Organizational culture and its impact on creativity in Malaysian SMEs

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Abstract. Organizations can benefit from establishing and sustaining a culture which supports creativity and human resource practices. Finding the gap between creativity and organizational culture is inevitable for organizations to establish strategies to be a creative organization. Fulfilling this gap needs to identify cultural factors as well as creativity aspects in the organization. The most predominant contribution of this study is the relationship of the two factors of organizational culture and creativity in the context of Malaysian SMEs. Result indicated that reward system is the most predominant factor contributing to creativity. In addition, the other factors of specific target and resources have positive correlation with creativity.

Keywords: Organizational culture, creativity, SME, Malaysia

1. Introduction

Creativity, as a new concept of businesses in 21st century, plays a critical role in society. It's not only a way to create new products and services, rather it consider consumers' desires and the way to fulfill them, creating jobs, meeting the community needs, thus improving the quality of life. In order to develop creative employees in the organization we need to consider two factors, individuals and environment. Several studies on creativity has emphasized on the individuals (i.e. Amabile, 1996; Csikszentmihlayi et al.,1993). But creativity is not the only factor contributing productivity of individuals in organization (Amabile, 1996). The social environment, a combination of individuals, has a salient role to impact the creative behavior. Generally, contextual characteristic can impact on individual creativity that takes place based on the organizational environment which indicates the importance of the creativity in the organizations. There are several factors influencing the creativity, such as culture, leadership, personality, team climate and etc. In this study we narrow the factors to organizational culture. More research on the problematic linkage between organizational culture and creativity will provide critical information in the literature.

The role of organizational culture in creativity has been studied in numerous organizations. However, the scarcity of finding this role in short and medium size enterprises (SMEs) is uncovered. A fundamental factor of Malaysia economics' development is Malaysian's SMEs. The development of SMEs in the country has been committed to be compatible with Malaysian vision on 2020. Therefore, it seems to be necessary to investigate the creativity in such organizations and different industries. In order to enhance the creativity in SMEs considering organizational culture is unavoidable. This study aims to investigate the role of organizational culture to enhance creativity in Malaysian SMEs.

2. Culture as a source of creativity

The interaction between culture and creativity is an issue for every business. This is creativity which produces many of today's intelligent systems, art activities and even music. To emerge creativity, there must be right conditions and available resources. Indeed, the most predominant source of creativity stemming from culture is people. There are numerous creative practices performed by people in different industries and businesses. Cultural values are forces to increase creative thinking for people. In addition, society as an influential factor of creativity can support creators or promoting investment in cultural practices. Societies

can impact creativity by laws and regulations of aiding and developing creative thinking. People get familiar with the concept of creativity in society. For example, school system demonstrates the important tools to encourage creativity and social success. Three factors that creativity is made from and recognized by society are innovation in technology, innovation in economy and artist creativity.

To establish culture-based creativity, it is required to increase personal abilities, technical skills and providing a conductive social environment that stimulate creativity. When these achieved, creativity becomes an expression of human sensibility which makes creativity an advantage expression of the being values.

3. The culture of a creative organization

The meaning of organizational culture is defined as underlying assumptions, norms and the values that have direct affects on operations of organization and arise during company's history and also can have influence over productivity, well-being of the organization (Reiman 2001, Reiman & Norros 2002). It is clearly noted that in most of studies regarding culture, the ideal culture is functional way of approach, therefore in a given instant it does not provide the best possible way of explaining and understanding organization's action. Assessing and understanding of constructed organization's culture desired states among employees in organization is very difficult at any given instant (Rochlin, 1999).

Organization's culture and creativity neither practically nor theoretically is separated (Guldenmund 2000, Reiman, 2001). The culture of a creative organization is what a group comprehends to treat with problems. A positive and open culture in the organizations leads to creative organizational environment with making satisfactory outcomes. Similarly, creativity cannot be flourished without an open culture and climate (Florida, 2002). Diversity and exchanging the ideas among employees is a source of creativity. Internal organization's operation at the external orientation expenses, are what culture typically focused (Cameron & Quinn 1999). Culture also may influenced by other factors of organization's climate indirectly.

4. SMEs profile in Malaysia

SMEs in Malaysia defined base on the turnover, size and activity. Three categories of micro, small and medium enterprises are under Malaysian SMEs definition which is base on number of employees and annual sales turnover. In micro manufacturing fields the numbers of employees are less than five or sales turnover is less than RM25000. However in the category of small enterprise manufacturing the full time employee are more than 5 and less than 50 or their annual turnover between RM250, 000 and finally, in medium enterprise sales turnover is between RM10 million and RM25 million or full time employees are between 51 to 150.

Department of Statistics Malaysia conducted a census in 2000 to investigate the total number of SMEs in the country. It has been found that active establishment in the manufacturing sector registered with the companies commission of Malaysia (CCM) were 20,445 out of 44,185 manufacturing companies. Furthermore, 89.3 percent or 18,271 companies out of these organizations were SMEs.

5. Organizational culture factors impacting creativity

Organizational culture standardized different factors of member's behavior regarding the way their think, feel and act within the framework of the organization. Management and creation of culture is particularly one of the most salient functions of organization founder or leaders. In order to establish a creative culture, a number of organizational culture factors impacting creativity need to be considered. In this study we put emphasized on four most important factors of risk taking, resources, specific targets and reward system. Table 1 indicates the definition of each factor based on the study of Plesk and Bevan (2003).

| | Table 1: definition of independent variables | | | | | |
|---|----------------------------------------------|-----------------------------------------------------------------------------------------------------------|--|--|--|--|
| | Variable | Definition | | | | |
| 1 | Risk taking | The degree to which there is psychological support for individuals and teams to want to try something new | | | | |

| 2 | Resources | The availability of money, protected time, information, and authority to act |
|---|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Specific targets | the degree to which the formal leaders make it clear that innovation / creativity is highly desired in certain specific areas that that are strategically or operationally important to the organization |
| 4 | Reward systems | The degree to which the organization rewards the efforts of creative / innovative individuals and teams that gives these people things they really value |

6. Methodology

6.1. Sampling

This study sampling method is based on the probability sampling which is the simple random sampling approach. In this method of sampling, each individual has an equal chance of being selected. This sampling's advantage is its probability to produce a representative sample. Also, this method is easy to conduct as the time is constraint for the research and less costly compare to other sampling methods. A total of 203 questionnaires distributed to the samples selected from 25 different SMEs in Malaysia. The SMEs selected from different sectors and industries to better understand the issues of the study. The questionnaire distributed to both employees and managers of targeted organizations. This helps us to better analyze the data as they may have different perspective of organizational culture and creativity.

6.2. Data analysis

The study's result is depended on the efficiency of the data analysis. In order to achieve this, the descriptive statistical tool to analyze used is Statistical Package for Social Science (SPSS) software version 16. A Pearson correlation analysis conducted to test the relationship between independent and dependent variables. Also, Multiple regression analysis used to provide the pattern of relationship between the set of variables.

7. Results

7.1. Descriptive statistics

There were a total of 203 respondents that all of them claimed their demographics. According to the analysis, 56.2% of the respondents were male while 43.8% were female. In addition, most of the respondents are in the age of 31 to 41 with a valid percent of 46.8 which contributes almost half of the respondents. Demographic analysis shows that 41.4% of the respondents were executives and most of the respondents work in production and operation unit which contributes more than 25%. Table 2 indicates that 36.9% of the respondents claimed that they have been in the present position for less than 3 years while 13.3% claimed that they have been in the present position for 6 to 9 years. Table 2 demonstrates a summary of respondents' demographics.

Table 2: Demographic profile of respondents (n=203)

| Characteristic | % | Characteristic | % | Characteristic | % |
|----------------------------------|------|---------------------|------|-------------------------------------|------|
| Gender Income (Ringgit Malaysia) | | | | Number of years in present position | |
| Male | 56.2 | Less than 1500 | 13.3 | Less than 3 years | 36.9 |
| Female | 43.8 | 1500-2999 | 45.3 | 3- 6 years | 26.1 |
| | | 3000-4499 | 23.6 | 6- 9 years | 13.3 |
| Age | | 4500-5999 | 10.8 | More than 9 years | 23.6 |
| 18-30 | 30.0 | 6000 or more | 6.9 | • | |
| 31-40 | 46.8 | | | Years of working experi | ence |
| 41-50 | 18.7 | Hierarchical level | | Less than 3 years | 10.8 |
| 51 and above | 4.4 | Non executive | 37.9 | 3- 6 years | 23.2 |
| | | Executive | 41.4 | 6-9 years | 14.8 |
| Education | | Managerial | 20.7 | More than 9 years | 51.2 |
| Certificate | 28.6 | - | | - | |
| Diploma | 43.3 | Organizational unit | | | |

| Bachelor | 20.7 | Production and operation | 25.1 |
|--------------|------|--------------------------------|------|
| Master | 7.4 | Business administration | 11.3 |
| PhD or above | | Engineering | 15.8 |
| | | Research and development (R&D) | 7.4 |
| | | Human Resource (HR) | 6.4 |
| | | Quality management | 7.9 |
| | | Information technology (IT) | 3.9 |
| | | Others | 22.2 |

Based on the results of analysis 74.4% of the organizations were in manufacturing sector which shows a large contribution of manufacturing sector in the study. The least contributions are governmental organizations and educational sector. Table 3 shows frequency of organization sector.

Table 3: Frequency of organization sector

| Organization sector | Percentage | Organization sector | Percentage |
|---------------------|------------|---------------------|------------|
| Agriculture | 3.0 | Health | 3.4 |
| Business | 10.3 | Government | 1.5 |
| Education | 2.0 | Others | 5.4 |
| Manufacture | 74.4 | | |

7.2. Relationship among variables

A Pearson correlation analysis conducted to investigate the relationship among variables. The outcome of the correlation analysis indicates that there were some strong and weak correlations among the variables. The analysis shows that the four independent variables are positively correlated with creativity. Reward system is the most significant positive correlated factor with creativity. Based on the findings, it is also noted that there is a significant positive correlation between specific targets and creativity in the organization. Respondents claimed that creativity increase when clear organizational goals comprehended by all organization members. Moreover, it is clearly mentioned that the relationship between resources and creativity is significant. In other words, having flexible manpower along with availability of money and information is positively correlated with creativity.

Table 4: Correlation between independent variables and creativity

| Independent variable | R | P-value | |
|----------------------|-------|---------|--|
| Reward | .292* | .000 | |
| Specific target | .279* | .000 | |
| Resources | .212* | .002 | |
| Risk taking | .177 | .012 | |

^{*.} Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis indicates a weak relationship between risk taking and creativity. Respondents claimed a weak relationship between providing allowance for mistakes for staffs and creativity along with a weak relationship of helpfulness of balance between risk and opportunity to generate novel ideas and creativity.

7.3. Creativity predictors

A Multiple Regression Analysis used to investigate which dimensions of creativity are significant predictors. Multiple Regression provides a view of relationship between a set of variables and an outcome variable. This study's predictors are risk taking, resources, specific targets and reward system. On the other hand, the outcome factor is creativity. To meet the objective of the study a model has been developed. The model encompasses the predictors and outcome factor. This model is helpful for managers of organizations to predict the important factors contributing in creativity. The model is as follows:

Creativity=
$$\alpha + \beta_1$$
 risk taking + β_2 resources + β_3 specific targets + β_4 reward system

In the above model, α is the slope and β_i is the regression coefficient of each predictor.

According to the model summary, 10.9% of the creativity variance can be significantly explained by all four predictors (risk taking, resources, specific targets and reward system).

Table 5: Model summary

| Model Summary | | | | | | |
|---------------|-------|----------|-------------------|----------------------------|--|--|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | | |
| 1 | .329ª | .109 | .091 | .54302 | | |

a. Predictors: (Constant), Reward, Risk taking, Resources, Specific target

The coefficient table demonstrates predominant factors predicting creativity. The most salient factors in predicting creativity, based on results, is reward as its t value is 2.034 followed by risk taking and specific target. The 't' value is the error level present in the model which takes creativity as dependent variable and four variables as the independent.

Table 6: Factors predicting creativity

| Coefficients ^a | | | | | | | | |
|---------------------------|-------------------------------------------------------|-------|------------|------|-------|------|--|--|
| | Unstandardized Coefficients Standardized Coefficients | | | | | | | |
| Model | | В | Std. Error | Beta | t | Sig. | | |
| 1 | (Constant) | 2.476 | .299 | | 8.294 | .000 | | |
| | Risk taking | .081 | .054 | .112 | 1.512 | .132 | | |
| | Resources | 024 | .095 | 024 | 253 | .800 | | |
| | Specific target | .121 | .085 | .141 | 1.416 | .158 | | |
| | Reward | .158 | .078 | .187 | 2.034 | .043 | | |

1. Dependent Variable: Creativity

8. Discussion and conclusions

Results indicated that reward depict the strongest relationship with creativity. In other words, respondents believed that treating creative results as the basis for rewards is very important issue for employees to generate new ideas. It means that a reward system can explain the creativity in the organization and reward system can evaluate the creativity. However, the result of having a single standard of reward system will damage creativity and reducing internal motives (Deci, 1985). Therefore, a comprehensive reward system needed to generate creativity for the organizations. This reward system should appreciate creative actions of individuals which give employees things they value. But it is important how leaders allocate reward and status (Plesk and Bevan, 2003).

Another significant factor in relation with creativity is specific target. Based on the findings, it can be deduced that when a clear organizational goal understood by all individuals in the organization is available and all employees know what the organization wants to achieve, the creativity will be increased. It means that specific target has a predominant role to explain creativity. Locke et al. (1981) argued that inappropriate goals would prevent creative ideas and innovation. Therefore, defining specific targets need a comprehensive view with the least errors along with a cooperation of employees. For the purpose of this study, respondents declare that if the organization provides them proper money and information without any time pressure, the novel and creative ideas will come up. Also, Amabile (1996) suggests that appropriate resources are strongly correlated with creative results. Creativity requires time and effort (Ford, 1996) and other resources are information, knowledge, funds and people (Shalley, 1995).

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