

A Study of Learning Practices in Telecommunication Sector: Evidence from Faisalabad

Alina Ahmad and Aniqah Ahmad

Author(s) Biography

Alina Ahmad is MS scholar at Department of Business Administration, National University of Modern Languages, Islamabad.

Aniqah Ahmad is Lecturer at Department of Economics, Govt. College Women University, Faisalabad.

ABSTRACT: *The purpose of this study was to investigate the learning processes and practices in the telecommunication sector of Faisalabad. Data from five different telecommunication companies which are Mobilink, Warid, Ufone, Telenor and PTCL were taken from forty two respondents. Five components of learning process and practices were analyzed in this study. Data was collected by using questionnaire developed by David Garvin (2008). Reliability of data was checked by using Cronbach's alpha and Arithmetic Mean was taken by using SPSS to analyze the learning practices in telecommunication sector. Results showed that there is a need to improve learning practices in telecommunication sector of Faisalabad. There is no significant difference in different telecommunication companies of Faisalabad area. Almost all the companies have same values of learning practices and need to be improved.*

Keywords: Learning Organization, Learning processes and practices, telecommunication sector, competitive advantage

The only persistent thing is change. Change is continuously adapting new processes to compete in competitive world and change comes from learning (Senge, 1990). Learning helps organizations to survive and to be effective in a changing environment. Learning is the only tool due to which organizations can get competitive advantage. Learning is a construct and it means processes which can be used to improve, transfer and improvement of skills. Also new training programmes, problem solving techniques, quality improvement activities and understanding of strategic, structural or interpersonal problems of the organization (Edmondson, 1996).

In past, main purpose of the organization was to generate profit and product now the basic purpose of any business is to become a learning organization. For any successful organization, it is very necessary to become learning organization which is continuously changing with the changing needs and demands of the environment and improving with time to time. If organization is slow in learning or adapting to change it will become obsolete (Marquardt, 1996).

Learning organization is that which develop, obtains and transfer that knowledge and changes its behaviour according to that knowledge. Five activities are the base of a learning organization (1) solving problem in a systematic way (2) Performing new experiments (3) Learning from History (4) Learn from others (5) sharing of knowledge (Garvin, 1985).

There are three main factors of learning (1) Environment that supports learning (2) concrete learning procedure and system (3) Leadership which supports learning. Environment that supports learning includes how much employees feel psychological safe at work place, acknowledgement of differences, regard new thoughts, continuous improvement. Concrete learning procedure and system includes continuous involvement in new experiments, gathering information, analysis, train and educate employees, transfer of knowledge. Leadership which supports learning includes leader behaviour. They are used to estimate the learning in organizations (Garvin, Edmondson, & Gino, 2008).

Telecommunication industry is very dynamic industry. Due to the changing environment and increasing competition learning has become a very important asset of telecommunication organizations (Wei, Choy & Yeow, 2006). Importance of telecom sector is increasing in western countries and also in Pakistan, telecom sector is rapidly growing. The telecom sector has generated Rs 411 billion revenue last year and showed 11 percent growth as compared to 2011 (Pakistan Telecommunication Authority 2013). In Pakistan,

PTCL, Warid, Ufone, Telenor, Mobilink and Zong are telecommunication companies. But Zong is not included in the study so that data can be collected easily due to time constraint.

Therefore there is a need of continuous improvement and innovation in this industry (Bourreau & Doğan, 2001). And this can't be done without learning in organization.

This study is conducted to analyze whether telecom organizations in Faisalabad following learning practices or not. And to which extent they are using learning practices in their organizations. Faisalabad area is studied only so that the data can be collected and managed easily.

David Garvin's questionnaire for measuring learning practices in the article "Is yours a learning organization?" is used to collect data from telecommunication industry of Faisalabad. Questionnaire is given to different employees of these telecom companies to get primary data for analysis.

Literature Review

Organizations should act in a way so that learning process can be increase in their organizations and they can reap its benefit (Argyris, 1977). Senge defines set of principles of learning organizations. He gave five disciplines of a learning organization and believes that without these disciplines an organization can't become a learning organization. These disciplines include system thinking, personal mastery, and mental models, developing a shared vision and working in a team (Senge, 1990).

In past organizations were based on the approach of rewards and penalty but now the trend has been changed and organizations are becoming learning organizations. To become a learning organization author gave a four step model in which first step is to discover the new ways to gain competitive advantage and to take opinion of experts, published knowledge and also information of competitors. Second step is to provide them the environment in which they can freely talk and can take jointly decisions to solve problems. This step basically enforces to create team skills in employees. Third step is to explain how the work will be done and fourth step is to understand what is right and wrong and take preventive measures to stop failure. This step basically focuses on the consequences of the work and practices done (Edmondson, 2008) (Khaliq Ur Rehman Cheema, 2012)

Organizational Learning occurs through eleven areas which are a learning approach to strategy, participation of employees in policymaking, dissemination of information, developmental accounting and control, internal exchange, reward flexibility, enabling structures, boundary workers as environmental scanners, learning by the actions of other companies, learning culture, and personal development of everyone in organization (Pedler, Burgoyne, and Boydell, 1991).

Double loop learning generates new knowledge in organization (Argyris, 1977). In service organization, quality strongly depends upon employee's behaviour. How much employees are devoted to provide superior and quality services to the customers (Irfan, Mohsin, & Yousaf, 2009). Some problems occurring in organizations especially in service organizations can't be managed by only a single individual so team working is necessary to control these issues. And it can give competitive advantage to other firms (Oakland, 1995).

The organizations who want to become a learning organization should create an environment of knowledge management and develop a culture of learning. Organizations should develop a system so that employees can share their ideas and can bring innovative change in organization (Yang, Watkins, & Marsick, 2004). Acquisition of knowledge, sharing, analyzing and implementation of that knowledge is very necessary for any organization to learn and compete in dynamic market (Huber, 1991).

There are specific factors that help organizations to become a learning organisation which are advancement in technology, foster change in environment, globalisation and customer orientations. In learning Organizations people have the capacity to respond better in dynamic and complex environment than competitors (Garvin and Edmondson et al 2008).

It is concluded that performance of an organization is related with the learning ability and collaboration among teams working in the organization. The role of new ideas is undeniable to gain competitive advantage and teams have a vital role to get new ideas (Edmondson, 2002).

As the economy has moved from industrial to information age, it has become necessary for telecommunication organizations to continuously manage and increase knowledge to compete in modern era (Yusof, 1998). To gain success, it is necessary for the telecommunication organizations to use their knowledge assets in their best way and also implement Knowledge assets properly. While there is no perfect answer that how knowledge management should be implemented, it is need for the telecommunication

organizations to think of what the critical factors are necessary to stay on top. The results of their research showed that the organizations know what factors are contributing in success but the shortcoming is that they are not implemented properly (Wei, Choy, & Yeow, 2006). In today's environment organizations can't gain competitive advantage without knowledge, because only knowledge assets are difficult to duplicate. The real worth of organizations can be determined by the ideas, cognition and information having their employees (Beijerse, 2000). So knowledge is the basic factor to gain competitive advantage in market (Lei et al., 1996).

Knowledge management strategies include culture, leadership, technology, and measurement they are used to increase flow and transfer of information among individuals and groups of the organization (Dove, 1998; O'Dell and Grayson, 1999). In his research Schein examined that culture, shared values and norms have a strong influence on the learning process of organizations (Schein, 1996). An organization can't become a learning organization within a night to become a learning organization continuous improvement and change is very necessary.

Some things like behavioural change, developing a culture needs more time while some changes should be taken immediately. Organizations that want to become a learning organization should follow some steps. These steps include free environment that supports learning, to foster the training and sharing of knowledge, and a competent and supportive leader for them. And the learning will become double if employees properly understand and utilize the learning practices (Garvin, 1985). To become a learning organization, proper planning and to implement best practices is very necessary (Main, Rauf et al. 1991).

Methodology

Target population of this study was the middle and top management of the telecommunication companies of Faisalabad. The objective of this study was to compare the learning practices in different telecommunication companies. In this research for data collection tool for measuring learning practices by Garvin (2008) was used. Garvin introduced three divisions in which all building blocks of a learning organization are covered, which are "supportive learning environment, concrete learning process and leadership behaviour".

But in this research only questions related to learning practices were used due to completely emphasize on the second building block of learning organization. Concrete learning process and practices portion was further

divided into five parts; "Experimentation, Information collection, Analysis, Education & Training, and Information transfer". Forty two questionnaires were filled from five different telecommunication companies which are Mobilink, Warid, Ufone, Telenor, and PTCL. 16 variables were used to measure the learning practices construct. To check the reliability of data Cronbach's alpha was used. Then Mean of all the variables were taken and was compared with the benchmark scores given by Garvin (2008).

Variables and Analysis

In this paper concrete learning process and practices were taken to compare the learning practices prevailing in the different companies of telecommunication sector of Faisalabad. Other two elements of a learning organization are not included in this study so that to give the entire focus to learning practices. The survey was consisting of following five elements of learning practices.

- Experimentation
- Information collection
- Analysis
- Education and training
- Information transfer

To measure these variables 16 items were used. Experimentation was measured by asking questions like experiments of new ways of working, experimentation of new products or services, formal way of experiments. Information collection on competitors, information collection on customers, information collection on economic and social trends, comparison of own performance with competitors, and comparing own performance with best-in-class organizations were the variables used to collect data about Information collection. To get data on analysis following questions like Productive conflicts and debates, dissenting views, freedom of saying anything, identification of underlying key assumptions were asked.

Education and training was measured by using the variables like; training of new employees, periodic training of old employees and how much training is valued in that organization. And, Information transfer was measured by using the variables like opportunities from learning from others, sharing of information with experts, communication of knowledge with key decision makers, and conducting post audit reviews and after action reviews.

After collection of data, Arithmetic Mean was taken individually of all telecommunication organizations. After that they were compared with the benchmark

scores given by David Garvin in his article "Is yours a learning organization". It consists of scaled scores of 100. These scaled scores were divided into four quartiles ranging from bottom quartile to top quartile. Median value is clearly mentioned in it. There are two quartiles i.e. bottom quartile and second quartile below the median and two quartiles i.e. third quartile and top quartile which is above the median. If variable mean fall in bottom and second quartile, it means that there is a need of improvement in that field and, if it fall in third or top quartile, it means that that organization is very strong in learning.

Results and Discussion

The reliability of data was checked by taking the Cronbach's alpha which was .540 which shows data is reliable. For interpretation of results Means Technique was used. For every item separately Mean was calculated then its composite was taken and compared to the Benchmark scores given by Garvin (2008). Following table 1 shows the Benchmark scores given by the Garvin (2008).

Table 1 Benchmark Scores

Variables	Bottom Quartile	Second Quartile	Median	Third Quartile	Top Quartile
Experimentation	18-53	54-70	71	72-82	83-100
Information Collection	23-70	71-79	80	81-89	90-100
Analysis	19-56	57-70	71	72-86	87-100
Education and Training	26-68	69-79	80	81-89	90-100
Information Transfer	34-60	61-70	71	72-84	85-100
Learning processes	31-62	63-73	74	75-82	83-100

Table 2: Mean Values of Telecommunication Organizations

Variables	Mobilink	Warid	Ufone	Telenor	PTCL
Experimentation	56.5	48.81	54.76	62.5	44.76
Information Collection	37.5	37.5	38.39	34.82	29.28
Analysis	70.09	75	75	72.77	75.36
Education and training	57.74	56	47.62	64.29	49.52
Information transfer	71.87	72.09	75	71.43	62.5
Learning processes	58.74	57.88	58.15	61.16	52.28

The mean value of Mobilink for experimentation is 30.95 which fall in second Quartile, for Information Collection is 37.5 which fall in Bottom Quartile, for analysis is 70.09 which also fall in second Quartile. For education and training is 57.74 which also fall in Bottom Quartile and for information transfer are 71.87 which fall in Median and if we take aggregate of this the learning composite is 58.74 which fall in bottom quartile which shows that there is a need of improvement in Mobilink in their learning practices.

The mean value of Warid for experimentation is 48.81, for Information Collection is 37.5, for analysis is 75. For education and training is 56 and for information transfer is 72.09 and if we take aggregate of this the learning composite is 57.88 which fall in bottom quartile which shows that there is also a need of improvement in Warid in their learning practices.

The mean value of Ufone for experimentation is 54.76, for Information Collection is 38.39, for analysis is 75. For education and training is 47.62 and for information transfer is 75 and if we take aggregate of this the learning composite is 58.15 which fall in bottom quartile which shows that there is also a need of some improvement in Ufone in their learning practices.

The mean value of Telenor for experimentation is 62.5, for Information Collection is 34.82, for analysis is 72.77. For education and training is 64.29 and for information transfer is 71.43 and if we take aggregate of this the learning composite is 61.16 which fall in bottom quartile which shows that there is also a need of some improvement in Telenor in their learning practices.

The mean value of PTCL for experimentation is 44.76, for Information Collection is 29.28, for analysis is 75.36. For education and training is 49.52 and for information transfer is 62.5 and if we take aggregate of this the learning composite is 52.28 which fall in bottom quartile which shows that there is also a need of some improvement in PTCL in their learning practices.

Conclusion

If we compare all these Mean values it shows that overall there is a need of improvement in telecommunication sector of Faisalabad because all companies fall in the bottom quartile. And comparatively in Faisalabad area Telenor has higher learning practice value than all other companies. Mobilink, Warid, Ufone also fall in Bottom Quartile but they all have very closer values and PTCL has comparatively low value among all.

This study evaluates that in Faisalabad area there is a need to improve learning practices in Faisalabad. This study was conducted only by taking the data from forty two respondents of five telecommunication companies of Faisalabad area and only one building block of learning organization that was learning process and practices was measured. Due to the small sample and taken only from the Faisalabad area the results of this research cannot be generalized. In future the study can be conducted by taking the large sample of all the telecommunication companies and from different cities so the results may differ. Also this study can also be

conducted on other sectors to measure the level of learning in those organizations e.g. education, banking, textile etc.

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Appendix

Reliability Statistics	
Cronbach's Alpha	N of Items
.540	5

Case Processing Summary			
		N	%
Cases	Valid	42	100.0
	Excluded	0	.0
	Total	42	100.0

a. List wise deletion based on all variables in the procedure.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experimentation	8	3.33	5.00	3.9583	.72237
Info. Collection	8	1.50	3.50	2.6250	.69437
Analysis	8	3.25	6.75	4.9063	1.17213
Edu. Training	8	2.33	6.00	4.0417	1.25277
Info. Transfer	8	3.25	8.50	5.0313	2.07208
Valid N	8				

a. Organization Name = Mobilink

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experimentation	8	2.33	5.33	3.4167	1.12335
Info. Collection	8	1.50	4.00	2.6250	.69437
Analysis	8	3.25	6.50	5.2500	1.05221
Edu. Training	8	2.33	5.67	3.9167	1.21825
Info. transfer	8	4.25	6.50	5.4063	.81216
Valid N	8				

a. Organization Name = Warid

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experimentation	8	3.33	4.67	3.8333	.53452
Inf. Collection	8	1.50	4.50	2.6875	1.13192
Analysis	8	3.25	6.50	5.2500	1.01770
Edu Training	8	2.33	5.33	3.3333	.97590
Info Transfer	8	3.25	6.50	5.2500	1.08562
Valid N	8				

a. Organization Name = Ufone

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experimentation	8	3.67	5.67	4.3750	.60257
Info Collection	8	1.50	4.00	2.4375	1.05009
Analysis	8	3.25	5.50	5.0938	.75519
Edu Training	8	2.33	6.33	4.5000	1.32137
Info Transfer	8	3.25	6.50	5.0000	1.18773
Valid N	8				
a. Organization Name = Telenor					

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Experimentation	10	2.33	4.67	3.1333	.74037
Info Collection	10	1.50	4.00	2.0500	.79757
Analysis	10	4.25	6.50	5.2750	.74021
Edu Training	10	2.33	5.67	3.4667	1.23927
Info Transfer	10	3.25	6.50	4.3750	1.04914
Valid N	10				
a. Organization Name = PTCL					