

ORGANIZATIONAL LEARNING AND INNOVATION IN FURNITURE INDUSTRIES

Sh Salleh Bin Sh Ahmad

Department of Manufacturing Engineering and Industries
Faculty of Mechanical and Manufacturing Engineering
Kolej Universiti Teknologi Tun Hussein Onn
86400 Parit Raja, Batu Pahat, Johor,
Malaysia

ABSTRACT

In today's borderless business world, technological changes in the form of innovation activities are known to be playing major role in securing organizations effectiveness and continuity. One of the major factors that influence the level of innovation is organizational learning. To determine the contribution of this factor, a study was conducted among furniture manufacturers in Malaysia. Innovation was represented by the dimensions of product, process, and organizational innovations. On the other end, organizational learning was divided into three main dimensions i.e. information gathering, information disseminations, and organizational memory. The results indicated that organizational learning has a meaningful correlation towards the level of innovations in the firms studied.

Keywords: competitiveness, furniture industries, innovation, innovative activities, organizational learning

1.0 INTRODUCTION

Traditional theories on international trades focused on the concepts of comparative advantage in which nations that have abundant of raw material, human resources and land are urged to fully utilize these factors in order to produce at the lowest cost. However, this has no longer represents the world of business. Technological change has been known to be a

correction, encourage resource creativity, autonomy and decentralization, and rewards. New ideas might not always come from outside, many good ideas and innovations are generated within the firms. Firms are normally known as natural incubators in producing good ideas and innovations. Innovations, also known as major elements of technological development, arise through learning process, which can be categorized into (Tunzelmann, 1995):

- i. Learning by using
- ii. Learning by doing
- iii. Scientific learning and learning by searching

Every organization must every time learn to increase its effectiveness and efficiency. To ensure survival, the rate of learning of any organization must always higher than the rate of changes in its surrounding environment. The focus of learning nowadays has moved from individual learning towards the concepts of organizational learning (Balasubramaniam, 1996). This concept, which was introduced, by Argyris and Schon in 1978 is currently very popular in literature related to organization (Popper and Lipshitz, 1998). Basically, organizational learning is defined as development of new knowledge that has the potential to influence attitude change and resulting to increase of performance (Sinkula, 1994; Nobel et al, 2002; Garcia and Vano, 2002). This happens through the transfer of knowledge from individuals to the organizations so that the knowledge then can be used by other members of the organization (Sinkula, 1994; Bontis et al, 2002).

In a research done on organizational learning among plastic industries in Ohio, Pennsylvania, and West Virginia, it was noted that the main source of information for the employees are from the companies' owner, customers, suppliers, and trade exhibitions. Resources from higher learning institutions and government programs were regarded as not important.

Majority of the knowledge was also generated within the firms themselves, which came from the experience of implementing daily activities and interactions with customers and vendors (Glasmeier, 1998).

On the other side, the definition of innovation is the creation of new ideas and implementing them towards developing new product, process, or services. Innovations also cover technical aspects, design, manufacturing, management and commercial activities that involve the marketing or commercial usage of any process or equipment. Innovation is not only limited to new product or process, but also includes performance increment or characteristics improvement on products or processes (Ivancevich, 1997). It is categorized as a creative approach towards any problem solving in firms which includes financial management and commercialization of new ideas (Graft et al, 2002), services (Strombach, 2002), and organizational administration (Kickul and Gundry, 2001). This broad-based innovation can happen at any location in any business process or at any department in an organization (Shervani and Zerillo, 1997). Firms must innovate on not only product innovation, but must also emphasize on: process innovation, marketing innovation, human resource innovation, financial innovation, information innovation, and accounting innovation.

3.0 METHODOLOGY

This research utilized a specifically developed questionnaire to measure the level of organizational learning in the firms studied. For this research, the operational definition of organizational learning is responses from members of firms towards changes happening inside and surrounding the firm through the process of error identification and correction during the daily routine activities (Argyris and Schon, 1978). The knowledge gained by employees will be transferred to the organizations so that other employees can utilize this

knowledge in order to improve the organizations performance (Sinkula and Baker, 1997). With this, it is said that the employees' learning experience is embedded into the organizations memory. Three dimensions will be used to measure organizational learning i.e information gathering, information dissemination, and organizational memory.

(a) Information Gathering

There are six elements to be considered in measuring the level of information gathering:

1. The frequency of analyzing the data related to quality, productivity, cost and sales value in a firm.
2. The frequency of communication between the firm and its suppliers or customers in order to get feedbacks on latest processes or the product quality input from end users.
3. The firm's commitment in executing activities related to routine problem identification.
4. Total number of seminars, trainings or trade exhibition attended by employees.
5. Total expenditure related to training programme for employees.
6. The frequency of meeting with staffs or employees in order to get feedback on problems encountered in their working activities.

(b) Information Dissemination

The elements that were used to measure the dimension of information dissemination in any organization (Sinkula and Baker, 1997) are:

1. The frequency of discussions activity within the organization related to requirements and feedbacks from customers or end users.
2. The firm's effort in disseminating useful information as early possible to the relevant department.

3. How often the firm disseminates the information related to current market situation, business performance, and strategic planning to staffs and employees.
4. The firm's commitment in instructing the employees to report and discuss the information gathered from trainings or seminars to the respective superior or fellow colleagues.
5. The firm's effort in distributing useful printed material gathered from trainings or seminars to other staffs or employees for their additional references.

(c) Organizational Memory

This dimension emphasized on the measurement of four major elements (Moorman and Miner, 1997):

1. Comparison of the firm's knowledge against other firms in similar industry.
2. Comparison of the firm's experience against its leading competitor in similar industry.
3. Comparison of the firm's skill against its leading competitor in similar industry.
4. The total expenditure for R&D programme.

This research utilized the innovative activities measurement method in order to measure the level of innovations in the furniture industries in Malaysia. The operational definition for innovation is a programme, policy, product, or process that introduces new characteristics to a particular organization and initiates changes in the firm's products, services, or daily activities (London, 1996). Generally, innovation must always improve the performance of the organization. This means that any introduction of a new product, services, methods, etc. which will benefit and enhance the performance of the organization is considered as innovation. It does not matter whether or not the similar innovation has been introduced in

any other part of the world. The dimensions that are used to measure the level of innovation in firms are product innovation, process innovation, and organizational innovation.

(a) Product Innovation

In this research, product innovation was referred to creation of a new product or an improvement of the performance of an existing product. The first element that was used to measure this dimension was the frequency of introduction of new product or new model in the organization. The second element was referred to how often the existing models were modified in order to improve their performance.

(b) Process Innovation

Process innovation could be defined as a better method in executing any particular activity. There were two elements used to measure this dimension. The first element was the frequency of activities related to modifying an existing process or the frequency of introduction of a totally new process in the organization. The other element was dedicated to the frequency of introduction of new machines or the frequency of modifying the existing machineries in the effort to improve the organizations performance.

(c) Organizational Innovation

This dimension was referred to the innovations in the area of marketing, human resource, finance, information technology, accounting, and administration. For this research, two elements were chosen to measure this dimension. The first element was intended to measure the frequency of changes in the organizational structure, accounting procedures, and administrative procedures. The second element focused in measuring the frequency of changes introduced in the marketing and human resource strategies.

4.0 FINDINGS

The main objective of this research was to find the correlation between the level of organizational learning and the level of innovation among the furniture manufacturers in Southern Malaysia. A total of thirty six respondents participated in this study. Data collected from the respondents were analysed for descriptive purposes and then Pearson correlation were used to test and evaluate the correlation among the identified variables. The dependent variables were represented by the elements of innovation while the independent variables were the elements of organizational learning. The correlation analysis suggested that there exist a fair positive correlation between the organizational learning and innovation level among the firms studied. This was portrayed by the Pearson correlation method which resulted to $r = 0.477$ at 0.01 significant level.

The result from the inferential analysis showed that there exist positive correlations between all the three dimensions of organizational learning towards the level of innovation among the furniture manufacturers. The dimension of information gathering had the highest correlation towards innovation with the correlation factor of 0.467. The correlation factor for information dissemination and organizational memory were at 0.403 and 0.410 respectively. It could also be concluded that the positive correlation did not happened coincidentally as the significant levels were at 0.002, 0.011, and 0.006 with all the three dimensions of organizational learning as shown in Table I.

Table I : Correlations Between The Dimensions Of Organizational Learning And Innovation

Dimensions Of Organizational Learning	Pearson Correlation (r)	Significance Level	Correlations
Information Gathering	0.467**	0.002	Positive (fair)
Information Dissemination	0.403*	0.011	Positive (fair)
Organizational Memory	0.410**	0.006	Positive (fair)

* Significance level 0.05 (1-tail)

** Significance level 0.01 (1-tail)

From Table II, all dimensions of organizational learning i.e. information gathering, information dissemination, and organizational memory had no meaningful relationship towards the dimension of product innovation. This means that the existence of organizational learning elements in the furniture industry does not contribute towards their level of innovations. The finding here is very relevant because majority of the product from the studied factories are not designed by them but are designed by their customers. However, all the three dimensions of organizational learning have meaningful positive relationship towards process and organizational innovations. As a whole, this finding means that the dimensions of information gathering, information dissemination, and organizational memory significantly contributes to the development of process and organizational innovations in the furniture industries. The strongest relationship is between the dimensions of information gathering and organizational innovation with Pearson correlation of 0.569.

Table II: Correlations between Dimensions of Organizational Learning and Innovation

Dimensions of Organizational Learning	Dimensions of Innovation		
	Product Innovation	Process Innovation	Organizational Innovation
Information Gathering	0.165	0.513**	0.569**
Information Dissemination	0.131	0.421*	0.460**
Organizational Memory	0.188	0.399*	0.500**

* Significance level 0.05 (1-tail)

** Significance level 0.01 (1-tail)

5.0 CONCLUSIONS

The research findings showed that organizational learning has a fair (medium) positive correlation towards the level of innovation in the furniture industries in the southern region of Malaysia. This is proven by the correlation analysis that produces $r = 0.477$ at the significant level of 0.01. However, for the dimension of product innovation, organizational learning does not have significant contribution. Dimensions of organizational learning only fairly contribute to process and organizational innovations. This means that firms, which emphasize to the dimensions of information gathering, information dissemination and organizational memory, will have high tendencies to achieve higher level of process and organizational innovations.

As a conclusion, the researcher feels that manufacturing companies that are having intention to improve organizational learning and innovation shall consider the following recommendations that are wholly translated from the data analysis:

- i. Most companies do not emphasize on formal training to their workers i.e. whether specific training or seminars organized by relevant bodies or institution. Companies are encouraged to use the Human Resource Development Fund in order to finance the training required. This will improve the organizational memory and will increase the companies' competitiveness through innovational activities.
- ii. Workers or staffs who have undergone any formal training or seminars shall be instructed to discuss the information or knowledge gathered with the relevant supervisors or colleague. This will speed up the organizational learning process and will allow speedy application of the newly gathered knowledge.
- iii. Printed matters obtained from any training, seminar or periodical that are useful to the companies shall be distributed to the relevant workers or staffs as early as possible for information sharing. This action enlightens the rate of organizational learning and shall increase the tendencies for innovational activities.

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