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Procedia - Social and Behavioral Sciences 116 (2014) 4005 - 4009

5<sup>th</sup> World Conference on Educational Sciences - WCES 2013

# Organizational learning capacity in cargo industry

Celalettin Serinkan, Mehmet Kiziloglu\*, Volkan Akcit <sup>c</sup> Pınar Enli

Pamukkale University, Denizli, Turkey

#### **Abstract**

Learning organizations are known as organizations which adopt learning as a team, systems thinking, creating a vision. The capacity of organizational learning is accepted as an important variable being a learning organization. When the Turkish literature on learning organizations was reviewed, it has been noted that there are some research carried out in different areas of interest, except cargo sector. The cargo industry worldwide has played an increasingly important role in world trade and cargo industry being the fastest growing sector in the dynamic market and therefore knowledge and learning are important issues for these foundations. The aim of this research was to evaluate the organizational learning capacity of the Cargo employees. Data were gathered from 102 employees who are working at Cargo companies in Denizli. SPSS was used for the data analysis.

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# 1. Introduction

We live in a world of disruptive change (Christensen&Overdorf, 2000). In our disruptive world, an organization's capacity to learn, apply and spread new insight has been touted as the fundamental strategic capability (Fiol &Lyles, 1985) and leading source of competitive advantage (de Geus, 1988, 1997; Stata, 1989). Organizational learning is fundamental for improving performance within a rapidly changing and competitive business environment. Some researchers such as; Argyris (1999), Crossan and Hulland (2002), Kululanga et al. (2002), Smyth (2004), Lopez et al. (2005), Senge (1990), Stata (1989), Kim et al. (2009) argue in general that organizational learning is conducive to companies performing well in the competitive environment of today's business world. Organizational learning can be defined as the development of new knowledge that has the potential to influence behavior in an organization (Huber, 1991). The literature on this topic has grown rapidly over the past few years. Various works have dealt with the analysis of this construct from differing viewpoints.

Our objective is to measure of organizational learning capacity. We test its validity and reliability in a sample of 102 employee who are working at Cargo companies in Denizli. We first establish the concept of organizational learning. Then, analyze data which we collected from Cargo employees. Finally, we set out the findings and conclusions of the study.

<sup>\*</sup> Corresponding Author: Mehmet KIZILOGLU Tel.: +90-535-4788552 mkiziloglu@pau.edu.tr

#### 2. Literature review

#### 2.1. Organizational learning

Organizational learning concept has been first emerged in 1970's and defined as to catch the errors and fix them. In these days, the firms' learning activities were being accepted to be realized via the employees working for them (Daft and Weick, 1984). Argyris has shortly defined organizational learning as detecting the error and fixing process. Organizational learning literature is studied by several researchers (e.g., Argyris and Schön, 1978; Argyris and Schön, 1986; Shrivastava, 1983; Fiol and Lyles, 1985; Daft and Huber, 1987; Levitt and March, 1988; Huber, 1991; Nonaka 1991; Sinkula, 1994; Crossan et al., 1995; Slater and Narver, 1995; Easterby-Smith, 1997; Baldwin et al., 2002; Bontis et al., 2002). Bontis et al. (2002) note that in order to survive organizations are forced to learn efficiently and effectively in today's tougher competitive environment and by effect of the knowledge era. Baldwin et al. (1997) noted that what seems to distinguish surviving and adapting organizations from the rest is their ability to learn. Also Nonaka (1991) argued that competitive advantage, innovation and effectiveness are the primary products of nurturing a culture of learning within a company.

Organizational learning is a dynamic process. Not only does learning occur over time and across levels, but it also creates a tension between assimilating new learning (feed forward) and exploiting or using what has already been learned (feedback) (Crossan et al., 1999).

## 2.2. Organizational learning capacity

The increasingly dynamic environment and the spurt in information technology gave rise to the recognition that knowledge is perhaps the most important resource for developing a sustainable competitive advantage (Grant, 1996a, 1996b). This literature stresses that an organization should focus on enhancing its intellectual capacity and the dissemination of knowledge among its members (Huber, 1991; Kogut and Zander, 1992, Hult et al., 2001).

It is the intangible, organization-specific knowledge that can generate value in a unique, inimitable, nontransferable way. Therefore, an argument can be made that knowledge and the capacity to develop knowledge are the major resources that generate added value. We refer to this capacity as the "organizational learning capacity." The key to obtaining a sustainable competitive advantage is the integration of knowledge of participants (Hult et al., 2001).

# 3. Method

The instrument used in this study is the organizational learning questionnaire comprised four factors with 17 questions. Hult (2001) designed this questionnaire, with the reliability of 0.87, the results were satisfactory. The factors of this questionnaire include team orientation, system orientation, learning orientation and memory orientation.

The sample group in the present research is employees of an cargo companies in Denizli, which in this research, among them 102 individuals were selected based on simple random sampling as statistical sample members. Finally, 102 questionnaires were distributed and then analyzied in SPSS.

## 4. Findings

The aim of this study to determine the views of the cargo employees about organizational learning capacity, sharing the resulting data on organizational learning and the creation of awareness of organizational learning in the cargo companies.

The participants of the survey were employees who work in cargo sector. The total number of the participants was 102. The sample consisted of 67 men with 65.7% and 35 women with 34.3%. Considering participants education level; 8.8% have primary school, 58.8% have high school, 23.5% have bachelor degree and 8.8% have

master degree degree. The rate of the participants who have high school is the highest level. In addition to these, the positions of the participants, 21.6% are manager, 48% are carrier, 18.6% are finance worker, 9.8% are customer representative. Many of participants to our study is carrier workers. According to the results of participants' job experience, 37.7% are 2 years and under 2 years, 44.1% are 3-5 years, 10.8% are 6-8 years and 7.8% are 9-12 years.

The reliability analysis of the 17 items questionnaire was 0.87 and then t test and anova was conducted to see the difference between the demographic datas and organizational learning dimensions.

Table 1.	Comparison	the employees	according to	their age level

		N	Mean	Std.Deviation	t	Sig.
Memory Orientation	20 ≤	14	4,05	,512	2.442	0.002
	30 ≥	11	3,34	,930	2,443	0,003

As shown in Table 1, result of the t test analysis revealed that a significant difference between 20 years old and younger workers and workers who were over the age of 30 who are employees participated in the survey. Employees consider different about the dimension of memory oriented in the scale of organizational learning capacity. While the arithmetic mean of the memory oriented participants under the age of 20 is ( $\overline{\chi}$ =4,05), participants over the age of 30 is ( $\overline{\chi}$ =3,34). Employees under the age of 20 are more memory oriented than over the age of 30.

Table 2. Comparison the employees according to their levels of education

		N	Mean	Std.Deviation	t	Sig.
Learning Orientation	Primary School	9	3,77	,814		
	High School	60	4,07	,709	1,418	0,041
	University	24	4,48	,539		

Table 2 showed that anova test analysis revealed a significant difference between the employee's education level of primary school, high school and university. Employees consider different about the dimension of learning oriented in the scale of organizational learning capacity. Arithmetic mean of the learning oriented participants from primary school is ( $\overline{x}$ =3,77), participants from high school is ( $\overline{x}$ =4,07) and participants from university is ( $\overline{x}$ =4,48). As we see from the result, learning capacity for the participants from university is the highest.

Table 3. Comparison the employee according to their job experience

		N	Mean	Std.Deviation	t	Sig.
System Orientation	2 ≤	38	4,38	,528	0.122	0.020
	3-5	45	3 96	643	0,133	0,020

As shown in Table 3, result of the t test analysis revealed that a significant difference between the employees who have job experience of 2 years and under 2 years and 3-5 years. Employees consider different about the dimension of system oriented in the scale of organizational learning capacity. While the arithmetic mean of the system oriented for the participants' job experience 2 years and under 2 is  $(\bar{x}=4,38)$ , 3-5 years job experience is  $(\bar{x}=3,96)$ .

Table 4. Comparison the employee according to their levels of income

		N	Mean	Std.Deviation	t	Sig.
Team	Low Income	34	3,98	,796	1 245	0.026
Orientation	Middle Income	65	4,16	,621	1,245	0,036

Table 4 showed that the t test analysis revealed a significant difference between employees who have low income level and the middle income level. Employees consider different about the dimension of team oriented in the scale of organizational learning capacity. Arithmetic mean of the team oriented participants who have middle income

level is ( $\overline{x}$ =4,16), participant who have low income level ( $\overline{x}$ =3,98). As we see on the result, employees who have middle income level more team oriented and high level of organizational capacity than employees who have low income level.

	1	2	3	4	5
1.Team Orientation	α=,75				
2.System Orientation	,595**	α=,74			
3.Learning Orientation	,420**	,662**	α=,80		
4.Memory Orientation	,339**	,600**	,515**	α=,70	
5.Org. Learning Capacity	,769**	,881**	,802**	,748**	α=,87

Table 5. Correlation of Organizational Learning Capacity and Its Dimensions

Correlation analysis has been conducted to test organizational learning capacity and its dimensions. As shown in Table 5, the result of correlation analysis revealed that the direction and degree of the relationship between organizational learning and its dimensions. When we examine the Table 5, we see that there is a high and positive relationship between organizational learning capacity and its dimensions.

#### 5. Conclusion

In today's fast, competitive and innovative world, organizations must commit themselves to learn continuously. Human factor is the most important factor to create learning organizations. If people are diligent to improve themselves and given the opportunity to practice what has been learned to pass his career, it can be said that organizations have started to become a learning organizations.

In this study, organizational learning capacities of employees in cargo companies were determined. As a result of the research, under 20 years old employees' learning capacity is higher than the others, university graduates are more inclined to learn than primary school and high school, employees with a less than 2 years of experience have higher learning capacity and employees with a higher level of income have higher organizational learning points have been identified.

In a learning organization there are lots of works to do for managers and to be a person who is unprejudiced, open to criticism, support new ideas is important for managers Additionally, in order to increase learning capacity, managers should try to create environments in which the work done is questioned, the information and the experiences are shared. At the learning organization, managers should be objective, open to new approaches, and keep themselves modern for adapt and follow innovations. Managers should appreciate team-oriented studies to have a continuous learning environment. Furthermore they should always investigate and implement better systems to use at work. Great learning atmosphere must be established and organizations should encourage employees continuously.

As a result, this study was conducted to determine organizational learning capacity in cargo companies, shed light on other research and reveals more effective results in different regions with different participants.

## Acknowledgements

We would like to thank Pamukkale University for providing the research grant PAU-PAUBAP-1420-2013

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<sup>\*\*.</sup> Correlation is significant at the 0.01 level,

α= Significant Level

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