

## THE RELATIVE IMPORTANCE OF STRUCTURE AND CULTURE TO KNOWLEDGE MANAGEMENT

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### Abstract

Knowledge management is deemed as a consequence of organizational structure and organizational culture. Previous projects have investigated the effects of organizational structure and organizational culture on the knowledge management; but none of them have evaluated the relative importance of organizational structure and organizational culture to the knowledge management. This research attempts to re-examine the relations of knowledge management with organizational structure and organizational culture by using the multiple linear regression. Specifically, it applies the analytic hierarchy procedure to rank the comparative significance between organizational structure and organizational culture to the knowledge management. The data for analyses was obtained from 101 publicly listed firms in the Vietnamese Stock Exchange. The findings provide statistically significant support for the influences of organizational structure and organizational culture on knowledge management and the influential levels are different. This research makes some contributions. For the theoretical aspect, the findings offer new evidence on the relative importance between organizational structure and organizational culture to knowledge management, which is organizational culture more important than organizational structure in boosting the implementation of knowledge management in business. On a practical aspect, the results help business managers with a good decision in adopting knowledge management to different types of organizational structure and organizational culture.

**Keywords:** Organizational Structure, Organizational Culture, Knowledge Management.

### 1. Introduction and Purpose

Knowledge management is the process of acquiring, organizing, sustaining, using, sharing and renewing both the tacit and explicit knowledge of employees to enhance organizational performance and create value (Girard & Girard, 2015). Knowledge management also refers to a multidisciplinary approach to achieving objectives of a firm by making the best use of knowledge. In addition, knowledge management is recommended by Chen & Huang, (2007) as a critical factor in supporting and improving organizational performance. In the same year, Lakshman, (2007) regards knowledge management as an organizational capability that guides its staff to work together to generate, capture, share and leverage their collective knowledge to enhance their performance. Previous studies (Gold, et al., 2001; Lin & Lee, 2005) have defined knowledge management as the extent to which organizations are contented with the levels of their knowledge management resulting in different levels of knowledge sharing and knowledge application. According to Huynh & Soon, (2015), the knowledge management in a firm is conditional on various factors, such as organizational culture and organizational structure.

In a study of “Organizational strategy, structure, and process”, Miles, et al., (1978) identify an organization as a group of people who together work to achieve a joint objective. In order to work together efficiently, the group must find the best way to organize the work that needs to be done in order to meet the objectives of the organization. Organizations can be structured in many different ways, conditional on their goals. Every organization has a structure that clarifies the roles of organizational members in performing work, in order for everyone to understand their responsibilities to the group. Organizational structure is regarded by Chen & Huang, (2007) as a system composed of explicit and implicit institutional rules and policies designed to outline how tasks are divided, grouped and coordinated in organizations. It also determines how information flows from level to level within an organization. Organizational structure plays a vital role in organizations, as it creates an efficient system of work and communication. Further, every organization has a unique culture to make it different from the others and give it a sense of direction. It is critical for the employees to understand the culture of their organization to adjust well. Huynh & Soon, (2015) refer to organizational culture as a workplace climate that is created from the communication, cooperation, and interaction among the employees in a firm. The interaction and behaviours of employees contribute to a unique cultural environment of an organization; while Tanase, (2015) indicate that, organizational culture is an important element that drives organizations. It creates an operational environment in which every employee strives to achieve the objective that was set by the firm. The criteria based on which the employees are measured and assessed are also defined by that environment. The dynamic view proposes that organizational culture plays an important role in helping an organization cope with its business environment.

Prior studies have investigated and suggested both organizational structure and organizational culture as determinants of knowledge management (Chen and Huang 2007, Yap et al., 2010; Enayati and Ghasabeh, 2012, Erwee et al. 2012, Huynh and Soon 2014); and some of them have explored the effects of both organizational structure and organizational culture on knowledge management in the joint research model. However, no study has examined the comparative importance of organizational structure compared with organizational culture to the knowledge management. Based on the previous underpinning on the relationship among organizational structure, culture and knowledge management, in which, knowledge management is driven by organizational structure and organizational culture. This research seeks to evaluate the impact of organizational structure and organizational culture on the knowledge management in business. It particularly compares the relative importance to which the variables of organizational structure and organizational culture contribute to the knowledge management in business. In order to rank the comparative significance between organizational structure and organizational culture to the knowledge management in business, this study is the first to employ the analytic hierarchy procedure to make pair-wise comparisons between all the judgments with each other.

The practical results reveal that, both organizational structure and organizational culture statistically affect the knowledge management in business, consistent with the previous research. Furthermore, this research provides evidence on the relative importance between organizational structure and organizational culture to the knowledge management in that organizational culture more strongly impacts the knowledge management in business than organizational structure does. The remainder of this research is organized as follows. The next section is “original framework” which develops hypotheses. The “methodology” is discussed in a subsequent section; which offers the guidance for collecting and analyzing the data, followed by a section on empirical results. Then a section called “managerial implications” recommends some implications. The final section delivers some conclusions.

## 2. Original Framework

This original framework examines how adopted organizational structure affects the way an organization manages their knowledge in order to achieve their best firm performance and how knowledge management is related to organizational culture. The literature in organizational structure, organizational culture and knowledge management will be reviewed as follows. Lakshman (2007) refers to knowledge management as an organizational capability that guides its staff to work together so as to generate, capture, share, and leverage their collective knowledge to enhance their firm performance.; whereas other previous studies, such as Gold et al. (2001) and Lin and Lee (2005) recognize the knowledge management in business as the extent to which firms are contented with the adoption of their knowledge management leading to different levels of knowledge sharing and application. Additionally, drawing on Gold et al. (2001) and Lin and Lee (2005), Huynh and Soon (2014) indicate that knowledge management is evident in an organization when any of the five items below exists: (1) knowledge sharing between supervisors and subordinates, (2) knowledge sharing among colleagues, (3) knowledge sharing across the units, (4) effective management of different types of knowledge sources as well as (5) practical application of knowledge.

For organizational structure, Rogers (1995) and Chen and Huang (2007) consider it as a variable of decentralization (1), mutual adjustment(2) and integration (3). The three dimensions are explained as follows. Decentralization refers to the extent to which companies design their organization to authorize decision-making power, being able to differ from centralizing decision-making power to decentralizing decision-making power. Mutual adjustment refers to the degree the rules and procedures are formalized; and can vary, such as formalized and informalized. Integration is defined as the extent to which employees and task assignments are integrated in dealing with work such as making no integration and making integration. Chen and Huang (2007) discover that organizational structure is positively related to the sharing and adoption of knowledge. Yap et al. (2010) argue that when knowledge is applied in business, organizational structure should always be taken into account. Thus, organizational structure is considered to impact on the knowledge management. In addition, the findings of Enayati and Ghasabeh (2012) reveal that organizational structure plays an important role in the effectiveness of knowledge management implementation; while Huynh and Soon (2014) provide statistical evidence on the influence of organizational structure on the knowledge management in business. The above findings help us hypothesize the hypothesis below.

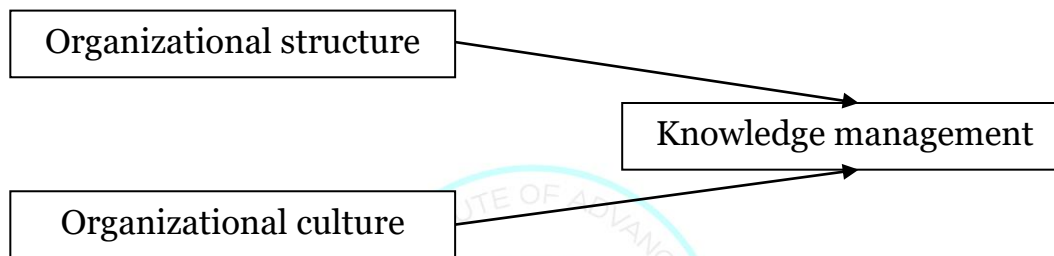
*H1: Organizational structure makes an important contribution to the knowledge management in business*

With regards to culture, Marshall (2002) defines organizational culture as values, norms and behaviors, which characterize the organization and its working environment. Marshall also refers to the attributes of organizational culture as innovative and cooperative working environments, trust, communication, and coordination among members, as well as accessibility of leadership and power relationships. It is indicated in previous studies that organizational culture affects the knowledge management, in which it brings success to organizations that implement knowledge management (Alazmi and Zairi, 2003). Organizational culture refers to innovative cooperative climate(Jaw and Liu 2003), trust, communication, and coordination among employees (Sivadas and Dwyer 2000). Moreover, Chen's and Huang's research on "how organizational climate and structure affect knowledge management" uncovers that organizational interaction considered as organizational culture positively impacts on the sharing and application of knowledge. According to Yap et al. (2010), organizational culture should be taken into consideration when knowledge management is applied to business. Organizational culture is proposed by Enayati and Ghasabeh (2012) to play a vital role in the knowledge

management. Furthermore, Magnier-Watanabe et al. (2011) suggest that knowledge management activities need to be tailored to organizational culture, while Erwee et al. (2012) find out that organizational culture affects both knowledge management strategies and process. Following them, Huynh and Soon (2014) explore the complicated link among structure, culture and knowledge management and offer statistical support for the relationship between culture and knowledge management. Grounded on the above arguments, this research conjectures the hypothesis below.

*H2: Organizational culture makes an important contribution to the knowledge management in business*

The above hypotheses will be used as underpinning knowledge to produce a proposed research model for this research. Having explained the hypotheses derived from the reviewed literature, we come to build the research model in Figure 1. Then, we would like to discuss the methodology that we apply to guide the data collection and facilitate the data analysis in the following section.



**Figure 1: Research Model**

### 3. Methodology

To achieve the above addressed objectives, we employ various procedures. First, the multiple linear regressions are applied to explore the effect of organizational structure and organizational culture on the knowledge management in business. Then, the analytic hierarchy procedure is used to rank the relative importance between organizational structure and culture to the knowledge management in business.

#### **Multiple linear regressions**

To test the research hypotheses on the influences of organizational structure and organizational culture on the knowledge management in business, we perform multiple linear regressions with the following step.

##### (1). Measurement of constructs

Knowledge management (KM) is composed of the five items, namely (1) knowledge sharing between supervisors and subordinates: KM1, (2) knowledge sharing among colleagues: KM2, (3) knowledge sharing across the units: KM3, (4) effective management of different types of knowledge sources: KM4 as well as (5) practical application of knowledge: KM5, adapted from Gold et al. (2001) and Lin and Lee (2005), Huynh and Soon (2014). A five-point scale (highly dissatisfied, dissatisfied, a little satisfied, fairly satisfied and highly satisfied) is used to evaluate these five dimensions. Organizational structure (OS) is of three types: decentralization (OS1), mutual adjustment (OS2), and integration (OS3). A five-point scale is used to assess the three types of organizational structures: (1) Decentralization ranges from 1.centralizing decision-making power to 5.decentralizing decision-making power; (2) Mutual adjustment ranges from 1.formalized to 5.informalized; (3) Integration ranges from 1.no integration to 5.integration. The types and scales are adapted from Rogers (1995), Chen and Huang (2007) and Huynh and Soon

(2014). Organizational culture (OC) consists of innovative climate (OC1), cooperative climate (OC2), trust (OC3), communication (OC4), and coordination (OC5). The five elements are measured by using a five-point scale ranging from 1. never occurred to 5. always occurred, adapted from Sivadas and Dwyer (2000), Jaw and Liu (2003) and Huynh and Soon (2014).

(2). Analytic procedures

Before the research hypotheses are tested, we applied a reliability analysis to check the properties of measurement scales and the dimensions that form the scales. The reliability analysis is utilized to evaluate the degree to which multiple measures of the same scale agree with one another (Nunnally 1978). It offers information about the links between individual items in the scale. If the link is strong, the scale will yield consistent outcomes and so is reliable. Then we employ multiple linear regressions to assess the influences of organizational structure and organizational culture on the knowledge management in business.

**Analytic hierarchy process**

To evaluate the comparative importance between organizational structure and culture to the knowledge management in business, we employ the analytic hierarchy procedure that is an instrument for multi-criteria judgment as well as for analyzing the decision-making process, which is introduced by Saaty (1980). This procedure has the subjective judgment of each judgment-maker as input and the quantified weight of each option as output. The procedure is considered as a compensatory technique that decomposes a complex judgment problem into a hierarchy. Pair-wise comparisons between all choices with each other are applied to acquire the eigenvectors and scores.

The judgment scale employed for pair-wise comparisons is displayed in Table 1. If attribute A is as equally significant in contributing to their factor as attribute B, it is rated at 1. If attribute A is absolutely more significant in contributing to their factor than attribute B, it is rated at 5. If attribute B is absolutely less significant in contributing to their factor than attribute A, it is valued at 1/5. It is similar for “more significant- 3” or “intermediate values- 2 and 4”. There are three steps to carry out the procedure.

Table 1: The Saaty evaluation

Strength of Significance	Classification	Explanation
1	Equally critical	Two factors contribute equally to the target.
3	More critical	Experience and judgment favor one over the other.
5	Absolutely more critical	The evidence preferring one to the other is of the highest possible validity.
2, 4	Intermediary values	When compromise is required

*(1) Stratification of the framework*

A factor is decomposed into its elements. Arranging all the components in a hierarchy recommend an overall view of the intricate links and helps to assess whether elements in each level have the same magnitude in order that they can be exactly judged. A component in a given level serves as an attribute for comparison. A hierarchy in this research includes two levels. Level 1 consists of ‘Organizational structure’ and ‘Organizational culture’. Level 2 is comprised of decentralization, mutual adjustment and integration (3 elements) on ‘Organizational structure’; and innovative climate, cooperative climate, trust, communication and coordination (5 elements) on ‘Organizational culture’.

### (2) Pair-wise comparison

For each pair, decision-makers are asked to assess how significant element A is compared to element B. Each of these judgments is assigned a number from 1 to 5. Firstly, 'Organizational structure' and 'Organizational culture' are compared with each other. Then, three elements of organizational structure are compared with one another. Simultaneously, five elements of organizational culture are also compared with one another. Finally, the matrices of the judgments are established. Those matrices decide the eigenvectors of the elements within each level, called the local eigenvectors.

### (3) Obtainment of the relative eigenvectors

The relative eigenvectors of elements are estimated from the above matrices. To check the consistence of judgments, a consistency ratio (CR) is calculated to measure how consistent the judgments are. The CR is a ratio of consistency index (CI) to random index (RI<sub>n</sub>); where the RI<sub>n</sub> is obtained from Table 2 (introduced by Saaty 1980) depending to its value of n, while the CI is equal to  $(\lambda_{\max} - n) / (n - 1)$ . The value of n is the number of elements needed to be judged; whereas the  $\lambda_{\max}$  is the maximum eigenvalue. The CR and CI should be less than 0.1, the level recommended by Saaty (1980). Finally, after the local weights at each level of the hierarchy are obtained, the global eigenvectors are computed as follows.

$$w_i = \sum_{k=1}^n (a_{ik} b_k)$$

Where:  $w_i$  is the global eigenvector of the  $i^{th}$  component  
 $a_{ik}$  is the local eigenvector of the  $i^{th}$  component to the  $k^{th}$  factor  
 $b_k$  is the local eigenvector of the  $k^{th}$  factor

Table 2: Random index

n	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
RI <sub>n</sub>	0.00	0.00	0.58	0.90	1.12	1.24	1.32	1.41	1.45	1.49	1.51	1.48	1.56	1.57	1.59

### Data collection

The economic growth of the Asia is currently the fastest over the world, especially in emerging economies of the Southeast Asia, including Vietnam. Vietnam is selected as a case study for analysis in this study, because it is one of the fastest growing markets in the Southeast Asia. The sample for this study is a total population of 1130 firms which are publicly listed in the Vietnamese Stock Exchanges. There are 13 measured variables in this research, so a sample of 130 observations (=13\*10), stipulated by Hair et al. (2010), is needed. For a sufficient sample of usable responses, a survey of 195 publicly listed firms is conducted (an increase by 50% compared to the required sample size of 130). For each firm, we get in touch with a manager involved in knowledge management to fill a questionnaire. Of the 130 questionnaires that were handed out, there are only 101 which offered positive outcomes with useful answers. Finally, we acquired 101 useful replies with sufficiently required information for this research.

## 4. Empirical Results

### Test of the research hypotheses

The outcomes of the reliability analysis are exhibited in Table 3, which is built to explicate how we established the reliability of the 3 constructs (Organizational structure: OS; Organizational culture: OC; Knowledge management: KM) for this project. The findings from the reliability analysis are used to test the scale reliability of the data. The results show that thirteen items, which make up the three variables, achieve their item-total correlations of over 0.5, the preferable level recommended by (Nunnally, 1978). Additionally, all the Cronbach alphas surpass 0.7 as the recommended level by (Nunnally, 1978). These findings show that the

constructs satisfy the internal reliability. Therefore, it can be ensured that our data has the adequately reliable constructs. Before further analyses, the composite variables are computed by taking an average of their own dimensions (OS1, OS2 and OS3 for OS; OC1, OC2, OC3, OC4 and OC5 for OC; KM1, KM2, KM3, KM4 and KM5 for KM). The composite variables OS, OC and KM are entered into linear regression analysis.

Table 3: Reliability Analysis

Constructs	Item	Item-total correlation	Cronbach Alpha
OS	OS1	0.689	0.837
	OS2	0.703	
	OS3	0.708	
OC	OC1	0.672	0.899
	OC2	0.803	
	OC3	0.855	
	OC4	0.707	
	OC5	0.747	
KM	KM1	0.579	0.836
	KM2	0.729	
	KM3	0.654	
	KM4	0.755	
	KM5	0.539	

Table 4: Regression analysis

Explained Variable	Explanatory Variable	Coefficients	Std. Error	t-statistics	Sig.t	R <sup>2</sup>	F	Sig.F
KM	Constant	1.685	0.277	6.085	0.000	0.334	24.619	0.000
	OS	0.218	0.075	2.895	0.005			
	OC	0.370	0.077	4.814	0.000			

The results obtained from the linear regression analysis are presented in Table 4, indicating that 33.4% of total variation of the knowledge management is explained by organizational structure and organizational culture. The research model achieves the value of F of 24.619 at the 1% significance level; suggesting that our research model is statistically significant and gets a good fit to the data. Furthermore, the figures from Table 4 also provide statistical support for the hypotheses H1 and H2 at the 1% significance level (with significances of 0.005 for organizational structure and 0.000 for organizational culture). The influence of organizational structure on the knowledge management in business is positive with the coefficient of 0.218; while the effect of organizational culture on the knowledge management in business is also positive, but with the coefficient of 0.370, which implies that organizational culture can put a stronger impact on the knowledge management than organizational structure does. The relative effect between organizational culture and organizational structure on the knowledge management is not apparent with the regression analysis, therefore in order to comprehensively investigate the relative importance of organizational culture and organizational structure on the knowledge management, we employ the analytic hierarchy procedure and the results are discussed as follow.

### **Evaluation of the relative importance of elements**

Table 5: Local eigenvector for Knowledge management

	OC	OS	The 2 <sup>nd</sup> root of values	Eigenvector	New Vector	New Vector/Eigenvector
OC	1.00	3.13	1.77	0.76	1.52	2.00
OS	0.32	1.00	0.57	0.24	0.48	2.00
Total			2.34	1.00		4.00

Where:

Eigenvector:  $w_j = \text{the } 2^{\text{nd}} \text{ root of value}_j / \text{the total of the } 2^{\text{nd}} \text{ root of values}$

New vector:  $[v_{ij}] = [a_{ij}] \times [b_{ij}]$

$[a_{ij}]$  is the matrix of the 2 components with 2 columns and 2 rows

$[b_{ij}]$  is the matrix of the Eigenvectors with 1 column and 2 rows

$\lambda_{\text{max}} = \text{Sum}(\text{New Vector}/\text{Eigenvector})/2 = 4.00/2 = 2.00$

$CI = (\lambda_{\text{max}} - n)/(n-1) = (2.00 - 2)/(2-1) = 0.00$ , so  $CR = CI/RI_n = 0.00$

With the sample of 101 firms, taking an average for each component and employing the Saaty method, we gain component eigenvectors of each level as given in Tables 5, 6 and 7. The results from Table 5 shows that organizational culture is slightly over three time more important in explaining the knowledge management than organizational structure is (0.76 compared to 0.24). It is calculated from Table 5, CI is 0.00 and CR is also 0.00 far less than 0.1, the accepted limit proposed by Saaty (1980). The consistency test of the eigenvectors is satisfied; as a result those eigen vectors be able to be used for further analyses.

Table 6 illustrates the relative importance between components to organizational structure; whereas Table 7 describes the relative importance between components to organizational culture. Table 6 demonstrate that the research model achieves CI of 0.00 and CR of 0.00 that are far smaller than 0.1, the proposed limit by Saaty (1980). The consistency test of this analysis is entirely met. Consequently those eigenvectors are suitable for following analyses. The numbers from Table 7 indicate that CI obtains the value of 0.008; while CR gets the value of 0.007; which imply that the analysis is reliable for use in the following steps.

Table 6: Local eigenvector for Organizational structure

	OS1	OS2	OS3	The 3 <sup>rd</sup> root of values	Eigenvector	New Vector	New Vector/Eigenvector
OS1	1.00	1.91	1.99	1.56	0.49	1.48	3.02
OS2	0.52	1.00	1.14	0.84	0.26	0.77	2.96
OS3	0.50	0.88	1.00	0.79	0.25	0.75	3.00
Total				3.19	1.00		8.98

Where:

Weight:  $w_j = \text{th } 3^{\text{rd}} \text{ root of value}_j / \text{the total of the } 3^{\text{rd}} \text{ root of values}$

New vector:  $[v_{ij}] = [a_{ij}] \times [b_{ij}]$

$[a_{ij}]$  is the matrix of the 3 components with 3 columns and 3 rows

$[b_{ij}]$  is the matrix of the Eigenvectors with 1 column and 3 rows

$\lambda_{\text{max}} = \text{Sum}(\text{New Vector}/\text{Eigenvector})/3 = 8.98/3 = 3.00$

$CI = (\lambda_{\text{max}} - n)/(n-1) = (3.00 - 3)/(3 - 1) = 0.00$

With  $n=3$ , based on Table 2,  $RI_n$  is 0.58; hence,  $CR = CI/RI_n = 0.00$



Table 7: Local eigen vector for Organizational culture

	OC1	OC2	OC3	OC4	OC5	The 5 <sup>th</sup> root of values	Eigenvector	New Vector	New Vector/ Eigenvector
OC1	1.00	1.07	2.13	2.25	3.67	1.80	0.32	1.60	5.00
OC2	0.94	1.00	2.04	2.07	2.93	1.59	0.29	1.46	5.03
OC3	0.47	0.49	1.00	1.14	2.12	0.86	0.15	0.79	5.27
OC4	0.44	0.48	0.88	1.00	2.02	0.82	0.15	0.73	4.87
OC5	0.27	0.34	0.47	0.50	1.00	0.48	0.09	0.45	5.00
Total						5.55	1.00		25.17

Where:

Weight:  $w_j = \text{the } 5^{\text{th}} \text{ root of value}_j / \text{the total of the } 5^{\text{th}} \text{ root of values}$

New vector:  $[v_{ij}] = [a_{ij}] \times [b_{ij}]$

$[a_{ij}]$  is the matrix of the 5 components with 5 columns and 5 rows

$[b_{ij}]$  is the matrix of the eigenvectors with 1 column and 5 rows

$\lambda_{\max} = \text{Sum}(\text{New Vector}/\text{Eigenvector})/5 = 25.17/5 = 5.034$

$\text{CI} = (\lambda_{\max} - n)/(n-1) = (5.034 - 5)/(5 - 1) = 0.008$

With 'n'=5, based on Table 2,  $\text{RI}_n$  is 1.12; hence,  $\text{CR} = \text{CI}/\text{RI}_n = 0.007$

The results derived from the local and global eigenvector calculation is offered in Table 8. The findings show that the local rank of the two constructs “organizational structure” and “organizational culture”, in that organizational culture is ranked stronger than organizational structure in affecting the knowledge management. Table 8 also displays the local and overall ranks of the “organizational culture” and “organizational structure”. For organizational culture, innovative climate (OC1) is ranked the first and cooperative climate (OC2) comes the second; whereas trust (OC3) and communication (OC4) both take the third position. And finally, coordination (OC5) stands at the weakest position. With regards to organizational structure, decentralization (OS1) takes the first, followed by mutual adjustment (OS2), and finally integration (OS3) comes to the last.

Table 8: Local and global eigenvectors and ranks

Factors	Local Eigenvectors	Local Rank	Components	Local Eigenvectors	Local Rank	Global Eigenvectors	Overall Rank
Organizational culture	0.76	1	OC1	0.32	1	0.25	1
			OC2	0.29	2	0.22	2
			OC3	0.15	3	0.11	4
			OC4	0.15	3	0.11	4
			OC5	0.09	4	0.07	5
Organizational structure	0.24	2	OS1	0.49	1	0.12	3
			OS2	0.26	2	0.06	6
			OS3	0.25	3	0.06	6

For the relative importance of components to the knowledge management, innovative climate (OC1) and cooperative climate (OC2) are graded as the first and second; while decentralization (OST1) arrives at the third. Trust (OC3) and communication (OC4) take the same position of the fourth next to the fifth of coordination (OC5). Mutual adjustment (OST2) and integration (OST3) both take the sixth position or the last.

## **5. Managerial Implications**

This research provides management researchers with an insight into the relative importance between organizational structure and organizational culture on the knowledge management in business in which overall organizational culture is more important than organizational structure in leading to the implementation of knowledge management in business. For specific elements, decentralization of organizational structure is the third most important element to the knowledge management in business just behind innovative climate and cooperative climate of organizational culture. The findings are also helpful to executive managers by offering them with better understand of the comparative effects between organizational structure and organizational culture on the knowledge management in business. Thus, they can make better decisions on implementing the knowledge management in business, which will result in the best possible organizational performance.

### **Conclusion**

The objective of this research is to investigate the effects of organizational structure and organizational culture on the knowledge management in business; especially evaluate the comparative importance of those two factors to the knowledge management in business that has ignored in prior knowledge of management. To rank the comparative contributions between organizational structure and organizational culture to the knowledge management, this research employs the analytic hierarchy procedure to make pair-wise comparisons between all the judgments with one other. The findings offer statistical support for the influences of organizational structure and organizational culture on the knowledge management in business, consistent with the previous research. Importantly, this study evidences that the importance between organizational structure and organizational culture to the knowledge management is different in which organizational culture is more vigorous in affecting the knowledge management in business than organizational structure.

It is acknowledged that there are some limitations in this research. Our data were based on single informants from organizations; so bias problem can exist. Future studies could employ a multi-informant research design to minimize the bias problem. We conducted this research in Vietnam as a developing country, however the results are expected for other economies; but business conditions among different economies is often different, therefore one should generalize the findings derived from this research with care.

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