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KNOWLEDGE SHARING IN TECHNICAL EDUCATION: ANALYSIS OF KNOWLEDGE CAPABILITIES

Dr. Bakhtiar Ali,
National Institute of Science and Technical Education

ABSTRACT

The present century is an era of learning and sharing of knowledge. Technical education sector being a big contributor in economic development is highly dependent on modern knowledge. Making knowledge available at all level needs dynamic knowledge sharing that can effectively be achieved by developing the strong capabilities of individual and organizational knowledge processing. Therefore, this study seeks to find the interrelationships between these capabilities and their effect on knowledge sharing. Based on empirical data analysis, study proposes a model with the underlying elements of both types of capabilities, for development of infrastructure and mobilization of organizational socio-technical resources.

INTRODUCTION

The present century is characterized as knowledge economy, where the only source of development, prosperity and economic growth is knowledge, which gave rise to the global competition based on free market. Consequently, it posited a big challenge to all kinds of industries and sectors of developed as well as developing countries like Pakistan to become innovative and learning organizations for producing products and providing services according to the global trends and standards. Skilled workforce is backbone of the economy and needs strategic attention at organizational and national levels. But, in developing countries most of the organizations are facing many problems in terms of competent workforce, sufficient funds, sophisticated technologies and access to world market; as a result, almost all developing countries have to rely on the various kinds of supports and loans from the donor agencies.

Various strategies are adapted to re-structure technical and vocational education and training (TVET) system for overcoming the problems of social and economic development (Atchoarena & Delluc, 2002). TVET sector in Pakistan like other countries is responsible to prepare technical workforce, but has many weaknesses. For example, in the expert opinion survey (2005), conducted by Pakistan Council for Science and Technology, experts identified various reasons for the below expectation performance of local technical manpower that are: lack of understanding of economic and accounting; lack of knowledge about recent technological developments; lack of know-how of human resource; lack of exposure to factory environment; and lack of comprehension of practical aspects of relevant subjects. Even in developed countries, the 74% of business Chief Information Officers (CIOs) complain that the modern institutions are not preparing their learners according to market demand (Hoffman, 2003). Similarly, Runyoro (2004), while recommending strategies, pointed out various issues/problems being faced by the sector. For example, financial constraints and poverty at national level is the big challenge. Resultantly, countries are compelled to allocate less budget to the TVET sector. Another big problem is poor infrastructure and non-conducive environment for teaching and learning, as content is overloaded with theoretical aspects that emphasizes less on hands-on practical teaching, which may be due to less or no exposure of teachers to the industry, non-existence of institutions-industry linkage or poor condition of industries itself. Furthermore, due to shortage of classrooms, classes are overcrowded. Poor infrastructure also creates an unhealthy environment and causes shortage of audio-visual aids, books and shop/lab equipments etc. For the professional development, proper in-services training and incentives in terms of financial earning and social recognition by the society are important factors that need

to be addressed very strategically. Likewise, due to poor literacy rate, provision of technology education to the out of school pupils becomes very much difficult, that causing major workforce non-productive members of the society and out of the stream. Because of poverty, and less attention to knowledge development, the most neglected area is research and development component of this sector (Runyoro, 2004). Similarly, Government of Pakistan has established a national level organization, National Vocational & Technical Education Commission, keeping in view various problems being faced by the country in TVET sector (NAVTEC, 2007):

- Paucity of labour market information and disconnect with training
- Fragmented and uncoordinated delivery of technical and vocational training
- Lack of evaluation of efficiency and outcomes of training institutions
- Weak participation of private sector in policy making and training delivery
- Nonexistence of employment placement data of trainees

Knowledge based economies are forcing organizations and educational institutions to manage their knowledge strategically, build knowledge-based infrastructure, and create a sense of awareness among all stakeholders to understand and treat knowledge as the top most and vital source of learning and innovation. To make TVET sector more productive and innovative, policy makers and management need to arrange, provide and mobilize all knowledge related resources to strengthen the intellectual capabilities and enhance the knowledge sharing culture across the organization through strategic management of their knowledge. There are many organizations, especially in developing countries that are practicing various tools and techniques of knowledge management other than its umbrella, for example meeting, brainstorming, sharing best practices, training, coaching, counseling, information and communication technology utilization, knowledge creation, after action review, benchmarking and organizational database etc. But, it is more viable to develop a strategy to mobilize these tools and techniques towards uninformed agenda i.e. to build the knowledge-based infrastructure to turn the organization in to learning organization. Although, in order to have a knowledge-based infrastructure, various measures are undertaken by the organizations, there are three main areas that need to be addressed strategically, i.e. increasing employee knowledge capabilities and developing positive behaviour towards knowledge and knowledge activities, increasing the collective organizational capabilities, and institutionalization of knowledge sharing activities (Dawson, 2000; Gray, Todd, & Seneque, 2002; European Committee for Standardization, 2004; Al-Hawaris & Hasan, 2004; Yu, Kim & Kim, 2004; Casselman & Samson, 2007; Theriou, & Chatzoglou, 2008).

Since, most of the knowledge management research studies focused large, commercial and profit oriented organizations and little attention has been paid to study knowledge related activities in public sector (Ahmed, Sharom, & Abdullah, 2006; Reigo, 2005), this study focuses TVET, with two objectives i.e. (a) to explore the impact of organizational knowledge capabilities on employees' knowledge capabilities; (b) and to assess the impact of two former factors on organizational knowledge sharing activity. Taking into consideration the given arguments and following the various aspects explored through the literature review along with the previous empirical analysis this paper develops a framework for making the organizational knowledge activities more effective to improve the organizational performance.

The remaining part of the study is organized and presented as follows: In section 2, literature is reviewed to explore the meaning and types of organizational knowledge; major attributes of and relationships between organizational knowledge capabilities (OKC), employees' knowledge capabilities (EKC), and knowledge sharing (KS); characteristics of requisite factors for making a conducive knowledge culture; and the types of information technology/system. Subsequently, research framework and hypotheses are presented. Section 3 covers the research methodology. Section 4 discusses statistical analysis. And the last section 5,

deals with the implications, limitations and recommendations.

LITERATURE REVIEW AND RESEARCH FRAMEWORK

Knowledge is the heart of both knowledge resource and knowledge capabilities" (Casselman & Samson, 2007, p.70), therefore, nurturing and developing professionals is one of the important goals of education system. Institutions are directly concerned with the knowledge activities. Teachers are the core elements and most valuable asset who create and disseminate knowledge. Institutions provide an environment, which can promote the process of this activity. It should be the great concerns for the management of the institutions to create such environment where knowledge flourishes and spreads across the institutions and nation. Such responsibility is increasing exponentially in the era of knowledge economy. Since, individual and organizational competencies are highly depended on the knowledge, which provides bases for all kinds of decisions and actions (Koskinen, 2003), variety of activities at individual and institutional levels is required for its effective management and processing.

Knowledge is either resides in the head of people or articulated and recorded in documents. Knowledge has many dimensions, which is fueled by data and information as well human personal knowledge, skills and experiences. Data is regarded as raw and discrete facts, which directly observable, provides no context, and needs further explanation (Groff & Jones, 2003; Dalkir, 2005). Information becomes data, when it is processed for certain purposes. As compared to data, it is dynamic and supports in decision making process and sometimes compels for action. Documents contain messages in the form of information, which shapes the person who is receiving it (Davenport & Prusak, 1998). Information converts into knowledge when some values, meaning, experience and judgments are added. Due to its complex nature, the debate to explore the essence of knowledge is going on for the last 5000 years among the epistemologists (Al-Ali, 2003). The literature reveals many diversified views and definitions, a single agreed definition is yet to be explored (Australian Standard, 2005). However, Davenport and Prusak (1998) have defined it more comprehensively, and it is cited by most of the scholars. According to them, it is "a fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information" (p.5).

Organizations yet trapped in the other dilemma, when they encounter to select appropriate strategy, methods and tools for different types of knowledge. Various scholars have identified different knowledge categories and developed knowledge taxonomies, the most agreed and cited taxonomy was given by Polanyi (1966) i.e. tacit and explicit. Tacit knowledge resides in the mind of the individuals and embedded in their personal experiences with many intangible aspects like personal views, values and beliefs. On the other hand explicit knowledge is articulated and codified knowledge, which is transmitted through systematic processing (Groff and Jones, 2003). Since, this type of knowledge is embodied in a code, or a language, its communication and transfer are easy as compared to tacit knowledge (Koskinen, 2003). However, the process of articulation or codification is most difficult part of knowledge processing, that need high level of intrinsic and extrinsic motivating factors in place to encourage individual and make his/her knowledge available to others. To make individual more creative and innovative, development and sharing of tacit knowledge across the organization needs special consideration, as it is the core elements of all knowing and learning process and ultimate mental power (Polanyi, 1966).

Both types of knowledge require different strategies and tools. For example, in order to share tacit knowledge, development of informal social network like professional group and communities of practice and training opportunities are more important and relevant techniques. While, for sharing of explicit knowledge, first it needs to be codified and then disseminated

through various means such as information and communication system, which in turn leads to availability of more knowledge to other members. Therefore, each type of knowledge and its processing activity requires specific kind of learning, system design and leadership (Cavaleri, Seivert, & Lee, 2005). Similarly, Rowley, (2003) recommended different knowledge related activities for the management of both types of knowledge. For explicit knowledge, she recommends: knowledge identification and selection; knowledge capture and documentation; knowledge organization; knowledge storage; and knowledge retrieval. As most of the values are derived from the tacit knowledge, she recommends training, learning, culture of creation and sharing for effective management of tacit knowledge.

The preceding arguments and views indicate that both types of knowledge need to be managed, for which many enabling factors are required, like organizational strategy and climate (Cavaleri et al, 2005), organizational knowledge capability and personal knowledge capability (European Committee for Standardization, 2004). In order to make the organizational knowledge sharing activities more effective, particular types of knowledge capabilities and competencies at individual and organizational levels have been recommended (Yang, & Chen, 2007), which European Committee for Standardization has categorized into two types, i.e. employee knowledge capabilities, and organizational knowledge capabilities. As these capabilities complement each other, they need to be addressed together by identifying their underlying elements and aligning strategically with organizational objectives and processes. Thus, three kinds of relationships and affects can be deduced from these recommendations such as (a) affects of organizational knowledge capabilities on employees' knowledge capabilities and organizational knowledge sharing activities, (ii) affects of employees' knowledge capabilities on knowledge sharing activities, and (iii) mediating role of employee knowledge capabilities between organizational knowledge capabilities and knowledge sharing. Extending these recommendations, this study seeks to identify potential relationship between these three constructs in the TVET institutions' environment. Figure 1, as a research framework portrays three constructs, out of which two are independent variables i.e. organizational knowledge capabilities (OKC), and employees' knowledge capabilities (EMC) and one is dependent variable i.e. knowledge sharing activities (KS).

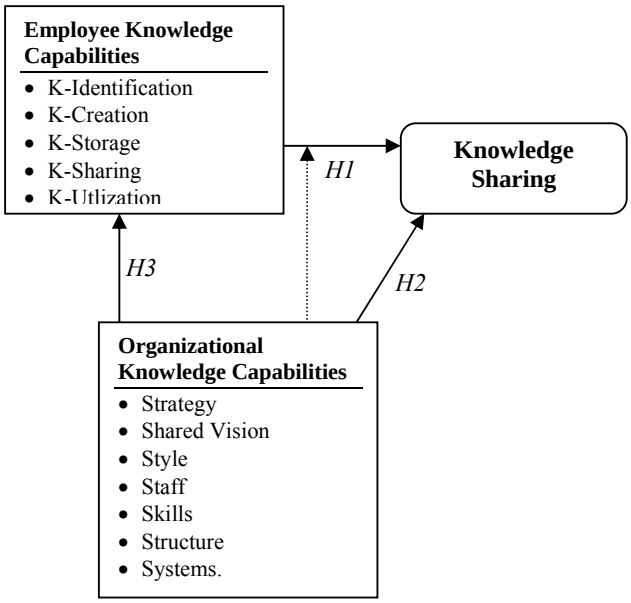

Figure 1. Research Framework

A. Knowledge Sharing

Technical and vocational institutions are directly concerned with business, industry, and economy, which made them more liable and responsible to develop their organizational and employees' knowledge capabilities to improve their performance through knowledge creation, sharing, and application. Sharing of knowledge plays a substantial role in success of organizations (Gorry, 2008) and their learning, which is highly desirable but the most difficult part of knowledge activities, hence, needs serious consideration (Riege, 2005). It has been defined as provision and dissemination of quality knowledge to the right person, at right time with right quality (European Committee for Standardization, 2004) that in turn effects both parties involved in the sharing process (Argote, McEvily, & Reagans, 2000). They emphasis on right quality, time and person indicates that creating value and taking right decision are crucial for organization at all levels. For the effectiveness of knowledge sharing process, various enablers are required, such as: organizational structure; personal satisfaction, desire to help others, and motivation and commitment; trust based collaborative culture and teamwork; and electronic community supported by technology (Riege, 2005; Gorry, 2008), communities of practice; training; seminars; coaching; and job rotation (European Committee for Standardization, 2004).

Incorporating knowledge sharing culture with organizational culture is most difficult task to achieve. Numerous studies focusing almost all types of organizations have been conducted to explore the potential barriers and enabling factor to nurture the knowledge sharing practices. Due to its complex nature, it needs comprehensive approach with mobilization of all organizational, individual and technological resources. As, Riege (2005) recommends that knowledge sharing practices should be people-driven, supported by organizational structure and technology. With the help of extensive literature review, he explored and enlisted 39 knowledge sharing barriers that usually occurred at organizational, individual and technological levels. At individual level, these factors include: lack of communication; social networks; differences in national culture; overemphasis of position statuses, and a lack of time and trust. Similarly, at organizational level, these barriers could be the economic viability, lack of infrastructure and resources, the accessibility of formal and informal meeting spaces, and the physical environment. And at technology level, these barriers are: unwillingness to use applications due to a mismatch with need requirements; unrealistic expectations of IS/IT systems; and difficulties in building, integrating and modifying technology-based systems. (Riege, 2005)

Educational institutions' main business is 'knowledge creation and dissemination'. All activities, including knowledge processing performed by professionals in educational setting are based on their knowledge and knowledge capabilities. Lou, Tseng and Shih (2006) have identified various knowledge activities through Delphi method, in which teachers of TVET sector are involved. These activities include knowledge acquisition, sharing, application and creation. Each process is undertaken at different occasions. For instance, knowledge is acquired and obtained through: meeting and chatting with teachers of the same subjects; interaction with professional groups and association; visiting technology related exhibitions; benchmarking of pre-service teachers and alumni; attending professional in-service training; reading of published materials; and obtaining knowledge and information from the internet related sources. Similarly, knowledge and experience are shared though: chatting with other colleagues and professional people and bodies; attending and participating in professional training programme, seminars, conferences, and exhibitions; and publishing research articles and books etc. Likewise, the obtained knowledge is applied at various occasions, like: providing guidance and counseling to the students; encouraging and motivating students to actively participate in class and technical competitions; guiding and providing the industry and business sector about current development in the concerned field; actively participating in teaching and learning process, guiding students in development of students special projects; participating in research and developing activities; and developing teaching and learning materials etc. Similarly,

teachers create knowledge by doing various activities such as: creating innovative abilities in students; increasing knowledge by learning from failures; creating new knowledge by reflecting on reading of various kinds of materials; creating new knowledge by attending professional group meetings, seminars and exhibitions and learning institutions for advancement of their studies.

B. Employees Knowledge Capabilities

According to the Bartlett and Ghoshal (2002), today human resource is confronted with the 'information-based, knowledge-driven, service-intensive economy' (Cited in Iske, & Boersma, 2005), which is forcing employees to carry out all activities based on knowledge. If performed accordingly, the human resource becomes the intellectual capital of the organization Nahapiet and Ghoshal, (1998) explain that the organizational intellectual capital represents knowledge and knowledge capability of the organizations. Therefore, employees' knowledge capabilities and the behaviour are considered to be the main player of knowledge activities, because, the maximum exploitation and utilization of knowledge resources is highly dependent on employee capabilities (Freeze & Kulkarn, 2005). For that reason, these knowledge capabilities need to be nurtured to improve organizational performance (Nielsen, 2006). Such capabilities, according to the European Committee for Standardization (2004) include: ambition; skills; behaviour; experience; methods, tools, and technique; time management; and personal knowledge. For employee motivation to participate in knowledge processes, personal and collective ambitions are needed to be aligned. Individual skill as a knowledge capability is very much critical to perform a given task, which includes codification of knowledge, active listening skill, communication ability, knowledge documentation technique, query formulation ability for knowledge searching, and selection and use of knowledge efficiently. Knowledge behaviour refers to individual approaches and attitude towards knowledge and knowledge handling (Davenport, 1997a). Human behaviour has two dimensions i.e. private self, and public self. As, private self is highly influenced by the internal organizational processes (Ahmed, et al, 2006), these processes, if aligned properly, can positively increase the employees' participation and contribution in organizational performance. To increase the participation, various encouraging social and technical factors are required (Davenport, 1997b) like, shared vision, culture, motivation, competency, structure and IT/IS (European Committee for Standardization, 2004; Casselman & Samson, 2007). Another employees' knowledge capability is know-how about use of various tools and methods such as internet, intranet, search tools, and task oriented specialized IT tools, meeting, benchmarking, workshops, time management and level of personal knowledge (European Committee for Standardization, 2004). All these capabilities can either mould the pattern of behaviour into knowledge processing facilitator or inhibit the entire knowledge life cycle effectiveness.

Therefore, characteristics of each capability indicate that all capabilities need sustained support in terms of specialized training and learning opportunities, and establishment of reward based knowledge friendly culture. Such knowledge friendly culture is created through organizational level intervention from the top management and demonstration by the leadership as a role model. Keeping in views the previous discussion and the role of employees' knowledge capabilities in knowledge activities, five hypotheses are derived:

H1. Employees knowledge capabilities (EKC) positively affect knowledge sharing (KS)

C. Organizational Knowledge Capabilities

For the survival and competitive advantage, organizations continuously add values to their services and products, for which they need knowledge capabilities (Pena, 2002). Organizational knowledge capabilities refers to the efficient and effective development of employee knowledge capabilities and management of knowledge related activities by providing the supporting environment. Casselman and Samson, (2007) have proposed four components of knowledge capabilities that include: (a) an organization ability to effectively manage its

collective knowledge with in the firm– refers to 'internal knowledge process capability'; (b) an ability to effectively maintain knowledge activities with the cooperation of supplier and partners – refers to 'indirect knowledge process capability'; (c) an organization ability to manage knowledge capability that captures and collects knowledge about its competitors and protects its own knowledge to be copied by competitors – refers to 'competitive knowledge process capability'; and (d) the firm's capability to effectively manage its culture, technology and structure – refers to 'knowledge infrastructure capability'. As each capability is directly concerned with knowledge, which is expected to be efficiently handled by firm's human resource, the collective organizational knowledge activities will be ultimately improved. Dawson, (2000) argues that the flow of information and knowledge is the key aspect of organizational knowledge capability that requires two major factors as a mean for development of this capability, i.e. technology and skill and behaviour. At individual level the technology factor includes: search engines; email filters; intelligent agents; and information visualization and skill and behaviour factors include: filtering information overload; analysis; synthesizing ideas; and decision making. For collective capability development level, technology factor includes: email; intranet and groupware; knowledge yellow pages; and videoconferencing and skill.

Whereas, European Committee for Standardization, (2004) recommended almost same but with different titles, the components of organizational knowledge capability, which include: clearly defined strategy; shared vision (free from conflicts of interest); trust and respect based knowledge friendly culture; strong collaborative and team-based culture; highly motivated staff; well organized supporting organization structure and process; technology infrastructure and its proper utilization by stakeholders; and development of collective organizational knowledge (i.e. collection of human capital, customer capital and structural capital). Leaders have the main responsibility to develop the organizational knowledge capabilities, to enable and facilitate the internal (employees) and external stakeholders (partners and client) for processing knowledge efficiently. Literature review depicts the existence of interrelationships between organizational knowledge capabilities with employee knowledge capabilities and organizational knowledge sharing activities. Based on the preceding discussion, 3 hypotheses have been developed to explore these relationships and affects:

H2. Organizational knowledge capabilities (OKC) positively affect knowledge sharing (KS).
H3. Organizational knowledge capabilities positively (OKC) affect employee knowledge capabilities (EKC).
H4. Employees' knowledge capabilities (EKS) mediate between organization knowledge capabilities (OKC) and knowledge sharing (KS).

REARCH METHOD

The research approach adopted for the study is quantitative and empirical analysis as it uses statistical methods for obtaining the findings (Marczyk DeMatteo, & Festinger, 2005). In order to test hypotheses, regression analysis method was used.

D. Instruments

After development of research framework, a series of personal interviews with professionals and academicians were conducted to validate the model, which was derived from past research studies. To tap the responses, items for all three variables were adopted from the questionnaire developed by Iske, Knocom, 2003, and recommended as a diagnostic tool (called knowledge quick scan -KQS) by European Committee for Standardization, (2004). Although, basic purpose of this questionnaire is to help organization in assessing (scanning) its position with respect to knowledge process, the items were also found relevant to objectives of the study. However, as last two items (g and i) of each knowledge process were related to employees' knowledge processing capabilities and attitude, these were re-grouped under new independent

variable – 'employees knowledge capabilities' for simplicity and understanding of the respondents. Items related to organizational knowledge capabilities are based on '7s model' from McKinsey, which focused on strategy, shared vision, style, staff, skills, structure and system. Likert scale rating method was used for tapping the response, ranging from "strongly agree" (5) to "strongly disagree" (1). The questionnaire items were grouped into eight variables, i.e. demographic data (6 items), organizational knowledge capabilities (7 items), employees knowledge capabilities (10 items), and knowledge sharing (7 items).

E. Data Collection and Sample

Participants were experienced teachers representing TVET sector having different level of qualification, position, experience and technology. Self-administered survey method was used and data was collected during their six-week in-services teachers training programme.

F. Validity and Reliability

Since, for one independent variable (EKC) 10 items were selected and re-grouped, it was necessary to test both validity and reliability of all variables. Based on the operationalization of the constructs, content was validated through discussion with various potential respondents, which was found suitable and understandable, thus, no modification was recommended.

Factor analysis is an interdependency technique, which is used to explore relationships of interval-level variables and to find set of items being hanging together under a single factor for conveying much information in the observed variable. Principal component analysis with Varimax rotation was conducted to assess the underlying structure of the variables. Three factors were requested, based on the fact that items were designed to index three constructs. After rotation, first factor accounted for 11.6% of the variance, the second factor accounted for 17.5% and third factor accounted for 14.1% variance. The summary of the factor analysis is presented in Table 1. This table also shows the items for the rotated factor having loading value < 0.40 and eigenvalues < 1.0 are dropped (i.e. OK5, EKC1 to EKC4, and EKC10). The values for Bartlett's test of sphericity were found significant at $< .001$, and KMO Measure of sampling adequacy was also found > 0.70.

For establishment of the reliability of instruments, the internal consistency of all variables was tested through the Cronbach's alpha, which is the reliability coefficient that tests how well the items in a set positively correlated. Result indicates that all variables have higher than 0.70 cut-off alpha value. Thus all values (see Table 1) indicate that instruments used in this study are adequate and found acceptable for inclusion in the analysis.

Table 1
Reliability of Scales and Factor Loading of All Factors

Variable	Cronbach's Alpha (α)	Factor Loading				Communality
		Item	KS	OKC	EKC	
KS	0.83	KS1	.67			.705
		KS2	.83			.400
		KS3	.61			.478
		KS4	.53			.569
		KS5	.70			.454
		KS6	.49			.376
		KS7	.85			.736
OKC	0.72	OKC1		.40		.352
		OKC2		.66		.643
		OKC3		.76		.656
		OKC4		.49		.271
		OKC6		.63		.518
		OKC7		.65		.444
EKC	0.71	EKC5			.49	.334
		EKC6			.42	.292
		EKC7			.61	.434
		EKC8			.53	.299
		EKC9			.78	.624
Eigenvalues			2.80	4.20	3.39	
% of variance explained			11.6	17.5	14.1	
Cumulative %			43.3	17.5	31.6	

Note. [a]Loading <.40 omitted
[b]Extraction Method: Principal Component Analysis.
[c]Rotation Method: Varimax with Kaiser Normalization.
Bartlett's test of sphericity χ^2 1688.713, df = 276, <.001
KMO Measure of sampling adequacy = .769

ANALYSIS OF RESULTS

G. Demographic Analysis

Demographic data is summarized and presented in Table 2. In response to 240 questionnaires, 189 were returned, out of which 178 were found valid with complete data. The reason of highest response rate (74.16 %) was the opportunity to have direct contact with the respondents during the entire training session.

Table 2
Respondent Background (N=178)

Characteristics	Frequency	Percent	Cumulative Percent
Job Title			
Junior Instructor	54	30.3	30.3
Instructor	79	44.4	74.7
Assistant Professor	45	25.3	100.0
Total	178	100.0	
Tenure/Experience			
1-3 Years	16	9.0	9.0
3-5 Years	60	33.7	42.7
> 5 Years	102	57.3	100.0
Total	178	100.0	
Qualification			
Diploma	34	19.1	19.1
Bachelor (Engg/Tech)	78	43.8	62.9
Master	66	37.1	100.0
Total	178	100.0	
Department			
Electronics Technology	13	7.3	7.3
Electrical Technology	47	26.4	33.7
Mechanical Technology	57	32.0	65.7
Civil Technology	37	20.8	86.5
Other	24	13.5	100.0
Total	178	100.0	

H. Descriptive Analysis and Correlations

As this research intends to study and understand the relationships between organizational knowledge capabilities, employee knowledge capabilities and knowledge sharing activities, correlation matrix was generated and analyzed. Table 3 indicates the means, standard deviations and correlations of all variables. Since correlation coefficient matrix indicates correlations of less than .90, therefore it can be assumed that there will be no problem with multicollinearity.

Table 3
Correlation between All Predictive and Dependent Variables

Variable	*M*	*Min*	*Max*	*SD*	KS	OKC	EKC
KS	3.60	1.70	4.00	0.58	--		
OKC	3.19	2.00	4.50	0.40	0.38**	--	
EKC	3.27	2.13	4.00	0.48	0.57**	0.47**	--

Note. Tolerance = 0.773; VIF =1.294
**$p < .01$, one-tailed

I. Test of Hypotheses

As this study intends to explore the effects of IVs on DV and all variables are based on likert scale, multiple regressions method using SPSS Version 13 was applied. Therefore, in

order to analyze the influence of organizational and employees' knowledge capabilities, hypotheses H1-H2 were tested by regressing KS on both OKC and EKC at a time. Result (see Table 4) shows that both hypotheses are substantiated, and indicates that the combination of these two IVs significantly predicts knowledge sharing (KS), F (2, 175) = 47.33, p < .001. Based on the finding it can be argued that both factors (organizational and employees' knowledge capabilities) have great affects and can be considered as substantial enablers in organizational knowledge sharing activities (β =.141, t = 2.03, p < .05) and (β =.512, t = 7.39, p < .001) respectively. Further, R^2 = 0.344 depicts that this model explains 34.4% of variance in knowledge sharing.

For testing of hypothesis (H3), EKS was regressed on OKS, which also shows the substantiation of hypothesis. Result (see Table 5) indicates that organizational knowledge capabilities have great relationship with and affects on employees' knowledge capabilities, F (1, 176) = 51.70, p < .001. Therefore, it manifests that employees' capabilities of knowledge processing are highly influenced by organizational capabilities, which need to be taken into account while planning and initiating any programme or project for the development of employee capabilities (β =.477, t = 7.101, p < .001). Likewise, R^2 = 0.233 depicts 34.4% of variance is explained by this model.

Table 4

Summary of Multiple Regression Analysis Summary for OKC and EKC, Predicting Knowledge Sharing (H1 & H2)

Variable	*B*	*SE B*	*β*	*t*
H1- Emp. K. Capabilities (EKC)	0.658	0.089	.512**	7.39
H2 – Org. K. Capabilities (OKC)	0.133	0.065	.141*	2.03
Constant	0.550	0.276	--	1.99

Note. R^2 = 0.344; F (2, 175) = 47.33, p < .001
*p < .05; **p < .001

Table 5

Summary of Multiple Regression Analysis Summary for OKC Predicting EKC (H3)

Variable	*B*	*SE B*	*β*	*t*
H3- Or. K. Capabilities (EKC)	0.349	0.049	.477**	7.191
Constant	2.054	0.175	--	11.74

Note. R^2 = 0.233; F (1, 176) = 51.70, p < .001
**p < .001

To analyze the mediating affects of variable, method recommended by Barron and Kenny (1986) was used. Firstly, dependent variable (KS) was regressed on independent variable (OKC), secondly, mediating variable (EKC) was regressed on independent variable (OKC), thirdly, dependent variable (KS) was regressed on mediating variable (EKC), and fourthly, dependent variable (KS) was regressed on both independent and mediating variables simultaneously. Mediation is established, if in first three equations, the predictor influences the dependent variable and in fourth equation the affects of independent variable on the dependent variable (in presence of mediating variable) is reduced (partial mediation) or completely disappeared (complete mediation). Chen and Huang (2007) also suggest that the over all fit of model in presence of mediating variable should also improve.

The obtained result indicates that despite significant relationship between these variables in first three steps, both the magnitude of estimated coefficient and t-statistic for independent variable (organizational knowledge capabilities) were reduced (β = .385 vs β = .141 and t = 5.535 vs t = 2.036) , while the over all fits of model is improved from R^2 = .148, F (1, 176) = 30.642 (p < .001) to $\triangle R^2$ = .351, F (2, 175) = 47.330 (p < .001). Furthermore, adjusted R^2 = .344 indicates that both variables explain 34.4% variance in KM effectiveness. These findings as presented in Table 6, suggest for partial mediation of employee knowledge capabilities between organizational knowledge capabilities and knowledge sharing.

Table 6

Summary of Stepwise Regression Analysis for Variables Predicting Knowledge Sharing (H4)

Variables	*B*	*SE B*	β	*t*
Step 1				
Constant	1.901	0.236		8.062
OKC	0.363	0.065	.385**	5.535
Step 2				
Constant	0.550	0.276		1.994
OKC	0.133	0.065	.141*	2.036
EKC	0.658	0.089	.512**	7.394

Note. R^2 = .148, F (1, 176) = 30.642 (p < .001) for Step 1 ;
$\triangle R^2$ = .351, F (2, 175) = 47.330 (p < .001) for Step 2.
*p < .05; **p < .001

FINDINGS AND DISCUSSION

Various implications can be drawn from the findings, which will be helpful for TVET sector in particular and other organizations in general, specially operating in developing country. Results indicate that the organizational knowledge capabilities significantly affect and have considerable relationship with employee knowledge capabilities and knowledge sharing. Similarly, employees' knowledge capabilities and behaviour are also significantly affecting organizational knowledge activities.

Management and the workforce required to clearly identify the specific kind of knowledge required for the particular task. It will enable policy makers to understand the kind of capabilities in terms of individual, and organization that are required to support knowledge processes for the improvement of institutional performance. Organizational knowledge capabilities are difficult to develop. Attention need to be paid to arrange enabling socio-technical factors such as less formalized and centralized organizational structure, trust based relationship and teamwork and collaboration, knowledge friendly culture, context aware information technology infrastructure and motivation of employees to use technology in knowledge processes. Study indicates that the core element of organization is human resource, which insists for keeping their knowledge capabilities development on the top of the organizations' agenda. Numerous types of training strategies can be formulated in this regard.

Knowledge sharing activity is the foundation for knowledge-based organization in particular, therefore, manager should be aware of various supporting elements to effectively stimulate knowledge processes. Furthermore, industry-institutions linkage is vital for success of the sector, but this is the most neglected area of TVET system. Establishment of dynamic link with the partners (industries and institutions), as a part of knowledge activities can facilitate inter-organizational information and knowledge sharing. The ultimate objective of organizational knowledge activities is improvement of individual and organizational performance, so these activities should be considered as a mean, rather as an outcome, and should not be treated as a one time activity. Hence, it should be taken into account to provide

continuous support to knowledge related activities, while formulating knowledge strategy, policy, or procedure.

J. LIMITATIONS

Four major limitations can be found in the study, i.e.: (a) it focused one sector, which making its generalization limited; (b) due to resource constraints only teachers were selected as participants and Policy makers, Administrators and Principals of the TVET institutions could not be contacted. Therefore, the generalization of findings would have been increased if they both were included in the study; (c) the organization capabilities have been studied with very limited dimensions, whereas, their each dimension needs more in-depth study and relevancy to knowledge process; and (d) the impact of knowledge sharing on the organization performance could not be included in the study, as it was beyond the scope of the study.

K. RECOMMENDATIONS

Many private and public sector organizations are working in and contributing to the TVET sector under different ministries, NGOs, and industries, with poor coordination and linkage to share information and knowledge resources. This missing inter-organizational knowledge sharing linkage and partnership leads to overlapping activities and poor performance. Therefore, context and research based model needs to be formulated to make dynamic linkage among all stakeholders of the sector. Furthermore, the model should also define the knowledge vision for TVET sector and identify the relevant stakeholders and their expectations, so that they could be mobilized for the common agenda.

In order to make TVET content market-oriented, the policy makers and teachers should have industry knowledge and exposure. In this context, based on empirical analysis, the pre-service and in-service teachers training programme should include a module to increase their industry and technology related knowledge.

Information communication technology infrastructure does not exist in TVET sector at national level and as a result no centralized platform is available to the teachers to share their best practices among fellows. Research-based model is required to establish and align technology infrastructure with business and knowledge processes for intra and inter-organizational information and knowledge sharing.

To make TVET institutions as learning organizations, deep research in the context of national and organizational culture is required to explore the hidden dimensions and requirements of learning organization development.

Improvement of the performance and knowledge capabilities of the organization is a big challenge of modern knowledge era, for which knowledge activities need continuous improvement. Therefore, the kinds of relationship and the effects of knowledge processes on organization performance need to be included in future research.

Entrepreneurship capabilities make skilled workforce independent, innovative and best contributors in economy. Teachers need to be capable of preparing learners for the future demand of market economy. Research needs to be undertaken in this area to explore the various aspects of entrepreneurship related knowledge for inclusion as training component/module in teachers training programmes.

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• FORCED ADOPTION OF TECHNOLOGY DUE TO ENERGY CRISES

Irfan Raza
Abdul Rehman Chaudhry
Muhammad Zia-ur-Rehman
Lecturers National University of Modern Languages

ABSTRACT:

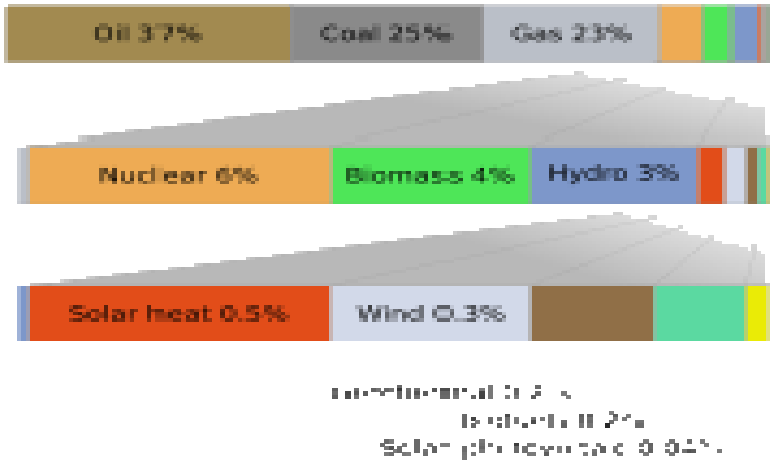
The purpose of this study is to examine the impact of energy crises on the adoption of Technological products by technological firms, so that they could perform their functions effectively and efficiently. Another purpose of this study was to check whether technological firms able to adopt modern technologies with reference to crises of energy. Survey method was used to collect data. Self administered questionnaire was distributed to 22 managers of banks. The results showed that technological firms are forced to adopt those technological products that replace the shortfall of energy and due to those technological products, they able to smoothly run their business. On the other hand technological and IT firms face difficulty to introduce new modes of technology. Sample size was limited and only taken from banks of Rawalpindi and Islamabad.

Keywords – *Energy, Technological Products, Adoption*
Paper type – *Research paper*

INTRODUCTION:

Energy is expressed in the form of support, time, money and resources, which make significant contribution to the success of a country (Di Virgilio, Marie and Ludema, 2009). Energy is lifeblood for an economy to run (Kristoferson, 1973). Today life is very difficult without the use of energy and at this span of time when there is war of resources between cultures, living without such a big resource is worst than if you would be living in era of Stone. Energy has many forms like oil, natural gas, coal, solar heat etc. figure 1 depict the usage of different energy sources in all over the world. One third of energy consists of oil , whereas coal and gas are also very important energy factors.

Figure 1: World energy usage

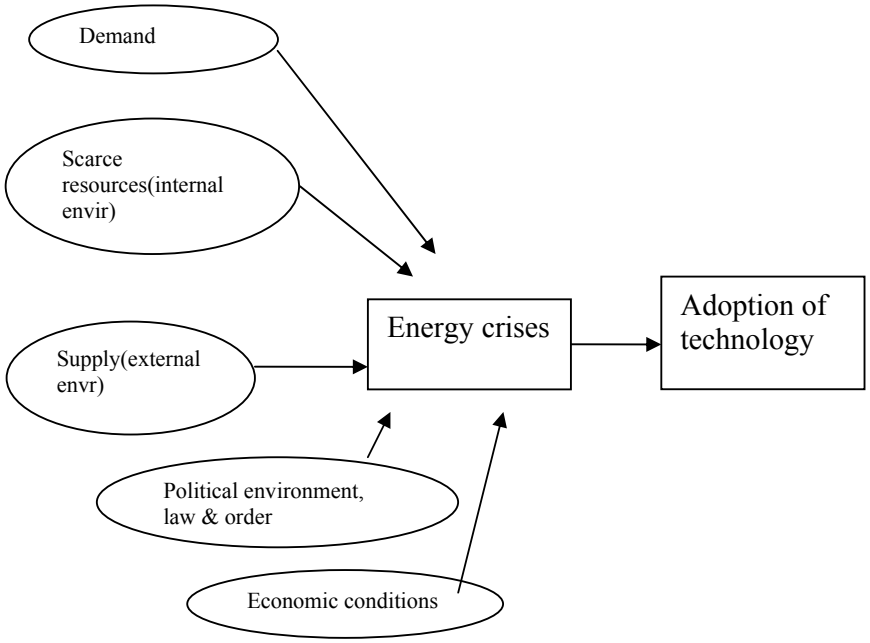


Source:
McKillop, http://en.wikipedia.org/wiki/File:World_energy_usage_width_chart.svg

Today world is facing the problem of scarcity of energy resources, which is termed as "energy crises". Shortage of energy is a big challenge of all major developed countries, but energy crises is not due to scarcity of resources, many other factors involve in this problem. Figure 2 illustrate some factors that involve in shortfall of energy.

Increase in population make increase in demand of energy that cause energy crises (Caldwell, Lynton K. 1976, Meadows , 1972), but according to Kristoferson (1973), Shortage of energy is political problem not technological problem. Internal environmental factors (scarce resources) and external environmental factors(energy supply) also cause the shortage of energy(Ilmakunnas and Torma, 1994). Economic and political conditions of a country are also one of the major factors of shortfall of energy. If a country is not stable economically and law and order situations are not better then crises of energy will be obvious (Kiesler, Sara and Lee Sproull, 1982).

Figure2



Pakistan is also facing short fall of energy which is causing problems for the firms to perform their daily operations smoothly. Normally organizations face load shedding for about 8-10 hours per day which is sufficient to decrease the firm's output and production. Organizations are forced to use alternatives for the production of energy in order to meet their requirements and targets (Hommels, 2005), alternatives include generators, ups and such other technological equipments. In the same way energy sources are also very much important for development of IT and telecom industry of a country. New developments cannot be made without energy.

Small manufacturing markets which are surrounded by major emerging economies like Pakistan, China, India, Malaysia, Indonesia, Philippines and Bangladesh will be worst effected with the rise of energy prices. With this situation, these countries will take advantage while Pakistan's economy will suffer badly.

In January 2009, Pakistan faces a severe energy crisis in terms of high prices and unavailability of Electricity, Gas, Oil, and Coal. Industrialists argue that the non-guaranteed supply of power by WAPDA (Water and Power Development Authority) is a major problem that negatively affects the textile industry. The frustration was observed recently, when the WAPDA and MEPCO (Multan Electricity Power Company) offices in Multan, were torched by daily wage workers. Many textile firms and power looms in Faisalabad are going to close their productions because of inconsistent behavior of electricity. They also highlight that the high cost of the utilities has made Pakistani textile uneconomical in the international market. The small businesses are highly effected by electricity crises.

This article is the study of how energy crises forcee the IT firms to adopt technological products to run their daily functions properly. On the other hand, in order to progress and go with competition every firm needs to adopt new modes of technologies. Many IT and technological firms face difficulties to introduce new modes of technology because of energy crises.

LITERATURE REVIEW:

Energy is lifeblood for an economy to run (Kristoferson, 1973). Importance of energy is evident from history, like the Energy crises of 1970's led to changes in the structure of production of manufacturing industries (Ilmakunnas and Torma, 1994). A great fraction of manufacturing industries is composed of IT industries which are an integral part for the growth of a country (Berlinguet Louis,1981). Some studies showed that energy crises in world is a political problem not technological problem (Kristoferson,1973). Opposing that, Di Virgilio, Marie and Ludema, (2009) demonstrated that Information Technology industry has a lot to do with the energy resources of a country and it can also suffer because of energy shortage. Di Virgilio, Marie and Ludema, (2009) further demonstrated that IT is a developmental area and new ideas and software's are difficult to implement without a proper support of energy. Adoption of technology is very difficult phenomena (Tyre and Orlikowski, 1994), a country can develop and proceed in new IT advancements only when it has full resources (Hommels Anique,2005). Thinking about resources, energy comes to mind first. Energy is main source of any country and Energy production of any country is the measure of its economy. Country's economic growth cannot be possible without sufficient energy creation. If energy supply of an industry is restricted, its output decreases and cost of production increases (Kristoferson, 1973). This results in the reduction of net income. Reduction of net income leads to lessen the investment because the economic situation becomes risky and uncertain.

According to the findings of Different studies, manufacturing industries utilize at least 33% production cost in terms of energy prices. In energy crises, prices of energy resources are increased. Increase in price of energy resources and the availability of these resources lead to increase in production cost of the firms. Thus manufacturing firms tend to decrease their labor cost or use alternative cost effective methods for energy generation to remain competent (Freeman and Quigg, 2009).

Shortfall of energy is due to uneven distribution of resources in the world (Kristoferson, 1973). Shortfall of energy, known as Energy crisis, is a situation in which the nation suffers from a disruption of energy supplies (Meadows, 1972; Mesarovic and Pestel, 1974). This shortfall refers to the shortage of oil and additionally to electricity or other natural resources or it may be referred to as an oil crisis, petroleum crisis, energy shortage, electricity shortage or electricity crisis. An energy crisis is a great bottleneck in the supply of energy resources to an economy. So the concern today is how the energy sector will meet the anticipated growth in demand over the longer term (Anonymous). Public is also going to be aware of this issue, they feel that progress of any country heavily depends on energy resources. Adoption of new dimensions of technology also based on proper energy assets (Anderson and Lipsey Mark W.,1978).

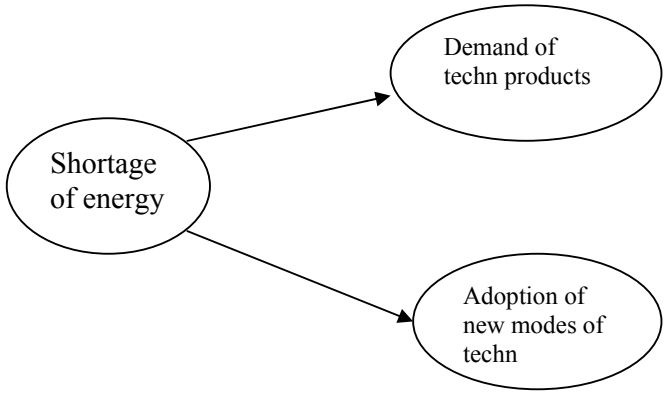
Based on the literature, two statements can be checked regarding the adoption of technology which was forced by energy crises.

Hypothesis 1: Demand of technological products increases due to Energy Crises

Hypothesis 2: Adoption of new mode of Technology becomes difficult because of short fall of energy.

Three variables have been taken, scarcity of resources (energy), demand of technological products and adoption of new methods of technology.
Figure 3: depicts the relationship of these three variables, and how shortage of energy influence the performance of technical and IT firms, and also make impact on adoption of products that substitute the short fall of energy.

Figure 3



METHODOLOGY:

Survey method was used to collect Primary data. The survey was conducted to study the adoption of technological products. Adoption of technological products and their use is very important in banking sector, as all electronic transactions require energy and electricity so the sample included banks of Pakistan. Convenient sampling was used so banks were mostly from Rawalpindi and Islamabad.

A self administered questionnaire was floated asking about types of technological products used in banks which could cover the short fall of energy and help them to continue their work. Sample size was 30 and 22 useable Responses could be collected. Respondents included Branch Managers, IT Managers, and Operations Managers of different banks and their opinion was taken. The questionnaire was designed to collect data about the purchase and use of technological products like generator (its on gas, petrol or diesel), UPS, search lights, gas lamp etc. Also purchase cost of these equipments, expense per day, daily usage in hours also checked. This information's gave a very clear idea how much cost firms and banks were bearing to adopt and acquire technological products for efficient performance of their technical departments due to scarce energy resources. Questionnaire also included questions regarding forced adoption of technological products and short fall of energy. Every respondent has to rate questions on a five point likert scale ranging from strongly disagree to strongly agree.

FINDINGS:

Results from table 1 confirm that (Hypothesis 1) due to energy crises, many software, IT firms, and banks are forced to adopt new technological products that replace the shortfall of energy (beta = 0.52 and p value = 0.004).

Table 1:

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.519	.393		6.414	.000
	energy crises	.329	.104	.520	3.165	.004

a. Dependent Variable: adoption of new modes

Table 2 shows (Hypothesis 2) that it's very difficult to adopt new modes of technology due to short fall of energy (beta = 0.428 and p value = 0.021). Adoption of new software's and new techniques become very difficult due to scarcity of energy.

Table 2:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.191	.625		3.508	.002
	energy crises	.406	.165	.428	2.460	.021

a. Dependent Variable: demand of tech products

As survey was conducted from different private and public banks, there are different level of use of technological products and their costs.

Meezan bank limited (I-10 branch) purchase generator costing Rs 250,000. Their daily expense is around Rs 350 and uses it 2 to 3 hours per day. It's their expense as they want to smoothly run their daily transactions and satisfy their clients. It's all due to short fall of energy.

Allied Bank Limited (I-9 branch) uses the generator but the head office provides them that facility, their approximated expense per day is Rs 500 and usage is 5 to 6 hours per day. For safe side they also purchase UPS used for 3 to 4 hours per day. So they are forced to adopt these machines due to load shedding, and now their daily work going well. If they do not use these technological products then they are unable to function their business. In charge commercial loans of this bank suggested "Rather depending upon thermal plant we have to look for alternate energy sources like coal, wind and Hydal resources"

Soneri Bank (I-10 branch) uses a very heavy generator costing Rs 750,000 and daily expense is Rs 600, and use it around 3 hours daily. Alternatively Purchase UPS costing Rs 200,000. UPS working all day for recharging purposes. For emergency purposes bank also have a search light costing Rs 300. Bank's In charge of trade and finance suggested that " Gas generators can be used instead of Diesel, because it reduces the overall cost as gas is cheaper than diesel , also we cannot depend much on diesel."

United Bank limited (Adyala road branch) has purchase generator costing Rs 100,000 and daily expense Rs 700 per day, usage is 4 hours a day. For backup bank also have UPS costing Rs 180,000 and daily use is 5 hours. Bank also have a search light of Rs 700, it's for security guards. Branch Manager stated "*shortage of energy is a main hurdle in technological advancement*".

It is not only banks which were surveyed but other public dealing organizations also checked. A CNG station, where different people used to fill the gas in their cars, also surveyed. **GAS WAYS (I-9 branch)** is a CNG station, it purchased generator costing Rs 100,000. Through it they make efficient use their gas pumps to satisfy customer needs and effectively run their business. Use of generator is 5 hours per day. Manager of gas station mentioned that due to load shedding and scarcity of electricity their business suffered a lot and find difficult to satisfy customer needs. Shortage of electricity forced them to adopt generator, but this may in turn increase the cost.

Figure 4

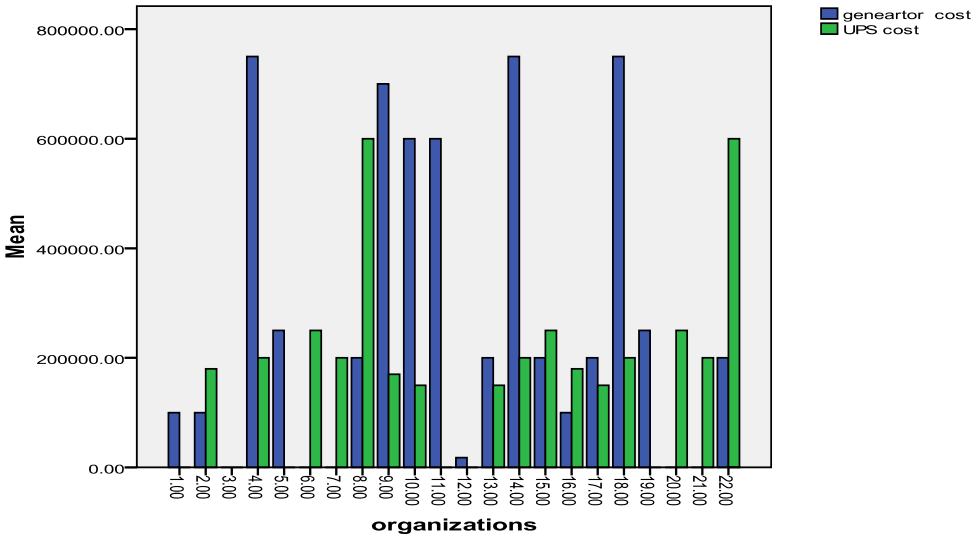
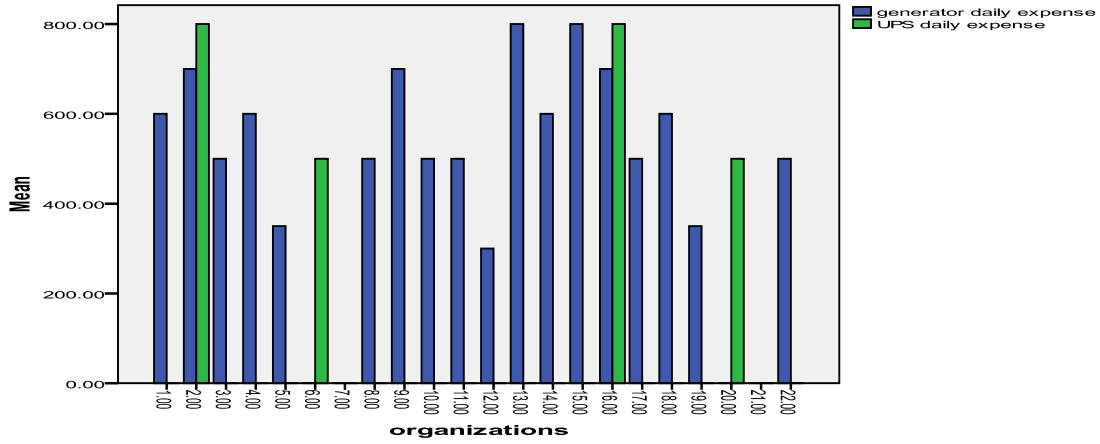


Figure 4 shows the comparison of guarantor and UPS costs that are adopted by different firms and banks. Some firms bear costs of generator unto Rs 800,000 only to run their business smoothly and efficiently, and forced to adopt this technology. Whereas this figure depicted that UPS is also very common technological product which is a backup for generator and its purchase cost can be Rs 600,000(maximum in this data).

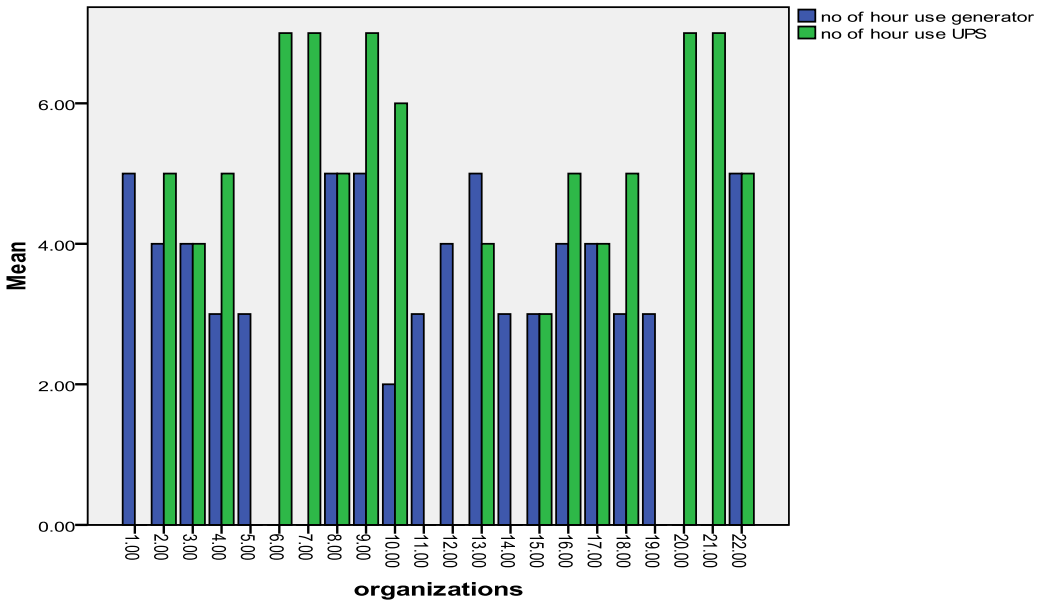
Figure 5 depicts the daily expenses of generator and UPS. As generators run mostly from diesel and petrol, so their daily expense is more as compared to UPS. This data shows that per day expense of generator is around Rs 800.

Figure 5



According to figure 6, daily usage of both generator and Ups is checked. UPS is mostly used and for logger number of hours as compared to generators. Maximum use of UPS is around 10 hours a day, whereas generators daily usage is around 4 to 5 hours, reason can be generators are more expensive to use daily as they run with petrol and diesel , UPS have batteries and charged with electricity.

Figure 6



CONCLUSION:

The purpose of this study was three fold: first, to check the impact of energy crises on adoption of technological products; second was to check the adoption of new areas of technologies, that are helpful for an organization to proceed, due to energy crises; third, to check the costs of technological products that are used alternatively due to shortage of electricity and energy.

Study reveals that demand of technological products increased in last three-four years, but these technological products are those which replace the shortage of energy. For example , generators, UPS and search lights. Since shortage of energy is a huge problem of Pakistan , many software firms, power mills and banks need these technological products as alternative for energy, so that they perform their functions smoothly and there should not be any barrier in their work. Energy crises major impact is that many IT firms are unable to introduce new techniques and methods that play major role in progress of country, their overall performance is declining and unable to attract new customers. Due to this overall progress of country is going very slow.

This study makes the cost and consumption analysis of technological products that used alternatively for energy. Data explores that large firms bear heavy costs on generators and UPSs', that make huge impact on the economy of country and firms, and due to this extra costs firms overall profit margins decline. Importance of technology cannot be ignored in today's world. Impact of technology is apparent in advertisement, management, automation, electronic commerce, e-banking, telecom industry ; but due to shortage of energy adoption of new phases of technology become very difficult, which results the decline in progress of individual firms and country.

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EMERGING MANAGEMENT PARADIGM IN THE CURRENT GLOBAL FINANCIAL CRISIS

Prof Dr Najeeb A Khan
Preston University

ABSTRACT

Currently, most of the economists believe that the world economy is in its worst shape since the 1930s.Demand is slumping across the globe as firms and consumers are battered by dysfunctional financial markets, falling wealth, higher unemployment, and rampant fear.
In order to cope with this grim scenario, the business enterprises are, reportedly, bringing about major transformations in their business policies and strategies and it would be only the outcomes which will reveal how far they have been able to mitigate the situation. This paper attempts to discuss the changing strategies of certain enterprises with a view that the new approaches get the attention of academic institutions and suitable updating is brought about in the text books based on research made by scholars in the changed business environment.

McGregor (2009,page30),cites the examples of certain companies, which came up with breakthrough ideas, for a world in which the game will never be the same. In 2, 000, Cisco Systems had the largest market cap in the world and more than 50%annual sales growth. Then the dot-com bubble burst, and the Cisco watched the networking giant's stock drop 86%, from 80to just 11by September 2001.The company laid off thousands of employees, shrank the number of suppliers and simplified many products. It also radically changed the way company was managed, turning a command-a-control hierarchy into a more democratic organizational structure. The company emerged from that recession more profitable than ever and went on to outperform many technical rivals. In retrospect Jhon Chamber, he CEO, wonders if he could have done even more ." Without exception," he says" all of my biggest mistakes occurred because I moved too slowly"
The challenge for many business leaders is figuring out what moves to make now. Whether you see signs of life in the economy or think the worst is yet to come, there is no question that the game has for business. The tools which the managers once used with great success, from how they pay their people to where they seek out new product innovations, are being reevaluated Manufacturing processes that worked seamlessly a year ago may be a recipe for piled up inventory as spending slows. And strategies once deemed unthinkable, such as cutting the salaries of rank-and-file managers ,are being embraced by some of the world's largest companies .
McGregor *(2009)* has summarized four ideas for keeping costs down and customer service solid:

FLEX YOUR WORK FORCE:

Cutbacks in staffing levels may be necessary as sales slow. But to keep service quality high, make the most of the workers you have. Cross-train employees so they can step up to fill a variety of needs –and you can avoid making new hires.

SPOIL SURVIVING STAFF:
Slashing jobs and benefits can wreak havoc on morale. If you must cut back, keep the front lines happy with flexibility and other rewards. American Express, for example, now lets call center representatives choose their own hours and swap shifts without supervisor' approval.

INVEST IN SIMPLE TECHNOLOGY:
It may not be the best time to upgrade your call center with pricy software. But easy self service solutions such as in-store Web cams that link customers with remote technical experts can serve multiple locations at minimal costs.

BABY YOUR BEST CUSTOMERS:
Now is not the time for equal treatment. Keep your most active buyers coming back with faster service, extra attention, and flexible rules? As business travel slows, Marriot, for instance, is extending elite status to its best guests even if they don't qualify under normal rules.
McGregor mentions the tactics of certain firms which prompted her to arrive at the above conclusions. For instance, Hertz (Rent a car business firm), laid off some 4000 employees in Jan, 2009, and resultantly such a measure to trim costs would have driven away many customers. The customers returning Hertz cars at two major airports of U.S.A returned the cars only to find nobody waiting with a check-in device and they had to drag their bags to the counter to return their cars. One of the customers complained," when you are rushing for an airplane, every minute counts. The less convenient they are, the more likely I am to try someone else."

In fact, the response to increasing global competition, as Bernandin and Ross(1993) mention, is organizational restructuring often in the form of downsizing," right sizing" or reduction in work force.

While businesses may feel forced to trim the costs, cutting too deeply can drive away the customers,. Hertz spokesman says company has reduced "instant return" hours at some smaller airports but is making adjustments to restore that service in locations where it "might have gone too far. You try to create right balance."

Across the business world, managers are trying to resolve the same kind of dilemma. Just as companies are dealing with plummeting sales and sinking employee morale, most of the customers want more attention, better quality, and greater value for their money. The best performing companies, however, are actually doing more to safeguard service in this recession.
One of the success story is that of Britain's Rolls-Royce.(Britain's lonely high flier, The Economist,London,Jan10th-16th2009 ,pp 58-60).The striking thing about Rolls –Royce has been its success in foreign markets. Its revenues, about 85%of which come from abroad, have almost doubled in the decade. as reported in the Economist(cited above), its revenues , about 85%of which come from abroad „have almost doubled in the decade since Sir John Rose took over as chief executive. About half of the latest wide-bodied passenger jets and a quarter of single-aisle aircrafts rolling off the production lines these days are powered off by its jet engines. At the Farnborough air show in 2008, its order book was swollen by almost $9.3 billion. This was half as much again in sales that its two main rivals, Pratt & Whitney and GE, made between them. It would be worth while to examine how the company has done so remarkably well in the wake of slowing economy in the recent years. There are two main reasons:
(1)Re-engineering
(2)Melding of technology with service

RE-ENGINEERING

An understanding of the firm's success requires some understanding of technology that goes into its civil-aircraft engines. This is not just Rolls Royce's biggest business, it is also the one that both felled company in 1971 and proved to be its salvation two decades later. The best place to start is the surprisingly small, almost underwhelming, turbine blades that make up the heart of the giant engines slung beneath the wings of world's biggest planes. These are not the huge blades which we see during the boarding, but are buried deep in the engines. Each turbine blade can fit in the hand like an oversized steak knife. At first glance it may not seem much more difficult to make. Yet they cost about $10,000 each.

Making the blades is merely the entry ticket to the market. Both Rolls –Royce's main rivals had also mastered the art. In such a competitive field an incremental advance by one manufacturer is usually matched by others within a couple of years.

Rolls Royce's triumph was not to build a slightly better engine and thus earn a temporary technological edge, but to design a completely different one. Remarkably, it did so from a position of weakness. Until the late 1960s the market for big jet engines was dominated by Pratt &Whittney, with a share of about 90%.Rolls -Royce played a bit part, making engines mainly for European aircraft manufacturers. These were losing, bit by bit, to America's biggest aircraft –makers, which had the benefit of a much larger domestic market and substantial military orders. Rolls-Royce realized that unless it could develop a large jet engine that would fit an American-made airliner, its sales of jet engines would collapse within a decade.

Rolls-Royce took the risk of concentrating its efforts on two revolutionary technologies. The first one was to use carbon composites to make fan blades far lighter than the metal ones of the time. The second was to change the basic architecture of jet engines by using three shafts instead of two. Both tasks turned out to be harder and costlier than Rolls Royce thought. Its composite blades shattered when hit by hail or birds. Eventually it had to abandon them for the tried and tested metals ones. And by then an embarrassing series of delays and missed performance targets had caused it to run out of cash. A conservative government nationalized the company in 1971.

Although the new design posed threat to the very existence of Rolls-Royce, it also proved to be the base for a whole family of winning engines. These were more complex to design, build and maintain than those of the rivals, but they also used fuel more efficiently and suffered less wear and tear. Much more importantly, they could be scaled up or down to fit bigger or smaller aircraft. As a result, Rolls Royce did not have to design a new engine from scratch each time a new airliner came onto the market, allowing it to compete for sales across a far wider range of aircrafts than its rivals. This was a huge advantage because the main determinant of whether a jet engine sells well was whether the aircraft using the Rolls –Royce's engine sells well. Rolls –Royce can sell across the board. It is the only one of the three main engine –makers with designs to fit the three newest airliners under development, the Boeing 787 Dreamliners, airAirbusA380 and the new wide-bodied version of the airbus A350.Of the world's 50leading airlines, 45 use its engines.

The significant point in the context of the issue under discussion in this paper is that the big pay-off from getting engines under more wings comes from selling spares and servicing them. This is because selling aircraft engines is like selling razors. The razor .and engine make little, if any profit; that comes later from blades or spare parts and servicing Gross margins from rebuilding engines are thought to be about 35%; analysts at credit Suisse, an investment bank, estimate that some makers of jet engines get above seven times as much revenue from servicing

and selling spare parts as they do from selling engines. .Rolls-Royce, however, is of the view that, on an average, engines are sold at a profit.

MELDING OF TECHNOLOGY WITH SERVICE

The trouble with selling razors at a loss is that someone else may make the blades to fit them. And the attractive margins in engine maintenance have indeed attracted a swarm of independent servicing firms (and engine- makers after each other's business).Rudolph Herdsman aircraft maintenance expert at aviation consultancy Holland, reckons certified
Spare parts for jet engines can be had for one- third of the price charged by the original manufacturers.

This is where Rolls-Royce has melded its technology with service to make it more difficult for competitors to pinch its business. Rather than simply giving away razors to sell razor blades, it offers to shave its clients every morning, if they wish so. Instead of selling airlines first engines and then parts and services, Rolls-Royce has convinced its customers to pay a fee for every hour that an engine runs. Rolls-Royce in turn promises to maintain it and replace it if it breaks down. The other makers of big engines are also doing the same, but Rolls-Royce is covering most of its sales by such contracting. The operations room of Rolls-Royce in Derby continuously assesses the performance of 3500 engines around the world, raising an almost insurmountable barrier to any rival that hopes to grab the work of servicing them. The data collected can be invaluable to Rolls-Royce.: it enables Rolls-Royce to predict when engines are most likely to fail, letting customers to schedule emergency repairs and fewer unhappy passengers. The data are equally valuable to Rolls-Royce. Spotting problems early helps it to design and build more reliable engines or to modify existing ones. The resulting evolution of its engines has steadily improved fuel efficiency and over the fifty years has extended the operating life of engines ten fold.

Another case of the secret to flourishing during tough times has been written by McCue Mike in Sales and marketing management magazine. (2008).

For nearly 60 years, Automatic Data Processing (ADP) Inc. has been the face of payroll processing for companies big and small----ranging from Mom-and Pop corner stores to giant companies. The company is responsible for paying one out of every six non-government workers in the United States. What is only starting to gain widespread understanding is that ADP is more than a payroll processing company, paying more than 33 million people worldwide and offering solutions that address tax and compliance issues, human resources and benefits administration. More than 585000 clients in 50 countries(including employer services and dealer services), ADP is the largest provider of HR services not just in North America ,but also in Europe, Latin America and the Pacific Rim. Only about 55%of the company's annual revenue comes from payroll processing, with the other 45% coming from areas such as workman's compensation insurance, taxes and compliance, and 401/kretirement products.

The diversity of ADP'S product portfolio is especially important in today's turbulent economy, with unemployment claims rising. The company would prefer a strong environment with improving employment conditions, but it is lucky to have a portfolio of diverse offerings designed to help companies reduce their HR and payroll expenses. The company also benefits from a business model in which 90% of revenues are recurring.

The diversity of its products offerings has kept ADP's products and services from being commoditized, but the focus on solution selling is what has maintained the business' health through tough times. The company has always had a reputation as a stellar face-to-face sales

organization (fielding more than 5,000 sales reps in the U.S.alone), but in 2005, ADP created a TeleSales division to increase market penetration and lower the overall cost of sales.

To make it all work, ADP managers have become adept at identifying the characteristics that make an individual a good sales person. More importantly, they have learned when and how to transition those quota carriers and sales representatives into effective sales leaders---a common problem that most organizations face, and one that carries a high price tag if not handled properly.

With approximately 46,000 employees, including more than 5,000 sales reps in the field and 600 more in the TeleSales program, the challenge of maximizing human capital was a steep one for ADP. Many companies simply assume that success in selling is a direct indicator of success in sales management, so they take their top performers and make them team leaders. But the skill sets are not the same, and giving someone the title of manager does not magically confer management abilities.

To make matters worse, if you take that approach and get it wrong, it is doubly disastrous. In addition to putting the wrong person in management, you have taken a top-performing sales rep out of field.

That is why ADP prefers a transitional approach. ADP claims (McCue, 2008) that the company spends a lot of time focusing on the career development of their employees. Their most successful salespeople have a real client – orientation and a strong work ethic. Customers like to buy from knowledgeable people whom they like and trust, so the company looks for these qualities in a sales person before they hire them.

While most businesses spend the lion' share of their training resources on new hires, ADP inverts that formula to devote a higher proportion of its resources to developing current employees .For example, a rep who produces great results selling to small clients would be given the opportunity to produce the same results with mid-sized customers, and then moved up to handling national accounts. When this type of performer then asks about opportunities in management, ADP moves the rep into its sales training manager position.

In other words, the company does not simply pluck its top people out of field and expect them to become leaders overnight. ADP is one of the top companies in providing training and career advancement opportunities to its associates. When looking for management candidates, they look within their own organization first due to great talent pool they have.

The sales rep who has been moved into sales managers position is given indirect management of another associate. The company teaches the trainee various coaching techniques, strategies to motivate people and tips on conducting a review session. But the management trainee still has an individual sales quota to maintain as they develop their leadership capabilities.

And that ultimately is the secret to ADP's success. If a sales person begins to assume some management duties and decides it just isn't the right fit, there are no hard feelings or perceptions of failure; the rep simply goes back on focusing on what he or she does best: pitching, closing and selling.

Now let us examine the existing theoretical prescriptions on the issue under discussion. to explore if new theoretical frame work is required in the wake of perpetuating recessionary environment?

According to Lamb (2004), the problems of inflation and recession go hand in hand ,yet recession requires different marketing strategies:

- *Improve existing products and introduce new ones:* The goal is to reduce production hours, waste, and the cost of materials. Recessions increase the demand for goods and services that are economical and efficient, offer value, help organizations streamline practices and procedures, and improve customer service.
- *Maintain and expand customer services:* In a recession, many organizations postpone the purchase of new equipment and materials. Sales of replacement parts and other services may become an important source of income.
- *Emphasize top-of-the –line products and promote product value.*

Tregarthen(1996)states that economic slump is characterized by high unemployment of factors of production, and thus low consumer demand. The lack of demand may lead to an easing in price increases or even a fall. Business will have low confidence in the future and investment is likely to fall back since there is no demand for output which would justify new projects.

Tinniswood(1991) is of the view that the economic environment consists of the general situation of economic growth or recession ,interest rates, and corporate profitability ,within which all firma operate. One frequently neglected aspect of the economic environment is the fact that a company's purchases are directly related to its to its own sales or order situation. For example ,shipments of beer in the United States rose by 2.7% in 1990.Part of this growth was due not to the industry's marketing efforts, but to stock piling by distributors and retailers ahead of a federal tax increase at the beginning of 1991.The price increase and the effects of recession on purchasing power made brewers shipments to be down 3 to 5 %in 1991.Trucking companies could expect a corresponding downturn in demand for their services, and manufacturers of brewing and canning equipment could expect even greater downturn as reequipment decisions were postponed and industry became even more McConnell and Brue (2005) have pointed out that firms that think a recession will be relatively short after their most obvious example: the cost of printing new menus when a restaurant changes its price. But changes in price create other costs of changing prices. There are the costs of (1) estimating the magnitude and duration of the shift in demand to determine whether prices should be lowered,(2) repricing item held in inventory (3)printing and mailing new catalogues, and(4)communicating new prices to the customers, mostly through advertising lived may be reluctant to cut their prices. One reason is so called **menu costs**. When menu costs are present, firms may choose to avoid them by retaining current prices. That is, they will wait to see if the decline aggregate demand is permanent.

McGregor(2009,p32) ,however, suggests that the best businesses have to do more than just survive this recession Jeffrey Immelt, General Electric's chief executive officer ,believes that what the corporate world faces now is fundamental "reset". He argues that shift in the financial services sector and the increased role of government in business" will be with us for the rest of our careers.' Many consumers will be forced to accept a more fragile lifestyle for years to come. Sectors such as retail, housing, media, and manufacturing are being transformed. And layoffs could permanently alter not the size of some companies but also the nature of relationships between the employees and their bosses.

Smart leaders recognize that they can use this crisis as a catalyst to spark new ways thinking and doing business. Niko Canner, co-founder of consultancy Katze bach Patners, notes that challenge is to look beyond the critical work of plugging financial holes to forge fresh strategies. Right now, he agues," people are using approaches that are insufficiently powerful to get them where they need to go." Some CEO's are determined to avoid that trap. Ray Davis, who heads regional bank Umpqua Holdings, asserts that" there is no more

normal." His top priority: position Umpqua to succeed in the coming years. Despite the turmoil, he has launched an eco-oriented lending unit to fund green ventures and is building an assets management division. The Oregon bank is suffering like many of its peers, though it did not offer, subprime loans to customers. But doing beyond hunkering down simply is not an option. "I feel like I am sitting in the middle of a railroad track." says Davis. "standing still is how you kill the company."

With U.S. and European markets in deep freez ,companies are even more interested in tracking market trends in emerging economies. About a year ago ,Master Card launched a process it calls" dynamic strategy". It created seven global networks that study developments such as technology, consumer behavior, and business spending. The heads of each network present their findings at twice-yearly forums attended by MasterCard's top brass. Already the initiative is helping executives understand the impact of developments such as payments by cell phone." Normally those smaller markets get pushed to the side," says Senior Vice President Randy Shuken, who oversees the project Even simple technology solutions, he explains," could affect our industry fundamentally."

WORKING WITH OUTSIDERS

As old methods fall short, executives need to bring a wider array of skills and background to the table. Companies are testing fresh methods to develop global leaders while tapping innovative collaboration tool sand social networks to speed up productivity and decision making. As McGregor,(2009)goes on to explain, perhaps no company has done more in this vein than Cisco. As part of his move to democratic management, Chamber (CEO, Cisco) set up a new hierarchy within the company." Councils" are teams of executives who make decisions on $10billion opportunities. "Boards consist of executives who have authority to make calls on $1 billion bets, and "working groups "are organized to deal with a specific issue for a limited period of time. Chambers--- who typically is not involved in the decisions ---believes his approach is a path others will need to follow." when you have the command and control by the ten top people, you can only do one or two things at a time," he says." The future is about collaboration and teamwork and making decisions with a replicable process that offers scale, speed, and flexibility."

The recession is prompting companies to reconsider how they work with outsiders, too. A critical new skill is learning to work with regulators and other public sector executives whose role in business has widely expanded. In the financial sector, that could mean interacting with government as owner. In other cases, it means looking for ways to tap the stimulus money now being doled out across the globe.

TRUSTED PARTNERSHIP WITH CUSTOMERS

Creative retailers, meanwhile are getting more involved with struggling suppliers and customers. Some exploring ways to help with financing where they can, while others are putting more emphasis on services as product sales drop off.

In the past, solving customers' problems was often talk. Now it has become critical throughout a number of industries. India –based outsourcer HCL Technologies has been testing new ways to help trim costs, from differing payments to help them look for ways to cut overall IT spending. The most immediate concern is that some clients may not survive if they don't find ways to take costs out of their bottom lines.

When a software client wanted to shelve a product it was developing, Nayyar had HCL take over the project in exchange for a share in the future revenue.

CONCLUSIONS

Only those firms would survive and grow, in the coming years, who will come up with break through ideas for a world in which the game will never be the same. Those who can't do it risk losing the business altogether; those who do may gain market share. This message is not only important for the senior managers of business firms: the academia and Deans of management sciences of the universities also need to arrange for revising the management related courses an d syllabi to address the new challenges. They must gear up afresh to look at the new theories with a major paradigm shift in .management approaches. .In particular the consumer's purchasing power is declining and the typical pricing decisions do not appear relevant in the wake of continuing spiral of global recession. In this paper an attempt has been made to examine how some of the successful companies are responding to the adverse economic conditions by coming up with innovative and creative ideas instead of going for simpleton solutions such as increasing/deceasing the prices of products/services. Cost effective methods and strategies are being put into place, such as rightsizing instead of downright lay offs. Networking with public sector executives and follow up of stimulus spending is becoming more critical. Fresh approaches for relationships with customers and suppliers are also being explored.

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CLASSROOM MANAGEMENT AND NEW ROLE OF MUSLIM TEACHERS IN EDUCATIONAL INSTITUTIONS

Dr. Abdul Hamid A. Al- Fatah
Saudi Arabian Cultural Mission Pakistan

ABSTRACT

Discipline, order and respect for law are the pre-requisite for smooth functioning of the Islamic Educational Institutions. Proper classroom management and discipline ensure the success of learning process. It is the teacher who plays the vital role in the learning process and the Muslim teacher is expected to play this role with certain objectives. In the era of globalization changing role of Muslim teacher demands that teacher has to be precise and clear in directions and communication to the students to maintain the effective management in the classroom. The proper process mainly on effective classroom is i) to academic learning, ii)to establish and maintain the positive class environment, iii) to develop healthy and professionally sound relationship with the students, iv) to prevent minor disruptions before they become major ones. It is also discussed in the present paper how to deal with disruptive situations.

INTRODUCTION

It is universally recognized that the teacher is the key person in an education system. He/She enjoys the high esteem and prestigious status sometimes denied to kings and emperors and he/she plays pivotal role. Around him, whole system of education revolves.

According to Lemlech (1988) classroom management is the linchpin that makes teaching and learning achievable. The author further defines the classroom management using the key components that affect success in the classroom. Classroom management is the orchestration of classroom life, planning curriculum, organizing procedures and resources, arranging the environment to maximize efficiency, monitoring student progress, and anticipating potential problems.

The key components of classroom management are planning, organizing, arranging, monitoring and anticipating; teachers who are excellent and successful classroom mangers have mastered techniques for planning activities and maintaining high levels of students' involvement in those activities enriching the classroom environment, anticipating organizational and behavioral problems and monitoring students' progress. According to Kounin (1970) successful classroom management results in a high rate of work involvement and a low rate of deviancy in academic setting. To maintain effective management in the classroom teachers have to be precise and clear in their direction to students, they communicate well, listen intently and express feelings to students. The most striking difference between effective and ineffective classroom mangers is the knack for anticipating potential problems. The effective teachers are anticipating resources and material needs, physical space needs, individual and group needs, noise constraints, effective and cognitive students' reactions. Insight into the problems avoids effective teachers from pitfalls. Another characteristic of effective manger is the ability to set clear expectations, teachers set expectations for behaviour, standards for students academic work and classroom procedures.

According to Lemlech (1988) classroom management and discipline are not synonymous. Discipline is the part of classroom management, discipline in the classroom dependent on good classroom management. Chaotic classrooms unstructured by group standards restrict the ability of the teach and students to learn. In many classrooms teachers set the rules, provide reward for abiding the laws and punishing those who transgress and tread down the rules (Lemlech. 1988). Dewey (1916-1944) talks about the social environment of the

classroom and its influence on the development of attitudes and dispositions. The social environment consists of all the activities of fellow beings that are bound up in the carrying on of the activities of any one of its members. It is truly educative in its effect in the degree in which an individual shares or participates in some conjoint activity.

Effective classroom management is the key to increase the learning time. Lack of discipline and mismanagement leads to class disruption, students' misbehaviour, and no participation. Administrators, parents and students expect teachers to be effective classroom mangers so that the much of the precious time is not wasted in discipline problems resulting in little students learning.

PURPOSE OF CLASSROOM MANAGEMENT

According to Siddique @ Kamran (2003) Classroom management is effective and efficient use of time, space and resources to achieve some educational objectives. Classroom management is the process of working with and through students effectively and efficiently to achieve educational objectives.

According to Iqbal, Z and Sultana, N (2004) following are the aims of classrooms management:-

i. To provide and maintain a secure learning environment where students can express themselves freely.
ii. To teach the lesson safely and in a manner appropriate to its aim.
iii. To take any necessary measures to prevent disruptions and interference.
iv. To maintain continuity of student interest and motivation during the lesson.
v. To give students feedback about their behaviour.
vi. To use sanctions and praise appropriately.

According to Evertson & Randolph (1999) the purpose of classroom management is not to keep the students quiet but to enhance and promote maximum learning. In disciplined and properly managed classrooms most of the time is allocated for learning and is not wasted in non-productive and non-academic activities The other purpose of classroom management is to increase engaged time. The purpose and the challenge of classroom management is to increase the academic learning time by way of increasing engaged time. So that academic learning time is brought as closer to the allocated time good instructors are also good class managers. In spite of all the efforts and endeavours of the teacher to maintain discipline some untoward and disruptive behaviour may erupt teacher must be able to deal with such occasions effectively.

According to Mccaslin & Good (1992) the purpose of classroom management is to develop student responsibility and self-regulation. Effective management helps students grow in their ability to mange their own learning and to control their own behaviour. Classroom management is like a vehicle, which enhances the student, self-understanding, self-evaluation and the internalization of elf control.

NEED FOR ESTABLISHING AND MAINTAINING POSITIVE CLASSROOM ENVIRONMENT

There is a need of establishing and maintaining positive classroom environment, because motivated student, engaged in learning rarely ruffle the classroom discipline so, therefore it is suggested to always keep students motivated in learning by setting stage for positive classroom environment.

ESTABLISHING POSITIVE ENVIRONMENT

Positive environment is necessary for managing the class in a befitting way. Positive environment can be establishing by adopting the following way:-

i. Teacher must try to meet students' basic and age related need.

ii. Make students feet physically comfortable, safe, welcome, socially accepted and valued otherwise they are more likely to face learning difficulties and behaviour disruptively.
iii. The degree of class control be moderate, effective learning takes place in congenial and permissive classroom condition rather than authoritarian fasten managed classroom.
iv. Too much control may be preventive for creativity critical thinking and problem solving ability and may promote rote or verbal learning.
v. Make them responsible for their learning through group and individual activities so that they become independent learners.
vi. Keep instruction at the students' developmental level.

MAINTAINING POSITIVE ENVIRONMENT

"Prevention is the best medicine" this maim is equally valid for classroom management to prevent maladaptive and disruptive behaviour following teaching and management practices may contribute to check management problems and maintain flourishing and learning classroom environment.

DEVELOP HEALTHY AND PROFESSIONALLY SOUND RELATIONSHIP WITH THE STUDENTS

In order to maintain positive environment in the classroom, teachers have to adopt the following strategies:-

i. Be friendly with the students and learn their names.
ii. Communicate interest in all the students and show concern for each of them. Interest and concern is communicated through brief eye contact, through supporting gestures and facial expressions. The actions enhance students' trust in and attachment for the teacher.
iii. Avoid labeling the students with negative adjectives, which hurt them.
iv. Describe the behaviour of the misbehaving students, not characterize the students.
v. Increase the engaged time by keeping the students involved in through the learning task.
vi. The most important is the wittiness; mean communicating students that you are fully aware of every thing happening in the classroom. You have the eyes at the back of your head.

PREVENT MINOR DISRUPTIONS BEFORE THEY BECOME MAJOR ONES

Teacher should prevent the following disruptions at the initial stage; otherwise it may become major preventions:-

i. Overlapping: Supervising several activities at the same time being conducted in the classroom.
ii. Smooth Transition: Keep the lesson and group moving at activity to from one another smoothly at appropriate and flexible pace.
iii. Seating Arrangement: proper seating arrangement which ensure equal participation of the students be planned.
iv. Group Focus: Keep students involved in appropriate class activities. All must have some thing meaningful to do during the lesson.
v. Teach rules and routines to the younger students in academic fashion with explanation, examples and practices during initial classes.
vi. Developed a set of few general classroom rules applicable to variety of situations. Rules should be displayed in classroom.
vii. Be assertive rather than passive or aggressive in enforcing discipline. Apply rules forcefully, fairly, consistently and calmly.

viii. Create business like climate in the classroom, where students understands that both teacher and students have commonly shared goal of accomplishing learning task.

DEALING WITH DISRUPTIVE BEHAVIOUR

First of all try to deal the disruptions at the initial stage not to be major ones, if it is so, then deal with them as follows: -

i. Deal with the present not with the past activity.
ii. Talk to student directly instead of talking about the students with others.
iii. Do not be harsh and provoked. Stay calm and address firmly anger.
iv. Empty threat must be avoided. The teacher should be model of self-restraint and self-control.
v. If the student is hostile, diffuse his/her hostility by responding with calm smooth tone. If the student's misbehaviour is blocking the teaching process. I statement be used by explaining to the student why you and as king are behaving in such manners?
vi. Punishment be proportionate according to the crime.

CLASSROOM MANAGEMENT AND USE OF PUNISHMENT

Try to avoid the punishment, but if it is necessary, use it accordingly.

i. Use punishment as a last resort
ii. Ensure the students understand class rules and their rational before using punishment.
iii. Explain to the students, why punishment is being used.
iv. Punishment should be appropriate, major punishment for small infractions or minor punishment for major infractions of rules must be avoided.
v. Punishment must be just and fair.

OUTCOMES OF EFFECTIVE CLASSROOM MANAGEMENT

INCREASED ACHIEVEMENT

The relationship between management and achievement is well documented (Evertson. 1987). Purkey and Smith (1983) indentified effective management as one of the four key characteristics of an effective school. Wang, Haertel, and Walberg (1993), in a comprehensive review of the literature on factors influencing learning concluded that effective classroom management has been shown to increase student engagement, decrease disruptive behaviour, and enhance use of instructional time, all of which results in improved student achievement. In short, effective management is an essential ingredient of effective teaching.

IMPROVED MOTIVATION

Brophy (1981) identified classroom management as an "essential precondition for motivating students". Classroom management is a foundation the teacher builds upon in creating motivating classrooms. Inn addition, be seeking student input on instructional and management issues, the teacher can promote student ownership and involvement, both of which positively influence student motivation (McLaughlin, 1994)

CONCLUSION

Discipline, order and respect for law are the pre-requisite for the successful and smooth functioning and working of the educational institution's proper classroom management and discipline ensure learning process success in the Muslim countries of the world. Disorder, lack of planning, disorganization and indifference, disregard and ignoring of the institutional code of

conduct results in impoverished learning the source of distorting the image and prestige of Islamic Institutions. Proper effective and assertive classroom management provides guarantee of promotion of learning and it creates sense awareness about the students that how important it is to regularize themselves and pay respect to rules and regulations of the due organization to make this task successful there and plenty of suggestions and techniques offered by the behaviour sciences. If these are followed and implemented in true letter and spirit then disciplinary problems can be solved. But it seems that we are still following the beaten track and try to solve the disciplinary problems on emotional and authoritarian fashion, which negates and disregards the findings of behavioral sciences, in some of our Educational Institutions in Muslim World. Over this attractable, indirectly, is the indicative of that the results of new researches must be confined to theoretical level. These are not practicable in real classroom management.

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