### UNIVERSITI TEKNOLOGI MARA

# (MEDIF) FOR MALAYSIAN CONSTRUCTION FIRMS IN INTERNATIONAL OPERATIONS

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#### **ABSTRACT**

The construction industry is critical to the country's economic growth through internationalization. However, the Malaysian construction firms' lack of participation in construction projects abroad is among the problems faced by the industry at present. In addition, no entry decisions using scales in the form of matrices have been developed from prior studies to assist Malaysian construction firms to enter the international market. Hence, a strategic framework in the form of a matrix based on a scale from poor to excellent decision-making is perceivably crucial in providing a clear guide to the Malaysian construction firms in adopting effective international market entry decisions. The current study develops a multi-entry decision integration (MEDIF) framework that is geared towards internationalisation for Malaysian construction firms. Moreover, MEDIF was introduced in parallel with the passage of time due to continuous improvement to achieve excellent decision-making to go abroad. This study utilized a mixed-methods research design, consisting of quantitative and qualitative approaches in realizing this framework. The respondents involved in this study are construction firms that undertook or have completed the projects in the international markets and were registered under the Construction Industry Development Board Malaysia for Class A and Grade 7. The perceptions of the MEDI among respondents with various positions from 74 international construction companies were obtained through a questionnaire survey. Meanwhile, the respondents' and firms' demographics were analyzed using SPSS, and fit items were obtained using the Rasch Model. Next, Structural Equation Modeling (SEM) through Smart PLS analysis was used to obtain the relationship between the key determinants with EL, ET, and EM to be included in the MEDIF. Then, seven (7) experienced construction industry experts were interviewed to obtain their opinions. Therefore, the published MEDIF has been able to identify six key determinants of the sustainability of Malaysian construction firms in the international market. Next, these determinants are measured based on appropriate entry decision level scales, ranging from poor to excellent decision-making, which from 1 to 6 due to the beta coefficient value from the Smart PLS analysis. The findings found that the host countries are the most crucial determinants, followed by home country, market, firm-resources, project-specific, and firm-specific. The MEDIF structure involves six (6) EL decisions consisting of continents such as Asia, ASEAN, Africa, Europe, the United States, and Australia. Meanwhile, the ET is divided into a pioneer (Pi), an early follower (EF), and a late follower (LF). Next, the EM is categorised into permanent EM and mobile EM. Permanent EM consists of the sole venture company (SVC), representative office (RO), strategic alliance (SA), branch office (BO), licencing (LIC), local agent (LA), and joint venture company (JVC). Meanwhile, Mobile EM consists of the joint venture project (JVP), Build-Operate-Transfer (BOT), and sole venture project (SVP). Moreover, MEDIF can pose as a reference to drive continuous improvement and break out silo-based thinking by integrating multi-entry decision domains. This study will benefit the Government's intention to achieve the aspirations of 2030 through the Construction 4.0 Strategic Plan (2021-2025), nurturing Malaysian champions in the international market. The framework is also useful, especially for Malaysian construction firms that are just beginning to explore foreign business opportunities. Accordingly, this MEDIF can be utilized by global players expanding geographically into new markets, selecting multi-entry decisions from the initial stage.

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## TABLE OF CONTENT

		Page
CO	NFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION		iii
ABS	STRACT	iv
AC	KNOWLEDGEMENT	v
TABLE OF CONTENT		vi
LIS	T OF TABLES	ix
LIS	T OF FIGURES	xiii
LIS	T OF SYMBOLS	xviiiii
LIS	T OF ABBREVIATIONS	xxivv
СН	APTER ONE: INTRODUCTION	1
1.1	Research Background	1
1.2	Problem Statement	5
1.3	Research Questions	10
1.4	Aim and Objectives	13
1.5	Scope of Study	14
1.6	The Theoretical Contribution and Practical Implications	15
	1.6.1 Impact on Society, Economy, and Nation	16
	1.6.2 Commercial Potential	16
	1.6.3 Relevance to Government Policy	16
1.7	Research Process and Methodology Framework	16
СН	APTER TWO: LITERATURE REVIEW	19
2.1	Introduction	19
2.2	Malaysian Construction Industry Overview	20
2.3	Internationalization	26
	2.3.1 The Internationalisation Process	28
2.4	Theories and Models related to International Market Entry	29
	Decisions	

2.5	Key Independent Determinants Influence Firms' Entry Decisions to	38
	Enter International Markets	
2.6	Entry Decision to International Market	45
2.7	Development of MEDIF	93
CH	APTER THREE: RESEARCH METHODOLOGY	96
3.1	Introduction	96
3.2	Research Approach	98
3.3	Research Population and Sampling	98
3.4	Design of Questionnaire Survey	99
3.5	Data Analysis	100
3.6	Scale Development	117
3.7	Semi-structured Interview for Validation of MEDIF	121
3.8	Summary	123
CH	APTER FOUR: RESULTS AND ANALYSIS OF DATA	124
4.1	Introduction	124
4.2	Phase 1:Data Analysis by using SPSS Software, Rasch Model and	127
	Smart PLS Software	
4.3	Phase 2: Development of Measurement of ELAC, EMAC, ETAC	237
	and MEDIF	
4.4	Entry Decision Strategies	330
4.5	Phase 3: Development of Final MEDIF	337
4.6	Summary	354
CH	APTER FIVE: SUMMARY OF FINDINGS, CONCLUSIONS	356
	AND RECOMMENDATIONS	
5.1	Introduction	356
5.2	Summary of Findings	356
5.3	Significance of the Study and Contribution in Developing MEDIF	365
	Decision to Facilitate Malaysian Construction Firms to Expand	
	Operations into International Markets	