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Developing A Framework For Enhancing Project Performances Through The Adoption Of The Industrialized Building System In The Malaysian Construction Sector

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ABSTRACT: ***The prevailing competitive forces compel Malaysian construction firms to modernize the construction process through industrialization with the aim of improving efficiency, and lowering costs by reducing construction time, improving site management, reducing wastage and enhancing building quality. Application of Industrialized Building Systems (IBS) as one of the options to solve the construction problems and modernize the industry. This underlines the need to achieve competitive advantage by adopting and implementing appropriate strategic approaches. This study will be undertaken from the perspective of dynamic capabilities which offers new insights on how competitiveness can be operationalized by construction firms by exploring an integrated approach between strategic approaches and management practices in order to improve the project performance and business performance of construction firms. It is therefore, the aim of this research to develop a theoretical framework on how a clear and specific strategic approaches will be built on the configuration of the construction firms' management practices such as value-adding activities and resources form the input to these practices or activities, whereas competences and core competences provide the skills and knowledge required to undertake IBS. It was found that Strategy Formulation was directly related to both Management Practices and Project Performance, that Management Practices are directly related to Project Performance, and that Project Performance was directly related to firm performance. Although Strategy Formulation and Management Practices were not directly related to Firm Performance, they were related to Firm Performance indirectly.***

Keywords: Industrialized Building System (IBS), Strategic Management Approaches, Strategy Formulation, Management Practices, Project Performance, Firm Performance, Malaysian Construction Industry.

1.0 INTRODUCTION

The constructions industry which is a key driver of national socio-economic growth is impacted by the dynamic macroeconomic environment and changing customers' demands (Pamulu, 2010). The construction sector of most developing countries accounts for approximately half of the investments of growth fixed capital formation (Jorge, 2008; Khan, 2008). With its backward and forward linkages to other economic sectors, the sector generates multiplier economic effects (Rameezdeen, 2006; Anaman & Amponsah, 2007).

However, the construction industry is often regarded as a laggard for innovation due to its fragmented nature, the procurement process and the conservatism of employees at building sites. But the construction industry is also looking for new methods, approaches and tools including

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industrialization to improve its performance (Brousseau and Rallet, 1995).

The industry has several stakeholders and activities. They include the creation, renovation, repair or extension of buildings and engineering constructions but also upstream manufacturing activities, parallel architectural activities, technical consultancy as well as downstream activities like facility management (Sexton *et al.*, 2007).

The Malaysian construction sector is generally on a growth trajectory with attractive and promising prospects. However, the vast majority of the construction firms are small and medium enterprises and several suffer from low profitability and low competitiveness. These also stem from the evolving needs of modernizing economies, changing consumer demands, technological changes, social changes and the growing emphasis on environmental issues. Fueled by the forces of globalization, the construction companies are expanding their geographical reach for long term business sustainability and this is creating intense competition in the industry (Accenture 2012).

The road to globalization carries several risks and challenges and these also impact on Malaysian construction firms that ventured abroad. The Malaysian construction sector is a significant contributor to GDP and it increased its share from 3% in 2005 to 3.8% in 2013. It is also a major source of employment and the industry directly employed 1,028,000 of 8% of the total workforce in 2012. The prevailing competitive forces compel Malaysian construction firms to modernize the construction process through industrialization with the aim of improving efficiency, and lowering costs by reducing construction time, improving site management, reducing wastage and enhancing building quality (Kamar *et al.*, 2009).

Increasingly construction firms are adopting industrialized building system (IBS) which can be defined as "a new construction method that can increase the productivity and quality of work through the use of better construction machinery, equipment, materials and extensive planning" (Haron *et al.*, 2005).

Malaysian construction firms are also taking advantage of growing infrastructure opportunities locally while securing lucrative contracts in South and South-East Asian countries (Accenture, 2015). However, they have to overcome the competitive pressures that they face in both domestic and international markets. This underlines the need to achieve competitive advantage by adopting and implementing appropriate strategic approaches (Ofori, 2007).

Recognizing the pivotal role that IBS can play in improving performance, the Malaysian Government is encouraging the construction industry to embrace IBS. However, the literatures suggest a slow adoption of IBS due to several challenges for business growth and sustainability (Hamid *et al.*, 2008).

This suggests that Malaysian construction firms have to emphasize on strategic approaches and develop dynamic capabilities for gaining sustainable competitive advantage (Gajendra *et al.*, 2013). Notwithstanding the above, Malaysian construction firms to adopt the 'best-fits' business models and understand their dynamic capabilities for high performance businesses (Teece, 2007). They have to be innovative and fully understand their process capabilities to enable them to achieve and sustain competitive advantage to provide for steady long term earnings (Accenture, 2012).

2.0 UNDERPINNING THEORY

"The fundamental question in the field of strategic management is how firms achieve and sustain competitive advantage?" (Teece, 1997, pg. 509).

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The dynamic capabilities framework analyzes the sources and methods of wealth creation by firms that operate in a business environment that is characterized by rapid technological change. Dynamic capabilities framework can be structured of strategic and operational processes (Güttel & Konlechner, 2009). Strategic processes largely to sensing and seizing new opportunities in the dynamic environment (Teece, 2007) and these processes determine the formation of company's strategy (Ridder *et al.*, 2012). Operational processes mostly relate to reconfiguring internal or external competencies and shaping operational routines in the company (Güttel & Konlechner, 2009).

The dynamic capabilities perspective can also be used as an analytical tool for understanding the existing capabilities of construction firms and the ways which they can respond to external changes (Kao *et al.*, 2006).

Prior research has also been undertaken on the internationalization of construction business with dynamic capabilities (Gajendra, *et al.*, 2013). The findings suggest that the dynamic capability framework facilitates the sensing of new business opportunities, seizing the appropriate ones and re configuring resources to develop new business processes, products or models for achieving competitive advantage.

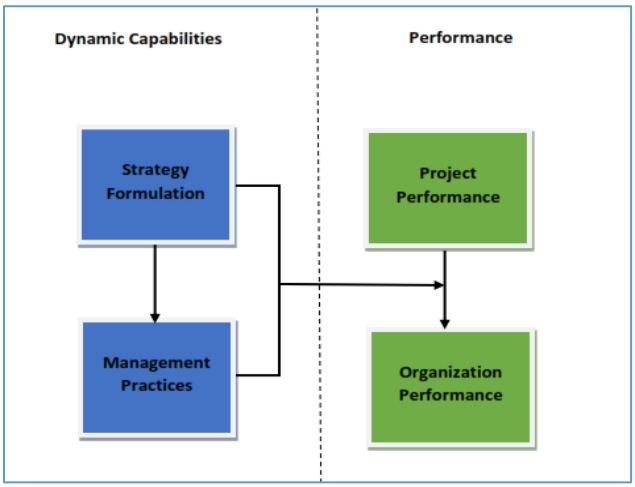
Gajendra *et al.* (2013) also used the dynamic capability framework to explore the role of e-commerce in the construction business. Their findings suggest that by identifying the potential of its dynamic capabilities a firm can exploit the innovation and integration potential of different e-business systems. Furthermore, contracting firms with developed dynamic capabilities are well positioned to exploit e-commerce platforms to channel upstream activities to an international destination.

Pamulu (2010) conducted doctoral research with the aim of recommending long-term corporate strategies studies for engineering construction firms that generate competitive advantage and superior performance. The findings revealed that a dynamic capability framework is well suited for construction firms to improve their organizational performance.

Based on these considerations, the dynamic capabilities concept was adopted as the preferred theory for this research.

Appropriate strategies and management practices are important for the successful adoption of IBS by Malaysian construction firms. However, there is a gap in the body of knowledge on the relationship between strategy formulation and management practices. Similar research gaps exist on; (i) the relationship between strategy formulation and the performance of firms and projects and (ii) the relationship between management practices, project performance and firm performance. Guided by these key considerations, the variables for the construct of the model are strategy formulation, management practices, project performance and firm performance, the underpinning theory or theoretical background of this study was illustrated in the Figure 1.

Figure 1: Dynamic Capabilities Framework for this Study



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(Source: Developed for this research)

3.0 HYPOTHESIS DEVELOPMENT

Based on the literature support, the expected relationships among strategy formulation, management practices, project performance and firm performance were discussed, and hypotheses relating these variables were developed as below:

3.1 Strategy Formulation and Management Practices

Construction firms require effective leadership and sound management practices to overcome the intense competition in the domestic and international markets. Leadership and management support are also required to formulate and implement appropriate business models supported by a long-term strategic plan (Malik, 2006). Based on these considerations, the following hypothesis was proposed.

H1: The extent of emphasis on Strategy Formulation is positively associated with the emphasis on Management Practices.

3.2 Strategy Formulation and Project Performance

Effective strategic management can increase organizational efficiency. Appropriate strategic approaches can contribute to enhanced business performance through effectiveness, efficiency and flexibility. It is also an important factor that can influence project performance. (Asim *et al.*, 2011).

Based on these considerations, the following hypothesis was proposed:

H2: The extent of emphasis on Strategy Formulation is positively associated with Project Performance

3.3 Strategy Formulation and Firm Performance

The domestic and international business environments are subject to dynamic changes emerging from new entrants, technological advancement and changing customer behaviour. These factors together, with increased competition, compel construction firms to emphasize on competitive strategies to enhance their business performance for long-term business sustainability (David, 1997; Price *et al.*, 2003; Price and Newson, 2003). Based on these considerations, the following hypothesis was proposed.

H3: The extent of emphasis on Strategy Formulation is positively associated with Firm Performance

3.4 Management Practices and Project Performance

Construction firms have to benefit from industry best practices to improve their own processes. The literature revealed several success criteria for project performance. However, these excluded the importance of management practices for project performance. Based on these considerations, the following hypothesis was s proposed.

H4: The greater emphasis on Management Practices is positively associated with Project Performance

3.5 Management Practices and Firm Performance

There are a number of frameworks as well as tools and techniques for performance measurement. These include financial and non-financial indicators. Construction firms generally only used financial norms to measure performance (Sommerville and Robertson, 2000). Effective management practices have a strong influence on improving project performance and overall organizational performance (Munns & Bjeimi, 1996). There are quantitative models for

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performance measurement systems. However, none of these models highlight the importance of the influence of managerial practices on performance and firm performance. Based on these considerations, the following hypothesis was proposed.

H5: The greater emphasis on Management Practices is positively associated with Firm Performance

3.6 Project Performance and Firm Performance

Quantitative models for performance measurement systems also do not take into account the relationship, if any, between project performance and firm performance. Based on these considerations, the following hypothesis was s proposed.

H6: Project Performance is positively associated with Firm Performance

4.0 Conceptual Model

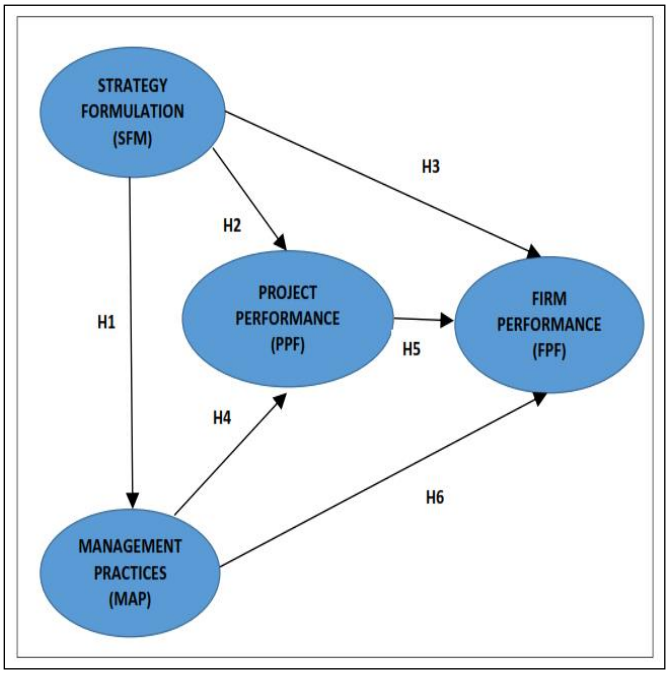
The research model centers on strategy formulation and management practices which have performance implications in terms of project performance and firm performance. By invoking the notion of these relationships in the context of the dynamic capabilities framework, this research model provides a theoretically defensible framework within which the relationships between strategy formulation, management practices, project performance and the performance of contracting firms can be examined.

The objective of Conceptual Model is to examine strategy formulation as contingent factor influencing management practices and performance. The four major proposed constructs (strategy formulation, management practices, project performance and firm performance) in Conceptual Model have already been identified through a comprehensive literature review. All the constructs, except the firm performance construct were higher-order (second-order) constructs that are represented by several sub-constructs; firm performance is a first-order construct.

Strategy formulation consisted of two constructs (Corporate Leadership, Business Strategy); Management practices was represented by six sub-constructs (Procurement and Contract, Project Management, Design Management and Integration, Supply Chain, Skills, Training and Education); Project performance contained two sub-constructs (Project Management Success, Product Success); and finally Firm performance as Market Success.

Figure 2 presents the conceptual model developed in this research. The framework proposes that Strategy Formulation will have an impact on Firm Performance both directly and also indirectly through Management Practices and Project Performance.

Figure 2: The Conceptual Model



(Source: Developed for this research)

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5.0 RESEARCH DESIGN

The research design of this research is reflected in the research path shown in Table 1 which comprises the research dimensions, data collection instruments, data analysis procedures and the measures taken to improve the reliability and validity of the research findings.

A two stage approach was used to justify the objectives of this research. In line with this, the exploratory research was deployed as the first stage to gain background information about the research problem, identify the key research issues and the research variables in order to construct a conceptual model and to craft the research hypotheses.

Descriptive research was undertaken during the second stage. The use of SPSS version 20, permitted an examination of characteristics of the survey data through the of descriptive statistics on respondent's profiles, demographic particulars and reliability. However, descriptive statistics had limitation as it fails to establish direct se-and-effect relationship if any between the research variables. Therefore, causal research was also performed as it offered the researcher with the controlled environment where independent variables could be manipulated to test the hypotheses about the dependent variable (Zikmund *et al.*, 2013).

Table 1 - Research path

Research Step	Process	Purpose
	Exploratory Phase	
1	Literature review / to review the relevant pertinent theories and models;	Identify research gaps; develop research models; Craft hypotheses
	Descriptive/Casual Phase	
2	Research approach	Identify appropriate research paradigm
3	Research design	Identify research dimension
		Data collection tools and analysis
4	Design questionnaire and conduct pilot study	Increase questionnaire validity
5	Sampling design	Determine target population Select sampling method Determine sample size.
6	Questionnaire administration	Pre-test. revised and prepare final draft
		Administer questionnaire
7	Descriptive analysis for the collected data (SPSS)	Pre-test and pilot study findings, respondents profile and cross tabulation, hypotheses findings, reliability test.
8	Inferential statistics EFA	Interrelationship of the variables of the conceptual model
9	Structural Equation Modelling (SEM)	Estimating a structural relationship among latent and observed variables.
10	Conclusion and recommendations	Findings on each research hypotheses, final research model, new theory development and recommendations.

(Source: Developed for this research)

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6.0 CONCLUSION ON RESEARCH HYPOTHESIS

6.1 Hypothesis 1

Strong empirical support for the relationship between Strategy Formulation and Project Management Practices (H1) was found in the Conceptual Model ($\beta = 0.467$; $t = 4.7790$) which indicates that the extent of emphasis on Strategy Formulation is directly positively associated with the emphasis on Management Practices. This hypothesis was supported at p-value < 0.01.

In line with prediction, the findings indicate that the higher the extent of emphasis on Strategy Formulation, the greater the emphasis on Project Management Practices. This result confirms the impact of Strategy Management in influencing the adoption, importance and thus emphasis of Management Practices as documented in previous research.

In summary, the result provides strong support for Hypothesis 1, thereby supporting the suggestion that in a Malaysian Contracting firm, Strategy Formulation can potentially have a positive influence on Management Practices. Consequently, contracting firms must ensure they implement appropriate Management Practices in line with the competitive strategies set and formulated by the top management in adoption and implementation of IBS.

6.2 Hypothesis 2

Hypothesis 2 proposed that Strategy Formulation has a positive association with Project Performance. The relationship between Strategy Formulation and Project Performance (H2) was found to be significant ($\beta = 0.349$; $t = 3.3028$) and the hypothesis was supported at p-value < 0.01. The positive result from this test empirically confirm the theoretical notion that detailed and comprehensive strategies directly leads to improved project performance.

Consistent with previous research, strategic management practice is an important practice as it gives a strong influence towards firms‟ success. The importance of strategic management in a firm can be answered by looking at the relationship between strategic management and organizational performance. Strategic management does give positive influence, especially in its profitability to the large firms (David, 1997).

6.3 Hypothesis 3

Hypothesis 3, on the relationship between Strategy Formulation and Firm Performance was tested. The hypothesis was not statistically supported ($\beta = 0.084$; $t = 1.0184$). Hypothesis 3 is therefore not supported and Strategy Formulation, in this particular circumstance, do not appear to have a positive association with firm performance. The finding seems unanticipated at first, since Strategy Management has been widely recognized in the literature as important to the success of a firm. Indeed, numerous empirical studies (Miller & Cardinal, 1994; David, 1997; Rogers *et al.*, 1999; Price *et al.*, 2003; Hill *et al.*, 2004) have argued that Strategy Management can directly positively affect the firm performance. Nonetheless, the results demonstrate that Strategy Formulation has a significant positive indirect effect on Firm Performance through Project Performance ($\beta = 0.2241$; $t = 3.0344$) at a p-value < 0.01. This implies that Project Performance is an important mediator linking Strategy Formulation and Firm Performance.

As hypothesis 3 is unsupported, this outcome implies that Strategy Formulation do not appear to impact directly on the Firm Performance of Malaysian contracting firms. Although this finding is at odds with previous research in this area, it does not of course provide categorical proof that a firm's Strategy (Corporate Leadership and Business Strategy) is of little or no benefit in contributing to its Firm Performance. The Strategy Formulation construct utilized here is fairly

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parsimonious and it is probable that the Strategy Formulation construct fails to capture some of the complexity of this key construct. This suggests that increase in Firm Performance may have been influenced directly by other factors (see results of Hypothesis 6).

This result which does not permit us to conclude Strategy Formulation directly improves Firm Performance could be due to Strategy Formulation and Firm Performance are defined, operationalized and measured in different and limited ways. Implicitly, the precise role occupied by Strategy Formulation and Management Practices within the Malaysian Construction Industry requires further research, bearing in mind that Firm Performance is a notoriously difficult measure to capture unambiguously and this can be influenced by many variables in any economy, especially one which is developing and somewhat volatile.

6.4 Hypothesis 4

Management practices have been proposed to have a positive influence on Project performance. In the Conceptual Model, the relationship was found to be significant ($\beta = 0.224$; $t = 1.9327$). The relationship is significant at p-value < 0.05. The result implies that the higher the emphasis on Management Practices, the higher the Project Performance.

The findings also reveal that Strategy Formulation increases Project Performance indirectly via Project Management practices. Besides the direct impact of Strategy on Project Performance (H2), hypotheses 1 and 4 jointly suggest an indirect relationship between Strategy and Project Performance through Management practices. Therefore, it can be concluded that Strategy influences Project Performance both directly and indirectly.

6.5 Hypothesis 5

Hypothesis 5 proposed that Management Practices has a positive direct influence on Firm Performance. However, this relationship was found to be non-significant in the test ($\beta = -0.005$; $t = 0.0537$). Within this context, the finding illustrates that Management Practices have no direct positive influence on Firm Performance.

As Hypothesis 5 is rejected, this outcome implies that Management Practices do not appear to impact directly on Firm Performance. Although prior research has reported mixed findings on the impact Management Practices have on Firm Performance, the finding from this study is inconsistent with some project management studies. This may be explained by the primary role of Management Practices more directly linked to planning and controlling; thus they indirectly increase performance. Project Management practices can be conceptualized as one of the most important parts of an organization's formal planning and control systems designed for providing information useful for managers (Bakouros and Kelessidis, 2000).

Previous studies reported that Project Management practices showed no evidence of improved firm performance directly. The finding confirms, however, that Project Management practices have a statistically significant indirect effect on the Firm Performance construct via the Project Performance construct ($\beta = 0.1438$; $t = 1.8745$) at a p-value < 0.1.

6.6 Hypothesis 6

Hypothesis 6 predicted that Project Performance is positively associated with Firm Performance and tested. Strong statistical support at p-value < 0.01 was found at ($\beta = 0.642$; $t = 7.7004$). Hypothesis 6 is strongly supported in this analysis, indicating a positive association between the Project Performance construct and the Firm Performance construct. This implies that project management success and product success should

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enable firms to achieve high firm performance in terms of market success.

Strategic management seeks to enhance the project performance by closely integrating the internal functions within a company and effectively linking them with external operations of principal project participants. Of particular interest in the research findings is the indirect effect of the Project Performance construct. This research reinforces the importance of Project Performance as an important mediator linking Strategy Formulation and Management Practices in improving overall performance. The finding implies that the Firm Performance could only be enhanced by improving Project Performance in the first place.

In summary, Strategy Formulation may have a greater direct impact on Management Practices (β = 0.467) than on Project Performance (β = 0.349). The results also show Firm Performance is more influenced by Project Performance (β = 0.642) than by Strategy Formulation (β = 0.084) or Management Practices (β = -0.005). This indicates that it is important to improve Project Performance in order to enhance Firm Performance although in the literature, Strategy Formulation mostly have been linked directly to Firm Performance. The findings of this research indicate the presence of an intermediate measure of Project Performance not only between Strategy Formulation and Firm Performance but also between Management Practices and Firm Performance.

7.0 SUMMARY

It was found that most of the hypotheses were fully supported or partially supported, broadly indicating that Strategy Formulation are related to Management Practices and they both in turn are related to performance. Specifically, by applying the dynamic capabilities approach, it is found that Strategy Formulation was directly related to both Management Practices and Project Performance, that Management Practices are directly related to Project Performance, and that Project Performance was directly related to firm performance. Although Strategy Formulation and Management Practices were not directly related to Firm Performance, they were related to Firm Performance indirectly.

Findings from Conceptual Model strongly support four hypotheses, H1 (SFM and MAP), H2 (SFM and PPF), H4 (MAP and PPF) and H6 (PPF and FPF). A substantial amount of variance is also explained in the model. A bi- directional relationship exists between the items used to assess Strategy Formulation and Management Practices. Additionally, both Strategy Formulation and Management Practices positively impact Project Performance which in turn influences Firm Performance. The relationships between the Strategy Formulation and the Firm Performance (H3), and between the Management Practices and the Firm Performance (H5) were not statistically significant. It implies that increase in Strategy Formulation and Management Practices does not directly influence Firm Performance. Firm Performance is usually influenced by many factors and it is hard to see whether any one factor will dominantly determine the overall performance of an organization. However, both Strategy Formulation and Management Practices indirectly positively influence Firm Performance via the Project Performance. Project Performance and Management Practices are important mediators of the relationship between Strategy Formulation and Firm Performance.

The results indicate that both factors of Strategy Formulation and Management Practices have direct positive and significant impact on Project Performance. Following this, firms should consider Strategy Formulation, creating better inter-firm cooperation and integration capabilities. Management team can thus use this information to

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effectively create an efficient Management Practices that will lead to improved Project Performance. In conclusion, the implementation of Strategy Formulation has a significant impact on Management Practices and Project Performance in an emerging country context.

References:

Anaman, K. A., & Amponsah.C. (2007). Analysis of the causality links between the growth of the construction industry and the growth of the macro economy in Ghana. *Construction Management and Economics*, 25, 951-961.

Bakouros, Y. and Kelessidis, V. (2000). Project management. Dissemination of innovation and knowledge management techniques. INNOREGIO project.

Brousseau, E., and A. Rallet (1995). Efficacite´ et Inefficacite´ de L'Organisation du Batiment: Une Interpre´tation en Termes de Trajectoire Organisationnelle, *Revue d'Economie Industrialle*, 74(4): 9–30.

David, F. R. (1997). *Concepts of Strategic Management*, Sixth Edition, New Jersey, USA: Prentice Hall.

Gajendran, T, Brewer, G & Marimuthu, M (2013). Internationalization of construction business and e-commerce: Innovation, integration and dynamic capabilities. *Australasian Journal of Construction Economics and Building*, 13 (2) 1-17

Güttel, W. H. and Konlechner, S. W. 2009. "Continuously hanging by a thread: Dynamic capabilities in ambidextrous organizations". *Schmalenbach Business Review*, 71: 150- 172.

Hamid, Z.; Kamar, K.A.M.; Zain, M.; Ghani, K.; and Rahim, A.H.A. (2008). Industrialized building system (IBS) in Malaysia: The current state and R&D initiatives. *Malaysia Construction Research Journal (MCRJ)*, 2(1), 1-13.

Haron, N.A. Hassim, S. Kadir, M. R.A., & Jaafar, M. S. (2005). Building Costing Comparison Between Conventional and Framework System. Journal of Technology, 43(B), UTM, Johor, Malaysia.

Hill, W., Jones, G. R. & Galvin, P. (2004), Strategic management: *An integrated approach*, Wiley, Milton.

Jorge, L. (2008). Investment in construction and economic growth. *Economics for the Modern Built Environment* (pp. 94-112): Taylor & Francis.

Kamarul Anuar Mohamad Kamar, Mustafa Alshawi and Zuhairi Abd Hamid (2009). Barriers to Industrialised Building Systems: The Case of Malaysia. Paper proceedings in BuHu *9th International Postgraduate Research Conference (IPGRC 2009)*: The University of Salford, United Kingdom, pp. 485-497 29-30 January 2009.

Khan, R. A. (2008). *Role of Construction sector in economic growth: Empirical Evidence from Pakistan Economy*. Paper presented at the ICCIDC-I, Pakistan.

Kao, C.-C., Green, S.D., Larsen, G.D. and Elmualim, A.A. (2006). Construction competitiveness: A dynamic capabilities perspective. *Construction in the XXI Century*: Local and global challenges, Rome, Italy.

Malik, N. F. N (2006). Supply Chain Management in IBS Industry. *Proceedings in Malaysian*

DOI: 10.18535/ijsshi/v3i9.1

International IBS Exhibition, Kuala Lumpur.

Miller, C. C. & Cardinal, L. B. (1994), Strategic planning and firm performance: a synthesis of more than two decades of research, *Academy of Management Journal* 37(6), 1649–1665.

Munns, A.K. and Bjeirmi, B.F. (1996). The role of project management in achieving project success. *International Journal of Project Management*, Vol. 14, No. 2, pp.81-87.

Ofori, D (2007). Social responsibility and ethics in Ghana: Stakeholders' expectation and challenges. *Management and Economic Development in Sub-Saharan Africa: Theoretical and Applied Perspectives* (London: Adonis & Abbey), 63-97

Olanrewaju, A.L. and Abdul-Aziz, A.-R. (2015). Building Maintenance Processes and Practices. *Springer Science Business Media Singapore.* doi: 10.1007/978-981-287-263-0_2.

Pamulu, Muhammad Sapri (2010) Strategic management practices in the construction industry: a study of Indonesian enterprises. *PhD thesis, Queensland University of Technology*.

Price A.D.F and Newson E. (2003). Strategic Management: Consideration of Paradoxes, Processes, and Associated Concepts as Applied to Construction. *Journal of Management in Engineering*, 19(4), 183–192.

Price A.D.F, Ganiev B.V and Newson E. (2003). Changing Strategic Management Practice Within the UK Construction Industry. *Strategic Change*, 12(7), 347–366.

Rameezdeen.R, Nisa.z et al,(2006). Study of linkages between construction sector and other sectors of the Sri Lankan Economy. *Department of Building Economics University of Moratuwa Sri Lanka*

Rogers, P. R., Miller, A. & Judge, W. Q. (1999), Using information processing theory to understand planning/performance relationships in the context of strategy, *Strategic Management Journal* 20(6), 567–577.

Ridder, H.-G., Hoon, C., & McCandless Baluch, A. (2012). Entering a Dialogue: Positioning Case Study Findings towards Theory. *British Journal of Management*, n/a–n/a. doi:10.1111/1467-8551.12000

Sexton, M., Abbott C., Barrett P. and Ruddock L. (2007). Hidden innovation in construction in de Ridder H.A.J. and Wamelink J.W.F. (Eds) *Second International Conference World of Construction Project Management*, TU Delft, The Netherlands.

Sommerville, J. and Robertson, Hamish W (2000). A scorecard approach to benchmarking for total quality construction. *International Journal of Quality and Reliability Management*, Vol.17: Issue 4/5: Pages 453-466.

Teece, D. (2007). Explicating dynamic capabilities: the nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28: p. 1319–1350.

DOI: 10.18535/ijsshi/v3i9.1