

## Strategies for International Market Expansion: Strength, Weakness, Opportunity and Threat (SWOT) Attributes of Malaysian Construction Firms

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### Abstract

The competitive and saturated construction industry has led many domestic firms to expand internationally. Therefore, in today's global industry, the construction firms must adopt a superior and an effective strategy to endure the increasing dynamics and uncertainties in the foreign markets. In the early stage of strategic planning, one of the basic but important steps is the need for firms to identify their strength, weakness, opportunity and threat (SWOT) attributes before they expand internationally. The aim of this study is to identify the important SWOT attributes to help the firms to manage and ease the inherent complexities and difficulties within international market domain. Survey questionnaires were sent to 115 Malaysian construction firms listed under Construction Industry Development Board Malaysia 2013 record resulted in 48.7 percent response rate. The relative importance index (RII) was used to rank the SWOT attributes. The findings revealed the following highest ranking of SWOT attributes: the ability to produce good quality products/services (strength), lack of research and development (weakness), mergers (opportunity), and policies, laws and regulations of host country (threat). The correlation analysis reveals a strong positive relationship between the opportunity and the threat attributes which indicates that the abundant opportunities are also accompanied by the inherent threats in the international markets. Thus, this study illustrates the identification of the most significant SWOT attributes related to the firms' international operations. It is hoped that the findings would offer valuable information and practical guidance to construction firms in their preparatory works to internationalize.

Keywords: Strength, Weakness, Opportunity, Threat, Malaysian construction firms, International market

### Introduction

The international business domain is saturated with complex variables that may affect the firm's performance if they are not well identified and effectively managed. This scenario warrants the firms to correctly identify and carefully examine their strengths, weaknesses, opportunities and threats associated with international operations.

SWOT analysis has been one of the most popular tools for strategic planning used by organizations to identify and utilize their strengths to exploit opportunities, to recognize and reduce their weaknesses and to minimize the known threats and challenges. SWOT is an acronym for strengths, weaknesses, opportunities, and threats. In a pioneer study, Shen *et al.* (2006) examined the firms' strengths and weaknesses by utilizing the factors related to

management ability, technological ability, financial ability, organization and operation. In addition, the economic, social, political, markets, and competition factors were also used to examine the opportunities and the threats to the firms' business.

Following to that, various studies have been carried out related to SWOT attributes for other international construction firms such as the Vietnamese, Chinese, Singaporean and Korean in the international market ( Lee *et al.*, 2011; Zhao *et al.*, 2009; Ling *et al.*, 2009; Lu, 2010). Despite, their internationalization operations, Malaysian construction firms are not well studied and this has resulted in lack of information on the international construction conditions. Thus, the firms must be informed and understand the internal and external risks and threats and at the same time acquire and strengthen their capabilities to seize the opportunities abundantly available in the emerging

markets.

Hence, this study aims to gain insights of the Malaysian firms in the international construction market, through identification of the SWOT attributes and finally producing a clear essence based on relative importance of the SWOT attributes.

**Literature Review**

Numerous studies have been carried out in relation to the opportunities, threats, risks and challenges in international market (Mat Isa *et al.*, 2013; Ling *et al.*, 2009; Lee *et al.*, 2011; Lu *et al.*, 2009; Shen *et al.*, 2006). According to Korkmaz and Messner (2008), in order to gain and maintain a competitive position in an increasingly challenging climate, the firms must understand of the external dynamic environments and strategize their internal capabilities according to evolving conditions.

Subsequently, Han *et al.* (2010) investigated some of the critical issues and successful strategies obtained by global contractors to sustain and growth in international market. It was concluded that the uncertainties and aggressive changes of global construction can cause serious threats to the international players. Hence, the firms must acquire complementary capabilities and skills, and improve their strengths to encounter the challenges in the changing market environment (Han *et al.*, 2010).

Based on a study by Zhao *et al.* (2009), SWOT analysis was used to assess the Chinese contractors' dynamic capabilities in the international markets. Some of the SWOT attributes were related to market competition, economic, social and political environment, management, financial and technological abilities and, cost and resources differences (Zhao *et al.*, 2009). The findings show that Chinese government played an important role by holding a strong support and promotion to the contractors. The study also revealed that the strengths of Chinese contractors were from the low costs of workforce, materials, machinery and equipment, and specialty expertise. They were also found having lack of capabilities and commitment in research and development, inadequate design capacity, lack of highly skilled labor and low productivity, weak financing capacity, lack of familiarity with the local system, and language disadvantage.

Therefore, Shen *et al.* (2006) recommended for the foreign contractors to grab the opportunities in Chinese market by offering their dynamic capabilities in distinguished products and services. This has thus complemented the local Chinese contractors those were behind in design and technical capability, project management skills and financial capacity together with lack of experience in international projects. Nonetheless, the nature and complexity of international

business environment are very uncertain and different from one country to another. A study by Ling *et al.* (2009) on Vietnamese firms shows that they lagged behind other foreign firms in financial capacity, experience in complex projects, knowledge in advanced design and construction technology, and management ability.

Another study carried out by Chen and Orr (2009) on Chinese contractors in Africa revealed that the needs for good infrastructure, availability of financing sources and availability of natural resources are among the top opportunities. Therefore, various complex variables that can affect the performance of construction firms need to be considered in managing and reducing the risks associated with international market (Gunhan & Arditi, 2005). Thus, the companies must have the strengths required to endure the increasing and changing threats and uncertainties in international construction industry.

Two generic strategies are adopted in this study namely; Porter's theory and the resource-based view (RBV). There are many theories frequently used in international business study as components for formulating strategies related the SWOT attributes (Flanagan *et al.*, 2007). Porter's theory for firm's competitiveness is characterized as the industrial organization view of competitive advantages (Flanagan, Lu, Shen, & Jewell, 2007). The analyses on the internal (strength and weakness) factors together with the external (opportunity and threat) factors have also been linked and guided by the resource-based view of the firm (Trevino & Grosse, 2002).

Hence, the intention of this paper is to identify and analyze the relative importance of SWOT factors of Malaysian firms in the international construction market. The input variables to SWOT attributes, definitions and theories related to construction environment were identified from the previous studies which some of them were discussed in the literature section is shown in Table 1.

Table 1: SWOT attributes related to international market expansion

SWOT Attributes	
Strengths	<p><i>Project Management Skill:</i> Ability to complete projects on time, within budget and quality set.</p> <p><i>Financial Strength:</i> Ability to increase the needed financing for purposes of bidding projects</p> <p><i>Specialist Expertise:</i> Comprehensive technical and management skills compared to competitors</p> <p><i>Track Record:</i> Successfully completed local and oversea projects in the past</p> <p><i>International Network:</i> Strong relationship with foreign partners in foreign countries.</p> <p><i>Technology Capability:</i> Strong knowledge and experience to handle technically complex projects</p>

	<p><i>Resources Availability:</i> Ability to support and manage equipment, material and labors</p> <p><i>Quality:</i> Ability to produce good quality products/ services.</p>
Weaknesses	<p><i>Shortage of Financial Resources:</i> Lack of ability to offer attractive financial resources</p> <p><i>Shortage of Labor Resources :</i>Difficulty in obtaining labors</p> <p><i>Shortage of Material Resources:</i> Difficulty in obtaining material and equipment</p> <p><i>Loss of Experience and Key Employees</i></p> <p><i>Lack of Research and Development:</i> Lack of information and up-to-date data regarding the host country.</p> <p><i>Poor Management:</i> Lack of ability to manage firm resources and strategic planning.</p>
Opportunities	<p><i>Increased Profitability:</i> Improved and enhanced profit of the firm for long term run</p> <p><i>Technological Innovation:</i> Establish new and improved technologies for construction activities</p> <p><i>Opening up New Markets:</i> Internationalization leading to new business opportunities</p> <p><i>Accessibility to New Service Areas:</i> Explore new types of construction markets</p> <p><i>Beneficiary International Agreements:</i> New prospects of construction market</p> <p><i>Maintain and maximize shareholder's return</i></p> <p><i>Mergers:</i> Establish international relationship by joint venture or strategic alliances</p>
Threats	<p><i>Interest Rate Increase:</i> Unstable cost of capital.</p> <p><i>Inflation and Currency Fluctuation</i></p> <p><i>Policy, Law and Regulations:</i> Different interpretation especially on FDI in the host country.</p> <p><i>Bribery in the Host Country:</i> Difficulty in dealing with the moral problems</p> <p><i>Foreign Competitors in the Host Country:</i> Competition from different foreign firms.</p> <p><i>Cultural Differences:</i> Difficulty in dealing with people/organizations in different environment</p> <p><i>Price war with competitors</i></p> <p><i>Market barriers</i></p>

This study builds on these earlier empirical and theoretical contributions by examining a more comprehensive range of the SWOT attributes identified by the firms with international experience. All four categories of the SWOT attributes were jointly considered across the previous studies. The main objective in the identification of SWOTs is to provide information for the firms to examine and leverage their strengths to seize the abundant opportunities and at the same time to identify and overcome their weaknesses which intensify the threats in international market. Hence, through identification of SWOT attributes, the internal and external conditions of international scenario become evident for the firms to strategize their international market expansion.

## Methodology

### Research design

The study adopts an exploratory approach utilizing a quantitative method. This approach is particularly suitable when the aim is to understand the “what” significant attributes being considered by the firms in their strategic planning. This approach is being commonly adopted in many construction management and marketing studies (Deng, Liu & Jin, 2013; Polat & Donmez, 2010).

### Target population

The target population is from the cross-section of Malaysian construction firms those undertaken and completed projects in the international market. The selection is based on CIDB (2013) record with 115 firms registered as global players operating in more than 50 countries. Their involvements in international projects includes various sectors such as buildings, infrastructures, branches of engineering, mechanical and electrical, power transmission and plant, and oil and gas.

### Questionnaires design

The survey questionnaires with cover letter were sent with self-addressed and prepaid enveloped to the respondents. The questionnaires analyzed in this paper are selected based on three sections. Section A enquires on the respondents’ background, designation and international experience and the international business location. Part B solicits the respondents’ opinions to evaluate the SWOT attributes of their firms based on the level of agreement. Each opinion was measured using a 5-point Likert scale. (1: Disagree; 2: Disagree; 3: Agree; 4: Much Agree; and 5: Strongly Agree). The following section explains the analysis and discussion based on the descriptive analysis and using statistical analysis tools (SPSS20). The purpose of each method and its results are explained in the following section.

## Analysis of results and discussion

The descriptive analysis used in this study includes response rate, the frequency counts and ranking of relative important index (RII). Several statistical analysis techniques namely normality test, reliability test and correlation analysis were used in this study. The results were critically analysed and discussed based on opinions and views from the respondents and supported by the literature reviews done earlier.

*Respondents' background*

In total, fifty six (56) respondents returned the completed questionnaires giving a response rate of 48.7 per cent. In order to increase the rate of response, various strategies were carried out to follow up, such as phone calls, personal distribution, reminders by letter and emails and through personal contacts. Hence, the response rate is reasonable since most of the survey done in Malaysia generated a rate that falls between 10 to 20 per cent ((Ahmed *et al.*, 2002; Hassan *et al.*, 2011)

*Respondents' designation*

Table 2 shows the number of respondents with their respective designations comprising of chief executives, technical/managing directors, general/senior/project/contract/financial/ quality managers, project engineer/designer, quantity surveyor, and other executive holding managerial post and in charge of international projects in their firms.

Table 2: Number of respondents and their designations

Designation	No.
Contract Manager	5
Senior/Project Manager	8
Account/Quality Manager	8
Civil/Project/Senior Project Engineer	12
Project Planner/Designer	2
Project/Architecture Coordinator	2
General/Manager (Human Resource)	4
Financial Controller	1
Deputy General Manager	1
Design Engineer	3
Quantity Surveyor	3
Technical/Managing/ Director	5
Vice President	2
Total	56

From the sample profile listed in the table, it is shown that the respondents represent a degree of diversity of background required in the international construction.

*Respondents' international experience*

Figure 1 shows the percentage of the respondents' experience in the international market. The figure shows that about to 25 per cent have more than 10 years, 30 per cent have between 5 to 10 years of experience and the rest (45 per cent) with less than 5 years of experience. Hence, the profile findings indicate that the respondents have the required international construction background to participate and give reliable opinions in the survey.

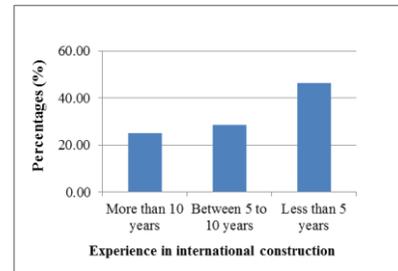


Figure 1: Respondents' international experience

*Firms' international business location*

Figure 2 shows the percentage of the respondent's firm business location in the international market. There are ten (10) countries that are grouped under ASEAN countries which are Malaysia, Singapore, Thailand, Vietnam, Laos, Myanmar, Cambodia, Indonesia, Philippines and Brunei. Other countries chosen by the firms are grouped under the non-ASEAN countries.

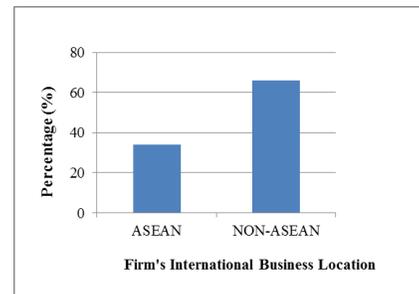


Figure 2: Firm's international business locations

The figure indicates that the majority of the firms (66 per cent) went to the non-ASEAN countries and the rest (34 per cent) have penetrated the ASEAN countries and.

*Descriptive analysis*

The mean values and standard deviations were extracted from the SPSS results and presented based on the level of agreement for the SWOT attributes agreed by the respondents. Table 3 shows the measures and descriptive statistics presented by the ranked mean values (M) and the associated standard deviation (SD) for the SWOT attributes related to the international market expansion.

As shown in Table 3, the highest ranked attribute is the strength (M = 3.97, SD = 0.916). The second ranked attribute is the opportunity available in the construction market (M = 3.814, SD = 0.828) and thirdly is the threat attributes faced during their international operation (M = 3.649, SD = 0.979) and finally followed by the weakness attributes that the firm

faced (M = 3.57, SD = 1.050). The overall mean score of 3.75 on a five-point rating scales for the all attributes suggests that the respondents' level of agreement lies between "Agree" and "Much Agree".

Table 3: Measures and descriptive statistics of SWOT attributes (N = 56)

Attributes	N	Mean	Std. Deviation	Ranking
Strength	56	3.970	0.916	1
Weakness	56	3.570	1.050	4
Opportunities	56	3.814	0.828	2
Threat	56	3.649	0.979	3
Overall mean score		3.750		

*Normality Test*

Normality tests were conducted to assess whether the data on the variables collected are normally distributed. In this study, the normality of the variables was established by evaluating the data distributions for skewness and kurtosis as shown in Table 4. The standard error is the range of possible error occurs in data (Good standard error value < 1.0). By using descriptive statistics, the normality test was performing in order to meet the assumption of normality. In this study, to access the normality assumption, the information of Skewness and Kurtosis statistics and also Normal Q-Q plot that was gathered from descriptive statistics was used. The results indicate that SWOT attributes are approximately normally distributed since the values of Skewness and Kurtosis coefficients for all attributes are in the range of ±1.0. Hence, the normality assumption for each variable was met, which indicates that the all SWOT attributes are normally distributed. The normal Q-Q plots used to measure the normality of the variable depict the majority of the observed values (smaller dots) lies on the straight line in the plots. Thus, these attributes are also approximately normally distributed. Since the majority of criterion used to check normality are said to be normal, hence, it can be concluded that the variables are normally distributed.

*Reliability test*

To check the quality of the research instrument was used in this study, reliability of the measurement was test. The analysis of Cronbach's Alpha- Coefficient was performing in order to access the reliability of the measurement. The widely accepted social science cut-off is that alpha value should be 0.70 or higher for a set of items to be considered scale, but some use 0.75 or 0.80 while others are as lenient as 0.60. Table 5 shows the results of Cronbach alpha to test the reliability of

the instrument.

Table 4: Normality tests using skewness and kurtosis and Q-Q plots

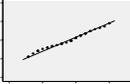
VARIABLE	SKEWNESS	KURTOSIS	Q-Q PLOT
Strength	-0.639	-0.428	
Weakness	-0.187	-0.686	
Opportunity	-0.173	0.196	
Threat	-0.204	-0.601	

Table 5: Reliability test for the SWOT attributes

Instrument	Cronbach's Alpha	Number of Items
Strength	0.874	8
Weakness	0.896	7
Opportunity	0.787	7
Threat	0.895	8

The results reveal that the Cronbach's values for all SWOT attributes are greater than 0.7 which is the minimum level recommended by Nunnally (1978). It is also supported by Garson (2011) that the widely-accepted social science cut-off of alpha should be 0.70 or higher. Hence, the questionnaire demonstrated high reliability in this study sample, indicating a good internal consistency of the study instruments for measuring the SWOT attributes.

*Mean Ranking for SWOT Attributes*

The data gathered from the survey were analyzed statistically using Relative Important Index (RII) to determine the relative significance and ranking of the SWOT attributes. The same approach has been used by many researchers to analyze the data collected from questionnaire survey (Jarkas & Bitar, 2012; Enshassi *et al.*, 2010; Alkaf *et al.*, 2012). The relative important index is computed using the following formula:

$$\begin{aligned}
 \text{Relative Important Index (RII)} &= \frac{\sum W}{AN} \\
 &= \frac{5n_5 + 5n_4 + 3n_3 + 2n_2 + 1n_1}{5N} \quad (1)
 \end{aligned}$$

Where:

W is the weighting given to each factor by the respondent, ranging from 1 to 5;  
 n<sub>1</sub> = number of respondents for strongly disagree;  
 n<sub>2</sub> = number of respondents for disagree;  
 n<sub>3</sub> = number of respondents for agree;  
 n<sub>4</sub> = number of respondents for much agree;  
 n<sub>5</sub> = number of respondents for strongly agree;  
 A is the highest weight (i.e. 5 in the study); N is the total population;  
 RII ranges from 0 to 1.

The following discussion are based on the first three ranked agreed statement under each attributes shown in Table 6.

**Discussion**

*Strength Attributes*

In general the internal factors include firm’s ability and capabilities to the successfully deliver their products or services using adequate resources and capabilities within the firms. There are eight (8) items used in this study for the measurement of the strength attributes acquired by the firms. The findings indicate the first three strength attributes that reached the highest ranking are the S8, “the ability to produce good quality products/ services”, S5, “international network” and S1, “project management skill”, “with RII values of 0.8567, 0.8533 and 0.8432, respectively. Ling *et al.* (2009) recommended that the international contractors offer their strengths through distinguished products and services. This has complemented the local contractors those were behind in design and technical capability, project management skills, financial capacity and experience in international projects. Even though the RBV elements have been considered as important to the external factors by previous study (Musso & Francioni, 2009), Kaur and Sandhu (2014) revealed that the firm factors such as the individual founder/manager characteristics and firm resources together with networking have encouraged the Malaysian firms to adopt early internationalisation. Hence, the RBV’s perspective have shown that internal factors have influenced the firm’s ability to produce or deliver quality products/services and acquired competitive advantages in project management and business networking in order to generate profits and sustain long-term growth.

*Weakness Attributes*

The strength attributes identified in this study shows that the firms have the ability to endure the increased threats and to counterbalance the weaknesses of the firms in order to survive and perform in the rapidly changing international market environment (Gunhan &

Arditi, 2005; Han *et al.*, 2010).

Table 6: Ranking of the SWOT attributes

Code	SWOT Attributes	RII	Ranking
<b>Strength</b>			
S1	Project Management Skill	0.8432	3
S2	Financial Strength	0.8285	4
S3	Specialist Expertise	0.8140	5
S4	Track Record	0.7988	6
S5	International Network	0.8533	2
S6	Technology Capability	0.7959	7
S7	Strong Resources	0.7884	8
S8	Quality	0.8567	1
<b>Weakness</b>			
W1	Shortage of Financial Resources	0.7345	6
W2	Shortage of Labour & Material Resources	0.7377	5
W3	Loss of Experience and Key Employees	0.7522	3
W4	Lack of Research and Development	0.7564	1
W5	Lack of Experience	0.7378	4
W6	Lack of Knowledge	0.7015	7
W7	Poor Management	0.7560	2
<b>Opportunity</b>			
O1	Increased Profitability	0.8169	2
O2	Technological Innovation	0.7694	6
O3	Opening up New Markets	0.8026	3
O4	Accessibility to New Service Areas	0.7553	7
O5	Beneficiary International Agreements	0.7698	5
O6	Maintain and maximize shareholder’s return	0.7737	4
O7	Mergers	0.8426	1
<b>Threat</b>			
T1	Increase of Interest Rate	0.7774	2
T2	Inflation and Currency	0.7627	4
T3	Policy, Law and Regulations	0.8138	1
T4	Bribery in the Host Country	0.7340	6
T5	Foreign Competitors in the Host Country	0.7523	5
T6	Cultural Differences	0.7197	8
T7	Price War	0.7233	7
T8	Market entry barriers	0.7632	3

Based on the seven (7) items used to measure the weakness attributes of the firms in this study, the findings show the first three weakness attributes with the highest ranking are “lack of research and development”, “poor management” and “loss of key employees”, with RII values of 0.7564, 0.7560 and

0.7522, respectively. A few previous studies on Vietnamese and Chinese international firms have shown that these firms were found lagged behind other firms in financial capacity, lack of capabilities and commitment in research and development, inadequate design capacity, lack of highly skilled labour and low productivity, lack of familiarity with the local system, unfamiliar with modern project management technique and inferior in design and technical ability in international projects (Ling *et al.*, 2009; Lu *et al.*, 2009).

*Opportunity Attributes*

There are seven (7) items used to measure the opportunity attributes available for the firms in the international market. The results show the first three opportunity attributes that reached the highest ranking are “mergers”, “increase in firm profitability” and “opening up new markets” with RII values of 0.8426, 0.8169 and 0.8026, respectively. The finding reveals “profitability” as the second most important goals related to the firms in international construction. The reason may be due to the fact that firms need higher profits and returns to counterbalance the greater risks and efforts in setting up their international operations. This is supported by a previous study where the decision to enter a new foreign market is of critical importance for the company’s profit making ability and sustainable growth (Chen & Orr, 2009). Hence, the availability of the export opportunities for the firms to generate and increase their construction revenue streams by utilizing external technology resources and learn from competitors by improving their service standards (Lew & Sinkovics, 2013).

*Threat Attributes*

Eight (8) items were used to measure the threat attributes faced by the firms in the international market. The first three threat attributes agreed by the respondents and reflected in the highest ranking are “policy, law and regulations of host country”, “increase of interest rate” and “market entry barriers”, and with RII values of 0.8138, 0.7774 and 0.7632, respectively. As identified by Omar and Porter (2011), threats represent external aspects such as competitive environments resulting from changes in governmental policies and society of the host country, as well as the international environment. These aspects were identified from previous studies which these threats are evidenced on the basis of significant events in terms of the political and economic environments (Chen & Orr, 2009; Lee *et al.*, 2011). Political risks in the host country, such as risk of expropriation, war, riot and governments’ policies and procedure have significant

impact to the survival and profitability of a firm (Jiménez, 2010). The inflation, currency and interest rate fluctuations are some of the common economic risks which had high influence over the project cost (Al-Sabah *et al.*, 2012). Hence, the identification of the important threats allows the firms to manage them effectively.

As a summary, the strategy to identify the important SWOT attributes by the firms in the international market expansion is very critical to acquire the competitive advantages. The firms need to adopt a good quality management system and develop business network to grab the opportunity such as mergers by improving their research and development activities in order to countermand the threats such as the host country government policies and regulations.

*Correlation analysis*

Correlation analysis is used in this study to describe the strength and direction of the linear relationship between variables (Pallant, 2011), in this case the SWOT attributes. Hence, the analysis determines not only whether a relationship between variables exists, but also the degree of the relationship between them. In this study, the level of measurement is designed for the interval level (continuous). Since, the nature of the data is normal, a parametric test is used. In this study, the procedure for obtaining and interpreting a Pearson product-moment correlation coefficient (r) is presented since, the Pearson r is designed for interval level variables which are used in the questionnaire design. The value gives indication of both the direction (positive or negative) and the strength of the relationships, taking on values from -1.0 to +1.0.

Hence, in a positive correlation the trend in both variables go in the same direction, whether that is to increase together or decrease together. In a negative correlation they are going in opposite directions. Different authors suggest different interpretations; however, based on Cohen (1988), Pallant (2011) suggests the following guidelines as shown in Table 7, while Table 8 shows the relationship that exists between the return and risk factors.

Table 7: Pearson Coefficients (Cohen, 1988)

Pearson correlation coefficients (r)	Value	Strength of Correlation
Between .10 and .29	Small	Poor relationship
Between .30 and .49	Medium	Medium relationship
Between .50 and 1.0	Large	Strong relationship

The relationships among variables were investigated

using Pearson product-moment correlation coefficients. Preliminary analyses were performed to ensure no violation of the assumptions of normality and outlier cases and have reduced that sample size to 40. Table 8 shows the relationship among the four groups of attribute by using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality and outlier cases which have resulted in N = 40.

Table 8: Pearson product-moment correlations among the SWOT attributes (N=40)

		Strength	Weakness	Opportunity	Threat
Strength	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	40			
Weakness	Pearson Correlation	.285	1		
	Sig. (2-tailed)	.075			
	N	40	40		
Opportunity	Pearson Correlation	.350*	.273	1	
	Sig. (2-tailed)	.027	.088		
	N	40	40	40	
Threat	Pearson Correlation	.269	.335*	.546**	1
	Sig. (2-tailed)	.093	.034	.000	
	N	40	40	40	40
	Sig. (2-tailed)	.200	.003	.004	.001
	N	40	40	40	40

Notes: \*\*Correlation is significant at the 0.01 level (2-tailed). \*Correlation is significant at the 0.05 level (2-tailed).

A medium strength positive correlation was found between the strength and opportunity attributes  $r(40) = 0.350, p < 0.05$ ). It means that if the strength attributes increase, the opportunity attributes also increase and vice versa. In summary, these strength attributes are required by the firm to grab and handle the opportunities available in the international market. A medium strength positive correlation was also found between the weakness and threat attributes  $r(40) = 0.335, p < 0.05$ ). It means that if the weakness attributes increase, the threat attributes also increase and vice versa. Thus, these weakness attributes must be minimized by the firms to reduce the inherent threats in the international market. However, a stronger positive correlation was found between the threat and opportunity attributes  $r(40) = 0.546, p < 0.05$ ). Thus, if the threat attributes increase, the opportunity attributes also increase and vice versa. Conclusively, these threat attributes were anticipated and experienced by the firm in order to handle the greater opportunities in the international market.

Hence, it is evident that there exist interrelations that signify between the four attributes. Most importantly, in order to maintain international operations, the firms must be able to face the threats and always being on the lookout for opportunities and working hard in order to grow the firm and sustain competitiveness (Kaur & Sandhu, 2014).

### Conclusions

This study investigates the SWOT attributes relative to the international market expansion by Malaysian construction firms. The quantitative methods based on descriptive statistics, such as ranking based on relative important index, mean, standard deviation and correlation analysis have further contributed to the body of knowledge in international market entry decisions. Based on the experience and opinions from the respondents participated in this research, it can be concluded that the respective significant strength, weakness, opportunity and threat of the Malaysian firms related to international market expansion are attributed by the ability to produce good quality products/services, lack of research and development, mergers, and policies, laws and regulations of host country.

Moreover, the study empirically has validated the relationship between the threat and opportunity attributes by suggesting a significant and strong positive correlation between both factors. In conclusion, the study suggests that the international market expansion must involve considerations the counterbalance between the strength, weakness, opportunity and threat attributes for the firms' survival and growth. Hence, effectively managing external attributes (opportunities and threats) and improving the internal attributes of the firms essential to achieve the competitive advantages and achieve sustainable growth. The current research was limited to four aspects of attributes in international expansion and involved quite a small sample. Hence, future research should examine other potential factors that might motivate the more construction firms' international expansion.

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