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# STRUCTURAL, OPERATIONAL AND MARKET RELATED FEATURES AMONG HOUSING DEVELOPERS IN MALAYSIA

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#### Abstract

In advancing our knowledge of the Malaysian housing industry, this paper presents the characteristics among housing developers operating in Malaysia. Despite the stream of research on organizations, limited attention has been directed towards the extent of the formalization, centralization, adhocracy culture, market orientation; level of transformational leadership and organizational learning; environmental uncertainty and market competition among housing developers in Malaysia. We used a proportionate stratified random sampling to collect data from micro, small, large and public listed housing developers in Peninsular Malaysia. We received 183 out of 504 questionnaires distributed, yielding 36.3 percent response rate. While formalization and government support were found to be low; centralization, adhocracy culture, organizational learning and environmental uncertainty were found to be moderate, while market orientation, transformational leadership and market competition were found to be high among the housing developers. Our findings provide a new impetus for a better understanding of the characteristics of housing developers operating in Malaysia. It can also provide a foreground for comparison with the housing industries in other countries.

Keywords: Organizational structure, culture, resources, external factors, housing developers, Malaysia.

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#### 1.0 INTRODUCTION

There has been a significant body of literature that examined organizational factors across industries (for example [1-7]. The understanding of organizational factors will provide a clue about the outputs of organizations. For example, literature has provided evidence on the impact of market orientation on company performance. Hence, a firm that has been identified with a high level of market orientation is expected to have better performance [2]. Despite the intellectual contributions of past research on organizational studies, organizational factors among housing developers in Malaysia have not received considerable attention. Recently, Kamaruddeen et al [8] have examined the impact of organizational factors on the innovativeness of housing developers. However, their study does not focus on the features that could be used to predict organizations such as their growth and performance. Following Alsaeed [4], we categorise the features examined in this paper as structural, operational and market-related factors. The purpose of this paper is to provide answers to the question: What is the extent of the structural (formalization and centralization), operational (Adhocracy and market orientation, transformational leadership style, organizational learning), and market-related factors (environmental uncertainty and market competition) among housing developers operating in Malaysia?

# 2.0 LITERATURE REVIEW

#### 2.1 Structural Related Factors: Firm Structure

According to Zheng et al [9], the organizational structure of a firm is an indicator of an enduring configuration of tasks and activities in that firm. While

scholars such as Subramaniam and Nilakanta [10] conceptualize firm structures as formalization, centralization and specialization, Pertusa-Ortega et al [11]'s concept of structure includes formalization, centralization and complexity. While the common structural dimensions amona scholars formalization and centralization (example, [9,12,16]), [9], have noted that centralization is one prominent dimension of the structural elements of firms. This therefore, considers formalization and centralization as the structural dimensions of the firms to be examined among housing developers in Malaysia.

#### 2.1.1 Formalization

Formalization refers to the degree to which a codified work process guides and controls work process in a firm. It provides a common language shared among staff members and enables efficient communication in a firm [17]. Formalization is an indication of the extent to which the rights and duties of the organizational members are determined, as well as the extent to which these are written down in rules, procedures and instructions [18].

Following Pertusa-Ortega et al [11], formalization in this study is defined as the degree to which decisions and working relationships are governed by formal rules and standard policies and procedures in housing development firms. In the context of the housing industry, housing developers with a formal structure will require the establishment of specific rules and procedures that indicate what needs to be done by the staff members [16]. This type of firm's setup prevents staff members in the housing development firms from performing different activities, or rather multiple activities in the course of performing their daily jobs [19].

# 2.1.2 Centralization

According to Jaworski and Kohli [12], centralization is the inverse of the amount of delegating the authority of decision-making in an organization, as well as the extent to which organizational members participate in decision-making. This definition is perhaps a multidimensional construct because it encompasses both authority and participation [20]. Looking from the perspective of large firms that have subsidiaries and branches, centralization is the structural element that explains how the decision-making authority is shared between the headquarters and branches. It also refers to how branches or subsidiaries provide specialized services of product and serve as specific centers [21]. This concept is consistent with John and Martin [22], p. 172, who define centralization as "the extent to which marketing planning-related activities and decisions are concentrated within a few positions". Following Pertusa-Ortega centralization in this study is defined as the locus of the decision-making authority and control within an entity of housing development firms. Centralization is referred to as "the extent to which decision-making power is concentrated at the top management level in the organization" and a firm is said to practice a centralized structure when the concentration of the decision-making task lies in few hands in the firm, [23].

The general purpose of this centralized structure in a firm is to produce a uniform policy and action, minimize the tendency of committing an error by staff members due to the lack of information or skills; and enable them to utilize the skills of central and specialized expertise, and to have a closer control of organizational operations [16]. In the context of the housing industry, housing developers that practice a centralized structure, limit the authority of the managers, in terms of the decision-making and sole decision power which lie in the hands of the chief executive or directors instead. Consequently, centralization prevents the staff members or even managers from being flexible or from taking the initiative in the course of performing their duties [16].

#### 2.2 Operational Related Factors: Firm Culture

According to Davies et al [24], firm culture refers to the assumption, values, attitudes as well as beliefs that a significant group shares among them within the firm. Four types of firm cultures have been identified in the literature: clan, adhocracy, hierarchical and market cultures [25]. Based on Cameron and Quinn [26]'s Competing Values Framework, the clan culture focuses on the internal organization and is associated with flexibility and change. Adhocracy focuses on the external organizational growth and is characterized with flexibility, resources' acquisition, creativity as well as adaptation. Hierarchical culture is associated with focusing on firm productivity, achievement and it tends to respond to external competition. Market culture is characterized as a concept focusing on internal stability, internal efficiency, compliance to rules and regulations of the firm [25]. In this paper, only the extent of adhocracy culture among housing developers is examined.

Adhocracy culture enhances the expansion, transformation of the firm and focuses on the competitiveness and insight of the firm. The members in this cultured firm are driven and motivated by growth as well as creativity. The leaders in this type of firms continuously attempt to seek for additional resources, capture external support and are willing to take risks. Flexibility is what underlies the existence of the firm and focuses on the external environment [27]. In summary, a firm embedded with adhocracy culture is expected to have a climate of entrepreneurship, and creativity whereby the firm's strategic emphases would tend to be on innovation, growth and acquisition of new resources [28].

#### 2.2.1 Market Orientation

According to Slater and Narver [29], market orientation is considered as an organizational culture because it involves the adoption of marketina concepts as a firm's business philosophy. Marketoriented firms pay much attention and priority to customers, and are interested in attaining long-term profitable firms [30]. This group of firms believes that satisfying the customers is the most effective way to achieve a position to achieve firm's objectives [31]. In examining the definitions of market orientation in the literature, Chen [32] have identified three major components of market orientation: customer focus, process emphasis and goal achievement. The aim of the firms performing these three components is to satisfy customers' needs and wants, thereby achieving their business goals. Hence, marketoriented firms are distinguished by possessing the ability to generate, disseminate and use superior information relating to their customers and competitors [33]. Following Narver and Slater [34]'s concept of market orientation, Narver and Slater [32] p.198, defines market orientation as organizational culture that most effectively and efficiently creates the necessary behaviors for the creation of superior value for buyers and, thus generates continuous superior performance for business". This study adapts Narver and Slater [35]'s (p. 242) definition to suit the context of housing development firms. In this study, market orientation is defined as the culture in which all housing developers' employees are committed to the continuous creation of superior value for the firms' customers.

#### 2.2.2 Transformational Leadership Style

Transformational leadership style is examined in this study as a dimension of organizational resources because empirical studies have shown that it is universally effective across cultures [36). It is therefore expected that the difference in culture will not influence the findings related to the transformational leadership examined in this study. Additionally, the transformational leadership theory has been recognized as the most advanced because it encompasses the symbolic, emotional and highly motivating behaviors that produce better results than do the ordinary leadership. Transformational leader is known for his or her ability to motivate followers (firm employees) to perform more than they are initially expected as they strive for better performance [37]. More importantly, the transformational leadership behavior has been identified to be representing the most active and effective form of leadership [38]. Furthermore, it has been identified as a strategic tool to manage a dynamic environment faced by the firms in recent times [39]. According to Waldman [40] transformational leadership refers to a leadership style in which the leader uses ideology and values to

achieve high end-values by means of motivating the firm's distant subordinates.

#### 2.2.3 Organizational Learning

Numerous definitions of organizational learning have been provided by scholars. The definition of [41] appears to be explicit enough to capture the basic element of learning. They define organizational learning as the process of acquiring information, distributing it, interpreting it, and reflecting it in behavioral and cognitive changes. From the viewpoint of the organizational behavior, learning happens at the individual level as firm members begin and continue to acquire new knowledge from their daily life experiences and from others until they have established a learning orientation or culture [42].

According to Hung et al [43], organizational learning can be viewed from three perspectives: strategic, systematic and process perspectives. The authors also suggest that organizational learning can be divided into individual, team and firm levels. This suggests that organizational learning starts with the individual level and spreads throughout the firm. From the systematic perspective, Hungn et al [43] refer to organizational learning as a balanced relationship between the environment and firm operation which is dynamic, whereby firms acquire knowledge externally and adjust their activities.

According to Dodgeson [44], organizational learning is a process that involves establishing firm knowledge, norms in a firm culture that change and produce firm effectiveness by improving employees' skills. In a similar line of reasoning, Bohmer and Edmondson [45] observe that organizational learning is such a dynamic and continuous process. According to the authors, the knowledge and insight acquired can influence changes to the firm's actions as a result of learning strategies. In a similar vein, the culture of organizational learning can influence continuous learning and enable the transformation of the firm's internal and external bodies of knowledge into sustainable knowledge Following [46] p. 409, organizational learning in this study is defined as "the process by which the firm develops new knowledge and insights from the common experiences of people in the organization, and has the potential to influence behaviours and improve the firm's capabilities". This learning process involves four stages: knowledge acquisition, distribution, and memory [47]. Knowledge acquisition is the process which firms use to acquire information and knowledge. The Knowledge distribution process involves the sharing of information between employees in a firm. Knowledge interpretation involves transforming information into shared knowledge. A firm's memory is used to store information and knowledge for future use [46].

#### 2.3 Market Related Factors: External Factors

In this paper, organizational external factors refer to variables which are beyond the control of the firm. The firm tends to manage these factors by reacting to them strategically. Following Choe [48], we conceptualize firm's external factors as environmental uncertainty and market competition.

# 2.3.1 Environmental Uncertainty

Mason [49] p. 1, defines complexity as "...the measure of heterogeneity or diversity in environmental sub-factors such as customers, suppliers, socio-political and technology." Firms find it difficult to use information for planning and prediction as the environmental complexity keeps on increasing [50]. Turbulence is defined as "dynamism in the environment, involving rapid, unexpected change in the environmental sub-dimensions." Unlike the stable environment where little changes are noticed and predictable, a turbulent environment is characterized as having many unexpected changes [49].

Environmental uncertainty has been identified as a major problem faced by the firms because it prevents the firms to make effective decisions [51]. According to Naranjo-Gil [52] p. 812, environmental uncertainty refers to the "organization's perceived inability to predict accurately the actions of customers and situations that comprise of the external environment, due to the lack of information or inability to discriminate between relevant and irrelevant information". Firms are said to be experiencing environmental uncertainty when they face difficulty in predicting the future accurately. Rapid technology and product change are two major determinants affecting firms' capability to predict the future [53].

# 2.3.2 Market Competition

The present study adopts Karuna [54]'s definition of competition. Karuna [54] defines competition as "...the extent to which firms attempt to win business from their rivals." According to Chong and Rundus [55], market competition is an important element among the factors that constitute a firm's external environment. There are four main indicators of market competition that relate to the product and are associated with the competitive environment of firms: Easiness of substitution, steady arrival of competing products, how quick is a product becoming obsolete (associated with product competition) and the continuous change in technology which relates to the production process [56]. According to Fung and Cheng [57], firms that are facing considerable competition tend to be more innovative than those experiencing less or no competition. Generally, firms which face market competition on products or services from another firm located within the same geographical location, or from firms outside the environment, can bring about the price elasticity of demand for a product [58].

#### 3.0 RESEARCH METHODOLOGY

# 3.1 Sample and Data Collection

The sampling frame of 987 housing developers was drawn from the recent edition of the Real Estate and Housing Developers' Association (REHDA) Directory. The managers were the respondents in assessing all the constructs that constitute our proposed model. Following the completion of the pre-test study with two academics and 35 housing developers to assess the research instrument, 504 questionnaires were mailed to managers along with addressed postagepaid envelopes and a cover letter explaining the purpose of the research and confidentiality of their responses. A total of 183 completed, usable questionnaires were returned which yielded 36.3% response rate. Cronbach's coefficient alpha was used to determine the reliability of the various items used in the study. All the Cronbach's coefficient alpha values obtained in this study are above the 0.7 minimum acceptable values [59].

# 3.2 Measurement and Operationalization

We used a five-point scale to measure all the variables examined, anchored by 1 = "not at all," 2 = "slightly true," 3 = "moderately true," 4 = "mostly true," and 5 = "completely true." In the firm structure for example, respondents were asked to score their extent of formalization and centralization by ticking on a scale of 1 to 5. The respondents are qualified personnel who understand the running of the business. The items used to measure formalization and centralization were adapted from Jaworski and Kohli [12]'s work. The firm resource construct is operationalized into two dimensions, namely, the transformational of leadership style, organizational learning. The items used to measure transformational leader were adopted from [60] items for organizational learning were adopted from [60-61] works. The firm culture construct is operationalized into two dimensions: hierarchical culture, and market orientation. Items used to measure adhocracy culture were adapted from [26; 62's] work. Items for market orientation were adopted from Jaworski and Kohli [12]'s work. Environmental uncertainty was adopted from Lin [63]; and Market competition adapted from Premkumar and Roberts [64]'s work.

# 4.0 RESULTS AND FINDINGS

#### 4.1 Background of the Respondent

Organizational culture was measured in terms of the adhocracy culture and market orientation. Table 3 and figure 2 show the descriptive analysis for both factors. Using the five point Likert scale, respondents scored above average for both factors. Respondents perceived that market orientation in their firm was more important (mean=3.94, sd=0.88), compared to the adhocracy culture (mean=3.44, sd=0.92).

Table 1 presents the distribution of the respondents according to their background comprising of marketing managers (31.1%), project managers (24.0%), executive directors (9.8%), engineers (4.4%), sales managers (3.8%) and others. Male respondents from the majority of them (68.9%) were compared to their female counterparts (31.1%). Most of the respondents were also from the firms specialized in mixed residential property (40.4%)terrace/detached/semi detached homes (34.4%). More than 60 percent of the firms were private limited. 57.4 percent of the firms were located in the local market and 42.1 percent of the firms were small-sized firms.

# 4.2 Descriptive Analysis

To determine the perception level of these factors, the mean was computed and the middle point was used to separate the level from low, moderate to high. Following [65], we divided the mean score into three levels as follows: low level (1.00 to 2.25); moderate level (2.26 to 3.75); and high level (3.76 to 5.00). We made use of the skewness and kurtosis values to test the normality of our data. Normality exists when the standard error for skewness and kurtosis ratios is at a significant level of .05 [66]. The results reveal that the ratio of skewness to kurtosis for all factors was within the normal distribution and consequently, the assumption of normality was met.

#### 4.3 Organizational Structure

Table 2 presents the descriptive analysis of organizational culture dimensions. Respondents perceived that centralization applied in the firm was moderately important (mean=2.92, sd=1.10). However, it was also found that the formalization

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#### 4.5 Firm Resources

Table 4 presents respondents' perception towards their firm resources. Firm resources were measured using two factors namely transformational leadership and organizational learning. Respondents perceived that transformational leadership and organizational learning were important. They scored a high mean for both factors; transformational leadership (mean=3.93, sd=0.91) and organizational learning (mean=3.56, sd=0.88).

#### 4.6 External Factors

External factors were government support, environmental uncertainty and market competition. It is found that respondents perceived that government support (mean=2.88, sd=1.09) and environmental uncertainty were moderately true. However, respondents perceived that market competition in the firm was mostly true and it was at the highest level of importance (mean=4.01, sd=0.81).

# 4.7 Differences between Groups of the Firms

This study also attempted to examine the differences in the organizational structure, culture, resources and external factors among the groups of the different firms. The analysis of variance (One-way ANOVA) was carried out to achieve this objective.

#### 4.8 Location

Table 6 summarizes the one-way ANOVA results to examine the differences in all variables according to the location of the firms. It has been found that there were no significant differences in all variables among the firms according to their locations (p<0.05).

**Table 1** Distribution of the respondents according to their background comprising of marketing managers.

	Frequency	Percentage
Position		
Executive Director	18	9.8
Project Manager	44	24.0
Marketing manager	57	31.1
Engineer	8	4.4
Contract manager	5	2.7
Sales manager	7	3.8
Account manager	5	2.7
Quantity Surveyor	2	1.1
Land Surveyor	1	0.5
Senior Executive	3	1.6
Others	33	18.0
Firm specialization		
Terrace/Detached/Semi detached	63	34.4
Apartment	10	5.5
Mixed residential property	74	40.4
Commercial Development	4	2.2
All	23	12.6
Others	9	4.9
Ownership		
Public limited	17	9.3
Private limited	127	69.4
Partnership	6	3.3
Corporation	12	6.6
Public listed company	16	8.7
Sole Proprietor	2	1.1
Others	3	1.6
Prime location		
Local market	105	57.4
Within few states	29	15.8
Regional	28	15.3
Across Malaysia	14	7.7
International market	7	3.8

N=183

**Table 2** Descriptive Analysis of Firm Structure

	Mean	Standard Deviation	Skewness	Kurtosis
Formalization	2.0623	0.92627	0.575	-0.531
Centralization	2.9249	1.10166	0.194	-1.095

Table 3 Descriptive analysis of firm culture

	Mean	Standard Deviation	Skewness	Kurtosis	
Adhocracy culture	3.4415	0.91903	-0.204	-0.615	
Market Orientation	3.9374	0.88196	-0.808	0.188	

Table 4 Descriptive analysis of firm resource

	Mean	Standard Deviation	Skewness	Kurtosis	
Transformational leadership	3.9318	0.91037	-0.934	0.842	
Organizational Learning	3.5635	0.87566	-0.715	0.305	

**Table 5** Descriptive analysis of external factors

	Mean	Standard Deviation	Skewness	Kurtosis	
Govt. Support	2.8762	1.09430	0.069	-1.028	
Env. Uncertainty	3.5326	0.79700	-0.203	-0.913	
Market Competition	4.0138	0.81169	-0.687	0.135	

**Table 6** Differences in variables according to firms' locations

	Mean					F
	Local market	Within few states	Regional	Across Malaysia	Intl market	-
Firm Structure						
Formalization	3.42	3.45	3.79	3.14	3.00	.627
Centralization	3.96	4.01	3.98	3.59	3.86	1.282
Firm Culture						
Adhocracy culture	3.92	3.99	4.16	3.63	3.54	1.780
Market Orientation	3.58	3.59	3.37	3.71	3.61	.583
Firm Resources						
Transformational	2.81	2.70	3.28	3.03	2.74	1.116
leadership						
Organizational Learning	3.55	3.41	3.57	3.57	3.60	.443
External Factors						
Government Support	4.00	3.94	4.19	4.12	3.68	1.313
Environmental Uncertainty	3.55	3.41	3.57	3.57	3.60	.200
Market Competition	4.00	3.94	4.19	4.12	3.68	.714

**Table 7** Differences in variables according to firms' sizes

	Mean				F	
_	Micro firm	Small firm	Medium firm	Large firm	_	
Firm Structure						
Formalization	1.91	2.19	2.05	1.87	.996	
Centralization	2.56	2.91	3.12	3.15	2.030	
Firm Culture						
Adhocracy culture	2.85	3.48	3.72	3.56	7.041**	
Market Orientation	3.54	3.94	4.13	4.12	3.432*	
Firm Resources						
Transformational leadership	3.50	3.98	4.11	4.07	3.554*	
Organizational Learning	3.09	3.56	3.78	3.88	5.354**	
External Factors						
Government Support	2.40	2.82	3.10	3.47	4.679**	
Environmental Uncertainty	3.02	3.51	3.81	3.76	8.160**	
Market Competition	3.51	3.95	4.36	4.20	9.170**	

#### 4.9 Firm Size

Table 7 presents the differences among sizes of the firms. The results suggest that there were no significant differences in organizational culture (formalization: F=0.996, p>0.05; and centralization: F=2.030, p>0.05). However, there were significant differences in firm culture, firm resources, and external factors. Adhocracy culture was significant at F=7.04, p<0.01 and market orientation was significant as well at F=3.43, p<0.01.

For the firm resource variables, transformational leadership (F=3.55, p<0.01) and organizational learning (F=5.35, p<0.01), they were significantly different among the firms. The same results could also be found in external factors. All of the factors significantly differed among the firm sizes as follows: Government support (F=4.68, p<0.01), environmental uncertainty (F=8.16, p<0.01) and market competition (F=9.17, p<0.01).

#### 5.0 CONCLUSION AND IMPLICATION

In this study, we investigate the extent of the organizational structure, culture, resources and external factors among housing developers operating in Malaysia. We use the stratified random sampling on 183 housing developers listed in a recent Real Estate and Housing Developers Association (REHDA) directory. Our finding shows formalization and government support are low; while centralization, adhocracy culture, organizational learning, and environmental uncertainty are moderate among the housing developers. In addition, we have found that market orientation, transformational leadership and market competition are high among the housing developers. The mean scores imply that the housing developers in Malaysia can be described as organizations with less formal rules and working relationship, centralized decisionmaking, the willingness to try new ideas, concept, process and that they are risk takers. They focus on customers' needs through extensive market study. having transformational leaders while facing environmental uncertainty and intense market competition. The same characteristics are exhibited across all locations providing the evidence to generalize this finding among the housing developers. The value of the present study lies in the better understanding of characteristics among housing developers. This paper provides a direction for examining other types of firm factors in housing and other industries.

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#### References

- [1] Katsikeas C. S. 1994. Export Competitive Advantages: The Relevance of Firm Characteristics. *International Marketing Review*. 1(3): 33-53.
- [2] Kim Y. 2003. How Will Market Orientation and Environment and Firm's Character Influence Performance? Cross Cultural Management: An International Journal. 10(4): 71-88
- [3] Hong J., Chin A. T. and Liu B. 2004. Firm-Specific Characteristics and Logistics Outsourcing By Chinese Manufacturers. Asia Pacific Journal of Marketing and Logistics. 16(3): 23-36.
- [4] Alsaeed K. 2006. The Association Between Firm-Specific Characteristics And Disclosure: The Case Of Saudi Arabia. Managerial Auditing Journal. 21(5): 476-496.
- [5] Eriotis N., Vasiliou D. and Ventoura-Neokosmidi Z. 2007. How Firm Characteristics Affect Capital Structure: An Empirical Study. Managerial Finance. 33(5): 321-331.
- [6] Ghosh S. 2010. Firm Characteristics, Financial Composition and Response To Monetary Policy: Evidence From Indian Data. Journal of Indian Business Research. 2(4): 198-215.
- [7] Zu X., Zhou H., Zhu X. and Yao D. 2011. Quality Management In China: The Effects Of Firm Characteristics And Cultural Profile. International Journal of Quality & Reliability Management. 28(8): 800-821.
- [8] Kamaruddeen A. M., Yusof N. A., Said I. and Pakir A. H. K. 2012. Organizational Factors And Innovativeness Of Housing Developers. American Journal of Applied Sciences. 9(12): 1953-1966.
- [9] Zheng W., Yang B. and McLean G. N. 2010. Linking Organizational Culture, Structure, Strategy, and Organizational Effectiveness: Mediating Role Of Knowledge Management. Journal of Business Research. 63(7): 763-771.
- [10] Subramanian A. and Nilakanta S. 1996. Organizational Innovativeness: Exploring The Relationship Between Organizational Determinants Of Innovation, Types Of Innovations, And Measures Of Organizational Performance. Omega. 24(6): 631-647.
- [11] Pertusa-Ortega E. M., Zaragoza-Sáez P. and Claver-Cortés E. 2010. Can Formalization, Complexity, And Centralization Influence Knowledge Performance? Journal of Business Research. 63(3): 310-320.
- [12] Jaworski B. J. and Kohli A. K. 1993. Market Orientation: Antecedents and Consequences. The Journal of Marketing. 57: 53-70.
- [13] Jantan M., Nasurdin A. M. and Fadzil N. F. A. 2003. Designing Innovative Organizations In Malaysia: Do Structure And Culture Matter? Global Business Review. 4(2): 213-226.
- [14] Kirca A. H., Jayachandran, S. and Bearden, W. O. 2005. Market orientation: A Meta-Analytic Review and Assessment of Its Antecedents and Impact on Performance. Journal of Marketing. 69(2): 24-41.
- [15] Meirovich G., Brender-Ilan Y. and Meirovich, A. 2007. Quality of Hospital Service: The Impact of Formalization and Decentralization. International Journal of Health Care Quality Assurance. 20(3): 240-252.
- [16] Katsikea E., Theodosiou M., Perdikis, N. and Kehagias, J. 2011. The Effects of Organizational Structure And Job Characteristics On Export Sales Managers' Job Satisfaction And Organizational Commitment. *Journal of World Business*. 46(2): 221-233.
- [17] Bodewes W. E. 2002. Formalization And Innovation Revisited. European Journal of Innovation Management. 5(4): 214-223.
- [18] Schminke M., Ambrose M. L. and Cropanzano R. S. 2000. The Effect of Organizational Structure On Perceptions Of

- Procedural Fairness. Journal of Applied Psychology. 85(2): 294.
- [19] Banai M. and Reisel, W. D. 2007. The Influence Of Supportive Leadership And Job Characteristics On Work Alienation: A Six-Country Investigation. *Journal of World Business*. 42(4): 463-476.
- [20] Auh S. and Menguc B. 2007. Performance Implications of The Direct And Moderating Effects Of Centralization And Formalization On Customer Orientation. *Industrial Marketing Management*. 36(8): 1022-1034.
- [21] Quester P. G. and Conduit J. 1996. Standardisation, Centralisation and Marketing In Multinational Companies. International Business Review. 5(4): 395-421.
- [22] John G. and Martin J. 1984. Effects Of Organizational Structure Of Marketing Planning On Credibility And Utilization Of Plan Output. Journal of Marketing Research. 170-183.
- [23] Willem A., Buelens M. and De Jonghe I. 2007. Impact Of Organizational Structure On Nurses' Job Satisfaction: A Questionnaire Survey. International Journal of Nursing Studies. 44(6): 1011-1020.
- [24] Davies H., Mannion R., Jacobs R., Powell A. and Marshall M. 2007. Exploring The Relationship Between Senior Management Team Culture And Hospital Performance. Medical care Research and Review. 64(1): 46-65.
- [25] Shih C.-C. and Huang S.-J. 2010. Exploring The Relationship Between Organizational Culture And Software Process Improvement Deployment. Information & Management. 47(5): 271-281.
- [26] Cameron K. S. and Quinn R. E. 1999. Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework. New York, NY: Addison-Wesley.
- [27] Denison D. R. and Spreitzer G. M., 1991. Organizational Culture and Organizational Development: A Competing Values Approach. Research in Organizational Change and Development. 5(1): 1-21.
- [28] Hynes N. 2009. Corporate Culture, Strategic Orientation, and Business Performance: New Approaches To Modelling Complex Relationships. Technological Forecasting and Social Change. 76(5): 644-651.
- [29] Slater S. F. and Narver J. C. 1994. Does Competitive Environment Moderate The Market Orientation-Performance Relationship? The Journal of Marketing. 58: 46-55.
- [30] González-Benito Ó, and González-Benito J. 2005. Cultural Vs. Operational Market Orientation and Objective Vs. Subjective Performance: Perspective Of Production And Operations. Industrial Marketing Management. 34(8): 797-829.
- [31] Shoham, A. and Rose, G. M. 2001. Market orientation: A Replication, Cross-National Comparison, And Extension. Journal of Global Marketing. 14(4): 5-25.
- [32] Chen S.-C. and Quester P. G. 2009. A Value-Based Perspective Of Market Orientation And Customer Service. Journal of Retailing and Consumer Services. 16(3): 197-206.
- [33] Jiménez-Jiménez D. and Cegarra-Navarro J. G. 2007. The Performance Effect Of Organizational Learning And Market Orientation. *Industrial Marketing Management*. 36(6): 694-708.
- [34] Narver J. C. and Slater S. F. 1990. The Effect Of A Market Orientation On Business Profitability. The Journal of Marketing. 20-35.
- [35] Narver J. C., Slater S. F. and Tietje, B. 1998. Creating A Market Orientation. Journal of Market-Focused Management. 2(3): 241-255.
- [36] Zagorsek H., Jaklic, M. and Stough S. J. 2004. Comparing Leadership Practices Between The United States, Nigeria, And Slovenia: Does Culture Matter? Cross Cultural Management: An International Journal. 11(2): 16-34.
- [37] Ergeneli A., Gohar R. and Temirbekova Z. 2007. Transformational Leadership: Its Relationship To Culture

- Value Dimensions. International Journal of Intercultural Relations. 31(6): 703-724.
- [38] Rubin R. S., Munz D. C. and Bommer W. H. 2005. Leading From Within: The Effects Of Emotion Recognition And Personality On Transformational Leadership Behavior. Academy of Management Journal. 48(5): 845-858.
- [39] Nielsen K. and Cleal B. 2011. Under Which Conditions Do Middle Managers Exhibit Transformational Leadership Behaviors?—An Experience Sampling Method Study On The Predictors Of Transformational Leadership Behaviors. The Leadership Quarterly. 22(2): 344-352.
- [40] Waldman D. A., Ramirez G. G., House R. J., and Puranam P. 2001. Does Leadership Matter? CEO Leadership Attributes and Profitability Under Conditions Of Perceived Environmental Uncertainty. Academy of Management Journal 44(1): 134-143.
- [41] David G. C., and Skerlavaj M. 2009. The Impact Of Organizational Learning On Innovativeness In Spanish Companies.In M. D. Lytras, Carrol, J. M., Damiani, E., Tennyson, R. D (Ed.), WSKS. 67-76. Springeer-Verlag berlin Heidelberg.
- [42] Yeung A. C. L., Lai K.H., and Yee R. W. Y. 2007. Organizational Learning, Innovativeness, And Organizational Performance: A Quantitative Investigation. International Journal of Production Research. 45(11): 2459-2477
- [43] Hung R. Y. Y., Lien B. Y.-H., Yang B., Wu C.-M. and Kuo Y.-M. 2011. Impact of TQM and Organizational Learning on Innovation Performance in the High-Tech Industry. International Business Review. 20(2): 213-225.
- [44] Dodgeson, M. 1993. Organizational learning: A review of some literature. Organizational Studies.14, (3): 375-394.
- [45] Bohmer R., Edmondson A. C. 2001. Organizational learning in health care. Paper presented at the *Health Forum Journal* 2: 32-35.
- [46] Jiménez-Jiménez D. and Sanz-Valle R. 2011. Innovation, Organizational Learning, and Performance. *Journal of Business Research*. 64(4): 408-417.
- [47] De Weerd-Nederhof P. C., Pacitti B. J., da Silva Gomes J. F. and Pearson, A. W. 2002. Tools For The Improvement Of Organizational Learning Processes In Innovation. *Journal of Workplace Learning*. 14(8): 320-331.
- [48] Choe J.-m. 2003. The Effect of Environmental Uncertainty and Strategic Applications Of IS On A Firm's Performance. *Information and Management*. 40(4): 257-268.
- [49] Mason R. B. 2007. The External Environment's Effect On Management And Strategy: A Complexity Theory Approach. Management Decision. 45(1): 10-28.
- [50] Black J. and Farias G. 1997. Genesis Of Complex Cycles, Paper Presented at 8th Annual International Conference of The Society for Chaos Theory in Psychology and Life Sciences. Boston University, Boston, MA.
- [51] Liao, S.-H. and Hu, T.C. 2007. Knowledge Transfer and Competitive Advantage On Environmental Uncertainty: An Empirical Study Of The Taiwan Semiconductor Industry. Technovation. 27(6): 402-411.
- [52] Naranjo-Gil D. 2009. The Influence Of Environmental And Organizational Factors On Innovation Adoptions: Consequences For Performance In Public Sector Organizations. Technovation. 29(12): 810-818.
- [53] Lee P. K., Yeung, A. C. and Edwin Cheng, T. 2009. Supplier Alliances and Environmental Uncertainty: An Empirical Study. International Journal of Production Economics. 120(1): 190-204.
- [54] Karuna C. 2007. Industry Product Market Competition and Managerial Incentives. Journal of Accounting and Economics. 43(2): 275-297.
- [55] Chong V. K. and Rundus M. J. 2004. Total Quality Management, Market Competition and Organizational Performance. The British Accounting Review. 36(2): 155-172.
- [56] Tang J. 2006. Competition and Innovation Behavior. Research Policy. 35: 68-82.

- [57] Fung M. K. and Cheng A. 2004. Diffusion Of Off-Balance-Sheet Financial Innovations: Information Complementarity And Market Competition. *Pacific-Basin Finance Journal*. 12(5): 525-540.
- [58] Goldberg P. K. and Knetter M. M. 1999. Measuring the Intensity of Competition in Export Markets. Journal of International Economics. 47(1): 27-60.
- [59] Nunnally J., and Bernstein, I. 1978. Psychometric Theory. McGraw-Hill, New York.
- [60] García-Morales V. J., Liorens-Montes F. J. and Verdú-Jover A. J. 2006. Antecedents And Consequences Of Organizational Innovation And Organizational Learning In Entrepreneurship. Industrial Management & Data Systems. 106(1): 21-42.
- [61] Paladino A. 2007. Investigating The Drivers Of Innovation And New Product Success: A Comparison Of Strategic Orientations. Journal of Product Innovation Management. 24(6): 534-553.
- [62] Duygulu, E. and Ozeren, E. 2009. The Effect Of Leadership Style And Organizational Culture On Firm's Innovativeness. African Journal of Business Management. 3(9): 475-485.
- [63] Lin C.-Y. 2007. Factors Affecting Innovation In Logistics Technologies For Logistics Service Providers In China. Journal of Technology Management in China. 2(1): 22-37.
- [64] Premkumar G. and Roberts, M. 1999. Adoption of New Information Technologies in Rural Small Businesses. Omega. 27(4): 467-484.
- [65] Healy, J. F. 2003. Statistics: A tool for Social Research, 7th Edition, Cengage Learning, Singapore.