THE RELATIONSHIP BETWEEN ORGANIZATIONAL CULTURE AND INNOVATION THROUGH VIETNAMESE EMPLOYEE'S PERSPECTIVE

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Abstract:

In a globalized business setting, a national culture that impacts strongly innovation is of utmost importance especially in developing countries that expect to improve income levels and compete globally. Since organizational culture is embedded in national culture, studying culture at the organizational level is apt especially when organizational culture and innovation have been found to increase performance. This study examines relationship between organizational culture and innovation through Vietnamese employees' perspective. More specifically, cultural traits of Empowerment, Team Orientation, Capability Development, Creating Change, Customer Focus and Organizational Learning on Innovation are considered in this paper. The respondents include 130 Vietnamese employees in both the private and public sectors. The results showed that Organizational learning, capability development, team orientation, creating change were found to be significant contributors to Innovation new to the organization and Innovation new to the industry. Implications and future recommendations are also discussed in this paper.

Keywords: organizational culture, innovation, Vietnamese employees.

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1. Introduction

Since the mid-1980s, through the "Doi Moi" policy, Vietnam has made a shift from a highly centralized planned economy to a socialist oriented market economy. Over that period, the economy has experienced rapid growth. At present, Vietnam is in a period of being integrated into the global economy. However, almost all Vietnamese enterprises are small and medium enterprises and lack of competitiveness, especially in this global market. In order to take advantage of opportunities and overcome challenges in the market in long term, Vietnam firms need to set focus on the root problems, especially innovation. In fact, innovation is central to building a proactive and entrepreneurial organization (Johannessen

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et al., 2001) that has become widely recognized as a key to competitive success (Francis and Bessant, 2005).

Besides, organizational culture is an aspect that appears in each internal company in order to enhance the work performance and create environment for innovation activities. Some researchers showed that strong cultures ranked higher in new product development and expected to grow more in the future, based on growth assumptions in their stock prices. A balanced culture on the other hand, can help an organization be innovative (Ashley and Bryan, 2009). Some have also found that traits of involvement and adaptability are important to execution and implementation resulting in innovation (Denison, 1990; Denison and Mishra, 1995; Kotter and Heskett, 1992; Sorenson, 2002).

In recent years, as my best understandings, there are plenty of researches about innovation on companies deeply, but in Vietnam, it is very little. There is less innovation research on particular business to test the effects of innovation on firm performance. Therefore, the main purpose of the research is to identify the influence of organizational culture on innovation. More specifically, this study based on Denison's model to analyze influence of organizational culture on innovation through Vietnamese employee's perspective and then provides the recommendations and implications for academics and practitioners based on the analyses.

2. Literature review

Organizational culture

Organizational culture is the set of the values, beliefs, and behavior patterns that represent the core identity of an organization and has a significant role in making up behavior of employees (Rashid, 2003). In other words, it includes values, concepts, and patterns, which are commonly learned and accepted and institutionalized by members of a group working in an organization (Lawson and Shen, 1998). Such a culture gives the members of an organization a unique identity and it contributes to increase group commitment and consolidates their social system.

Organizational culture is a complex phenomenon; nevertheless, it has an important effect on accelerating the progress trend and renovation of an organization. Thus, an organization will actually face with various problems such as organization conflict, non-integrity of organization and decreased performance if it does not consider its organizational culture and the dimensions as well as the indicators of it adequately. Hence, familiarity with organizational culture helps the managers to capture the strengths by understanding the atmosphere dominating the organization and taking necessary actions for predicating the weaknesses (Rahimnia and Alizadeh, 2008).

Organizational culture includes an organization's expectations, experiences, philosophy, and values that hold it together, and is expressed in its self-image, inner workings, interactions with the outside world, and future expectations. It is based on shared attitudes, beliefs, customs, and written and unwritten rules that have been developed over time and are considered valid.

In this study, the Denison organizational culture model as well as its definition of organizational culture is applied. Denison (1996) argued that behavior being the

outcome of underlying assumptions, values and beliefs, drives results. Behavior being the most obvious dimension of culture is a practical and appropriate approach to explore when one's research interest is on how culture drives results. Here, we want to explore one particular behavior, which is innovation, which when applied effectively, especially in processes, brings huge strategic gains (Rosenbush, Brinkmann and Bausch, 2011).

Innovation

Innovation is widely regarded as a critical source of competitive advantage in an increasingly changing environment (Dess and Picken, 2000; Tushman and O'Reilly, 1996). According to management scholars, innovation capability is the most important determinant of firm performance (Mone et al., 1998). One of the primary definitions of innovation was coined by Schumpeter in the late 1920s. According to Schumpeter, innovation is reflected in novel outputs: a new good or a new quality of a good; a new method of production; a new market; a new source of supply; or a new organizational structure, which can be summarized as 'doing things differently'. West and Farr (1990) defined innovation as "the intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, group, organization or wider society". Rogers (1995) defines innovation as an 'idea, practice or object that is perceived to be new by an individual or other unit of adoption'.

Apart from introducing new and improving existing technologies and processes, enhancing management practices are also viewed as innovation (Johannessen et al., 2001).

Innovation is also regarded as newness, as suggested by Johannessen et al., (2001) in which case these researchers inferred, firstly, newness provides the beginning of employing innovation concepts. Secondly, newness can be an indicator of establishing organizational competitive advantages that are sustainable when intellectual capital is the outcome that inspire creativity and improve organizational performance. This study considers innovation as a process that involves the generation, adoption, implementation and incorporation of new ideas, practices or artefacts within the organization (Van de Ven et al., 1989).

In addition, innovation is also classified in two types as radical and incremental, according to its degree of novelty (Dewar and Dutton, 1986). Radical innovation is doing something different, incremental innovation is doing what we do but better.

Organizational culture and innovation

Since studies have found innovation for improving performance (Rosenbush, Brinkmann and Bausch, 2011) organizations have been aggressively instilling innovation in its culture, especially high-tech companies. Nonetheless, even in non-tech industries such as the insurance industry, Lee and Yu (2004) found that an innovation-orientated culture helps insurance firms improve growth in business.

The organization is called innovation that means organizations do not only give creative ideas, instead that ideas must be implemented. However successful implementation of creative

ideas demand for a certain set of behaviors, norms and values which differ from merely producing creative ideas. In other words, generation of creative ideas alone does little for the organization, what is highly important is the effective implementation of those creative ideas (Flynn and Chatman, 2001). In addition, high involvement and adaptive cultures help foster creativity in terms of generation of ideas and implementation (Denison, 1996).

Based on the various cultural dimensions of Denison model, this study explored cultural dimensions that would promote innovation and in particular, within the setting of Vietnamese firms. According to Denison model, there are six cultural dimensions including empowerment, team orientation, capability development, creating change, customer focus and organizational learning (Figure 1).

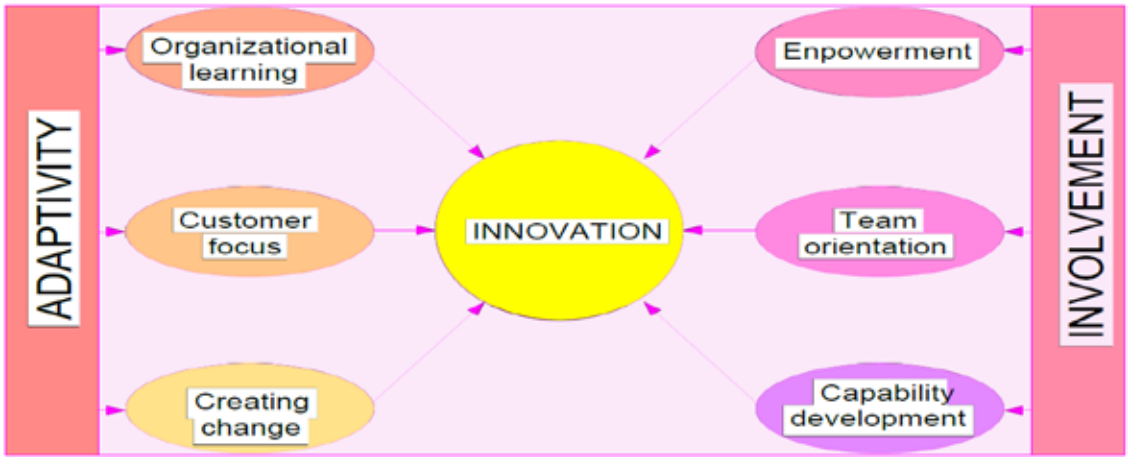

Figure 1: Conceptual framework based on Denison (1996)

Empowerment enables individuals to have the authority, initiative, and ability to manage their own work, which creates a sense of ownership and responsibility toward the organization (Denison, 1996). The results seen in an empowered workforce are higher quality products and services, better decision making, and better problem solving which, in turn, result in greater organizational effectiveness, which includes innovation (Denison, 1984)

***Hypotheses 1 (H1)**: There is a substantial relationship between empowerment and innovation.*

Team orientated culture emphasizes cooperation toward common goals for which all employees feel mutually accountable. Co-operate teams are identified by some researchers as having an influence on the degree to which creativity and innovation take place in organizations. Well established working teams which allow for diversity and individual talents that complement one another should promote creativity and innovation (Arad et al., 1997).

***Hypotheses 2 (H2)**: There is a substantial relationship between team orientation and innovation.*

Capability development is another trait of organization that helps innovation. An organization that continually invests in the

development of employees' skills tends to stay competitive and meet on-going business needs (Denision and Mishra, 1995). This is seen as shaping the building blocks of key resources in organizations. Internally developing human capital helps firms realize the benefits of these employees in terms of their value creating potential.

Hypotheses 3 (H3): *There is a substantial relationship between capability development and innovation.*

A culture that is flexible and agile adaptably translates the demands of the organizational environment into action. An adaptable culture sees employees taking risks, learning from their mistakes, and has the capability and experience at creating change (Senge, 1990). An organization that creates change is able to read the business environment, react quickly to current trends, and anticipate future changes (Denison, 1995).

Hypotheses 4 (H4): *There is a substantial relationship between creating change and innovation.*

Customer focus is another cultural dimension that is important for innovation. Customer focusing organizations tend to learn ways to understand and react to their customers and anticipate customer's future needs (Denision and Mishra, 1995).

Hypotheses 5 (H5): *There is substantial relationship between customer focus and innovation.*

Most studies consider that learning takes new ideas into the organization, increases the capacity to understand new ideas, and strengthens creativity and the ability to spot new opportunities. In other words, it favors the presence of innovation (Damanpour, 1991). Moreover, the organization receives, translates, and interprets signals from the environment into opportunities for encouraging innovation, gaining knowledge, and developing capabilities.

Hypotheses 6 (H6): *There is a substantial relationship between organizational learning and innovation.*

3. Research methodology

This study obtained data from questionnaire survey that consisted of two main contents. The first and second ones cover statements of organizational culture and innovation variables, respectively. The organizational culture questionnaire, which was adopted from Denison (1996) comprised of six dimensions (Empowerment, Team orientation, Capability development, Creating change, Customer focus, Organizational learning) with total of 30 items. The innovation questionnaire was adopted from Johannessen et al. (2001), which comprises of 12 items to assess the innovation level of that organization. The innovation variable includes two dimensions, namely innovation perceived to be new to the organization and innovation perceived to be new to the industry. Detailed information of all items or variables is in Table 1 below. Both the organizational culture and innovation measures used a 5-point Likert scale – from 1 – Strongly Disagree to 5 – Strongly Agree.

This study used convenient sampling method in which the respondents comprised of part-time MBA students of University of Economics and Business, Vietnam National University. The MBA students are ones who are working for different organizations of both

private and public. They can be employees or managers who study MBA of the University to improve their knowledge and skills. Due to adoption of scale measurement confirmed from previous studies (Denison, 1996; Johannessen et al., 2001), the questionnaire was smoothly translated into Vietnamese without need of a pilot test. The questionnaire survey was conducted during March, 2014. About 200 copies of questionnaires were sent out to the MBA students at the university. The response rate was 65% that is quite high. Therefore, the analysis sample for this study was 130. Analysis methods were used in this paper including reliability, factor analysis and multiple regressions to test all these hypotheses. The data was analyzed using the SPSS software version 18.0.

Table 1. Variables of organizational culture and innovation

Denote	Label	Explanation
Empowerment		
E1	Empowerment 1	Most employees are highly involved in their work
E2	Empowerment 2	Decisions are usually made at the level where the best information is available
E3	Empowerment 3	Information is widely shared so that everyone can get the information he or she needs when it's needed
E4	Empowerment 4	Everyone believes that he or she can have a positive impact
E5	Empowerment 5	Business planning is ongoing and involves everyone in the process to some degree
Team orientation		
T1	Team orientation 1	Cooperation across different parts of the organization is actively encourages
T2	Team orientation 2	People work like they are part of a team
T3	Team orientation 3	Team work is used to get work done, rather than hierarchy
T4	Team orientation 4	Team are our primary building blocks
T5	Team orientation 5	Work is organized so that each person can see the relationship between his or her job and the goals of the organization
Capability development		
CD1	Capability development 1	The ways things are done is very flexible and easy to change
CD2	Capability development 2	We respond well to competitors and other changes in the business environment
CD3	Capability development 3	New and improved ways to do work are continually adopted

CD4	Capability development 4	Attempts to create change usually meet with resistance
CD5	Capability development 5	Different parts of the organization often cooperate to create change
Creating change		
CC1	Creating change 1	The ways things are done is very flexible and easy to change
CC2	Creating change 2	We respond well to competitors and other changes in the business environment
CC3	Creating change 3	New and improved ways to do work are continually adopted
CC4	Creating change 4	Attempts to create change usually meet with resistance
CC5	Creating change 5	Different parts of the organization often cooperate to create change
Customer focus		
CF1	Customer focus 1	Customer comments and recommendations often lead to changes
CF2	Customer focus 2	Customer input directly influences our decisions
CF3	Customer focus 3	All members have a deep understanding of customer wants and needs
CF4	Customer focus 4	The interests of the customer often get ignored in our decisions
CF5	Customer focus 5	We encourage direct contact with customers by our people
Organizational learning		
OL1	Organizational learning 1	We view failure as an opportunity for learning and improvement
OL2	Organizational learning 2	Innovation and risk taking are encouraged and rewarded
OL3	Organizational learning 3	Lots of things" fall between the cracks"
OL4	Organizational learning 4	Learning is an important objective in our day-to-day work
OL5	Organizational learning 5	We make certain that the: right hand knows what the left hand is doing
Incremental innovation: Has your company made changes during the last three years that were perceived to be new for the company, within the following areas??		

II1	Incremental innovation 1	New products
II2	Incremental innovation 2	New services
II3	Incremental innovation 3	New methods of production
II4	Incremental innovation 4	Opening new markets
II5	Incremental innovation 5	New sources of supply
II6	Incremental innovation 6	New ways of organizing
Radical innovation: Has your company made changes during the last three years that were perceived to be new to the industry in which the company operates, within the following areas?		
RI1	Radical innovation 1	New products
RI2	Radical innovation 2	New services
RI3	Radical innovation 3	New methods of production
RI4	Radical innovation 4	Opening new markets
RI5	Radical innovation 5	New sources of supply
RI6	Radical innovation 6	New ways of organizing

4. Research results

Data description

Table 2. Demographic profile of respondents

Characteristic	N	Percentage
Gender of responders		
Male	59	45.4
Female	71	54.6
Total	130	100
Age (years)		
20-29	64	49.2
30-39	50	38.5
40-49	12	9.2
Over 50	4	3.1
Type of organization		
State ownership company	33	25.4
Partnership	2	1.5
Limited liability company	49	37.7
Private	10	7.7
Joint stock company (JSC)	34	26.2
Joint venture company (JVC)	2	1.5
Current job position		
Director	1	0.8
CFO	5	3.8
Engineer	15	11.5
Banker	9	6.9
Employees	68	52.3
CEO	10	7.7
Accountant/administrator	22	16.9

The profile of respondents is showed in Table 2, it can be seen from Table 1 that the number of age between 20 and 29 occupies a largest percentage (49.2%); The second position is the age of 30-39 (38.5%); Over 50 only keep 3.1%. Most of the respondents

are belonging to Limited liability Company (37.7%), while type of organization of partnership and Joint venture Company make up same percentage of 1.5. Similarly, current job position has also the largest number of employees (52.3%).

Table 3. Descriptive analysis

	Mean	Std. Deviation
Organizational learning	3.25	.86
Customer focus	3.43	.57
Capability development	3.03	.74
Team orientation	3.34	.67
Creating change	3.45	.75
Empowerment	3.56	58
Incremental innovation	2.76	.65
Radical innovation	2.74	65

As Table 3 indicated, organizational culture scores for six components ranges from 3.5 to 3.99. Employees assessed organizational culture at a fairly high level. Meanwhile, mean score for radical innovation of 2.76 is slightly higher than that of incremental innovation, which is 2.74

Table 4. Reliability statistics of the variables

Variables	Items	Cronbach's Alpha
Empowerment	5	0.762
Team orientation	5	0.883
Capability development	5	0.887
Creating change	5	0.868
Customer focus	5	0.879
Organizational learning	5	0.924
Incremental innovation	6	0.860
Radical innovation	6	0.863

Table 5. Exploratory Factor Analysis

	Component					
items	1	2	3	4	5	6
OL5	0.981					
OL1	0.857					
OL2	0.855					
OL3	0.839					
OL4	0.832					
CF4		0.931				
CF5		0.889				
CF2		0.761				
CF1		0.74				
CF3		0.738				
CD5			0.947			
CD3			0.817			
CD2			0.798			
CD1			0.762			
CD4			0.702			
T5				0.904		
T4				0.855		
T3				0.771		
T1				0.758		
T2				0.649		
CC5					0.898	
CC3					0.89	
CC4					0.863	
CC1					0.669	
CC2					0.614	
E4						0.759
E2						0.713
E3						0.702
E1						0.657
E5						0.594

Table 4 shows that Cronbach's Alpha coefficients of all variables are also greater than 0.7 and thus these scales are reliable for next analyses. KMO test and Bartlett's test were examined before fulfilling factor analysis (EFA). The KMO index ranges from 0 to 1, with 0.5 suggested as the minimum value for a good factor analysis (Tabachnick and Fidell, 2001). After using EFA (Table 5), results showed six factors of organizational culture variables and two factors for incremental innovation, and radical innovation.

Regression results for incremental innovation

Regression results for incremental innovation shows in Table 6 R square of 0.334 that means model explains 33.4% of variance in incremental innovation. Table 7 shows that variables including *customer focus* and *empowerment* are not statistically significant at 5%, thus these hypotheses (H1 and H5) are rejected. The other variables (hypotheses H2, H3, H4, H6) have values of significances that are smaller than 0.05 and thus they are accepted. From standardized coefficients values, they reveal strong or low impact of organizational culture on innovation among variables. It can be seen that organizational learning and team orientation will perform a stronger contribution than other variables to explaining innovation

Table 6. Standard Multiple Regression between organization culture and incremental innovation

Model	R	R Square	Adjusted R Square	F	Sig.
1	.578[a]	.334	.302	12.804	.000[a]

a A pendent variable: incremental innovationn
Dependent variable: incremental innovation

Regression results for radical innovation

Regression results for radical innovation shows in Table 8 R square of 0.384 that means model explains 38.4% of variance in radical innovation. Table 9 also shows that variables including *customer focus* and *empowerment* are not statistically significant at 5%, thus these hypotheses (H1 and H5) are rejected. The other variables representing hypotheses H2, H3, H4, H6 have values of significances that are smaller than 0.05 and thus they are accepted. From standardized coefficients values, it also can be seen that organizational learning and team orientation will perform a stronger contribution than other variables to explaining the radical innovation

Table 7. Coefficients between organization culture and incremental innovation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.454	.436		-1.042	.299
Organizational learning	.176	.057	.232	3.095	.002
Customer focus	.118	.091	.103	1.300	.196
Capability development	.181	.074	.206	2.438	.016
Team orientation	.219	.084	.226	2.595	.011
Creating change	.146	.069	.169	2.111	.037
Empowerment	.123	.094	.110	1.304	.195

Table 8. Standard Multiple Regression between organization culture and radical innovation

Model	R	R Square	Adjusted R Square	F	Sig.
1	.620a	.384	.354	10.281	.000a

a A pendent variable: incremental innovationn Dependent variable: radical innovation

Table 9. Coefficients between organization culture and radical innovation

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	-.542	.421		-1.289	.200
Organizational learning	.213	.055	.280	3.871	.000
Customer focus	.065	.088	.056	.742	.459
Capability development	.164	.072	.185	2.280	.024
Team orientation	.257	.081	.264	3.154	.002
Creating change	.201	.067	.231	3.006	.003
Empowerment	.096	.091	.085	1.053	.294

In conclusion, there are four hypotheses accepted – organizational learning, team orientation, capability development and creating change, which have positive impact on both incremental and radical innovation (Table 10) . Therefore, this paper would provide a partial support for the relationship between organizational culture and innovation through employee's perspective.

Table 10. Summary of Hypotheses

Hypotheses	Results
H1: Empowerment has positively significant impact on innovation	Not supported
H2: Team orientation has positively significant impact on innovation	Fully supported
H3: Capability development has positively significant impact on innovation	Fully supported
H4: Creating change has positively significant impact on innovation	Fully supported
H5: Customer focus has positively significant impact on innovation	Not supported
H6: Organizational learning has positively significant impact on innovation	Fully supported

Findings and discussions

The findings of this study showed that four variables over six ones were related to innovation – team orientation, creating change, capability development, and organizational learning. Hence our statistical results provided a partial support for the relationship between organizational culture and innovation of Vietnamese employees in this study. These findings did not totally support earlier studies, which found organizational culture to be

positively associated with innovation (Ashley and Bryan, 2009). One possible explanation is that majority of respondents came from local firms, especially 33% state-owned firms, compared to joint venture companies of only 2%. One can anticipate that organizations with foreign factors, especially MNCs are generally more aggressive in developing innovation as opposed to locally-owned companies. Foreign firms are superior to Asian companies in product and process innovation and technological development (Luo, 2001). They have been more innovative, transferred more technologies to local firms, and have made greater commitments to quality control and adapting technology to suit the needs of local consumers (Luo, 2001). Local companies, by contrast, generally make fewer commitments of product and market development in the local market and tend to produce more labor-intensive products.

From the findings, significant correlations exist between creating change, organizational learning with innovation, respectively. The dimensions of Creating Change and Organizational Learning fall under the category of adaptability of Denison's model. Highly adaptive organizations respond to external demands by actively creating changes which at the same time involve some risks that they willingly take and when faced with obstacles learn to find ways to go around it. In situations where mistakes are made, highly adaptive cultures view them as feedback and learn from it to respond to demands from the external environment. Obviously in such a culture, the organization is in a better position to continually respond to and meet the demands of its customers, which is part of innovation. Hence organizations that insist on cultures with strong adaptability usually experience sales growth and increased market share (Denison and Mishra, 1995). In addition, the dimensions of Team orientation and Capability development fall under the category of involvement. Highly involved organizations create a sense of ownership and responsibility. This sense of ownership grows a greater commitment to the organization and an increased capacity for autonomy.

Conclusion and implications

This paper focused on the relationship between organizational culture and innovation through Vietnamese employee's perspective. Particularly, employees came from many fields in Vietnamese organizations and they were studying MBA level at UEB. 200 questionnaires were sent to MBA students. After using EFA that still kept 42 items of both organizational culture and innovation, these items were divided by eight factors in which six factors were organizational culture and two independent factors came from innovation.

Implications for academics

Previously, many researchers have ever investigated about relationship between organizational culture and innovation; nonetheless, in Vietnam it is quite new for scholars to perform this study. Especially, this study applied Denison's model to examine the relationship between organizational culture and innovation. Accordingly, this study provides extra new evidence about relationship between organizational culture and innovation in Vietnam. These results may be good references for academics in Vietnam and it can provide empirical evidence for the importance of organizational culture in

predicting innovation despite the fact that the proposed framework was partially validated.

Implications for practitioners

The results showed that out of six independent variables of organizational culture, four factors *Organizational learning, Capability development, Team orientation and creating change* are statistically significant for innovation. Accordingly, some implications for practitioners will be given:

First of all, importance of organizational learning and creating change show that organization should improve activities of receiving, translating, and interpreting signals from the environment into opportunities for encouraging innovation, gaining knowledge, and developing capabilities.

Secondly, team orientation is the second significant factor to innovation. Team orientation will debate extra new ideas from supporting of employees, and organizations can apply their presentations as well as develop comprehensive employee's skills. Consequently, organizations should rely on team effort to get work done and improve innovation.

Another considerable factor to innovation is creating change. Organizations should focus on creating adaptive ways to meet changing needs and welcome new ideas that are willing to try new approaches to do things.

Finally, capability development has a lowest significant effect in comparison with the other three factors. However, it is also very important for innovation at any organizations, therefore organizations should invest in the development of employee's skills in order to stay competitive and meet on-going business needs.

Limitations of the study

Data of organizational culture were gathered for the study through respondents' self-assessments. Data was collected at small space and time was short, this would limit to results of research.

Suggestions for future research

- Organizational culture should be investigated for the critical positions in the organizations.
- It is worthwhile to include other culture types in future studies to further explore the influence of other cultures on innovation
- Next studies can be researched at broader scope and respondents should be expanded more.❑

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