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## CRITICAL ORGANIZATIONAL LEARNING FOR COST LEADERSHIP STRATEGY AND PERFORMANCE: STUDY OF TELECOM SECTOR IN PAKISTAN

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### ABSTRACT

This study illustrates the relationship between cost leadership strategy to organizational performance through organizational learning that was studied via its dimensions including External Knowledge Acquisition, Knowledge Distribution and Internal Knowledge Acquisition. The subjectivity of this study is to examine the criteria for measuring organizational performances outcomes via organization learning dimensions in telecom sector organizations. This study is an effort to answer the literature gap regarding link of cost leadership strategy towards performance with organizational learning in context. Extensive literature on organizational learning has been reviewed and their limitations were identified. Self-administered questionnaires were mailed for this study to telecom sector in Pakistan. Cost leadership strategy via organization learning dimensions have been found to be having significant impact on growth and overall organizational performance.

**Disciplinary:** Management Sciences and Mathematics (Statistics).

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## 1. INTRODUCTION

For last few decades one of the interested areas for the researchers had been Analysis and connectivity among strategy and performance. Many studies had been further made on the strategies proposed (Miles et al., 1978, Porter, 1980). Although performance can be affected by applying different strategies, but still to attain success in competition organizational learning is a critical factor (Bapuji and Crossan, 2004). Developing advanced customer value for long run is Organization learning (Kandemir and Hult, 2005). The current research has intensively studied the links used, among theories, frameworks and constructs, to ensure gaps in the literature. The relationship among organization's generic strategies, organization learning, innovation and firm's performance, has been examined earlier, but in different studies not in one and in pieces too. Relationship among the above mentioned variables is studied collectively in current study.

Selecting different activities that carry exclusive blend of value is Strategy (Porter, 1991). Strategy focuses on three parts. First the maintain a fit between a company's competitive environment and company, second the resource allocation in between investment opportunities and third the willingness to take strategic view that is making long term investments earlier to have high returns in the long run (Hamel, 1993). Cost leadership (LC) or low cost provider strategy is among the generic strategies that a firm can pursue to attain the status of a firm with the lowermost cost production in the business (Porter, 1985). LC can be attained by various means such as direct access to raw materials, product or process innovation, attaining economies of scale in purchasing, production and production and making use of learning curve effects. Probability of performing above the average industry performance becomes high when a firm attains LC and charges less than its competitor.

Though the LC strategy has been studied by researchers comprehensively in different scenarios but not in association with the variables of the current study i.e. organization learning. This reach carries a new aspect in the management literature by exploring a rare blend of variables. This research fills up the gap of investigating LC strategy, organization learning and performance in a single frame work. The objective of this research is to deeply examine the combination of above mentioned variables so as to increase the performance of business in today's competitive environment. With a very sharp growth of 2.9 percent and Rs. 322 billion revenues the telecom sector is rapidly growing sector With (Wasti, 2014). The telecom sector organizations in competition need to focus on competitive strategy along with the critical factors of organization learning and innovation. In, order to reap maximum organization performance efforts on organization learning dimensions are required to be placed in the appropriate combination. Organizations of telecom sector of Pakistan face issue of fierce competition. Factors linked to the organizational performance have been studied in the current research. LC strategy and organizational performance has become more important for the knowledge based organizations due the dynamics of organization learning and high competition. Though the organizational performance and LC strategy has been empirically studied in numerous researches but fundamental forces of LC strategy into organizational performance are more complex. It is argued that they have not been tested with the mediation of external knowledge, internal knowledge and knowledge distribution.

## **1.1 SIGNIFICANCE OF THE STUDY**

Although LC has been extensively studied, but it has not been studied with external knowledge, internal knowledge and knowledge distribution as mediators. The model will serve as a configured way for the execution of the LC strategy with right mix of efforts in acquisition of external knowledge, internal knowledge and knowledge distribution. This study is helpful in understanding the LC impact on performance in link with the internal knowledge, external knowledge and knowledge distribution.

## **1.2 RESEARCH QUESTIONS**

- How LC strategy impacts on the organizational performance?
- Does external knowledge acquisition (EKA), internal knowledge acquisition (IKA) and knowledge distribution (KD) act as mediators between the relationship of cost leadership strategy and organizational performance?

## 2. LITERATURE REVIEW

### 2.1 COST LEADERSHIP

The dynamic features about LC strategy should be considered in order to stay as an above average industry performer are: 1) level of differentiation must be near to the competitors and 2) in order to maintain its cost advantage, replicating the sources of competitive advantage should be hard for the competitors (Kay, 1993). An implication is that, instead of becoming a cost leader in the market, to be at a position just behind the cost leader is also good (Dietrich, 1993). The efficiency and effectiveness of generic strategies is reliant on many exterior factors prevailing in the environment like customer sensitivity to the price, loyalty towards brands etc. (Day, 1984). Relationship between charging lower prices to attain the customer having low price attraction and LC is strong than attaining customers by newness or representation (Miller, 1988). Being a price leader is more beneficial in a price sensitive market. If resources and skills of a firm are very hard to replicate, that firm can sustain LC for a long time Murray (1988). Attaining efficiencies in operation management is a way to take advantage from LC. The advantage of LC are temporary and long term profitability cannot be sustained, as advantage taken from operation management sustains only until the new and better resources (Eisenhardt and Martin, 2000).

LC strategy described itself well on short term. Economic recession of 2008 validates that, cost efficiency is the obligatory factor for the businesses pursuing LC strategy (Valipour et al., 2012). On the other end, value added creation is needed to justify the economic stability of the business (Valipour et al., 2012). If an organization is following LC strategy, firms performance can be enhanced by improving financial leverage and dividend payments (Valipour et al., 2012). Wada (2018) recommends that after the labor cost rise in developing countries, capability based cost leadership strategies are appropriate for the firms. In addition, products and skills connectivity between the corporate core unit and the subsidiary is encouragingly linked to the divisions focus on the LC strategy (Pehrsson, 2017).

### 2.2 ORGANIZATION LEARNING

The concept of organization learning has been the focus of attention of management, academicians and practitioners. Much awareness about organization learning has been raised (Senge, 1990). In early 2000s, learning was taken as an approach to enhance performance of the organization by the manager. Encouraging resource allocation efforts to stimulate learning in the organization are focused by Hussein et al. (2014). Many studies take organization learning dimensions of EKA, IKA and KD as mediating variable between the relationship of LC strategy and organizational performance.

*Extraversion* is the tendency to be energetic, warm, and aggressive. Individuals with extraversion tend to be more talkative, self-confident and their energy level is frequently high, so they are impatient. Extroversion according to Tupes and Christal (1961), is all about being, Adventurous, Energetic, Frank, Assertive, Social, Cheerful and Composed. Kurukulasuriya and Rosenthal (2013) reported high extraversion among employees and those with high extroversion were found proud, comfortable and happy which has also been confirmed by Bhatti et al. (2013). The extraversion appears to be social, action makeable, somehow first movers (Bhatti et al., 2013). Extraversion sometimes causes awkward social situations that may be hostile (Paris, 2017). According to Ott and

de Vries (2012), individuals, with high tendency of extraversion are mostly able to be more debatable, open to discussion and negotiable. Colbert et al. (2012) stated that the individuals with extraversion characteristics have a power to be socially dominant and be more interactive and communicative.

*Agreeableness* is defined as a person being, good natured, emotionally mature, cooperative, trustworthy, kind, adaptable and the one who is not jealous (Tupes and Christal, 1961). Individuals with high tendency of this trait are most likely to be generous, trusting, empathetic, capacity to bear etc. These individuals if are recognized and understood as extroverts, can be utilized as smooth role players. In today's world whether socially or organizationally, all individuals need to be socially connected. According to Awais Bhatti et al. (2014), an individual having personality factor of agreeableness is sympathetic, devoted and caring. Individuals identified with agreeableness trait are usually considered generous, trusting, empathetic, and cooperative and carry good relationships with others (Phipps and Prieto, 2011). Moreover individuals carrying agreeableness have been found good in conflict resolution and perform better on their jobs (Bhatti et al., 2013). The tendency of agreeableness factor carries cooperation, cheerfulness, supportiveness, social responsiveness and harmony which makes individuals more flexible in adjustments (Phipps and Prieto, 2011).

*Conscientiousness* according to Tupes and Christal (1961) is defined as responsibility, dependability, conventionality, and preservice. Surgeons have been reported more conscientious than being carefree and irresponsible as compared to the rest of the population (Kurukulasuriya and Rosenthal, 2013). According to Sartori, et al., (2017), conscientiousness is one of the key drivers of job performance. Conscientiousness can also be referred as dependability (French, 1953) and conformity (Campbell and Fiske, 1959) and people who have high tendency of conscientiousness are identified as organized, and responsible ones. Colbert et al. (2012) found that such personality traits include hardworking, task completing, and very organized and highly responsible individuals. In addition to, a great deal with conscientiousness reveals that such individuals are achievement oriented because they are highly task competent which is a good sign for an employee (Judge et al., 2002).

*Openness to Experience* in ab-initio was identified as a cultural facet (Campbell and Fiske, 1959). Bhatti et al. (2014) narrated openness to experience as a reason of wide interest and exploring the social environment. The individuals who are open to experience are found aesthetically fastidious, socially polished, independent, cultured and imaginative (Tupes and Christal, 1961). Openness, according to Paris (2017) can be a source of performance and engagement. According to Kurukulasuriya and Rosenthal (2013), male individuals in hospitals are found to be more open and ready to go for new experiences as compared to the other gender. Openness to experience is highly sought-after trait to enhance productivity of the organization or improve the team performance, giving chances to new idea and creativity is one of the essential required skill and ability of leader. Creativity is also seen as an important part of this trait.

*Neuroticism* is primarily associated with disturbance anxiety and tense personality. Tupes and Christal (1961) described neuroticism as neurotic, not placid or poised, hypochondriac, dependent emotionally immature and irresponsible. Neuroticism is a personality trait that is moody and always tense personality (Bhatti et al., 2013). Kurukulasuriya (2013) quoted the doctors and surgeons are less neurotic and more emotionally stable and thus their performance remain stable. Evidences exhibit that less neurotic or emotionally stable individuals are more likely to deal in troublesome, annoying and uncomfortable situation and have grip over the problems accurse there (Bhatti et al., 2013).

## 2.3 ORGANIZATIONAL PERFORMANCE

Gaining lead among the competitors and evaluating the best typology is the basic issue in the area of strategic management (McGee, 2005). On the suitability of performance measures, no agreement has been made yet (Parnell, 2000, Beal and Yasai-Ardekani, 2000). Hindrances in the evaluation of firm's performance like the future performance may get similarity with previous performance, due to feedback mechanism firm's performance may get deviated and influences on organization may differ in long or short term, were identified by March and Sutton (1997). While opposing to it, firm's performance is measured by financial and non-financial variables by a number of researches (Dess and Davis, 1984, Parnell, 2000, Dyer and Reeves, 1995). Link between performance and stakeholder's satisfaction, performance in comparison to the competitors and ethical behavior are the non-financial variables studies in these researches. Performance is said as multi-facet variable (Ostroff and Bowen, 2000).

An eight item scale was developed to measure organizational performance by Aragón-Correa et al. (2007). For objective evaluation, top managers were inquired about the firm's performance based on return on assets, return on sources and growth in sales of their main products or services. Using the aforementioned variables, managers were asked to compare and scale their firm's performance with respect to their competitors. A number of studies have employed subjective perceptions of managers to evaluate organizational outcomes. For evaluation of organization performance, both objective and subjective measures are said valid by a number of researches (Dess and Robinson, 1984).

## 2.4 COST LEADERSHIP STRATEGY AND ORGANIZATION PERFORMANCE

The association among competitive strategy and firm performance can be marked out to (Bain, 1956, Mason, 1939) industrial organization framework, that portrays industry's characteristics, where activities of industries structure drive profit of the organization primarily. Industry's characteristics have much impact on organization performance (Barney, 1986). The second view is endogenous, where diversified organizational traits and conduct are the reason for organizational performance. In this viewpoint resource base theory holds supremacy. Better organizational performance may be attained via corporate strategy mechanism, is also suggested by different researchers. To impact the competition nature strategy is employed for the development of resources (Reed & Defillipi 1990). An established macro and micro environment fits a firm pursuing strategy of LC (Miller, 1988). A LC firm, improves its chances to become an above average industry performer by charging lesser prices than its competitor firms. Whereas following the LC strategy, when a number of firms are employing same LC strategy without keeping them self at cost disadvantage, it becomes very hard for long run to sustain advantage in competition (Barney, 2002).

Practices and technologies that enhance efficiency and reduce costs, if these are transferred to competitors, it will quickly reduce the competitive advantage. Cost efficiencies attained via process improvements barely becomes a source of cost advantage, especially if any kind of contribution to such process improvement is made by suppliers, as it may act as a source of transfer of such practices to competitors. If competitor in the industry also starts operating business at the same or large level with same or more resources as the cost leader firm has, then cost efficiencies attained by economies of scale may disappear due to large scale of production. Organization learning is too considered an important source of advantage, but if there is a quick knowledge dispersion across competitors that, advantage does not remains sustainable (Murray, 1988). In addition learning orientation is considered

as critical factor for enhanced organizational performance (Kharabsheh et al., 2015). Furthermore capability based LC has been recommended strategy for the firms in developed countries after the growth in labor cost of developing countries (Wada, 2018).

H1: LC strategy has significance impact on organizational Performance.

## **2.5 COST LEADERSHIP STRATEGY AND ORGANIZATION LEARNING**

As per the resource based theory, organization's abilities and resources are the source of its competitive business strategies plan. (Hunt and Morgan, 1995). An organization must have valuable, infrequent, unique, and non-substitutable abilities and resources to gain advantage in the competition through competitive strategies (Barney and Wright, 1997). Organization learning is an important ability as it can contribute in exploiting opportunities and decreasing the impact of threat and causing advantage in a competitive environment (Hult et al., 2003). Organization learning helps to acutely understand the macro and micro environment of firm in which it is operating, so it can more competently satisfy customer's needs and improve the efficiency of this process (Sinkula, 1994, Day, 1994). Organizational learning is hard to develop, as it requires to generate new knowledge which will leads to adoption of that new knowledge (Huber, 1991). Organizational learning is not possessed by a lot of firms; hence it is rare (Slater, 1995). Organization learning's replication or transfer is not easy for competitors as it is based on organization processes and is intangible.

H2: LC strategy has significance impact on EKA.

H3: LC strategy has significance impact on IKA.

H4: LC strategy has significance impact on KD.

## **2.6 ORGANIZATION LEARNING AND ORGANIZATIONAL PERFORMANCE**

Organizational learning is encouraged by a lot of cultures and that has resulted in improved organizational performance. (Egan et al., 2004, Ellinger et al., 2002). Innovation performance is enhanced when the organizational learning enhances (Mansfield, 1983). The learning aptitude of the employees has increased the absorption and incorporation of internal information is increased (Cohen and Levinthal, 1990). Connection between organizational learning and its put comes have been studied by a very low number of studies. The connection between organization learning and innovation performance has been studied by Pérez López et al. (2005) but there has been weak evidence empirically also there has been not a lot of research on learning processes (Bapuji and Crossan, 2004). Most researches focused on theoretical side of organization learning (Saru, 2005).

### **2.6.1 EXTERNAL KNOWLEDGE ACQUISITION AND PERFORMANCE**

The advantages of acquiring knowledge from external sources are vital in high tech businesses, where businesses are distinguished by producing new generation products (Uotila et al., 2009). Developing knowledge from the external sources broadens the knowledge base of the business, thus providing the benefit to effectively identify the opportunities and threats. Furthermore, it also opens approach to the new marketplaces and know-hows (Danneels, 2008, Narteh, 2008). Knowledge based view reflects knowledge as an external R&D activities show improved performance (Berchicci, 2013). Moreover it is also taken as addition to the resource based view. Knowledge transfer is valuable within the firm and also among the several firms (Grant, 1996). Businesses acquiring external knowledge through external R&D activities show improved performance (Berchicci, 2013).

H5: There is a mediating role of EKA between the relationship of LC strategy and organizational Performance.

## 2.6.2 INTERNAL KNOWLEDGE ACQUISITION AND PERFORMANCE

Internal knowledge acquisition is of the essence for fruitful learning process of the business, but it is impracticable for a business to totally depend on its internal means. The competitive nature of the contemporary world compels a business to constantly learn from the external bases nevertheless this does not signify that acquiring knowledge from the internal sources is not valuable. To gain from the knowledge of the internal sources, it is critical to effectively put together the sources of internal knowledge with those of external knowledge, as the rapid transforming external environment possibly will outdate the firm's current knowledge base (O'Reilly and Tushman, 2008). Consequently, together external internal knowledge acquisition are essential to positively improve the firm's capabilities, so as to gain competitive advantage. In addition the internal knowledge enhance the intensity of the effect of external knowledge on innovation performance of the organization (Segarra-Ciprés et al., 2014).

H6: There is a mediating role of internal knowledge acquisition between the relationship of LC strategy and organizational Performance.

## 2.6.3 KNOWLEDGE DISTRIBUTION ACQUISITION AND PERFORMANCE

Knowledge distribution is believed to be a valuable driver in improving knowledge and innovation (Jackson et al., 2006). To use the knowledge base owned by an organization, it is crucial to distribute that knowledge among employees. Knowledge distribution between employees possibly will bring advantages like lessening of production costs, better-quality processes and upgraded organizational performance (Mesmer-Magnus and DeChurch, 2009).

H7: There is a mediating role of knowledge distribution between the relationships of LC strategy and organizational Performance.

The theories that support the variables in this study are resource based theory, knowledge based view, transaction cost theory. Transaction cost theory provides the basis for mediating variables in this study. The theory that encapsulates all the variables in the study is resource based theory as discussed in the literature and according to resource based theory, resources possessed by an organization become source of its competitive advantage (Hunt & Morgan, 1995) and organization learning is considered as a resource that is hard to imitate or replicate as it is valuable, inimitable, rare and non-substitutable (Barney, 1997).

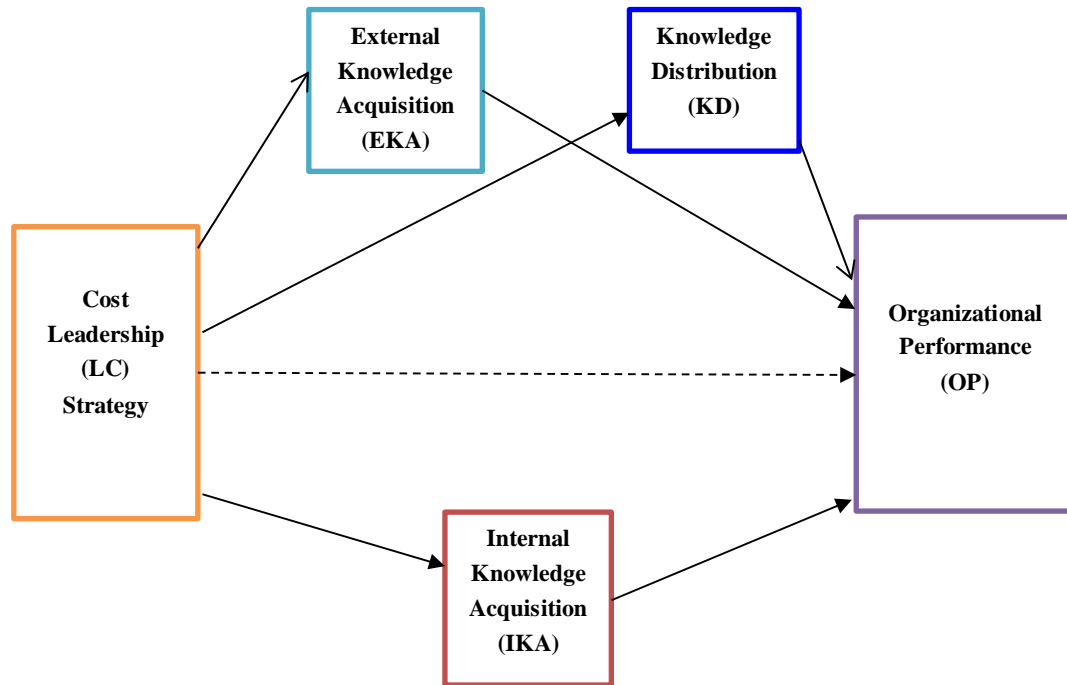
## 3. DATASET AND METHODOLOGY

This section gives detail about the study dataset and the methodology used in this study. Figure 1 give detail of this study conceptual framework.

### 3.1 DATASET

The study identified four promising telecom organizations currently working in the Pakistan telecom sector namely Mobilink; Ufone; Telenor and CMPAK (Zong). The research engaged quantitative causal research methods to examine the relationship. Cross sectional time horizon is used

and telecom sector is the unit of analysis for the study. The sample size taken was drawn from the population of these organizations against the total population of N = 2448. Simple random sampling technique is used. From self-administered survey, out 600 distributed questionnaires, 296 were received fit for analysis.



**Figure 1: Conceptual Framework**

### 3.1.1 SAMPLE DESCRIPTION

Table 1: Details of sample size from the population of telecom organizations in Pakistan

Organization	Questionnaires	Questionnaires received (fit for analysis)	Questionnaires unanswered	Response rate	Gender Female/Male
Mobilink	150	93	57	0.62	
Ufone	150	86	64	0.57	
Telenor	150	63	87	0.42	
CMPAK (Zong)	150	54	96	0.36	
<b>Age</b>					
< 18					0.26 / 0.74
> 18 but < 25					0.29 / 0.71
> 25 but < 35					0.43 / 0.57
> 35 but < 45					0.47 / 0.53
> 45					0.13 / 0.88
<b>Job responsibility</b>					
1 Assistant Manager					0.08 / 0.92
2 Manager					0.19 / 0.81
3 Director					0.47 / 0.53

### 3.2 METHODOLOGY

A total 296 confirmed respondents is useful for the multivariate analysis. From the  $\chi^2$  – test under the confidence interval of 5% the results showed no remarkable differences between the characteristics of the telecom business types among the population studied. The simplified factor structure developed after performing the maximum likelihood analysis in accordance to the promax



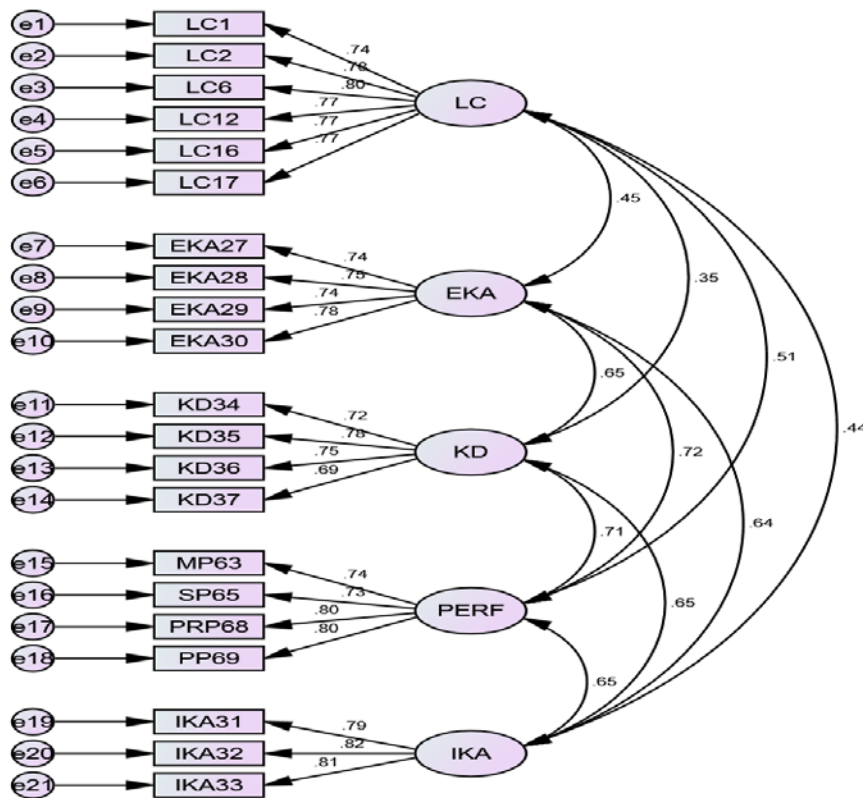
rotation criteria to enhance the factor loadings. There is no evidence of discernment and convergent validity issue existed. The reliability test of Cronbach Alfa confirms that all the values of the constructs are above the acceptable value of 6.0.

#### 4. RESULTS AND ANALYSIS

The selected sample data was analyzed with SPSS and AMOS programs. Different statistical methods were utilized along with the multivariate analysis methods such as exploratory and confirmatory factor analysis. Empirical findings gave the basis of systematic and procedural process of knowledge dimensions. After application from factor analysis method i.e. exploratory and confirmatory through SPSS and AMOS software the initial factors were chosen for construct validity. For that the eigenvalue was taken into consideration with the usage of maximum likelihood factoring and promax rotation method. The concept of organization learning via knowledge dimensions refers to the organization management and for that the data extracted from the assistant managers, managers and directors. From the exploratory analysis, the resulted values of all the variables determined the high communalities (from 0.624 to 0.793) and thus no elimination of variables done at this stage.

Table 2 displayed the exploratory factor analysis of the selective constructs for the measurement variables for the study. KMO test statistics showed the value around 0.918 and confirmed the sampling adequacy of the data which the Barlett's test of sphericity p-value of significance (sig. = 0.000 for all variables). There was 5 factors extracted with the cumulative value of round 62 % approximately, and that was above the acceptable range. The reflective latent measures extracted from the pattern matrix for the factor LC were reduced to six in total (eliminate LC3 to LC5; LC7 to LC11). This addressed LC strategy with in the telecom sector organizations in Pakistan. For the organizational learning via knowledge dimensions explained by all three factors IKA; EKA and KD. To the context of the study the elimination was considered in constructs for not only this variable, but for the remaining factor PERF too.

The fitness of model to data was confirmed before hypothesis testing. For that the invariance analysis were done to confirm the model adequacy. The figure 2 confirms the validity of the model to be executed for the multivariate analysis. It showed the covariance values among the variables which ranges from 0.40 to 0.70. To evaluate the attributes of this study's measurement model, indices of model data fit were also observed. According to the literature, value of  $\chi^2/df$  should be smaller than 3 for the acceptance of the study model (Kline 1998) and according to Marsh and Hocevar (1985), value of  $\chi^2/df$  smaller than 5 is acceptable. The value for  $\chi^2/df$  was observed 1.808/179 with a value well below a confidence interval level of 5% (Table 3). For the construct validity for measurement model, average variance explained i.e. EVA and MSV values for all the variables must be well below the respective values of CR. The diagonals values given in the table 4 for the receptive variables are higher compared to the values below. For instance, for the variable of organizational performance i.e. PERF the diagonal value for variance was 0.768 compared the other variance value of the LC strategy variable i.e. LC was 0.511 etc. Therefore, after ensuring the adequacy of the research model to the data collected.



**Figure 2:** Invariance analysis of cost leadership strategy; organizational learning via knowledge dimensions

**Table 2:** Exploratory factor analysis of constructs for cost leadership strategy, organizational learning via knowledge dimensions and organizational performance.

Exploratory factor analysis	Kaiser-Meyer-Olkin Measure of Sampling Adequacy	Bartlett's Test of Sphericity $\chi^2/df$ Sig.	Cumulative%	Reflective latent measures from Pattern matrix
	0.918	3363.45**	61.66	
Goodness-of-fit test		239.50**		
LC				LC1; LC2; LC6; LC12; LC16; LC17
IKA				IKA31; IKA32; IKA33
EKA				EKA27; EKA28; EKA29; EKA30
KD				KD34; KD35; KD36; KD37
PERF				MP63; SP65; PRP68; PP69

**Table 3:** Measurement model and SEM model fit for multivariate model analysis.

	$\chi^2/df$	CFI	GFI	RFI	RMSEA	PCLOSE
<b>Model-I (Invariance)</b>	1.808/179	0.955	0.895	0.890	0.053	0.306
<b>Model-II (SEM)</b>	2.689/182	0.905	0.851	0.837	0.046	0.700

**Table 4:** Confirmatory factor analysis for construct validity for multivariate model analysis.

	CR	AVE	MSV	PERF	LC	EKA	KD	IKA
PERF	0.852	0.590	0.518	0.768				
LC	0.898	0.595	0.261	0.511	0.771			
EKA	0.838	0.564	0.518	0.720	0.454	0.751		
KD	0.826	0.543	0.508	0.713	0.347	0.651	0.737	
IKA	0.849	0.651	0.420	0.648	0.439	0.640	0.648	0.807

From telecom organizations, this study has developed a fine proof of the construct validity of organization strategy, organization learning via knowledge dimensions and organization performance for the telecom sector of Pakistan. Scales for organization strategies, organization learning and organization performance were found to be appropriately fit for the measurement model of this study. Thus, all the constructs used in this study are suitable for the telecom sector.

For the multivariate analysis the SEM method was proposed to achieve the study objectives. This study preferred SEM over regression because of the complexity of the model under analysis, as it could be evaluated through a single statistical model by using SEM analysis technique. SEM deals with complex and specific hypotheses in an effective way (Kaplan, 2000). As a result, the indices of model fitness attained were:  $\chi^2/df = 2.689/182$ , CFI = 0.905, RFI = 0.837, GFI = 0.859, RMSEA = 0.046 and PLCOSE = 0.700.  $\chi^2/df$  is lower than 3 with the other indicators e.g., CFI, GFI and RFI. The values of comparative fit index and normed fit index should be close to 0.9, ideally (Kaplan, 2000). This indicates that results are acceptable. Other than testing the hypotheses of direct relationships in the study model, SEM also helped in studying the mediation impact of organizational learning via knowledge dimensions, among strategy and performance, effectively.

### **Hypothesis Testing – I) Cost leadership strategy and organizational performance**

Our hypothesis assumed that the cost leadership has a significant positive impact on the organizational performance, and even more when the age, gender and job responsibility variables has been controlled for, in a telecom organizations. Table 5 showed the standardized coefficient values for the relationship between the cost leadership strategy and organizational performance. For instance the when the direct path analysis was done to observe the impact of cost leadership strategy in the telecom organization performance, there was positive high significance value of 0.53 was found. The low t-statistics value confirms that the value was below the confidence interval level of 1% ( $\beta = 0.53$ ;  $t_{\alpha=1\%} = 8.64$ ). With reference to the R<sup>2</sup> value there found to be 21% of the variability among the organizational performance which was accounted for cost leadership strategy. The result is in accordance to the H1 hypothesis fact and that the cost leadership strategy cannot be ignored for organizational performance. However, there was no significant impact of controlled variables when cost leadership strategy and organizational performance was observed.

### **Hypothesis Testing – II) Cost leadership strategy and organizational learning via knowledge dimensions**

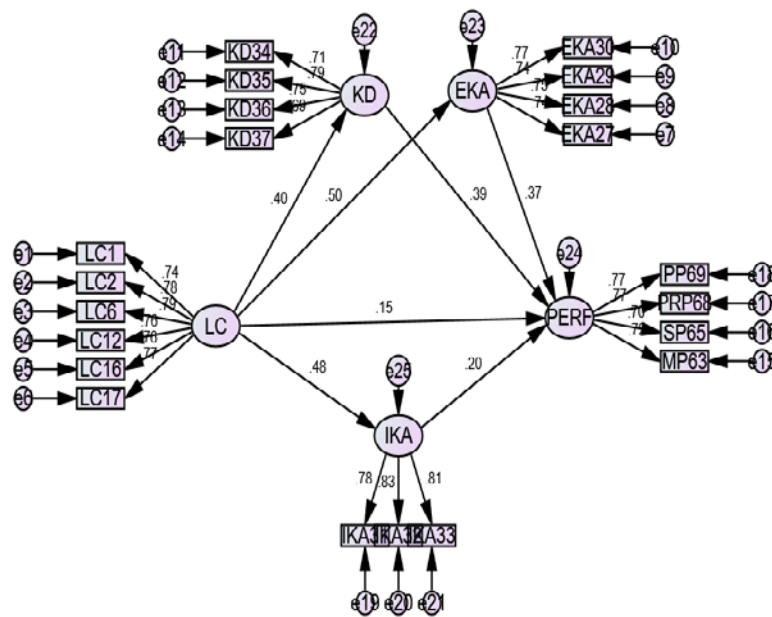
The above mentioned relationship was observed through the respective hypotheses i.e. H2; H3 and H4, after controlling for age, gender and job responsibility in telecom organizations. These hypotheses have assumed to have a significant positive impact when cost leadership strategy was taken into consideration with the belief that the three selective knowledge dimensions would harness in telecom organizations in Pakistan. Table 5 showed the standardized coefficient values for the relationship between the LC strategy and organizational learning. Furthermore, the table 5 showed an evidence of supporting the respective hypotheses with the significance standardized coefficient values. For example, when the first dimension of organizational learning i.e. internal knowledge acquisition and the impact of LC strategy on that was observed, there was positive high significance value of 0.48 was found. The low t-statistics value confirms that the value was below the confidence

interval level of 1% ( $\beta = 0.48$ ;  $t_{\alpha=1\%} = 7.09$ ). With reference to the R2 value there found to be 15% of the variability to the internal knowledge acquisition which was accounted for LC strategy. The result is in accordance to the H2 hypothesis with the fact that the LC strategy contributes significantly for organizational learning. Noticeably, when the controlling variables such as gender, age and job responsibility was observed only under the 2nd selective knowledge dimension and that of the LC strategy as an explanatory variable in the model, age and gender seemed to be significantly effecting the relationship among the observed variable.

**Table 5:** Mediating role of organizational learning via knowledge dimensions among LC strategy and organizational performance.

	H1: $\beta$ (t) Organization performance	H2: $\beta$ (t) IKA	H3: $\beta$ (t) EKA	H4: $\beta$ (t) KD	H5 to H7: $\beta$ (t) Organization performance
(Constant)	2.53 (8.84*)	2.41 (7.18*)	3.08 (11.42*)	2.87 (9.83*)	0.04 (1.31)
Gender	-0.13 (-1.43)	-0.02 (-0.34)	-0.10 (1.82**)	-0.07 (-1.31)	-0.05 (-0.60)
Age	-0.07 (-1.57)	-0.03 (-0.48)	-0.12 (-2.23*)	0.05(0.89)	-0.06 (-1.48)
Job Responsibility	0.02 (0.85)	-0.02 (-0.46)	-0.02 (-0.34)	0.04 (0.75)	0.02 (1.00)
Internal Knowledge Acquisition (IKA)					0.20 (3.30*)
External Knowledge Acquisition (EKA)					0.37 (4.93*)
Knowledge Distribution					0.32 (5.74*)
LC Strategy	0.53 (8.64*)	0.48 (7.09*)	0.50(7.48*)	0.40 (5.33*)	0.15 (4.01*)
R2	0.21	0.15	0.17	0.10	0.53
Adjusted R2	0.20	0.14	0.16	0.10	0.04
S.E of the Estimates	0.76	0.90	0.72	0.78	0.35

Note: \* confidence interval of p-value @ 1% level; \*\* confidence interval of p-value @ 5% level



**Figure 3:** Structural equation model of LC strategy through mediation of organizational learning via knowledge dimensions among organizational performance.

### Hypothesis Testing – III) Mediating role of organizational learning via knowledge dimensions among LC strategy and organizational performance

Under this hypothesis testing the authors assumed a mediating role of an organizational learning among the relationship between the observed and explained variables under study. The respective hypotheses were H5; H6 and H7 which proposed that the LC strategy positively affected the organizational performance and not only this it would insured that the more knowledge able the

managers were, the more effective performance of the organizations would be. For the mediating role of all the respective KD among the LC and organizational performance, there observed the positive significant relationship found in Figure 3. Table 5 showed the standardized coefficient values. However, there was decreased in values for respective coefficients of organizational learning in the model ( $\beta = 0.20, 0.37$  and  $0.32$ ;  $t_{\alpha=1\%} = 3.30, 4.93$  and  $5.74$ ). The model fit test statistics i.e. R2 value observed the value of 53% of the variability among the organizational performance which was accounted for LC strategy through the mediation of organizational learning with knowledge dimension constructs. The result is in accordance to the respective hypotheses and concluded that there was mediation (partial) impact of internal knowledge acquisition, EKA and KD among the LC strategy and organizational performance in telecom organization of Pakistan.

## 5. CONCLUSION

Earlier studies on competitive strategies have ignored organization learning via knowledge dimensions. This study recommends the importance of the above mentioned construct while considering the LC strategy. The research investigated link mentioned above in telecom sector of Pakistan via knowledge dimension. For the contextual purpose, the study used multivariate analysis by using AMOS software. The findings support the fact that the LC strategy cannot be ignored in organizational performance in telecom sector. Further, there was a significant evidence found when the same relationship was reviewed via the knowledge dimensions. This proved that the knowledge and skill played a triggering role and concluded the more knowledgeable managers were the more would be the performance of an organization.

## 6. AVAILABILITY OF DATA AND MATERIAL

Data can be made available by contacting the corresponding author.

## 7. REFERENCES

- ARAGÓN-CORREA, J. A., GARCÍA-MORALES, V. J. & CORDÓN-POZO, E. 2007. Leadership and organizational learning's role on innovation and performance: Lessons from Spain. *Industrial marketing management*, 36, 349-359.
- BHATTI, M.A., KAUR, S. & BATTOUR, M.M. 2013. Effects of individual characteristics on expatriates' adjustment and job performance. *European Journal of Training and Development*, 37, 544-563.
- BHATTI, M.A., MOHAMED BATTOUR, M., RAGEH ISMAIL, A. & PANDIYAN SUNDRAM, V. 2014. Effects of personality traits (big five) on expatriates adjustment and job performance. *Equality, Diversity and Inclusion: An International Journal*, 33, 73-96.
- BAIN, J. S. 1956. *Barriers to new competition: their character and consequences in manufacturing industries*, Harvard University Press Cambridge, MA.
- BAPUJI, H. & CROSSAN, M. 2004. From questions to answers: reviewing organizational learning research. *Management Learning*, 35, 397-417.
- BARNEY, J. B. 1986. Strategic factor markets: Expectations, luck, and business strategy. *Management science*, 32, 1231-1241.
- BARNEY, J. B. 2002. Gaining and sustaining competitive advantage.
- BARNEY, J. B. & WRIGHT, P. M. 1997. On becoming a strategic partner: The role of human resources in gaining competitive advantage.
- BEAL, R. M. & YASAI-ARDEKANI, M. 2000. Performance implications of aligning CEO functional experiences with competitive strategies. *Journal of Management*, 26, 733-762.

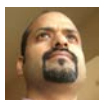
- BERCHICCI, L. 2013. Towards an open R&D system: Internal R&D investment, external knowledge acquisition and innovative performance. *Research Policy*, 42, 117-127.
- CAMPBELL, D. T. & FISKE, D. W. 1959. Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological bulletin*, 56, 81.
- COHEN, W. M. & LEVINTHAL, D. A. 1990. Absorptive capacity: a new perspective on learning and innovation. *Administrative science quarterly*, 128-152.
- COLBERT, A. E., JUDGE, T. A., CHOI, D. & WANG, G. 2012. Assessing the trait theory of leadership using self and observer ratings of personality: The mediating role of contributions to group success. *The Leadership Quarterly*, 23, 670-685.
- DANNEELS, E. 2008. Organizational antecedents of second - order competences. *Strategic Management Journal*, 29, 519-543.
- DAY, G. S. 1984. *Strategic market planning: The pursuit of competitive advantage*, West Group.
- DAY, G. S. 1994. Continuous learning about markets. *California Management Review*, 36, 9.
- DESS, G. G. & DAVIS, P. S. 1984. Porter's (1980) generic strategies as determinants of strategic group membership and organizational performance. *Academy of Management journal*, 27, 467-488.
- DESS, G. G. & ROBINSON, R. B. 1984. Measuring organizational performance in the absence of objective measures: the case of the privately - held firm and conglomerate business unit. *Strategic management journal*, 5, 265-273.
- DIETRICH, M. A. A.-A., M. 1993. Generic strategies and competitive advantage: a new approach on an old theme.
- DYER, L. & REEVES, T. 1995. Human resource strategies and firm performance: what do we know and where do we need to go? *International Journal of human resource management*, 6, 656-670.
- EGAN, T. M., YANG, B. & BARTLETT, K. R. 2004. The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human resource development quarterly*, 15, 279-301.
- EISENHARDT, K. M. & MARTIN, J. A. 2000. Dynamic capabilities: what are they? *Strategic management journal*, 21, 1105-1121.
- ELLINGER, A. D., ELLINGER, A. E., YANG, B. & HOWTON, S. W. 2002. The relationship between the learning organization concept and firms' financial performance: An empirical assessment. *Human resource development quarterly*, 13, 5-22.
- FRENCH, J. W. 1953. The description of personality measurements in terms of rotated factors.
- GRANT, R. M. 1996. Toward a knowledge - based theory of the firm. *Strategic management journal*, 17, 109-122.
- HAMEL, G. 1993. Y CK PRAHALAD:" Strategy and Stretch and Leverage. *Harvard Business Review*, 74-85.
- HUBER, G. P. 1991. Organizational learning: The contributing processes and the literatures. *Organization science*, 2, 88-115.
- HULT, G. T. M., KETCHEN, D. J. & NICHOLS, E. L. 2003. Organizational learning as a strategic resource in supply management. *Journal of Operations Management*, 21, 541-556.
- HUNT, S. D. & MORGAN, R. M. 1995. The comparative advantage theory of competition. *The Journal of Marketing*, 1-15.
- HUSSEIN, N., MOHAMAD, A., NOORDIN, F. & ISHAK, N. A. 2014. Learning Organization and its Effect on Organizational Performance and Organizational Innovativeness: A Proposed Framework for Malaysian Public Institutions of Higher Education. *Procedia-Social and Behavioral Sciences*, 130, 299-304.

- JACKSON, S. E., CHUANG, C.-H., HARDEN, E. E. & JIANG, Y. 2006. Toward developing human resource management systems for knowledge-intensive teamwork.
- JUDGE, T. A., BONO, J. E., ILIES, R. & GERHARDT, M. W. 2002. Personality and leadership: a qualitative and quantitative review. *Journal of applied psychology*, 87, 765.
- KANDEMIR, D. & HULT, G. T. M. 2005. A conceptualization of an organizational learning culture in international joint ventures. *Industrial marketing management*, 34, 430-439.
- KAY, J. 1993. Foundations of corporate success Oxford University Press. Oxford.
- KHARABSHEH, R. A., JARRAR, K. & SIMEONOVA, B. 2015. The impact of competitive strategies on responsive market orientation, proactive market orientation, learning orientation and organizational performance. *Journal of Strategic Marketing*, 23, 423-435.
- KURUKULASURIYA, P. & ROSENTHAL, S. 2013. Climate change and agriculture: A review of impacts and adaptations.
- MANSFIELD, E. 1983. Technological change and market structure: An empirical study. *The American Economic Review*, 205-209.
- MARCH, J. G. & SUTTON, R. I. 1997. Crossroads-organizational performance as a dependent variable. *Organization science*, 8, 698-706.
- MASON, E. S. 1939. Price and production policies of large-scale enterprise. *The American Economic Review*, 61-74.
- MCGEE, J. 2005. *Strategy*, Wiley Online Library.
- MESMER-MAGNUS, J. R. & DECHURCH, L. A. 2009. Information sharing and team performance: a meta-analysis. *Journal of Applied Psychology*, 94, 535.
- MILES, R. E., SNOW, C. C., MEYER, A. D. & COLEMAN, H. J. 1978. Organizational strategy, structure, and process. *Academy of management review*, 3, 546-562.
- MILLER, D. 1988. Relating Porter's business strategies to environment and structure: Analysis and performance implications. *Academy of management Journal*, 31, 280-308.
- MURRAY, A. I. 1988. A contingency view of Porter's "generic strategies". *Academy of Management Review*, 13, 390-400.
- NARTEH, B. 2008. Knowledge transfer in developed-developing country interfirm collaborations: a conceptual framework. *Journal of knowledge management*, 12, 78-91.
- O'REILLY, C. A. & TUSHMAN, M. L. 2008. Ambidexterity as a dynamic capability: Resolving the innovator's dilemma. *Research in organizational behavior*, 28, 185-206.
- OSTROFF, C. & BOWEN, D. E. 2000. Moving HR to a higher level: HR practices and organizational effectiveness.
- OTT, D. & DE VRIES, M. 2012. Thinking in the right direction: An ellipsis analysis of right-dislocation. *Linguistics in the Netherlands*, 29, 123-134.
- PARIS, P. 2017. The Deformity-Related Conception of Ugliness. *British Journal of Aesthetics*, 57, 139-160.
- PARNELL, J. A. 2000. Reframing the combination strategy debate: defining forms of combination. *Journal of Applied Management Studies*, 9, 33-54.
- PEHRSSON, A. 2017. Foreign subsidiaries' competitive strategy: the impact of corporate support and local competition. *European Business Review*, 29, 606-627.
- PÉREZ LÓPEZ, S., MANUEL MONTES PEÓN, J. & JOSÉ VAZQUEZ ORDÁS, C. 2005. Organizational learning as a determining factor in business performance. *The learning organization*, 12, 227-245.

- PHIPPS, S. T. & PRIETO, L. C. 2011. The influence of Personality factors on Transformational Leadership: Exploring the moderating role of Political skill. *International Journal of Leadership Studies*, 6, 430-447.
- PORTER, M. E. 1980. Competitive strategy: Techniques for analyzing industries and competition. *New York*, 300, 28.
- PORTER, M. E. 1985. Competitive advantage: creating and sustaining superior performance. *New York*.
- PORTER, M. E. 1991. Towards a dynamic theory of strategy. *Strategic management journal*, 12, 95-117.
- SARU, E. Organizational learning and strategic HRD-how are they valuable for small firms. 2005 2005.
- SEGARRA-CIPRÉS, M., ROCA-PUIG, V. & BOU-LLUSAR, J. C. 2014. External knowledge acquisition and innovation output: an analysis of the moderating effect of internal knowledge transfer. *Knowledge Management Research & Practice*, 12, 203-214.
- SENGE, P. M. 1990. The fifth discipline: The art and practice of the learning organization. *New York: Currency Doubleday*.
- SINKULA, J. M. 1994. Market information processing and organizational learning. *The Journal of Marketing*, 35-45.
- SLATER, S. F., & NARVER, J. C 1995. Market orientation and the learning organization. *Journal of Marketing*, 59, 63-74.
- TUPES, E. C. & CHRISTAL, R. E. 1961. Recurrent personality factors based on trait ratings. DTIC Document.
- UOTILA, J., MAULA, M., KEIL, T. & ZAHRA, S. A. 2009. Exploration, exploitation, and financial performance: analysis of S&P 500 corporations. *Strategic Management Journal*, 30, 221-231.
- VALIPOUR, H., BIRJANDI, H. & HONARBAKHS, S. 2012. The Effects of LC Strategy and Product Differentiation Strategy on the Performance of Firms. *Journal of Asian Business Strategy*, 2, 14.
- WADA, T. 2018. Capability-based cost leadership strategy of Japanese firms. *Annals of Business Administrative Science*, 17, 1-10.
- WASTI, S. E. 2014. Pakistan Economic Survey 2013-/2014. *Ministry of Finance*.



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