R3 which stated that for Malaysian, we really appreciate loyalty and we value about it. Trust, compliance to client's requirement and quality in construction serves as a route for Malaysia contractors to gain recognition in the international market (Hamdan and Adnan, 2009). Therefore, all of the respondents agree with this factor.

#### 5. Experience in overseas construction project.

According to the statistic in CIDB webpage, Malaysian firms have started their involvement in India since year 1996 and up until year 2011, there have 87 numbers of projects with the total value of USD5467.84mil (Figure 4.1).

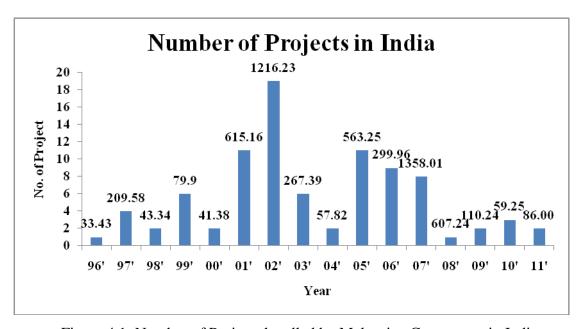


Figure 4.1: Number of Projects handled by Malaysian Contractors in India

The statement is also been supported during the discussion with CIDB, MBAM and EXIM Bank Malaysia. India can be ranked as the earliest country been ventured by Malaysian contractors after China. They venturing in India market especially in highway construction and did a joint-venture with local company.

They also mention that some of the contractors are still having projects there and some actually diversified in India and venturing into a building, other infrastructure and also housing type of development in India.

In early year 2000, some companies moved to venture into Middle East. During that time, Middle East was booming and offering a lot of opportunities. Until now, Malaysian contractors still appears as quiet aggressive in Middle East.

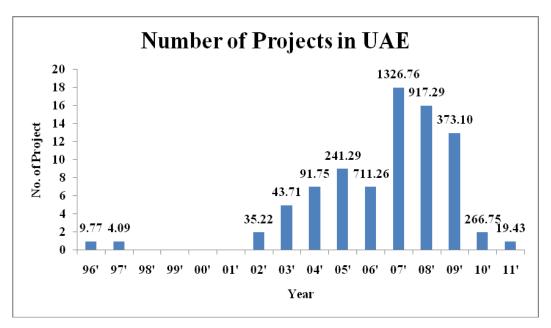


Figure 4.2: Number of Projects handled by Malaysian Contractors in UAE

This statement also been supported by the statistic taken from the CIDB webpage for the numbers of projects involved by Malaysia contractors in United Arab Emirates as shown in Figure 4.2. The figure shows that the aggressive involvements begins in year 2002 and up until year 2011, there have 79 numbers of projects in UAE with the total value around USD3761.48mil.

Malaysian contractors also started to venture in Thailand on year 1993. Figure 4.3 shows the number of project successfully acquired by Malaysian contractors until year 2011. The total number of projects is 47 with the value of around USD689.59mil.

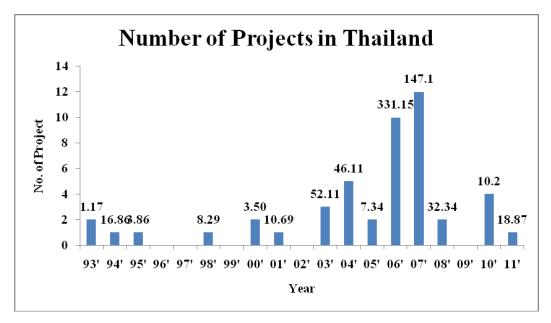


Figure 4.3: Number of Projects handled by Malaysian Contractors in Thailand

In addition, all of the respondents from questionnaire survey agree that having experience in overseas construction projects is also one of their company's strength. Referring to Table 4.12, majority of the company has operated overseas more than five years except R13. It also state the experience of the respondents itself which is majority of them having more than five years of experience.

#### 6. Capability to joint-ventures with other contractors.

Malaysian contractors also having a capability to form a joint-venture with other companies as well as foreign local contractors in some of their projects aside operated as wholly owned. This shows the ability of the company to cooperate with other contractors in handling the projects. During the interview session, R1 suggested the newcomers to form a joint-venture with local contractors that having good reputation as a beginning. It will help in terms of local culture, networking and language.

It also been supported by R3 which mention that the joint-venture especially with host country contractors is a necessity to operates in overseas. However, a

proper planning should be carry out in identifying and getting the right partner to form a joint-venture.

According to Hamdan and Adnan (2009), one of Malaysian contractors was forming a joint-venture with a reputable Indian construction company for road construction project under the National Highway Authority of India (NHAI)

## 7. Financial capability.

All of the respondents agree that financial capability is one of their strength when venturing to overseas. At the end of year 1990's, a year of economic recession and internally there is no large project to sustain and support the continuation of company operation and causing a financial crisis. With the experience and projects gain since early 1990's, most of the contractors have become more capable in terms of financing and start to venture out from Malaysia. It becomes one of the strength for Malaysian contractors to be involved in international construction.

According to Bursa Malaysia webpage, the companies are listed in Bursa Malaysia Market. During the interview session, respondent R5 mentioned that the company should have a stable financial capacity before participating in overseas project. It also been supported by R6 by saying that "if the company is not rich enough, you are not be able to perform in overseas market".

Having a strong financial capacity is one of the most important thing perceived by Malaysian contractors as a road to success in India (Hamdan and Adnan, 2009). Therefore, strong financial capacity is a vital requirement to support high operation expenses when venturing in the new market.

#### 8. Relationship with key players in other countries.

All of the respondents from questionnaire survey agree that relationship with key players in other countries as one of their strength. As being mentioned by R5 during interview session, they are actively involves in association of builders locally in overseas. Referring to Hamdan and Adnan (2008), the most contributed factors for Malaysian contractors to success in India is good relationship and contract with Indian customers, partners, employees, authorities and businessman. It shows that the relationship is important when the company venturing to the other countries.

#### 9. English language.

During the round table discussion, the participant mentions that another plus point for Malaysian contractors to be in international venture is the use of English language. Normally, the system has dual-language. One of it will be in English. The original version might use the local language but generally it will be translated in English. Therefore, the system can be well understood by Malaysian contractors.

The participant also states that if the contractors hire someone to translate the system, it can make a mistake. The meaning of the sentence might be different. Therefore, this is one of the strength owned by Malaysian contractors.

#### Weaknesses:

1. Lack of skill labor workers in host country and labor productivity.

Lack of skill labor workers and labor productivity was voted as the weakness of Malaysia contractors when operating in Thailand. According to Thailand property news on December 2012, labor shortage are causing stagnancy for construction in Thailand and foreseen as a big challenge in the year ahead due to the difficulties to find workers even there have an increment in daily minimum

wage. It also states that labor shortage problem will worsen in 2013. This issues was also mention in Master Builders 2006 1<sup>st</sup> Quarter report that the problems occur in Thailand was related to the lack of skilled workers or low productivity of local workforce.

These factors were also agreed by one of the cases (C15) that operated in UAE which labor productivity and lack of skill labor workers is their company weaknesses. According to Bakar (2008), labor in Middle East are outsource from Indonesia, Bangladesh, India and others. Normally the suppliers appointed them as a skill labor but in fact they are not. Hiring unskilled labor workers indirectly reduce the productivity of construction process.

#### 2. Lack of cheap manpower in Malaysia.

In addition, difficulties in seeking cheap manpower in Malaysia were agreed for cases C12, C15 and C19 when operating in overseas. C12 and C15 were operated in UAE and C19 in India. During the interview session, R1 has stated that sometimes the distance and location of the projects might increase the problem in finding the right person to handle the project. This statement was also supported by R5 which mentioned that workforce is always a problem and our biggest problem is to find the right people to run the job.

According to Bakar (2008), the company normally face difficulty in positioning staff in overseas. In order to persuade the staff to stay for a longer period, high salary plus necessary allowances and necessity needed by them need to be provided. It is also mention by Hamdan and Adnan (2009) that the company weakness is the lack interest of most Malaysian personals to be located in India. Therefore, an incentive scheme can be provided in order to increase the staff interest to work in overseas.

#### **Opportunities:**

1. Government involvement in overseas construction projects.

According to one of the participant during round table discussion, Government to Government agreement (G2G) or Memorandum of Understanding (MoU) is used to protect the company or investment in particular country. Malaysian contractors maybe could rely more on the strength of having G2G relationship of certain country with Malaysia. This will provide a comfortable point and it recognizes that Malaysia government had sign something procure mended in regards of certain level of development.

Construction Industry Development Board (CIDB) is a recognized and established representative of Malaysian government. Everything related to international construction will be handled by CIDB including promoting and providing information to Malaysia Company. Therefore, Malaysia contractors should take this opportunity to be in the international arena.

2. Economic growth of developing countries and increase of investment development projects in host country.

Referring to the article wrote by EC Harris Research, the construction sector in UAE remains dominated by two emirates (Abu Dhabi and Dubai) that set the pace for UAE as a whole. Opportunities are seen from the attempt of UAE government in continuing to drive the economy forward through a strategy of diversification and investment in a number of major projects with a particular focus on social infrastructure. The development is a part of the goal in becoming UAE as a "world class tourist destination".

In Thailand, during year 2012-2016, there have a lot of opportunities offered especially for reconstruction and rehabilitation of flooded area and the future flood protection plan in both private sector and government sector. For government sector, 800 billion USD budgets is allocates for improvement in

infrastructure and approximately 11.3 billion USD for water and flood management (Thailand country report, 2011).

Moreover, the opportunities also offered in India due to the commitment of Indian Government towards the massive infrastructure plan for the country. In the same time, it will give immense benefit to foreign contractors including Malaysian for a long period of time (Hamdan and Adnan, 2009).

#### 3. Political situation of host country.

The other opportunity voted by the respondents is political situation of host country. During interview sessions, the respondents involve in UAE mentioned that UAE having a stable politic condition. However, respondent R5 mentions that if the projects is in Bahrain, Syria or Algeria, there might be affected due to the political issues. This factor is also supported by Bakar (2008) which stated that Middle East region is a safe place to conduct business due to the stability of the political condition. It was not denied that political condition can be the main threats if the country having instability political condition because it is not easy to predict political changes.

The same perception gives by respondents who have been involved in India. As mentioned by R2 during interview session, there is no problem with the political situation in India however the company might face a problem when dealing with their law and regulations. It is also supported by Hamdan and Adnan (2009) where one of their respondent mention that politics in India is quite stable.

The situation was different if the comparison made between India and Thailand. According to R1 who has experience in both countries, in terms of political stability, India is more stable compare to Thailand. He also mentions that political situation is the main threat when operating in Thailand. However, the respondent personally gives his opinion that the situation does not bring any

negative impacts to his operation in Thailand. The research on political condition is required before venturing to any particular country.

#### **Threats:**

#### 1. Corruption in host country.

Corruption is the main threats which occur in every country. According to respondent R3, in UAE it is called as commissioning services where the company need to hired an agent and pay them for the services in helping to get the job. The other respondent (R6) state that it is so frustrated if the company already fulfill all of the requirement but still could not get the job because others using this kind of way. Therefore, respondent R6 advise the young generation to change this kind of cultures in Malaysia.

This factor is also mentioned in Emerging Asia S.W.O.T. Report (2011) for India and Thailand. Corruption is a major problem in India. It is operationally defined as the misuse of entrusted power for private gain. This variable evaluates the risks associated with economies that tolerate bribery or the granting of favors, normally to government employees, for approvals or concessions that would not be granted without these favors.

#### 2. Inflation rate in host country.

Another threat seen by the respondent is inflation rate in host country. Respondent for cases C11, C12 including C15 agree that inflation rate of host country is a threat of their company. According to the detail recorded in CIDB webpage, for case C11, the company started their involvement in UAE on April 2005 and the latest one is on January 2008 and company for case C12 started their involvement in UAE on April 2005 and the latest project on July 2009. For case C15, they started their involvement in UAE on April 2007 and another project on Sept 2007. Trading economics was referred to identify the trend of inflation rate in UAE.

This inflation rate is reported by the Ministry of Economy. Historically, from 1990 until 2013, the United Arab Emirates inflation rate averaged 2.2 percent reaching an all-time high of 12.3 percent in December of 2008 and a record low of -1.6 percent in January of 2011 as shown in Figure 4.4. Therefore, assumption can be made base on the contract period that started before year 2009.

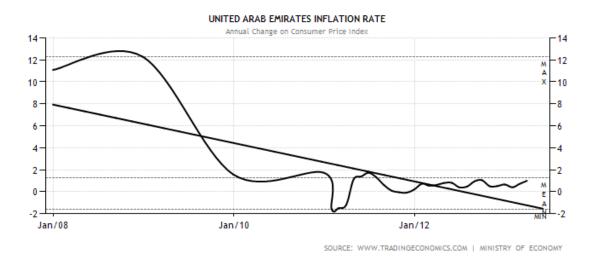


Figure 4.4: United Arab Emirates Inflation Rate

In India, the inflation has been voted for case C19 as the threat to operate in India. The company start to venture in India since 1998 and the latest project on December 2009 (CIDB official portal). The inflation rate was recorded at 5.96 percent in March of 2013. Inflation rate in India is reported by the Ministry of Commerce and Industry. Historically, from 1969 until 2013, India Inflation Rate averaged 7.74 percent reaching an all time high of 34.68 percent in September of 1974 and a record low of -11.31 percent in May of 1976. Figure 4.5 shows a chart with historical data for India inflation rate.

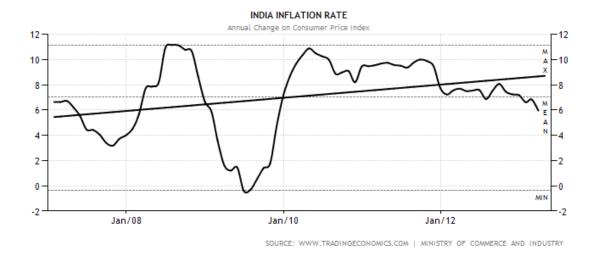


Figure 4.5: India Inflation Rate

Apart from that, the respondent for case C18 agrees that the inflation rate in Thailand is one of the threats. The company start to venture in Thailand with their first project on December 2003 and the latest project on January 2011 (CIDB official portal).

The inflation rate was recorded at 2.69 percent in March of 2013. Inflation Rate in Thailand is reported by the Ministry of Commerce. Historically, from 1977 until 2013, Thailand inflation rate averaged 4.66 percent reaching an all-time high of 24.56 percent in June of 1980 and a record low of -4.38 percent in July of 2009 as shown in Figure 4.6. Therefore, the changes of inflation rate might cause a problem.



Figure 4.6: Thailand Inflation Rate

#### 3. Foreign competitor in host country.

Another company's threat found from the questionnaire distribution is foreign competitor. In UAE, due to a lot of opportunities offered in becoming a "world class tourist destination", there will be more competitors to compete among each other. This factors was agreed for cases C11, C12 and C15 that been operated in UAE.

During the interview sessions, respondent R6 mentioned that international construction is a very open market and the company has to compete not only with foreign contractors but local contractors as well. This factor is also stated in the Master Builders 1<sup>st</sup> Quarter 2006 reports that UAE is one of the countries having stiff competition from other international companies.

Cases C18 and C19 also agree that the foreign competitors is one of their threat when operating in India and Thailand. This factor has been mention by Hamdan and Adnan (2009) that the competition from more experienced industry players remained a substantial threat to the company.

#### 4. Current interest rate in host country.

One of the threats seen by the respondent is interest rate. Interest rate in host country has been voted for cases C11 and C12 as the threat for their firms when operating in UAE. By referring to the contract period, the interest rate is viewed from trading economics Central Bank of the UAE. Figure 4.7 below shows the historical data for UAE Interest rate from 2007 until 2013. United Arab Emirates Interest Rate averaged 1.38 percent reaching an all-time high of 4.75 Percent in November of 2007 and a record low of 1 percent in January of 2009.

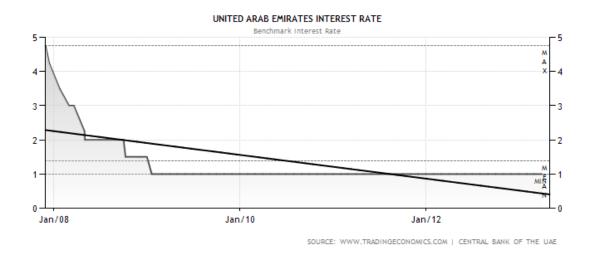


Figure 4.7: United Arab Emirates Interest Rate

In India, interest rate and inflation rate in host country has been voted by R8 for case C19 as the threat for their firms when operate in India. Interest rate in India is reported by the Reserve Bank of India. From 2000 until 2013, India interest rate averaged 6.56 percent reaching an all-time high of 14.50 percent in August of 2000 and a record low of 4.25 percent in April of 2009. The interest rate decisions are taken by the Reserve Bank of India's Central Board of Directors. Figure 4.8 shows the historical data for India Interest Rate (Trading economics webpage).

According to Hamdan and Adnan (2009) one of the company operated in India mentioned that during the initial years of operation, interest rates which were as high as 16% had caused severe financial obstacles for the industry player.

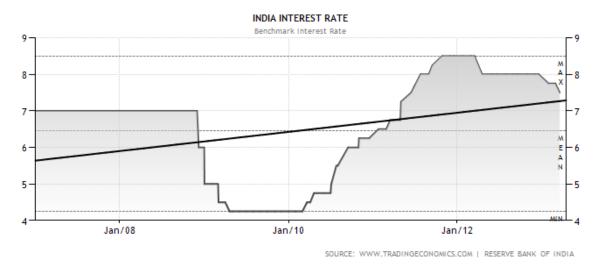


Figure 4.8: India Interest Rate

The same factors agreed by company operated in Thailand as the threats for their firms when operate in Thailand. According to trading economics, the benchmark interest rate in Thailand was last recorded at 2.75 percent. This interest rate is reported by the Bank of Thailand. From 2000 until 2013, Thailand Interest Rate averaged 2.49 Percent reaching an all-time high of 5 percent in June of 2006 and a record low of 1.25 percent in June of 2003. The interest rates decisions are taken by The Bank of Thailand's Monetary Policy Committee. Figure 4.9 show a chart with historical data for Thailand interest rate. Therefore, the threat might come from the fluctuation of current interest rate in host country.

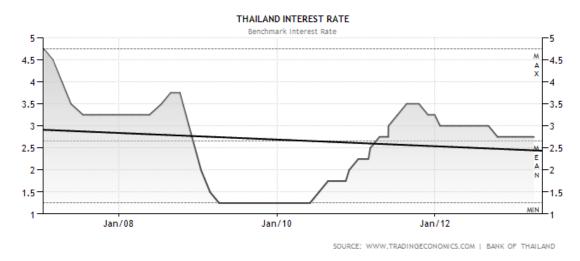


Figure 4.9: Thailand Interest Rate

#### 5. Host government law and regulation.

During the discussion, one of the participants mentioned that main business venture to other country is how to protect ourselves. The problem or arguments will not different much if the law can be well understood. Malaysian contractors are facing a problem with clients in Arab country. It happens when they try to find a way to twist and turn the law.

This is actually the highest factors facing by Malaysian contractors in Middle East. It is better for the contractors to well understand the law before venturing to the particular countries and be comfortable with it. Even they made some changes but the origin law will always be the same. Therefore, if one individual trying to diverge or twist the law, the contractor must know how to explain based on the original law. This is so important.

Apart from that, Malaysian contractors can go aggressively going out from Malaysia especially India because of the law is not much different from Malaysia. It is important for the company to understand and feel comfortable with the venturing law and regulations. This key point is also been mentioned during the forum in Putrajaya that the corporate laws and institutions in India are similar to Malaysia.

However, the problem might occur if the Malaysian firms venture in other country such as Indonesia, Thailand or Middle East. They do not have any fix law to be followed.

According to R4 during interview session, it is advisable to understand the culture and law before participating in overseas. The industry practices are not similar with Malaysia such as the process and the government time of operation.

In India, the law is not strict but it keeps on changing. For example, in term of workforce or taxation issues in India. According to R2, the rules and regulations are sometimes not solid like Singapore and it turns out as not our advantage. The other thing is about land issues in India, they are not as strong as here (Malaysia). If the contractor involve in road project, it takes year to solve the land issues.

It is also being supported by Hamdan and Adnan (2009) that unexpected costs incurred from time to time have also increased the difficulties of operating in the market. Delays and bureaucracy are inevitable when operating in the India market. Bureaucracy is one types of problems occur in India (Master Builders 1st Quarter, 2006).

In Thailand, they have double tax system between Malaysia. Thailand is easier as long as you pay according to the tax. Bureaucracy is also one types of problems occur in Thailand (Master Builders 1st Quarter, 2006)

## 6. Equipment, material and labor supply.

Another factor for threat is equipment, material and labor supply. R4 mentioned that these factors are depends on the country ventured. It can give a problem to a company because these factors are imported from other nearby countries.

According to Bakar (2008), there is no problem related to equipment because it is easily found in Middle East. However, the problem might occur for materials and labor supply because normally it is outsourced from other country. Fluctuation rates of materials which might happen will incur major losses if their clients insist on sticking to the originally agreed figures.

A proper management should be made to bring in all the materials when needed. In terms of labor supply, normally it comes from Indonesia, Bangladesh and India. However, the problem might occur in getting the skilled labor workers from those countries.

According to R2, there is no problem with labor supply in India because the labours are from India and Nepal but the in term of transferring the material from one boarder to another, payment of taxation is required. Machineries are also has to consider the taxation.

In addition, R1 also stated that India is more difficult in terms of limiting the money back to Malaysia and import some machinery from Malaysia. The technology is also not good enough and the workers do not know how to operate the machineries. Therefore, the company has to send their operator to India in order to teach them. Hamdan and Adnan (2009) also added that one of the threats faced when venturing to India is the shortage of materials and had resulted in price increase.

Other than that, R1 mentioned that Thailand is a very developed and established country. There is no problem with the product because we are able to fabricate in Thailand with our raw material. It is more than enough on our sector unless the sector is very high technology system; we need to import from Japan or somewhere.

In Thailand, although foreign investors may see corruption as rife in government, institutions like the police and military, and state-owned companies,

not many feel it is a handicap to doing business and making profits in Thailand. They are much more concerned with ensuring that there is a stable political and economic environment for doing business.

Besides of the listed opportunities and threats, there are several factors remark as \*\*\* which can be classify either an opportunity or threat for a company depends on the ventured country. Therefore, the discussion of results is explained below.

## 1. Project owner financial resources.

According to distributed questionnaire, project owner's financial resources have been agreed by all of the respondent as their company opportunity while operating in UAE except for case C17. Company for case C17 been operated in UAE less than 5 years for mixed development construction and the owner of project is non-government.

During the interview session, respondent R3 and R6 has mention that the problem occur when the client do not have enough financial resources and keep delay to make the payment. Therefore, the respondent suggests that make sure the financial is tied up before signing the contract.

It is also being mentioned by Bakar (2008) that the unique risk faced by the international participation in Middle East is the cash flow of the clients. Background checking on the potential client can be done in order to make sure that they could pay for the constructed facility.

In India, R2 mention that there have some problem but it is not that critical. However, from questionnaire distribution, all of the respondent agree that this factor is an opportunity to operate in India.

The difference situation occurs in Thailand where all of the respondents (interview and questionnaire) state that this factor is an opportunity. According to

R1, it becomes opportunity for the firm because the company works more on government project. In addition, if the project was funded by government or World Bank or agent development bank, the payment will be 100% secure. If the project involve is from private sector, lot of study should be done.

## 2. Culture and Industry practices.

According to Bakar (2008), there is no big difference between UAE and Malaysian culture. However, it is advisable to understand and respect their culture and way of life by becoming a good corporate citizen. It is also being supported by R6 that the culture and business practices should be well understood before venturing to other country.

In India, R2 added that the company has difficulties in sending the staff especially to some remote areas. Not everyone willing to go due to the differences of culture, weather, and difficulties to find food. This factor also been mention during round table discussion that the caste system is still rules the Indian culture. According to Hamdan and Adnan (2009), most of Malaysian contractors have problem to adapt with the Indian culture. However, there have a large proportion of India's educated population is highly qualified, fluent in English and cheap to employ.

Apart from that, there is no problem with the culture and industry practices in Thailand except language. According to R1, they spend six (6) months to learn Thai language. It also been supported by Master Builders 1<sup>st</sup> Quarter Report that one of the problem faced by Malaysian companies in Thailand is the language.

#### 3. Project distance from Malaysia.

From the questionnaire distribution, two (2) out of four (4) respondents in UAE agrees that project distance from Malaysia is a threat. During the interview session, respondent C2 mentioned that somehow distance will affect the

workforce. The problem will occur when finding the right person to be appointed there. This has been supported by R3 by mentioning that distance can increase the cost because of the products transship. However, respondent R6 mentioned that distance will not be an issue because we need to travel wherever we need to go.

According to Hamdan and Adnan (2009), the country's location which is not very far from Malaysia reduces the problem of logistics and mobility. The same situation for R1 which is the distance is not a threat to operate in Thailand.

### 4. Standard system.

Malaysia is one of the countries being colonies by British and that contributes to the easiness of Malaysian contractors to adapt in any international system such as British System Standard and American Standard for highway.

During the round table discussion, one of the representative mentioned that BS Standard has been used in India even some modification has been made but it is not too far from the original system. This is also one of the opportunities obtained by Malaysian contractors in order to venture in India. This statement is also being supported by the article paper presented in Regional Economic Forum 2005 held on November 22, 2005 in Putrajaya. He mentioned that, the standards in India as well as bid and contract documents are very similar to those in Malaysia.

In Middle East, the same BS Standard, UERO Standard, and American Standard have been applied. Even there must be some modification; it does not change much from Malaysian practices. The same goes to the contractual format because Malaysian contractors and Middle East use the same international contractual format such as FIDIC. Therefore, it gives much opportunity for Malaysian contractors to venture in Middle East comparing to other ASEAN countries.

Therefore, it can be concluded that each country might have a different trend of problem. It is necessary for a company to make an underground research on the particular country in order to get more useful and inside view of information. This might helps to avoid any circumstances which could influence the construction process. The factors identified as S.W.O.T of Malaysian contractors are summarized in Table 4.27 until 4.30.

Table 4.27: Ranking of Strengths

No	Strengths
S1	Having good track records from previous project
S2	Advanced construction technology
<b>S</b> 3	Knowledge regarding large-scale construction
S4	Project management skill
S5	Experience in overseas construction projects
S6	Capability to joint-ventures with other contractors
S7	Financial ability
<b>S</b> 8	Relationship with key players in other countries
<b>S</b> 9	Ability to manage sophisticated projects
S10	Experience in complex project

Table 4.28: Ranking of Weaknesses

No	Weaknesses
W1	The current status of seeking cheap manpower in Malaysia
W2	The status of having skill labor workers in host country
W3	Labor productivity

Table 4.29: Ranking of Opportunities

No	Opportunities
O1	Government involvement in overseas construction projects
O2	Economic growth of developing countries
O3	Increase of investment development projects in host country
O4	Political situation of host country

Table 4.30: Ranking of Threats

No	Threats
T1	Corruption in host country
T2	Current inflation in host country
T3	Foreign competitor in host country
T4	Current interest rate in host country
T5	Equipment, material and labor supply in host country
T6	Host government and regulations

#### 4.5 Discussion of Mean Value based on Each Country

According to the Table 4.18, Malaysian contractors have a similarity in term of strengths while operated in United Arab Emirates, India and Thailand. It shows that the agreement of all factors is level more than 3.00 which is in the moderate agreement. The mean value for each country is more than 3.00. Therefore, these factors can be identified as the strength of Malaysian contractors.

However, both of the differences and similarities are found from mean value of weaknesses, opportunities and threats factors for each country. Company operated in India has a problem in seeking cheap manpower in Malaysia. This factor has been voted for case C19 as a threat for their company to operate in India and for case C20 as strength but in the very low agreement.

Seeking cheap manpower in Malaysia gives a positive mean value for company operated in United Arab Emirates but it shows the mean value is lower than very low agreement. Therefore, it can be concluded that this factor is a weakness for the company who operated in United Arab Emirates. As referred to the Table 4.18, two (2) out of seven (7) cases voted as their company weakness and three (3) out of seven (7) cases voted as their company strength but level with the low agreement.

As being mentioned in the results and discussion, company normally faced a problem to position staff in overseas such as India due to the difference culture, weather and difficult to find food. Therefore, high salary and necessary allowance has to be offered to persuade the staff to work in India.

For skill labor workers in host country, company operated in Thailand voted this factor as their company's weakness. In United Arab Emirates, case C15 voted this factor as their company's weakness. In addition, there is one case (C17) which agrees that this factor as their strength but level it with a low agreement. However, both of the cases in India voted this factor as their strength with moderate agreement. The

same case for UAE and India has voted labor productivity as their company weakness.

There is not much difference of mean value voted by the respondent for opportunities in these three countries. As referred to Table 4.18, all of the factors are voted more than moderate value (3.00) except for political situation in United Arab Emirates which is 2.57. Four (4) out of seven (7) cases in UAE voted political situation as their company strength with moderate agreement and one of the respondents (R7) voted as weakness with high agreement. According to the previous research, Middle East region is safe place to conduct business due to the stability of the political condition. Therefore, with the overall mean value more than 3.00, this factor can be identified as the opportunity to operate in overseas. However, research on political situation is still required. This is because political situations are hard to predict.

Apart from that, threats are one of the factors that should be considered on the first place before participating overseas. According to the results gathered from each of the country, one of the threats is corruption in host country. Three (3) out of five (5) cases voted corruption as a threat with highly agreement. This type of culture is hard to be changed.

In addition, inflation rate and foreign competitor in host country are seen having similar trends of agreement. Inflation rate are agreed as a threat for cases C11, C12, C15 in United Arab Emirates, C18 in Thailand and C19 in India. It gives the overall mean value lower than -1.00 which is in the range of very low and low. The same cases also voted the foreign competitors in host country as their threats.

In United Arab Emirates, interest rate has been voted by most of the respondents as their company's opportunity. Three (3) out of seven (7) cases agree this factor is their opportunity by leveling it as moderate. However, two (2) out of seven (7) cases voted this factor as their threats with moderate and high agreement. In addition, this factors is also been voted as a threat for case in Thailand. The

respondent ranks this threat with high agreement. This factor is considered as threat due to the overall mean value which falls in the negative range. Therefore, the summary of factors for each country is shown in Table 4.31 to Table 4.33.

## 4.6 Summary of Chapter

From the interview session, questionnaire distribution and round table discussion, a list of Malaysian contractors SWOT can be identified. The mean value from questionnaire distribution for three main countries are gathered and the information obtained from interviewees, Malaysian bodies representative and secondary sources (CIDB data, company webpage, literature review, country report) are used to support the listed factors.

It can be seen that there is a similarities and differences of trend for mean value in each country. However, the explanation on the factors has been discussed in this chapter and the conclusion could be made from the overall mean value by considering all of the countries. Therefore, the listed factors are used to propose a potential strategic planning for Malaysian contractors in order to perform in international venture.

Table 4.31: Summary Results for India

Factors	Level of Agreement				
Strengths	C19	C20	Sum	Mean	
Proven good track records from previous project	5	N/A	5.00	5.00	
Advanced construction technology	4	4	8.00	4.00	
Knowledge regarding large-scale construction	4	4	8.00	4.00	
Project management skill	4	4	8.00	4.00	
Experience in overseas construction projects	4	4	8.00	4.00	
Capability to form Joint-venture with other contractors	3	N/A	3.00	3.00	
Financial capability	4	4	8.00	4.00	
Having relationship with key players in other countries	3	3	6.00	3.00	
Ability to manage sophisticated projects	4	3	7.00	3.50	
Having experience in complex projects	4	3	7.00	3.50	
Weaknesses	C15	C16	Sum	Mean	
Cheap manpower in Malaysia	-4	1	-3.00	-1.50	
Skill labor workers in host country	3	3	6.00	3.00	
Labor productivity	3	2	5.00	2.50	
Opportunities	C15	C16	Sum	Mean	
Government involvement in overseas construction projects	3	4	7.00	3.50	
Economic growth of developing countries	4	4	8.00	4.00	
Investment development projects in host country	4	4	8.00	4.00	
Political situation of host country	4	3	7.00	3.50	
Threats	C15	C16	Sum	Mean	
Corruption in host country	-5	N/A	-5.00	-5.00	
Current inflation in host country	-4	3	-1.00	-0.50	
Foreign competitor in host country	-3	3	0.00	0.00	
Current interest rate in host country	-3	3	0.00	0.00	
Equipment, material and labor supply in host country	3	3	6.00	3.00	
Host government law and regulations	3	2	5.00	2.50	

Table 4.32: Summary Results for Thailand

Factors Level of Agreem					
Strengths	C18	Sum	Mean		
Proven good track records from previous project	5	5.00	5.00		
Advanced construction technology	5	5.00	5.00		
Knowledge regarding large-scale construction	4	4.00	4.00		
Project management skill	4	4.00	4.00		
Experience in overseas construction projects	4	4.00	4.00		
Capability to form Joint-venture with other contractors	5	5.00	5.00		
Financial capability	3	3.00	3.00		
Having relationship with key players in other countries	4	4.00	4.00		
Ability to manage sophisticated projects	3	3.00	3.00		
Having experience in complex projects	3	3.00	3.00		
Weaknesses	C14	Sum	Mean		
Cheap manpower in Malaysia	3	3.00	3.00		
Skill labor workers in host country	-4	-4.00	-4.00		
Labor productivity	-4	-4.00	-4.00		
Opportunities	C14	Sum	Mean		
Government involvement in overseas construction projects	5	5.00	5.00		
Economic growth of developing countries	4	4.00	4.00		
Increase of investment development projects in host	3	3.00	3.00		
country	3	3.00	3.00		
Political situation of host country	4	4.00	4.00		
Threats	C14	Sum	Mean		
Corruption in host country	N/A	N/A	N/A		
Current inflation in host country	-4	-4.00	-4.00		
Foreign competitor in host country	-4	-4.00	-4.00		
Current interest rate in host country	-4	-4.00	-4.00		
Equipment, material and labor supply in host country	-4	-4.00	-4.00		
Host government law and regulations	-3	-3.00	-3.00		

Table 4.33: Summary Results for United Arab Emirates

Factors	Factors Level of Agreement								
Strengths	C11	C12	C13	C14	C15	C16	C17	Sum	Mean
Proven good track records from previous project	4	5	5	5	N/A	N/A	N/A	19	4.75
Advanced construction technology	3	4	4	4	4	4	4	27	3.86
Knowledge regarding large-scale construction	4	4	4	5	5	4	4	30	4.29
Project management skill	4	4	4	5	5	3	4	29	4.14
Experience in overseas construction projects	4	4	3	3	5	3	3	25	3.57
Capability to form Joint-venture with other contractors	3	3	4	4	N/A	N/A	N/A	14	3.50
Financial capability	3	4	3	5	5	3	3	26	3.71
Having relationship with key players in other countries	4	3	3	5	5	2	3	25	3.57
Ability to manage sophisticated projects	4	4	3	5	5	4	3	28	4.00
Having experience in complex projects	4	4	3	5	5	4	3	28	4.00
Weaknesses	C7	C8	C9	C10	C11	C12	C13	Sum	Mean
Cheap manpower in Malaysia		-3	2	2	-3	2	3	3	0.43
Skill labor workers in host country	4	3	4	3	-4	3	2	15	2.14
Labor productivity	3	3	4	3	-4	3	3	15	2.14
Opportunities	C7	C8	C9	C10	C11	C12	C13	Sum	Mean
Government involvement in overseas projects	4	3	2	1	5	2	4	21	3.00
Economic growth of developing countries	-4	4	3	5	5	5	4	22	3.14
Investment development projects in host country	4	4	2	5	4	5	2	26	3.71
Political situation of host country	-4	3	3	5	5	3	3	18	2.57
Threats	C7	C8	C9	C10	C11	C12	C13	Sum	Mean
Corruption in host country	-3	-5	-5	4	N/A	N/A	N/A	-9	-2.25
Current inflation in host country	-4	-4	3	4	-4	3	3	1	0.14
Foreign competitor in host country	-4	-3	3	4	-4	3	3	2	0.29
Current interest rate in host country	-4	-3	3	4	4	3	3	10	1.43
Equipment, material and labor supply	4	-4	4	5	-3	3	3	12	1.71
Host government law and regulations	3	2	2	5	4	3	3	22	3.14

#### **CHAPTER V**

# STRATEGIC PLANNING OF MALAYSIAN CONTRACTORS IN INTERNATIONAL CONSTRUCTION PROJECTS

This chapter aims to identify the potential strategies for Malaysian contractors when venture out from Malaysia. The results were collected and analyzed from a round table discussion with government and private bodies in Malaysia. Based on the collected results, the second objective of research has been fulfilled. In this chapter, the analyses of results obtained from the round table discussion and the additional list of strategies adapted from previous research are explained in the following section.

## 5.1 Lists of Potential Strategic Planning for Malaysian Contractors

### 5.1.1 Suggested Strategies from Round Table Discussion

During the round table discussion, lists of potential strategies that can be applied by Malaysian contractors are discussed. There are some strategies that have been already applied by Malaysian contractors and some of them are the suggested strategies for Malaysian contractors which can be used as a guideline for newcomers who will venture out from Malaysia. The listed strategies are:

## 1. Joint-venture between local companies in host country.

One of the suggested strategies from experienced contractors during the round table discussion is forming joint-venture with host country contractors. This strategy was found as the best way to venture out from Malaysia due to the easiness of obtaining support (logistic), understand the local culture, law and regulation. The local company from host country should know better about their own country. Therefore, the joint-venture between local companies in host country should be one of the strategies for operating construction in overseas.

Another reason is due to the high competition among foreign firms as well as local firms. This strategy has been applied by most of Malaysian contractors when venturing to Middle East and India.

At the same time, the Malaysian contractors can widen and enhance their connection and relationship within the government or even with private company in order to run their business in future.

## 2. Recruits host country engineers to work in Malaysia.

A year ago, one of the companies in Malaysia started to recruit Indian engineers to work with them in Malaysia. This practice gave a pioneer to Malaysian contractor, when their company has project in India. These are the people who help to run the project. Therefore, the company already has advantage there. Instead of starting from the bottom, Indian engineers can work there as expatriate not as a local. They know better about India and make it much easier for Malaysia contractor to do the project rather than having a difficulty in communication.

#### 3. Review the financial condition of clients.

Mostly Malaysian contractor prefer to be involved in government related project or government funded project. It is not a priority to go for private projects especially when involving financial. Financial problem is the key issue in all projects over the world and it may trouble during the payment agreement. Therefore, Malaysian companies are more preferable to venture in oversea that give profits to the growth of country economic with the packing of government fund.

However, the company should survey about the parties involved in the projects. For example, if the project is wholly owned by the government without other bodies in between, the financial condition of the government should be

review to avoid any circumstances during the construction of project such as lack of financial to make the payment.

### 4. Research on particular country political situation.

Political is also an important thing to be focused on. If there is a change in leaderships in host country, it may delay the whole construction process and will cause problem to Malaysian contractors. Research should be conducted in terms of analyzing the political stability of the host country such as the last election made, the style of political leadership in that particular country and how long the same leader has been empowered. This kind of information might help in terms of self-preparation and budgeting the suitable time to venture out from Malaysia.

## 5. Having standby backup by the bankers.

Malaysian companies are highly lookup for support especially when venturing to the developing countries. This is the way for contractors to be more secure in handling overseas projects. By doing so, bankers are able to manage their base and involve from the start of the projects in order to understand overall situation and identify the parties involved in the projects. Therefore, if anything happen throughout the projects, it is easier for banker to know how to assist in solving the problem.

### **5.1.2** Strategies from Previous Research

Apart from round table discussion, the additional strategies are found from the previous research which can be adapted in this research. Previously, there are several researchers managed a strategic planning for local firms doing business in overseas. Some of the references are used in this research in order to identify the possibility of applying the same strategic planning for Malaysian contractors.

Therefore, the strategies are listed out and selected strategies will be matched with the S, W, O, and T of Malaysian contractors. The strategic planning was taken from several papers, journals and books. The strategies implemented are summarized in Table 5.1.

Table 5.1: List of Strategies from Previous Research

Participating in International project as a subcontractor.  Participation in small-scale or simple projects.  Using government support for contract guarantee and financing.  Form a joint-venture with local company.  Cooperate with foreign contractors (joint-venture).  Enhance market share in Asia.  Temploy local workers.  Training project management.  Diversify the business territory.  Develop new overseas markets.  Advancing in investment development projects through self-financing.  Bid for projects that have established good names and relations.  Bid for projects that seek low costs, high technology, and good experience.  Established performance incentive schemes.  Withdrew from those overseas markets that have no development prospects.  Focus on favorable markets, e.g., Asian countries.  Bid for residential projects.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Co into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Bid for BOT projects	No.	List of Strategies  List of Strategies
2 Participation in small-scale or simple projects. 3 Using government support for contract guarantee and financing. 4 Form a joint-venture with local company. 5 Cooperate with foreign contractors (joint-venture). 6 Enhance market share in Asia. 7 Employ local workers. 8 Training project management. 9 Diversify the business territory. 10 Develop new overseas markets. 11 Advancing in investment development projects through self-financing. 12 Bid for projects that have established good names and relations. 13 Bid for projects that seek low costs, high technology, and good experience. 14 Established performance incentive schemes. 15 Withdrew from those overseas markets that have no development prospects. 16 Focus on favorable markets, e.g., Asian countries. 17 Bid for residential projects. 18 Provide higher quality service and output. 19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development.	-	
Using government support for contract guarantee and financing. Form a joint-venture with local company. Cooperate with foreign contractors (joint-venture). Enhance market share in Asia. Employ local workers. Training project management. Diversify the business territory. Develop new overseas markets. Advancing in investment development projects through self-financing. Bid for projects that have established good names and relations. Bid for projects that seek low costs, high technology, and good experience. Withdrew from those overseas markets that have no development prospects. Focus on favorable markets, e.g., Asian countries. Focus on favorable markets, e.g., Asian countries. Bid for residential projects. Provide higher quality service and output. Review technology used and to purchase new equipment. Increase R & D allocation. Go into neighboring countries for expansion. Seeking opportunities in the private sector to avoid involvement in political competitions. Select project with shorter duration. Fixed currency of payment used in contract. Sign a dual-currency contract – local currency and foreign currency. Built network and contacts in host country. Engage subcontractors from host country. Built up team of experts which can closely monitor the policy change. Focus on one's own strength to build leading-edge development.		
Form a joint-venture with local company. Cooperate with foreign contractors (joint-venture). Enhance market share in Asia. Employ local workers. Training project management. Diversify the business territory. Develop new overseas markets. Advancing in investment development projects through self-financing. Bid for projects that have established good names and relations. Bid for projects that seek low costs, high technology, and good experience. Withdrew from those overseas markets that have no development prospects. Focus on favorable markets, e.g., Asian countries.  Hereican the projects and output. Review technology used and to purchase new equipment. Increase R & D allocation. Go into neighboring countries for expansion. Seeking opportunities in the private sector to avoid involvement in political competitions. Select project with shorter duration. Fixed currency of payment used in contract. Sign a dual-currency contract – local currency and foreign currency. Built network and contacts in host country. Engage subcontractors from host country. Built up team of experts which can closely monitor the policy change. Focus on one's own strength to build leading-edge development.		
<ul> <li>Cooperate with foreign contractors (joint-venture).</li> <li>Enhance market share in Asia.</li> <li>Employ local workers.</li> <li>Training project management.</li> <li>Diversify the business territory.</li> <li>Develop new overseas markets.</li> <li>Advancing in investment development projects through self-financing.</li> <li>Bid for projects that have established good names and relations.</li> <li>Bid for projects that seek low costs, high technology, and good experience.</li> <li>Established performance incentive schemes.</li> <li>Withdrew from those overseas markets that have no development prospects.</li> <li>Focus on favorable markets, e.g., Asian countries.</li> <li>Bid for residential projects.</li> <li>Provide higher quality service and output.</li> <li>Review technology used and to purchase new equipment.</li> <li>Increase R &amp; D allocation.</li> <li>Go into neighboring countries for expansion.</li> <li>Seeking opportunities in the private sector to avoid involvement in political competitions.</li> <li>Select project with shorter duration.</li> <li>Fixed currency of payment used in contract.</li> <li>Sign a dual-currency contract – local currency and foreign currency.</li> <li>Built network and contacts in host country.</li> <li>Engage subcontractors from host country.</li> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	4	
6 Enhance market share in Asia. 7 Employ local workers. 8 Training project management. 9 Diversify the business territory. 10 Develop new overseas markets. 11 Advancing in investment development projects through self-financing. 12 Bid for projects that have established good names and relations. 13 Bid for projects that seek low costs, high technology, and good experience. 14 Established performance incentive schemes. 15 Withdrew from those overseas markets that have no development prospects. 16 Focus on favorable markets, e.g., Asian countries. 17 Bid for residential projects. 18 Provide higher quality service and output. 19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development. 30 Cooperate between Malaysia contractors	5	
Training project management.  Diversify the business territory.  Develop new overseas markets.  Advancing in investment development projects through self-financing.  Bid for projects that have established good names and relations.  Bid for projects that seek low costs, high technology, and good experience.  Established performance incentive schemes.  Withdrew from those overseas markets that have no development prospects.  Focus on favorable markets, e.g., Asian countries.  Bid for residential projects.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.	6	
9 Diversify the business territory. 10 Develop new overseas markets. 11 Advancing in investment development projects through self-financing. 12 Bid for projects that have established good names and relations. 13 Bid for projects that seek low costs, high technology, and good experience. 14 Established performance incentive schemes. 15 Withdrew from those overseas markets that have no development prospects. 16 Focus on favorable markets, e.g., Asian countries. 17 Bid for residential projects. 18 Provide higher quality service and output. 19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development. 30 Cooperate between Malaysia contractors	7	Employ local workers.
10 Develop new overseas markets.  11 Advancing in investment development projects through self-financing.  12 Bid for projects that have established good names and relations.  13 Bid for projects that seek low costs, high technology, and good experience.  14 Established performance incentive schemes.  15 Withdrew from those overseas markets that have no development prospects.  16 Focus on favorable markets, e.g., Asian countries.  17 Bid for residential projects.  18 Provide higher quality service and output.  19 Review technology used and to purchase new equipment.  20 Increase R & D allocation.  21 Go into neighboring countries for expansion.  22 Seeking opportunities in the private sector to avoid involvement in political competitions.  23 Select project with shorter duration.  24 Fixed currency of payment used in contract.  25 Sign a dual-currency contract – local currency and foreign currency.  26 Built network and contacts in host country.  27 Engage subcontractors from host country.  28 Built up team of experts which can closely monitor the policy change.  29 Focus on one's own strength to build leading-edge development.  30 Cooperate between Malaysia contractors	8	Training project management.
11 Advancing in investment development projects through self-financing. 12 Bid for projects that have established good names and relations. 13 Bid for projects that seek low costs, high technology, and good experience. 14 Established performance incentive schemes. 15 Withdrew from those overseas markets that have no development prospects. 16 Focus on favorable markets, e.g., Asian countries. 17 Bid for residential projects. 18 Provide higher quality service and output. 19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development. 30 Cooperate between Malaysia contractors	9	Diversify the business territory.
Bid for projects that have established good names and relations.  Bid for projects that seek low costs, high technology, and good experience.  Established performance incentive schemes.  Withdrew from those overseas markets that have no development prospects.  Focus on favorable markets, e.g., Asian countries.  Bid for residential projects.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.	10	Develop new overseas markets.
Bid for projects that seek low costs, high technology, and good experience.  Withdrew from those overseas markets that have no development prospects.  Focus on favorable markets, e.g., Asian countries.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.	11	Advancing in investment development projects through self-financing.
experience.  14 Established performance incentive schemes.  15 Withdrew from those overseas markets that have no development prospects.  16 Focus on favorable markets, e.g., Asian countries.  17 Bid for residential projects.  18 Provide higher quality service and output.  19 Review technology used and to purchase new equipment.  20 Increase R & D allocation.  21 Go into neighboring countries for expansion.  22 Seeking opportunities in the private sector to avoid involvement in political competitions.  23 Select project with shorter duration.  24 Fixed currency of payment used in contract.  25 Sign a dual-currency contract – local currency and foreign currency.  26 Built network and contacts in host country.  27 Engage subcontractors from host country.  28 Built up team of experts which can closely monitor the policy change.  29 Focus on one's own strength to build leading-edge development.  30 Cooperate between Malaysia contractors	12	Bid for projects that have established good names and relations.
Withdrew from those overseas markets that have no development prospects.  Focus on favorable markets, e.g., Asian countries.  Bid for residential projects.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	13	
prospects.  Focus on favorable markets, e.g., Asian countries.  Bid for residential projects.  Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	14	Established performance incentive schemes.
17 Bid for residential projects. 18 Provide higher quality service and output. 19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development. 30 Cooperate between Malaysia contractors	15	<u> </u>
Provide higher quality service and output.  Review technology used and to purchase new equipment.  Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	16	Focus on favorable markets, e.g., Asian countries.
19 Review technology used and to purchase new equipment. 20 Increase R & D allocation. 21 Go into neighboring countries for expansion. 22 Seeking opportunities in the private sector to avoid involvement in political competitions. 23 Select project with shorter duration. 24 Fixed currency of payment used in contract. 25 Sign a dual-currency contract – local currency and foreign currency. 26 Built network and contacts in host country. 27 Engage subcontractors from host country. 28 Built up team of experts which can closely monitor the policy change. 29 Focus on one's own strength to build leading-edge development. 30 Cooperate between Malaysia contractors	17	Bid for residential projects.
Increase R & D allocation.  Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	18	Provide higher quality service and output.
Go into neighboring countries for expansion.  Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	19	Review technology used and to purchase new equipment.
Seeking opportunities in the private sector to avoid involvement in political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	20	
political competitions.  Select project with shorter duration.  Fixed currency of payment used in contract.  Sign a dual-currency contract – local currency and foreign currency.  Built network and contacts in host country.  Engage subcontractors from host country.  Built up team of experts which can closely monitor the policy change.  Focus on one's own strength to build leading-edge development.  Cooperate between Malaysia contractors	21	Go into neighboring countries for expansion.
<ul> <li>Fixed currency of payment used in contract.</li> <li>Sign a dual-currency contract – local currency and foreign currency.</li> <li>Built network and contacts in host country.</li> <li>Engage subcontractors from host country.</li> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	22	
<ul> <li>Sign a dual-currency contract – local currency and foreign currency.</li> <li>Built network and contacts in host country.</li> <li>Engage subcontractors from host country.</li> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	23	Select project with shorter duration.
<ul> <li>Built network and contacts in host country.</li> <li>Engage subcontractors from host country.</li> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	24	• •
<ul> <li>Engage subcontractors from host country.</li> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	25	Sign a dual-currency contract – local currency and foreign currency.
<ul> <li>Built up team of experts which can closely monitor the policy change.</li> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	26	Built network and contacts in host country.
<ul> <li>Focus on one's own strength to build leading-edge development.</li> <li>Cooperate between Malaysia contractors</li> </ul>	27	Engage subcontractors from host country.
30 Cooperate between Malaysia contractors	28	Built up team of experts which can closely monitor the policy change.
	29	Focus on one's own strength to build leading-edge development.
31 Bid for BOT projects	30	Cooperate between Malaysia contractors
	31	Bid for BOT projects

Table 5.1: List of Strategies from Previous Research

No.	List of Strategies
32	Enlarge the business scope and find new markets in the countries where
32	the company has been successful
33	Develop local office in host country (long-term strategy)
34	Emphasize on long term relationship with the client
35	Gathered necessary information accurately
36	Maintain good relationships with local government
37	Allocated risk to local key players in host country
38	Use advance construction technology
39	Allocated risk at the operational level to the local partner

References: Lee, Jeon et al. (2010), Zhao, Shen et al. (2009), Yean Yng Ling and Yu (2009), Mohamed, Ann et al. (2010), Li (2009), Yean Yng Ling, Ibbs et al. (2008), Yean Yng Ling, Vu Min Chau et al. (2009), Leung, Hui et al. (2011), Hamdan and Adnan (2009), Bakar (2008).

Ten previous research studies were being referred and the suitable strategies listed will be added in suggested strategies from round table discussion. It might be applied by Malaysian contractors when venturing to overseas. The additional strategies are based on the suitability with the SWOT of Malaysian contractors.

# **5.2 Matching of Round Table Discussion Strategy with SWOT of Malaysian Contractors**

The listed strategies during the round table discussion are matched with the SWOT of Malaysian contractors (Table 5.2) in order to form the four-quadrant matrix as shown in Table 5.4. Therefore, the second objective of the research will be fulfilled.

Table 5.2: List of Strategies from Round Table Discussion

	List of Strategies	SO	ST	WO	WT
1.	Joint-venture between local companies in host country.	<b>√</b>	<b>√</b>		✓
2.	Recruits host country engineers to work in Malaysia.	<b>√</b>			
3.	Review the financial standing of host country government.	<b>√</b>	<b>√</b>		
4.	Research on particular country political situation.	<b>V</b>	<b>V</b>		
5.	Having standby backup by the bankers.				

# 5.3 Additional Strategy from Previous Research

The additional list of strategies as shown in Table 5.3 below can be used as a guideline for Malaysian contractors in enhancing and developing their own strategic planning. This additional strategy might be one of the strategies that were never being thought by Malaysian contractors when venturing out from Malaysia. Therefore, the learning from previous research might help to generate a new idea for Malaysian contractors to form their own strategy.

Table 5.3: List of Additional Strategies

List of Strategies	SO	ST	WO	WT
Cooperating between Malaysia contractors	√			
2. Bid for BOT projects	✓			
3. Enlarge the business scope and find new markets in the countries where the company has been successful		√		
4. Develop local office in host country (long-term strategy)	✓			
5. Emphasize on long term relationship with the client	√			
6. Gathered necessary information accurately	√			
7. Joint-ventures with host country contractor	√	√		✓
8. Maintain good relationships with local government	√			

Table 5.3: List of Additional Strategies

List of Strategies	SO	ST	WO	WT
9. Allocated risk to local key players in host country		<b>√</b>		
10. Recruit local manpower			<b>√</b>	
11. Provide training program			<b>√</b>	
12. Using advance construction technology			<b>√</b>	
13. Allocated risk at the operational level to the local partner				√
14. Proper planning and identify all the taxes		√		

Therefore, the four-quadrant matrix could be formed based on the matching strategies with the list of strength, weakness, opportunity and threat of Malaysian contractors as shown in Table 5.4 below. The explanations of proposed strategy are shown in Table 5.5 to Table 5.8. The proposed strategies for ambiguous factors opportunity / threat are also shown in Table 5.9.

### **5.4 Summary of Chapter**

There are several strategies can be concluded from previous discussion with the Malaysian government and private bodies. The strategies are projected for newcomers that are planning to venture in international construction. However, the additional strategies that had been applied by foreign contractors can also be referred as a guideline. Thus, a strategic planning that match with S.W.O.T by Malaysian contractors were performed in this research as a reference for newcomers to prepare their own strategy before penetrating in overseas.

Table 5.4: Four-quadrant Matrix

	Strengths (S <sub>1</sub> , S <sub>2</sub> , S <sub>3</sub> , S <sub>4</sub> , S <sub>5</sub> , S <sub>6</sub> , S <sub>7</sub> , S <sub>8</sub> , S <sub>9</sub> , S <sub>10</sub> )	Weaknesses (W <sub>1</sub> , W <sub>2</sub> , W <sub>3</sub> )
Opportunities	SO Strategies:	WO Strategies:
$(O_1, O_2, O_3, O_4)$	Cooperate between Malaysia contractors	• Recruit local manpower (W <sub>2</sub> O <sub>2</sub> O <sub>3</sub> )
	$(S_1S_2S_3S_4S_5S_6S_7O_2O_3)$	• Provide training program (W <sub>1</sub> W <sub>3</sub> O <sub>2</sub> O <sub>3</sub> )
	• Bid on BOT projects (S <sub>1</sub> S <sub>7</sub> O <sub>2</sub> O <sub>3</sub> )	Use advance construction technology
	• Enlarge the business scope and find new markets in the	$(W_1W_3O_2O_3)$
	countries where the company has been successful $(S_1S_5O_2O_3)$	
	• Develop local office in host country (long-term strategy) (S <sub>7</sub> O <sub>2</sub> O <sub>3</sub> )	
	• Emphasize on long term relationship with the client $(S_1S_5S_8O_2O_3)$	
	• Gathered necessary information accurately (S <sub>1</sub> S <sub>2</sub> S <sub>3</sub> S <sub>4</sub> S <sub>5</sub> S <sub>6</sub> S <sub>7</sub> O <sub>2</sub> O <sub>3</sub> )	
	• Joint-ventures with host country contractor (S <sub>1</sub> S <sub>5</sub> S <sub>6</sub> O <sub>4</sub> )	
	<ul> <li>Maintain good relationships with local government (S<sub>8</sub>O<sub>4</sub>)</li> </ul>	
	• Recruits host country engineers to work in Malaysia (S <sub>7</sub> O <sub>2</sub> O <sub>3</sub> )	
Threats	ST Strategies:	WT Strategies:
$(T_1, T_2, T_3, T_4, T_5, T_6)$	• Enlarge the business scope and find new markets in the countries where the company has been successful	• Allocated risk at the operational level to the local partner (W <sub>1</sub> W <sub>3</sub> T <sub>2</sub> T <sub>4</sub> )
	$(S_1S_3S_5S_7T_3)$	Joint-ventures with host country contractor
	• Joint-ventures with host country contractor $(S_1S_5S_6T_3T_6)$	$(W_1W_2W_3T_3)$
	<ul> <li>Allocate project risk to local key players in host country (S<sub>1</sub>S<sub>5</sub>S<sub>7</sub>T<sub>2</sub>T<sub>4</sub>)</li> </ul>	
	• Proper Planning and identify all the taxes $(S_1S_5S_7T_6)$	

Table 5.5: Proposed SO Strategies

Strength	Opportunity	SO Strategy	Supportive Reference
- Proven good track	- Economic growth of	- Cooperate between	- Based on CIDB data, a few joint ventures were
records from previous	developing	Malaysia	reported involved cooperation between
project.	countries.	contractors.	Malaysia contractors in order to minimize and
- Advanced construction	- Increase of		eliminate competition amongst Malaysian
technology.	investment		contractors despite enhancing the financial and
- Knowledge regarding	development		expertise capacity.
large-scale	projects in host		- For example, joint ventures between Gamuda
construction.	country.		Bhd and WCT Engineering to construct New
- Project management			Doha International Airport worth at RM2.631
skill.			mil (Mustaffa, Adnan et al., 2012)
- Experience in overseas			
construction projects.			
- Capability to joint-			
ventures with other			
contractors.			
- Financial capability.			
- Proven good track	- Economic growth of	- Bid on Built-	- According to Mustaffa, Adnan et al. (2012),
records from previous	developing	Operate-Transfer	normally this type of entry modes take the
project.	countries.	(BOT) project.	form of an invitation from a local government
- Strong financial	- Increase of		based on a company's reputation on specialist
capability.	investment		projects. Currently, this entry mode becomes
	development		popular among several Malaysian construction
	projects in host		companies as to secure the project for the long
	country.		term.

Table 5.5: Proposed SO Strategies

		ueie eiei Tioposeu se suu	
Strength	Opportunity	SO Strategy	Supportive Reference
<ul> <li>Proven good track records from previous project.</li> <li>Experience in overseas construction projects.</li> </ul>	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> </ul>	- Enlarge the business scope and find new markets in the countries where the company has been successful.	- One of the Malaysian contractors applies this strategy when the group's has built a strong involvement in the Indian road and highway programs which strengthened company's presence in Indian construction market; the company start to look on other sectors besides road and highway (Hamdan and Adnan, 2009).
- Strong financial capability.	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> </ul>	- Develop local office in host country (long-term strategy).	- The presence of local office in India several years prior to securing the contract was very beneficial to build early relationship with prospective sub-contractors and suppliers (Hamdan and Adnan, 2009).
<ul> <li>Proven good track records from previous project.</li> <li>Relationship with key players in other countries.</li> <li>Experience in overseas construction projects.</li> </ul>	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> </ul>	- Emphasize on long term relationship with the client.	- This strategy has been used by one of Malaysian contractors to have a successful penetrating in Indian market (Hamdan and Adnan, 2009).

Table 5.5: Proposed SO Strategies

	Strength		Opportunity		SO Strategy		Supportive Reference
-	Proven good track records from previous project. Advanced construction technology. Knowledge regarding large-scale construction. Project management skill. Experience in overseas construction projects. Capability to joint-ventures with other contractors. Financial capability.	-	Economic growth of developing countries. Increase of investment development projects in host country.		Gathered necessary information accurately.	-	The difficulty occurs when inadequate information that was overlooked during initial research on the market. This problem faced by one of Malaysian contractors associated with the venture in India (Hamdan and Adnan, 2009).
-	Relationship with key players in other countries.	-	Political situation of host country.	-	Maintain good relationships with local government.	-	According to Ling and Hoi (2006) it is advisable for contractors to cooperate and maintain good relationship with local government to avoid problems if there is any political risk.

Table 5.5: Proposed SO Strategies

Strength	Opportunity	SO Strategy	Supportive Reference
<ul> <li>Proven good track records from previous project.</li> <li>Experience in overseas construction projects.</li> <li>Capability to form joint-ventures with other contractors.</li> </ul>	- Political situation of host country.	- Joint ventures with the local firms in host country.	- This is because it perceived that the local government would not truly welcome 100% wholly owned firms. The strategy was suggested by one of the respondent who operated in Middle East (Bakar, 2008).
- Financial capability.	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> </ul>	- Recruits host country engineers to work in Malaysia.	- During the round table discussion, the representative mentions that one of the companies in Malaysia started to recruit Indian engineers come to work with them in Malaysia. This is the pioneer, when the company has project in India, this are the people who help to run the project. Therefore, the company already has advantage there, instead of starting from the bottom.

Table 5.6: Proposed WO Strategies

Ī	Weakness	Opportunity	WO Strategy	Supportive Reference
	<ul> <li>Lack of cheap manpower in Malaysia.</li> <li>Lack of skill labor</li> </ul>	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> <li>Economic growth of</li> </ul>	<ul> <li>Recruit local manpower.</li> <li>Provide training</li> </ul>	<ul> <li>According to Hamdan and Adnan (2009), one of Malaysian contractor using this strategy to operate its entity in India due to the lack of interests of most Malaysian construction personals to be located in India.</li> <li>A series of job training has been conducted to</li> </ul>
	<ul><li>Lack of skill labor workers in host country.</li><li>Low labor productivity.</li></ul>	developing countries. Increase of investment development projects in host country.	program.	equip the workers with skill to achieve the quality standards, level of productivity as well as safety awareness and consciousness. It becomes a necessity because productivity, quality and innovation are becoming increasingly important for the industry (Bakar, 2008).
	<ul> <li>Lack of skill labor workers in host country.</li> <li>Low labor productivity.</li> </ul>	<ul> <li>Economic growth of developing countries.</li> <li>Increase of investment development projects in host country.</li> </ul>	- Use advance construction technology.	- According to respondent C2 during the interview session, due to the labor issues in Thailand, the company has applied the construction technology such as prefabrication (pre-cast concrete) in order to reduce the number of staff needed to develop the projects.

Table 5.7: Proposed ST Strategies

Strength	Threat	ST Strategy	Supportive Reference
<ul> <li>Proven good track records from previous project.</li> <li>Knowledge regarding large-scale construction.</li> <li>Experience in overseas construction projects.</li> <li>Financial capability.</li> </ul>	- Foreign competitor in host country.	- Enlarge the business scope and find new markets in the countries where the company has been successful.	- Chinese contractors has the advantage of good reputation and technical strengths, they has been extending its main business of building works to infrastructure works such as roads, bridges, and water supply projects in overseas market (Zhao, Shen et al., 2009).
<ul> <li>Proven good track records from previous project.</li> <li>Experience in overseas construction projects.</li> <li>Capability to joint-ventures with other contractors.</li> </ul>	<ul> <li>Foreign competitor in host country.</li> <li>Host government law and regulations</li> </ul>	- Joint-venture with local firms in host country.	<ul> <li>One of the suggested strategies from experience contractors during the round table discussion is forming joint-venture with host country contractors.</li> <li>The reason of forming joint-ventures is because of the high competition among foreign firms as well as local firms. This strategy has been applied by most of Malaysian contractors when venturing to Middle East and India.</li> <li>For example, one of Malaysian contractors was forming a joint-venture with a reputable Indian construction company for road construction project under the National Highway Authority of India (NHAI) (Hamdan and Adnan, 2009).</li> </ul>

Table 5.7: Proposed ST Strategies

	Strength	Threat	ST Strategy	Supportive Reference
r p - H	Proven good track ecords from previous project. Experience in everseas construction projects. Financial capability.	<ul><li>Current inflation in host country.</li><li>Current interest rate in host country.</li></ul>	- Allocated risk to the local key-players in host country.	- Allocating risks such as interest rate fluctuation, inflation and currency exchange rate fluctuation, tax rate increase through contracts is a very normal method in overseas projects practice. It can be allocated to the local employer, local owner or the local subcontractors (Li, 2009).
r p - H	Proven good track ecords from previous project. Experience in overseas construction projects. Financial capability.	- Host government law and regulations.	- Proper planning and identify all the taxes.	<ul> <li>The complicated tax system with many direct and indirect taxes such as customs duties, entry tax, service tax and others which is sometimes more than the cost of production (Bakar, 2008).</li> <li>The same strategy was adopted by Singapore firms when venturing to India (Ling and Hoi, 2006).</li> </ul>

Table 5.8: Proposed WT Strategies

Weakness	Threat	WT Strategy	Previous Research
<ul> <li>Lack of skill labor workers in host country.</li> <li>Lack of labor productivity.</li> </ul>	<ul> <li>Current inflation in host country.</li> <li>Current interest rate in host country.</li> </ul>	- Allocated risk at the operational level to the local partner.	- Some experts shared that construction delays are common in India. This led to the financial losses because liquidated damages had to be paid. Delays may occur because of strikes and low working pace. They felt that workers in India are strongly united and unionized and it is possible for them to cripple project progress completely (Ling and Hoi, 2006).

Table 5.8: Proposed WT Strategies

	Weakness	Threat	WT Strategy	Previous Research
-	Lack of cheap	- Foreign competitor	- Joint-venture with	- One of the suggested strategies from
	manpower in	in host country.	local contractors in	experience contractors during the round table
	Malaysia.		host country.	discussion is forming joint-venture with host
-	Lack of skill labor		_	country contractors.
	workers in host			- This way is found as the best way to venture
	country.			out from Malaysia due to the easiness of
-	Lack of labor			obtaining support (logistic), understand the
	productivity.			local culture and law and regulation.

Table 5.9: Proposed Strategies for the ambiguous opportunity / threat

Opportunity / Threat		Strategy		Previous Research
- Project owner's	-	Review the financial	-	Background checking on the potential client and cross checking with
financial		condition of clients.		contractors who had worked with the client previously to verify the financial
resources.				health before signing the contract (Bakar, 2008).
- Equipment,	-	Imported from other	-	Equipment are sometimes available in India, however, it is generally
material and labor		countries or altered		outdated and not of high capacity. This problem faced by Singapore firms
supply in host		design to adapt with		when venturing to India. In terms of equipment unavailability, early planning
country.		available machinery.		must be carried out because long lead times are involved for the equipment to
				arrive from overseas. The expert also advised that designs could be altered to
				adapt to available machinery (Ling and Hoi, 2006).

#### **CHAPTER VI**

#### CONCLUSION AND RECOMMENDATION

This chapter represents the findings and conclusion for this study. Recommendation is also presented for further research in this area to enhance the information for other countries that might be one of the interests of Malaysian contractors.

#### 6.1 Conclusion

At the end of this research, there are two main objectives need to be identified. The first objective is to determine the strengths, weaknesses, opportunities and threats of Malaysian contractors who have been involves in international construction. In order to identify the list of factors, interview session and questionnaire distribution was conducted towards Malaysian contractors. The additional factors for SWOT were gathered from the round table discussion.

The results were ranked and summarized based on the mean value agreed by the respondents on each factor. The interviews are conducted in order to get an initial point of view about S. W. O. T. of Malaysian contractors and allow the contractors to share their personal experience when venturing to the other countries.

The information gathered from interview session are used to form a questionnaire survey and was distributed to the corresponding companies who have been involved in United Arab Emirates, India and Thailand. The round table was also conducted in order to gain more supportive information on S.W.O.T of Malaysian contractors.

There are several factors found as the main S.W.O.T of Malaysian contractors. For strengths, there are twelve (12) main factors including loyalty to the client and the use of English language. The factors for strengths that has been identified are proven good track records from previous project, advance construction technology,

knowledge on large-scale construction and project management skill, loyalty to the clients, having experience in overseas construction projects, capability to form joint-venture with other contractors, strong financial capability, having good relationship with key players in other countries, able to manage sophisticated projects, having experience in complex projects and the use of English language.

Meanwhile, several factors are identified as weaknesses for Malaysian contractors when participating in overseas project. The factors are lack of skilled workers in host country, lack of cheap manpower in Malaysia and low labor productivity. These factors are identified from overall mean value obtained from three countries which is United Arab Emirates, India and Thailand.

Apart from strengths and weaknesses, the factors for opportunities and threats are identified. There are four (4) main opportunities identified which are government involvement in overseas construction projects, economic growth of developing countries, increase of investment development projects in host country and stability of political condition of host country.

However, six (6) threats of Malaysian contractors are identified from this research. The factors are corruption, inflation, foreign competitors, interest rate, equipment, material and labor supply, and host government law and regulations. Therefore, these factors will be used in the next stage of this research.

The second objective is to suggest the potential strategic planning which can be used as a reference for newcomers to form their own strategies. For this part, the round table discussion has been conducted with Construction Industry Development Board (CIDB), a recognized and established representative of Malaysia Government and Master Builder Association Malaysia (MBAM) which is also another established non-government organization representing the Malaysian Contractors. The representatives from these organizations are well experienced and knowledgeable in overseas construction works and as well as in Malaysia.

There are five (5) suggested strategies during the round table discussion which can be applied by Malaysian contractors when venturing to overseas. The suggested strategies are forming joint-venture between local companies in host country, recruits host country engineers to work in Malaysia, review the financial standing of clients, research on particular country political condition and having standby backup by the bankers. However, the contractors are advice to make a research on particular country before participating in overseas project.

The previous research has been referred in order to gather more information on the proposed strategies. The suitable strategy that can be match with strengths, weaknesses, opportunities and threats of Malaysian contractors are adapted in this study.

The matching between S.W.O.T of Malaysian contractors and strategies from round table and previous research has been made. There are eight (8) suitable proposed SO strategies identified by matching factors of strengths and opportunities. Meanwhile, there are only three (3) suitable strategies for WO and ST quadrant. WO strategies are formed from the matching weaknesses and opportunities factors and ST strategies from the strengths and threats factors.

The last quadrant which is the formation of WT strategies, there are two (2) suitable strategies identified. Therefore, these proposed strategies could be used by the newcomers as a guideline to form their own strategy when venturing to overseas projects.

Malaysian contractors who are encouraged to venture in overseas construction projects are advised to form joint-venture with contractors who already have high experience in overseas project. This is one of way to start business in overseas. Besides, Malaysian contractors should discard negative local mindset and not to export our local culture that has been a practice here in Malaysia.

However, before getting involved in international venture, a group of expert should be formed in order to analyze the external environmental forces with minimum of 6 months duration in the chosen country. The main factors that should be taken into consideration are political situation, economic condition, contractual and the participation of foreign firms.

A good partner selection is also one of the most important elements in venturing the international construction. Contractors are demanded to have a strong financial management. However, having a good relationship with host country contractors either government or private could lend a helping hand by providing them an attractive capital market products and bonds to meet the contractors funding needs. Contractors are also advised to be careful in selecting their prospective clients and projects. A review of respective client should be made in order to know their financial standing and previous records. Contractors should not simply grab all the offers.

## 6.3 Limitation of Study

The data for this study were obtained from interview session with 6 respondents from Malaysia who have experienced in overseas construction project. This small number of respondents might cause some bias in the findings but it can be used as a guideline and provides initial look of Malaysian contractors.

However, the interviews with 6 interviewees should fulfill the concept of triangulation concept which states that information about a single phenomenon should be allocated from at least three difference sources. This is also been supported with a series of questionnaires distributed to the parties.

Out of 20 distributed questionnaires, eight (8) of the respondents replied. The questionnaire survey was distributed to the contractors who have been involved in United Arab Emirates, India and Thailand around year 2007 until 2011 in order to achieve the research objectives.

However, there are five (5) factors which have been missing of data due to the unnoticed information while preparing the questionnaire survey, yet, this factor are still considered due to the similarities of agreement from several respondents with interview sessions.

Apart from that, the analyses of S.W.O.T are made based on interviewees' opinion and being supported by secondary sources referred from the CIDB database, company report, company webpage, journals, papers, and so on in order to strengthen the information gathered during the interviews and questionnaire distribution.

However, the information is focused on three main countries which are United Arab Emirates (seven respondents), India (two respondents) and Thailand (one respondent). The difference number of respondents on each country might cause a bias in the finding but the results can be accepted due to the similarities with the findings from interview sessions. It can be used as a reference for newcomers to identify the factors should be considered before participating in international construction.

Furthermore, the results are based on mean value for each factor. The limitation of sampling and time could give some effect to the final output of the results. Therefore, the secondary sources are used to strengthen the information gathered from interview and questionnaire distribution.

#### **6.4 Recommendations**

This study has been conducted by gathering information from interviewees who have been involved in international construction and distributes the questionnaire survey to companies being involved in top five countries which are United Arab Emirates, India and Thailand. These countries being chosen due to a lot of on-going projects handle by Malaysian contractors.

However, there are limitation in sampling which there is only seven respondents from United Arab Emirates, two respondents from India and one respondent in Thailand. There are several research did about international construction in Middle East and India, however, there is not much on ASEAN countries which is related to Malaysian contractors. Therefore, in future, larger study's scope can be conducted involving respondents from other countries.

#### REFERENCES

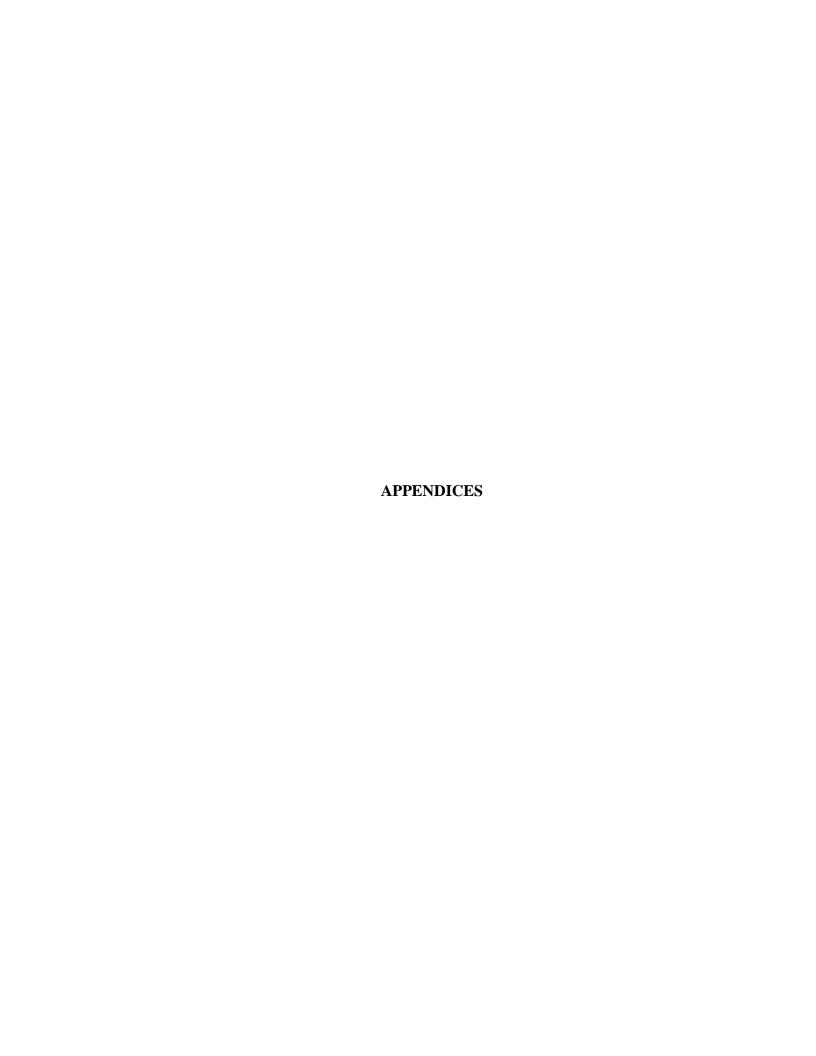
- **Bursa Malaysia.** Available from: http://www.bursamalaysia.com/market/listed-companies/list-of-companies/main-market [2013, April].
- Construction Industry Development Board (CIDB) official portal.
- **Construction Industry Master Plan 2006-2015.**
- Emerging Asia S.W.O.T. Report 2011.
- Malaysian Economic Report, Treasury Malaysia (2011/2012). Available from: http://www.treasury.gov.my [2011, September].
- Master Builders 1st Quater 2006.
- **Trading Economics.** Available from: http://www.tradingeconomics.com [2013, March].
- Ahmad, S. Z. and Kitchen, P. J. International expansion strategies of Malaysian construction firms: entry mode choice and motives for investment Problems and Perspectives in Management. 2008.
- Al-Tmeemy, S. M. H. M., Abdul-Rahman, H., et al. Future criteria for success of building projects in Malaysia. International Journal of Project Management. 2011: 337-348.
- Andersen, P. H. and Strandskov, J. **International Market Selection.** Journal of Global Marketing. 1997: 65-84.
- Bakar, Z. A. (2008). <u>Challenges Face by Malaysia Contractors in International Ventures</u>. Master of Science, Universiti Teknologi Malaysia.
- Chang, H.-H. and Huang, W.-C. **Application of a quantification SWOT analytical method.** Mathematical and Computer Modelling. 2006: 158-169.
- CIDB Malaysia. Malaysia Report. Country Report Theme Paper. 2008.
- Dess, G. G., Lumpkin, G. T., et al. **Strategic Management: Text and Cases** 4th ed. City: McGraw-Hill/Irwin, 2008.
- Domke-Damonte, D. Interactive effects of international strategy and throughput technology on entry mode for service firms. Management International Review (MIR). 2000: 41-59.

- Ghani, K. D. A., Nayan, S., et al. **Critical Internal and External Factors that affect Firms Strategic Planning.** International Research Journal of Finance and Economics. 2010.
- Goodstein, L., Nolan, T., et al. **Applied Strategic Planning: how to develop a plan that really works.** City: McGraw-Hill International Editions, 1993.
- Gunhan, S. and Arditi, D. Factors Affecting International Construction. Journal of Construction Engineering & Management. 2005: 273-282.
- Hamdan, N. A. M. and Adnan, D. H. Case Studies of Malaysian Contractors in India Opportunities, Challenges and Strategies. Built Environment Journal. 2009: 41-50.
- Hamdan, N. A. M. and Adnan, H. An Assessment of Analysis on Penetration of Malaysian Contractors into India. Asian Social Science. 2008.
- Howes, R. and Tah, J. H. M. **Strategic management applied to international construction.** City: Thomas Telford, 2003.
- Intenational News and Views Corporation. India and Malaysia Signs MoU in the Field of Highway Management and Development [Online]. Available from: http://www.internationalnewsandviews.com/2010/12/23/india-and-malaysia-signs-mou-in-the-field-of-highway-management-and-development/ [2011, December]. 2011.
- Kangari, R. and Lucas, C. L. Managing international operations: A guide for engineers, architects and construction managers. 1st ed. City: American Society of Civil Engineers, 1997.
- Korkmaz, S. and Messner, J. I. Competitive Positioning and Continuity of Construction Firms in International Markets. Journal of Management in Engineering. 2008: 207-216.
- Lee, S., Jeon, R., et al. Strategies for Developing Countries to Expand Their Shares in the Global Construction Market: Phase-Based SWOT and AAA Analyses of Korea. Journal of Construction Engineering and Management. 2010: 460-470.
- Leung, B. Y. P., Hui, E. C. M., et al. Swot Dimensional Analysis for Strategic Planning The Case of Overseas Real Estate Developers in Guangzhou, China. 2011: 105-122.

- Li, S. **Risk Management for Overseas Development Projects.** International Business Research. 2009: 4.
- Ling, F. Y. Y. and Hoi, L. Risks faced by Singapore firms when undertaking construction projects in India. International Journal of Project Management. 2006: 261-270.
- Lu, W., Li, H., et al. Strengths, Weaknesses, Opportunities, and Threats Analysis of Chinese Construction Companies in the Global Market. Journal of Management in Engineering. 2009: 166-176.
- McCuen, H. The Elements of Academic Research. City: ASCE Press, 1996.
- Mohamed, Z. A., Ann, H. J., et al. **Strategic Management.** 1st ed. City: Oxford Fajar Sdn. Bhd., 2010.
- Mustaffa, N. K., Adnan, H., et al. Entry Strategies for Malaysian Construction Related Companies Going Abroad. Australian Journal of Basic and Applied Sciences. 2012.
- Ramayah, T., Mohamad, O., et al. **Internationalisation of Malaysian contractors.**International Business and Entrepreneurship Development. 2010.
- Stone, E. F. **Research methods in organizational behaviour.** City: Goodyear publishing company, 1978.
- Tan, D. J.-Z. and Ghazali, F. E. M. Critical Success Factors for Malaysian Contractors in International Construction Projects using Analytical Hierarchy Process. EPPM, Singapore. 2011.
- Weihrich, H. The TOWS matrixâ€"A tool for situational analysis. Long Range Planning. 1982: 54-66.
- World Bank. World Development Indicators Database. July 2011.
- Yates, J. Globalization of Engineering and Construction Legal Issues. Journal of Professional Issues in Engineering Education and Practice. 2007: 169-170.
- Yean Yng Ling, F., Ibbs, C. W., et al. Strategies Adopted by International Architectural, Engineering, and Construction Firms in Southeast Asia.

  Journal of Professional Issues in Engineering Education & Practice. 2008: 248-256.
- Yean Yng Ling, F., Vu Min Chau, P., et al. Strengths, Weaknesses, Opportunities, and Threats for Architectural, Engineering, and Construction Firms:

- Case Study of Vietnam. Journal of Construction Engineering & Management. 2009: 1105-1113.
- Yean Yng Ling, F. and Yu, G. Strengths, Weaknesses, Opportunities, and Threats: Case Study of Consulting Firms in Shenzhen, China. Journal of Construction Engineering & Management. 2009: 628-636.
- Yin, R. K. Case Study Research: Design and Methods (2nd edition). City: Sage Publication, 2003.
- Zhao, Z. Y., Shen, L. Y., et al. Performance and Strategy of Chinese Contractors in the International Market. Journal of Construction Engineering & Management. 2009: 108-118.
- Zhi, H. **Risk management for overseas construction projects.** International Journal of Project Management. 1995.



# APPENDIX A DATA COLLECTION PART I

#### **PARTICIPANT INFORMATION SHEET**

You are invited to take part in this research study. Before you decide, it is important for you to understand why is the research being done & what it will involve. Please take time to read the following info carefully. Ask me if there is anything that is not clear or if you would like more information. Take time to decide whether or not you to take part.

#### **Study Title**

SWOT Analysis for Malaysian Contractors in International Construction Industry

#### What is the purpose of this study?

The objectives of the research is to identify Malaysian contractors strengths, weaknesses, opportunities and threats in the international construction market and develop the strategic planning to assist Malaysian contractors to further improve their competitiveness when expanding their overseas careers.

#### Why I have to take part in this study?

Interview session will be conducted in order to support my thesis progress; this is where I can know more about Malaysian contractors who are now undergoing construction projects in overseas. When you do take part, you will be given this information sheet to keep & asked to sign a consent form.

#### What are the procedures to be followed?

Following your agreement to participant in this study, in part A you will be asked regarding your company background and part B, based on your experience in conducting projects abroad, you will be ask questions regarding the factors that contribute as strengths, weaknesses, opportunities and threats of your company. Every participant should be encouraged to express your views.

#### Will my taking part of this study be kept confidential?

All information which collected about you during the course of the research will be kept strictly confidential.

#### **Contact for further information:**

You may contact the following researchers if you have any questions:

Assistant Professor Dr. Vachara Peansupap Advisor, Department of Civil Engineering, Chulalongkorn University, Bangkok, Thailand pyachara@chula.ac.th

## Kenyataan Kebenaran / Consent form

A study of SWOT Analysis for Malaysian Contractors in International Construction Industry

Kajian Analisis SWOT bagi Kontraktor Malaysia dalam Industri Pembinaan Antarabangsa.

The objective and procedures of the research have been explained to me and I understand that I am participating in this research on my free will. I am fully aware of the fact that I can refuse to answer any question if I wish so. I also understand that any information deriving from this research and its result will be treated in the strictest confidence.

Tujuan dan prosedur kajian telah pun diterangkan kepada saya dan saya memahami bahawa penglibatan saya terhadap kajian ini adalah secara sukarela. Saya menyedari sepenuhnya bahawa saya berhak menolak daripada menjawab soalan-soalan yang ditujukan kepada saya sekiranya saya ingin berbuat demikian. Saya juga memahami bahawa sebarang maklumat dan keputusan yang diperolehi daripada kajian ini akan dipelihara oleh pihak tuan dan akan dirahsiakan.

## 

## INTERVIEW SESSION PART A

Correspondent and Companies Background

a)	Please state your role in your organization in relation to international contracts.
b)	How many years of experience do you have in the construction industry?
c)	Please state the names of the country you been involved in the international project?
d)	How many years did your company operate in overseas?
Co	rrespondent Involvement in International Level Project
a)	Where is the location of project?
b)	What are the types of services involved presently and before? (Residential / Office Blocks / Township / Facilities and etc)
c)	Who is the owner of the project?
d)	What type of entry mode made by your company? (JV with home country subcontractors / wholly owned / JV with foreign local contractor / firm of the country / JV with other foreign non local contractor / firm of the county)
e)	Does your company receive any financial funds in conducting the project? (Please State)

#### PART B

Based on your experience in conducting projects abroad, what are the factors that contribute as strengths, weaknesses, opportunities and threats of **your company**?

Level	Description	Agreement (%)
1	Very Low	<20
2	Low	21-40
3	Moderate	41-60
4	High	61-80
5	Very High	>80

Pro	oject Location (Country):						
	rengths and Weaknesses Contractor's financial status.	Level	1	2	3	4	5
<b>b</b> )	Yes No Contractor's experience in						
D)	conducting international project.						
	Yes No						
c)	Contractor's experience on large- scale and complex projects.						
	Yes No						
d)	Having good track records from the previous project.						
	Yes No						
e)	<b>Project management capability</b> (contractors are capable to organize themselves with reliable credibility's to satisfy the standard, specification and needs of clients).						
	Yes No						

f)	Having the international network with overseas company or agencies in charge of the construction investment.			
	Yes No			
g)	Able to get or find the valuable information of the overseas construction projects.			
	Yes No			
h)	Most of Malaysian Contractors are loyal to the clients.			
	Yes No			
i)	Levels of technological advantage of your company comparing to other companies in Malaysia.			
	Yes No			
<b>j</b> )	Capability to joint-ventures with other contractor's in host country.			
	Yes No			
k)	Workforce cost.			
	Yes No			

Opportunities and Threats a) Status of project owners' finantesources in oversea project.	Level icial	1	2	3	4	5
Yes No No Inflation and currency fluctuate of the host country.	ions					
Yes No No Contract Trace increases.						
Yes No No do Strong support from	the					
government.  Yes No	the					
e) Having good relationships vother countries.	vith					
Yes No No Host government law regulations.	and					
Yes No No Host country political situation.						
Yes No No Status of equipment, material	and					
labor supply in host country.  Yes No	wa414					
i) Differences of cultures industry practices.	and					
Yes No						

j)	Foreign competitors in host country.	]
	Yes No	
k)	Bribery in host country.	]
	Yes No	
l)	Project distance from Malaysia.	]
	Yes No	
m)	Globalization and openness of market (2015).	]
	Yes No	

	List of Questions	R1	R2
1.	Do you believe that your company has a stable financial status?	Yes.	In terms of financial is yes.
2.	Does your company have high experience in conducting international project?	Yes	Yes.
3.	Are the project involve in the large-range project?	Yes	Yes.
4.	Does your company having good track records from the previous project?	Yes. Track records are very important especially to owner or bankers. This is because construction line is very small and they will look at your reputation. We keep our reputation and products good enough and we never abandon any single projects that we handle.	I will say yes but not all project are successful projects.
5.	Do you believe that your company is capable to meet the clients need in term of standard and specification?	Yes	Yes of course. You need that capability.
6.	Does your company have any international network connection with overseas company or agencies in charge in the construction investment?	Yes.	Yes.

List of Questions	R1	R2
7. Does your company have the	Yes.	Yes.
ability to get or find the		
valuable information of the		
overseas projects?		
8. Do you believe that most of	Yes.	Yes.
Malaysian Contractors are		
loyal to the clients?		
9. Do you believe that your	1 1	Yes and especially in bridges.
company has a higher	is our disadvantage because no matter how, they	
technological advantage		
comparing to the other	_ <del>* *</del>	
companies in Malaysia.	might support but not 100%.	
10. Does your company have the	Yes.	Yes. We have done mostly even with Malaysian
ability to joint-venture with		companies and currently with IJM Construction
other contractors in host		Berhad for project in India.
country?		
11. Is the workforce cost in the	Yes. Of course it has good and bad. The cost is	Yes. Sometimes they do give problem.
host country give a problem	actually compare to the back years is still lower	Especially like doing business in India, Oman,
to your company?	but we got shortage problem and the Thai people	and Saudi Arabia. It involves difference cost
	they don't like to work in construction line. So	structure.
	we involve a lot of foreign general workers like	
	Myanmar, Cambodia and Laos.	

	List of Questions	R1	R2
1.	Is there any problem with the project owner's financial resources in overseas project?	No. It is the opportunity for us because if that project is funded by government or World Bank or Agent Development Bank, the payment is 100% secure. If it private projects than a lot study should be done. We work more on government projects.	<u> </u>
	Do you believe that inflation and currency fluctuations of the host country give a problem to your company?	Yes.	I would say yes for India.
3.	How about interest rate increases? Does it give any problem to your company?	Yes.	Yes.
4.	Did your involvement in international project get a full support from the government?	1	Yes.
5.	Does your company have any good relationships with other countries?	Yes.	Yes but the level is difference for each country.

	List of Questions	R1	R2
6.	Did host government law and regulations give any problem to your involvement in international project?	Yes. Compare between India and Thailand, India is more difficult in terms of limit the money back to Malaysia and import some machineries from Malaysia. In Thailand, they have double tax system between Malaysia. Thailand is easier as long as you pay according to the tax. In India every province they have their own duty and language as well.	In India is yes. Their law is not strict but they keep on changing sometimes. For example, in term of workforce or taxation issues in India. Their rules and regulations are sometimes not solid like Singapore and it turns out as not our advantage. If we know from the beginning its ok but they keep changing when the project is already on-going so it will cause a problem to us. The other thing is about land issues in India, they are not as strong as here (Malaysia). If you have road project, it take years to solve the land issues.
7.	How about the political situation in host country? Does it give any problem to your project?	Yes. In India the political is quite stable; the political is not so weak compare to Thailand. We don't feel worried personally. Political condition is a threat because if suddenly goes to other government, the policy might change. Let say we have ongoing project and the new government didn't agree with it, so the projects have to be stop.	There is no problem with the political but in term of safety in India, it is not that safe.
8.	Does your company face any problem in equipment, material and labor supply in host country?	Yes. In India, we are doing highway. The technology is not good enough. They have money but they don't know how to operate the machineries. We have to ask our operator in India to teach them. For Thailand, there is no problem.	Yes. In India there is no problem because they have labours from India and Nepal. However, for material and machineries, taxation required to transfer from one boarder to another.

List of Questions	R1	R2
9. Do the differences of	No.	For India is yes. We have difficulties to send our
cultures and industry		people especially to some remote areas, not
practices give any problem		everyone willing to go due to the difference
to your company?		culture, weather, and difficulties to find food.
		We have problem with that.
10. Do you think the foreign	Yes.	In India is yes. All the big contractors are there.
competitors in host country		It's very competitive.
affect the probability for		
your company to get the		
project?		
11. Do you believe that,	No.	Yes. Everywhere they will have this kind of
corruption in host country		culture but depends on the country. Some is high
affect your involvement in		and some is low.
international project?		
12. Is there any effect of project	No. That depends on country itself. For us	Possibly yes. Sometimes we can't get the right
distance from Malaysia?	countries like Thailand we don't feel any threats	person. The good people are not willing to go
	because of distance.	there especially in remote area and have problem
		issues over there. Somehow distance will affect
		your workforce; you will have some problem to
		find the right person to go there.

	List of Questions	R3	R4
1.	Do you believe that your	Yes. Definitely, if you go to the other country	Yes. Actually it depends on the type of project
	company has a stable	and your company financial is not stable you can	so the bank will lend you the money. I can say it
	financial status?	forget about it.	as moderate because it is not depends on us; it
			depends on the project and clients. For example,
			if you go to Middle East, the stability goes up
			because the clients can pay. It derives from the
			clients.
2.	Does your company have	Yes. India is special country because have many	Yes but not that high. That's why we going
	high experience in	state and provinces which is not similar to	overseas.
	conducting international	Malaysia.	
	project?		
3.	Are the project involve in the	Yes. In India and Indonesia we had been	Yes.
	large-range project?	involved in power plant. In UAE is building	
		works.	
4.	Does your company having	In the early days, we have good track records.	Previous local project, yes.
	good track records from the	Later on, it is not good. We had been involved in	
	previous project?	this country more than 13 years. I cannot say	
		that we have good track records because at one	
		time we think we want to discontinue our project	
		because we lose money.	
5.	Do you believe that your	In India case I should say no.	Yes. Bid at the right price and delivered. There
	company is capable to meet		are lot of factors in this category. Different
	the clients need in term of		country has difference difficulties. The
	standard and specification?		requirements are different.

	List of Questions	R3	R4
6.	Does your company have	We actually have good present in India. There	We have local partner so obviously we have.
	any international network	are other office in India and suppose to have a	Yes. Not only overseas company because you
	connection with overseas	regional person in charge. In UAE, during my	need overseas bank as well and law.
	company or agencies in	involvement there wasn't but later on we went	
	charge in the construction	there to setup ourselves and we have to works	
	investment?	with the local sponsor. In Indonesia, we work	
		with local party there. They are quite powerful.	
7.	Does your company have the	I would say yes but not very strong. In UAE, we	Yes.
	ability to get or find the	are very behind.	
	valuable information of the		
	overseas projects?		
8.	Do you believe that most of	Yes. They are. This is very good about us. We	Yes. If you go overseas you have to complete
	Malaysian Contractors are	are very loyal to the clients. Sometimes the	the projects.
	loyal to the clients?	client is not loyal to us. Malaysian, we	
		appreciate loyalty and we value about it.	
		Somehow it is not easy thing to get.	
9.	Do you believe that your	<u> </u>	No. I think we share the same technological
	company has a higher	aspect we are not. There are people who are	advantages.
	technological advantage	better than us. Like for example, we have our	
	comparing to the other	own manufacturing IBS, we also do some	
	companies in Malaysia.	Building Information Model (BIM). Not many	
		contractors outside there do that. But having said	
		that, there are company do that well than us.	

List of Questions	R3	R4
10. Does your company have the	Yes. It is a necessity. Strategic is getting the	I would say yes for Pakistan and Qatar but no
ability to joint-venture with	right partner and how to identify them.	for Saudi Arabia we did on our own.
other contractors in host		
country?		
11. Is the workforce cost in the	Yes. In any industry, workforce is always the	Yes. Some country you have to import and use
host country give a problem	problem. Basically you must get the right people	high cost.
to your company?	to run the job; the biggest problem is we always	
	get the wrong people.	

List of Questions	R3	R4
1. Is there any problem with the	Yes. Client don't have money, they keep delay	It depends on the country. For Pakistan is yes
project owner's financial	to do the payment. In fact, like certain job you	and level it as quite high. For Saudi and Qatar I
resources in overseas	need your financial to be tied up.	will say no.
project?		
2. Do you believe that inflation	Yes. Currency fluctuations in host country are	Yes. This is always happen. Even not inflation
and currency fluctuations of	terrible especially for staff because sometimes	but increase in petrol price as well.
the host country give a	you are paid in a local currency.	
problem to your company?		
3. How about interest rate	Yes. Honestly, interest rate kills you.	Yes, of course. Sometimes it can reach more
increases? Does it give any		than 15%.
problem to your company?		

	List of Questions	R3	R4
4.	Did your involvement in international project get a full support from the government?	Yes. We need the strong support from the government. If you don't have good relationship with the country, don't go.	Yes.
5.	Does your company have any good relationships with other countries?	Yes.	Yes.
6.	Did host government law and regulations give any problem to your involvement in international project?	Yes.	Yes. Try to understand their culture, law. Before we go is one thing, but for practices which is not similar with Malaysia such as the process and the government time of operation.
7.	How about the political situation in host country? Does it give any problem to your project?	Yes.	Stable, but I can say for Pakistan is yes. For Saudi and Qatar, their political situation is stable.
8.	Does your company face any problem in equipment, material and labor supply in host country?	Yes.	Yes. It depends on the country. Saudi actually no. Pakistan and Qatar is yes.
9.	Do the differences of cultures and industry practices give any problem to your company?	Yes. Cultures and industry practices are very different.	Yes, a lot. This one is very high. You have to understand their culture. Not only their culture, but also their industry practice.

List of Questions	R3	R4
10. Do you think the foreign	Yes.	Yes.
competitors in host country		
affect the probability for		
your company to get the		
project?		
11. Do you believe that,	Yes. That's the issues except for UAE you don't	Yes.
corruption in host country	call it bribery. It called as commissioning	
affect your involvement in	services.	
international project?		
12. Is there any effect of project	Yes, of course. It increase more cost because of	Yes.
distance from Malaysia?	tranship of the products.	

List of Question	s	R5	R6
1. Do you believe that	- I		Yes. If your company is not rich enough you
company has a stabl	e		can't go to overseas.
financial status?			
2. Does your company	y have a Yes. We have a co	ouple of projects.	Yes we have but not very much. So far we are
lot of experie	nce in		just involve in UAE
conducting inte	rnational		
project?			
3. Are the project invo	ve in the Yes. Large in terr	n of quantum that is more that	Yes there are. More than billion contract.
large-range project?	1 million dollar.		

	List of Questions	R5	R6
4.	Does your company having good track records from the previous project?	Yes. We delivered the project on time especially for the three universities. For highway is also yes. We get good recommendation from Indian government in terms of the connection of the highway.	Yes. During our first involvement, we are able to complete the project faster than the other contractors who already start 6 months or 2 years ahead and yet we are the first one complete the project with good quality. Then we have been offered the next and next projects.
5.	Do you believe that your company is capable to meet the clients need in term of standard and specification?	Yes. There is no issue about that.	Yes.
6.	Does your company have any international network connection with overseas company or agencies in charge in the construction investment?	No. We would like to do things on our own.	Yes. We do have some people who introduce and evaluate the projects that we want.
7.	Does your company have the ability to get or find the valuable information of the overseas projects?	Yes. We do have that. We have been appointed for few overseas projects as well and working on a few projects in a pipeline.	Yes.
8.	Do you believe that most of Malaysian Contractors are loyal to the clients?	I believe the clients are not loyal to Malaysian contractors.	Yes. I believe in that.

List of Questions	R5	R6
9. Do you believe that your	For technology I would say no. I think the most	No. I think we all share the same technological
company has a higher	important thing is engineering team. You need	advantages.
technological advantage	to have your in house engineering team which	
comparing to the other	going to do with value engineering.	
companies in Malaysia.		
10. Does your company have the	Yes. Obviously when you go into other country	Yes we have.
ability to joint-venture with	you need to understand the culture, content. The	
other contractors in host	way you understand that is you need to have	
country?	good partners.	
11. Is the workforce cost in the	No. Labor cost is not a problem but it's a part of	No. Cost of workforce is no longer an issues
host country give a problem	parcel of the overall cost.	because whatever cost is already included in the
to your company?		project itself.

List of Questions	R5	R6
1. Is there any problem with the project owner's financial resources in overseas project?	Yes. The clients should have enough money to run the project.	Yes, especially in United Arab Emirates. Now we are wrapping up our project and we feel like giving up doing business over there.
2. Do you believe that inflation and currency fluctuations of the host country give a problem to your company?		Yes.

	List of Questions	R5	R6
3.	How about interest rate	Yes. Higher interest rate gives you a problem	Yes. Anything related to the financial will give
	increases? Does it give any	because you have to pay your loan.	effect to your company whether it is foreign
	problem to your company?		exchange or interest rate in that country because
			one day you have to transfer back all your
			money. If the country have economical problem
			the interest rate might be increase.
4.	Did your involvement in	, 11	Yes it is but we didn't actually get involve with
	international project get a	Malaysia government.	the government.
	full support from the		
	government?		
5.	· · ·	Yes. We talk to each other. We have association	Yes actually we have a very good relationship
	any good relationships with	of builders locally in overseas and we are	with other countries.
	other countries?	actively involves in that association.	
6.	Did host government law	Yes.	No. I don't think so.
	and regulations give any		
	problem to your involvement		
_	in international project?		
7.	How about the political	If you are working in Bahrain, Syria or Algeria	UAE is a very stable country. This is because
	situation in host country?	you will be in trouble but we are not working	their law by monarchy. Everything in Arab will
	Does it give any problem to	there so it should not be an issue. No.	be spread everywhere not like Egypt, Syria. In
	your project?		political, they are very-very stable.
8.	Does your company face any	Yes.	No.
	problem in equipment,		
	material and labor supply in		
	host country?		

List of Questions	R5	R6
9. Do the differences of cultures and industry	Yes.	No. This is my honest opinion; before you go you should understand well the cultures and
practices give any problem to your company?		business practice.
10. Do you think the foreign competitors in host country affect the probability for your company to get the project?	No. We had shown that we have the capability. International tender will not be an issue.	Yes of course. It is very open market and we are competitive each other. We are not just fighting with local; we are fighting with international contractors. So you have to be better than anyone else.
11. Do you believe that, bribery in host country affect your involvement in international project?	No. It is not something that we do in our business.	Yes it does. This type of culture (paying to get the job) and it's not just even UAE, it's happen everywhere, you have to pay someone to get the job, and it becomes very frustrated to do business. If you already meet all the criteria, yet you still couldn't get the job. I hope young generation try to change this.
12. Is there any effect of project distance from Malaysia?	No effect.	No. Even I hate travelling but I think it never become an issue because we need to move to wherever we need to go.

# APPENDIX B DATA COLLECTION PART II

## **QUESTIONNAIRE SURVEY**

#### PART A

Correspondent and Company Background

Please state your role in your organization in relation to international contracts.  C CEO  C Head of Department  C General Manager
Other:
How many years of experience do you have in the international construction industry? $C < 5$ years $C > 10$ years
How many years did your company operate in overseas?
C < 5 years $C > 10$ years $C > 10$ years
Where is/are the location of the project? (It must be the project of your company arou year $2005 - 2011$ )
☐ United Arab Emirates ☐ Thailand ☐ China ☐ India ☐ Indonesia
If you have more than one project within that period, could you please fill in Part B separately? Each form will be used for each country. Thank you for your cooperation
separately. Each join was be asca joi each country. Hank you joi your cooperation
What is/are the type of services involved for the project?
What is/are the type of services involved for the project?  ☐ Residential ☐ Office Blocks ☐ Township ☐ Facilities  Other:
What is/are the type of services involved for the project?  ☐ Residential ☐ Office Blocks ☐ Township ☐ Facilities
What is/are the type of services involved for the project?  Residential Office Blocks Township Facilities  Other:  Who is the owner of the project?
What is/are the type of services involved for the project?  Residential Office Blocks Township Facilities  Other:  Who is the owner of the project?  Government Private
What is/are the type of services involved for the project?  Residential Office Blocks Township Facilities  Other:  Who is the owner of the project?  Government Private  What type of entry mode made by your company?
What is/are the type of services involved for the project?  Residential Office Blocks Township Facilities  Other:  Who is the owner of the project?  Government Private  What type of entry mode made by your company?  JV with home country sub-contractors
What is/are the type of services involved for the project?  Residential Office Blocks Township Facilities  Other:  Who is the owner of the project?  Government Private  What type of entry mode made by your company?  JV with home country sub-contractors  Wholly owned

#### **Example: Guideline to answer the questionnaires.**

Count	P11 .	T	hail	and
Count	<i>1</i> y .		ıuıı	unu

Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
Experience in overseas construction projects is my company (strength / weakness) comparing to other competitors in overseas.	0	0	•	0	0	0
**************	*****	*****	****	*****	*****	***

#### PART B

The factors listed below require the respondent to choose whether the factor is the **strength or weakness** and **opportunity or threat** of the company **while operating in the chosen country** (UAE, Thailand, China, India, or Indonesia) and level the agreement of the sentence. Each of the agreement is based on the below explanation table.

Level	Description	Explanation
1	Very Low Agreement (0% - 20%)	I have very low agrees on this statement.
2	Low Agreement (21% - 40%)	I have low agrees on this statement.
3	Moderate Agreement (41% - 60%)	I have moderate agrees on this statement.
4	High Agreement (61% - 80%)	I have high agrees on this statement.
5	Very High Agreement (81% - 100%)	I have very high agrees on this statement.
-	I Don't Know	I have no idea on this statement.

CC	OUNTRY:						
Str	engths / Weaknesses						
	Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
a)	Experience in overseas construction projects is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
b)	Project management skill is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0

	Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
c)	Relationship with key players in other countries is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
d)	Financial ability is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
e)	Advanced construction technology is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
f)	Knowledge regarding large-scale construction is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
g)	Current channels for sourcing construction information are my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
h)	Knowledge on host country regulations is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
i)	Labor productivity is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
j)	Status of having talented people in handling projects are my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
k)	The status of workforce cost is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
1)	Management skill is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
m)	The current status of providing full package in handling project is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
n)	The status of having skill labor workers from Malaysia is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0

	Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
o)	The status of having skill labor workers in host country is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
p)	The current status of seeking cheap manpower in Malaysia is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
q)	Ability to manage sophisticated projects is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
r)	Experience in complex project is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
s)	Having good track records from the previous project is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
t)	Malaysian contractors are loyal to the clients is one of the (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
u)	Capability to joint-ventures with other contractors in host country is my company (strength / weakness) comparing to other competitors in overseas.	0	0	0	0	0	0
v)	Obtaining loans from local bank due to the strict rules and regulation of local bank is my company (strength / weakness) comparing to other competitors in overseas.	c	0	0	c	0	0
Op	portunities / Threats						
	Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
a)	Government involvement in overseas construction projects gives the (opportunity / threat) to my company in operating overseas project	0	0	0	0	0	0

	Factors	Very Low Agreement	Low Agreement	Moderate Agreement	High Agreement	Very High Agreement	I Don't Know
b)	The differential of contracts law prepared by rival foreign construction companies gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
c)	Economic growth of developing countries gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
d)	World trade organization (WTO) agreement is the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
e)	Increase of investment development projects in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
f)	Projects owner's financial resource in current overseas project gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
g)	Cultures and industry practices in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
h)	Host government and regulations gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
i)	Geographic environment of host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
j)	Political situation of host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
k)	Foreign competitor in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
1)	Current inflation in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
m)	Current interest rate in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0

	Factors	Very Low Agreemen	Low Agreemen	Moderate Agreemen	High Agreemen	Very High Agreemen	I Don't Know
n)	Equipment, material and labor supply in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
o)	Globalization and openness of market in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
p)	The status of involving manufacturing company in securing projects gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
q)	The current status of seeking cheap manpower in host country gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0
r)	Bribery in host country gives the (opportunity / threat) to my company in operating overseas project (if there is).	0	0	0	0	0	0
s)	Project distance from Malaysia gives the (opportunity / threat) to my company in operating overseas project.	0	0	0	0	0	0

#### ~ Thank you for your co-operation ~

If you have any questions or inquire about this questionnaire, please send email to  $nursoleha88@yahoo.com\ or\ pvachara@chula.ac.th$ 

Your address or contact detail for sending the executive summary of research

Name-Surname: Address:

Email:

#### **BIOGRAPHY**

Nur Soleha Binti Abdul Rahim was born on March 7, 1988 in Penang, Malaysia. She completed her high school at SMK Bukit Jambul in 2005 and continued her study at Kedah Matriculation College for one year in science physics course. In year 2007, she decided to further her study in Civil Engineering and was awarded to continue her bachelor degree at Engineering Campus, Universiti Sains Malaysia. As soon as she graduated from her bachelor degree, she was awarded by AUN/SEED-Net scholarship to continue her master's degree program in field of Constuction Engineering and Management, Department of Civil Engineering, Faculty of Engineering, Chulalongkorn University, Thailand in 2011.