

## **Project Knowledge Sharing: A case study of Pakistani organization**

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### **Abstract**

*This research investigates the impact of knowledge sharing and its impact on the organizations and their projects on the whole. The organizations studied in this context are NHA, The Communicators Pvt ltd, and HEC of Pakistan. The results show that if Knowledge is shared amongst the people involved has a positive impact as it reduces time, the cost overruns and thus improves the overall quality of the systems developed for the completion of the projects.*

**Keywords:** *Knowledge, organization, project, management*

## **1. Introduction**

Predominantly data is taken into account to be a strong quality for organizations [1]. So as to change its identification, sharing, application, and creation among the organization, data has to be properly managed; otherwise, this valuable quality is irretrievably lost. Data management proves to be an elementary in maintaining structure performance. There lies range of economic edges that narrate effective management of data like specialization, co-ordination, and employ of valuable info. Once the identification of data as a main resource, organizations square measure currently making an attempt it to induce managed during a lot of organized and operative manner. However, managing data isn't meant to be a simple task because it adheres to be intangible, vigorous and involves several cultural constraints. Thus, klick needs rigorous efforts in an endeavor to boost however data is formed, brought and utilized [2]. The idea of klick and structure learning emphasizes on the importance of data as a key to achieve higher insights associated with performance and ultimately a competitive edge.

An important side of data management is its distribution to wherever abouts where it's needed and might be any recycled. Data transfer is one in every of the key components within managing method of data thus creating it a lot of operative. In associate degree structure context, it's outlined as a close method during which organizations recreate and uphold a posh, typically causally obscure set of routines. despite the fact that the 2 declared ideas, data transfer (KT) and data sharing (KS) square measure closely finite and reticulate, some authors try and develop a definite distinction amongst them that change them to induce distinguished [3]. Overall, each KT and American state share a typical purpose that's to exchange and dispense structure data, therefore this overall analysis refers to each idea as extremely reticulate. This being command, but data Sharing will and will occur at numerous levels: between people among or outside organizations, from people to open sources creating it a lot of specific, from people to clusters, between teams, across teams, and from the cluster to the organization [4]. Moreover, American state is supposed to be a lot of multifarious than communication, as a result of (1) The data is inheritable in structure members, tools, responsibilities and their networks and (2) Ample data residing with organizations is implicit, terribly laborious to access and categorical as data remains unclear. The analysis deliberately investigates the

behaviors that form the information sharing from the attitude of project management. Project Managers are crucial and dominant to the project network and as such have information concerning all the problems lying within the project. They have a tendency to possess a high eminence and directly management all business functions envisioning the project, personnel and different resources and in and of itself play a vital role as connectors between comes and therefore the organization, and across comes. They even have Kansas obligations, that typify the need to give LL and oversee venture correspondence and have a capable capacity to weaken mistakes, and institute reevaluation by gaining from each other [5]. Along these lines, the clarification for represent considerable authority in the PM point of view is their position inside the middle of the task data system and their expansive data concerning undertaking issues. This examination chose AN inductive hypothesis building methodology wherever various contextual analyses were hand-picked in a try to make hypotheses from cases. the usage of hypothetical (deliberate) rationale grants for the decision of 4 cases, which all, every the grouping arranged by the Project Management Body of data (PMBok) [6], were gigantic PBOs having vigorous framework structures.

Mostly organizations that square measure useful in nature, specialization on those useful lines change higher Learning practices. Moreover, organizations that square measure useful have already personified mechanisms designed and developed to tie useful departments along and act as data silos. Project primarily based Organizations adhere to lack such mechanisms that account certain data, its acquisition and transfer from one project to a different. There are not any formal links across comes in such organizations that square measure exclusively projects primarily based or, at best, the association developed amongst them is weak; this causes delays in the data distribution and learning process-project data sharing and communication.

Perennial quality could contribute in inflicting hinders in inter-project data Sharing undertakings. Once comes end, individuals principally got to return to their previous functions during which they were already serving or begin acting on fresh fashioned comes. Individuals from the disseminated group consistently have almost no time and inspiration to reflect on their mastery and archive that transferable information to impel it reused for the long run making it a great deal of accommodating by giving positive experiences. Subsequently, as every new project starts with new needs and totally different nature thus, there lies an inclination to reinvent, instead of to be told from the experiences of previous comes because it demands totally different operating practices, data and also the nature appears to be entirely totally different. These issues doesn't appear to be common in useful organizations wherever individuals stay stagnant in their positions; this permits the event of experience, as members of that terribly organization focus on a specific operate. Consequently, variations lying between useful and project primarily based Organizations seem to own an impression on data sharing practices. Therefore, Project primarily based Organizations cannot altogether apply approaches that follow data sharing from useful organizations. what is more, there lie several updated project management tools and processes that are developed so as to facilitate data sharing across comes, as well as the apply of lessons learned (LL), end-of-project reviews, and preparation of project management offices (PMOs).

This exploration explores KS practices from the endeavor chief's viewpoint. PMS are important to the endeavor system and in essence have learning regarding the task problems. They unremarkably have a status and immediate management over business capacities, college and completely different assets and in this capability assume a necessary half as connectors within the middle of tasks and also the association, and crosswise over activities. They in addition have KS obligations, that incorporate the necessity to make LL and supervise venture correspondence, and have a solid ability to attenuate mistakes, and establish rating by gaining from each other. Thusly, the aim behind concentrating on the PMS viewpoint is their position within the attentiveness of the venture learning system and their wide data regarding endeavor problems. This exploration picked Associate in Nursing inductive hypothesis building methodology exhorted wherever various case studies were chosen attempting to manufacture speculations from cases. the use of theoretic (intentional) principle takes under consideration the selection of 4 cases, which all, as indicated by the arrangement projected by the Project Management Body of information (PMBok) (Project

Management Institute, 2008), were intensive PBOs with solid lattice structures. Data were gathered from the task administration divisions of the actual associations.

By taking in account the problem rationale residing in this very research, the aim is to study that how Organizational Culture and Knowledge sharing mechanisms influence the behaviors which in turn develops a base for effective sharing use of knowledge amongst the projects.

## 2. Literature Review

Literature existing within the field of project management has conjointly recognized that there lies a requirement for American state among and between comes so as to avoid Brobdingnag Ian fatalities [7]. It has long been known as a vital locus and supply for structure learning [8]. Lessons from past comes can give valuable insights associated with data occurring as a result of surprising actions, distinctive approaches that square measure followed to beat problems, drawback old throughout the project's course of action throughout the phases of the project. Applying gained data from past comes and also the lessons learned throughout their implementation helps to avoid gratuitous reinventions and redundant efforts that result in price overruns and expect to be longer overwhelming. Moreover, Fong states that project is seen and might contribute towards generation of latest data and intrinsically is utilized in alternative comes resulting in a lot of potency and effectiveness [9]. Consequently, arguments are drawn that comes shouldn't be viewed in isolation, however rather as repositories of data and knowledge for current and future comes themselves square measure subject to urgency, thus square measure needed to deliver the specified outcomes on timely basis. useful organizations square measure thought-about to be a lot of survival instead of time orientated; they understand that the long run is everlasting and continuous (whereas the comes as enumeration within the attribute of getting restricted timeframe build the time virtually vital. Having that in mind, project managers (PMs) square measure and that they do primarily specialize in the delivery of project instead of the data being shared that contributes to positive results or writing endeavors that build the operating a lot of sleek and straightforward to assess. The current writing in this very part sightsees learning administration (KM) by focusing on information imparting (KS) hones associations that appear to be extend based namely (PBOs). The key focuses to be considered as chief give a complete delineation of the idea lying behind the learning, its characterization, how it developed, its successful administration and the courses of action and methodology, including Knowledge Sharing. The second part nearly examines the hypothetical establishments and systems of the study and writing nearly identified with KM. Consequent related segments draw the way of PBOs by examining these conversely with firms which have a tendency to be practical in nature. Moreover, this part investigates Knowledge Management hones in associations that appear to be extend based, making sense of the most recent discoveries on Knowledge Sharing instruments in the connection of venture administration. The last dialog of this section supports the distinguishing proof of the fundamental exploration issue: activities have a tendency to rehash the same slip-ups over and over again due to incapable between venture learning offering (I-PKS) practices and lacking utilization of undertaking administration forms that could encourage KS.

The reason lying behind the fortune of such a comprehensive outline of the writing is determined towards the exploration that is arranged in the two expansive fields of Knowledge administration and venture administration. Consequently, the enthusiasm of potential peruses could be confined in one field, however not the other. To respect the peruse, an all-encompassing perspective of the region of this exploration ought to be given.

Recently, organizations work in a quickly changing and information serious environment. In these conditions firms need to be very aggressive to accomplish constant improvement in the business. To accomplish this, organizations need to ensure the best use of their authoritative information. This can be accomplished through KM that engages the compelling association of information in an association by —identifying, sorting out, exchanging, and utilizing the data and learning both really and institutionally inside the association to support vital targets. KM can enhance information creation, conveyance and use, driving associations to more proficient thing progression and advancements [10]. Despite the way that KM

has generally starting late rose as an unequivocal area of investigation in the scholastic and professional fields, learning has been administered verifiably for very much a while. The current pattern of KM is evolving in the direction of issues concerning: what stimulates individuals to acquire and offer knowledge; how to motivate workers to contribute their knowledge to an organizational KM framework; and how to create and sustain KM so it maximizes achievement in the organization.

In the KM-related writing it is broadly recognized that KM structures a cycle of techniques including: (i) information era, (ii) codification and coordination, and (iii) trade. Case in point, KM approach comprises of four parts: (1) learning creation, (2) information stockpiling, (3) information trade, and (4) learning application; these are examined underneath. Learning creation is the capacity of an association to make novel and accommodating thoughts and arrangements; which moreover expects to use or recombine existing learning to deal with current issues. Hierarchical information creation includes creating new substance or supplanting existing substance inside the association s implied and express learning insinuates learning era as a method of information creation in which gatherings make, by producing new or creating information through communication and correspondence. While associations make information and learn, they in like manner neglect. In this way, learning stockpiling and recovery are critical segments of information organization. The point of codification is to put authoritative learning into a structure that makes it available to the people who need it. It truly changes learning into a code to make it as composed, express, flexible, and clear as could be normal in light of the current situation. Codification gives ceaseless quality to learning that may some way or another exist just inside an individual personality. It identifies with information in structures that can be conferred, secured, consolidated, and controlled. A vital bit of dealing with the learning is its trade to areas where it is obliged and can be used.

Information needs to be disseminated and bestowed all through the association, before it can be misused at the hierarchical level. Trade of learning happens at different levels: trade of information between people, from people to express sources, from people to get-togethers, between social occasions, across over get-togethers, and from the get-together to the association. More on learning move is clarified in the accompanying subchapter. Learning application means making information more dynamic and relevant for the firm in making qualities. There are different courses through which an association can use its learning resources. For example, it could repackage accessible information in an alternate association, raise the inner estimation standard, prepare and persuade its family to think inventively, and use their seeing as a piece of the association s things, systems, or administrations. It is hence imperative to make hierarchical information limit. Depicting information application, Kasvi alludes to learning usage and productization, for occurrence; incorporation into things and choices, and application in distinctive undertakings [11]. The wellspring of aggressive purpose of investment lives in the use of information instead of in learning itself. Eventually, in all cases these methodology add to hierarchical adapting by giving a skeleton to uniting authoritative learning, encouraging its area and conveyance, and giving simpler access to inferred information.

### **3. Materials and Methods**

Three vast Pakistani-based undertaking associations were picked to partake in this examination speaking to diverse industry areas overwhelming specialists in, information transfers, correspondence administrations, and mining— which considered control of certain natural varieties, as proposed by [12]. Predictable with the typology proposed by A Guide to the Project Management Body of Knowledge (PMBok® Guide) – Fourth release (PMI, 2008) all cases had solid lattice sort structures, instead of an immaculate undertaking based hierarchical structure. In every case, there was a devoted venture administration unit, typically included undertaking and project directors, task officers, and project/program administration office and spotted in-house. Our examination concentrated on exploring overwhelming social values in the undertaking administration unit, knowledge sharing hones between venture chiefs working inside venture management unit, and their impression of reliable practices. This investigation grasped a multi-level unit of examination, on both the progressive and individual levels. Society was assessed at the venture organization unit level, while trustworthiness and knowledge-sharing practices that happened between

rather than inside wanders were broke down on an individual level. the main augment based affiliation was a limitless relationship in the significant building and building industry that has a multi-billion dollar contract with the chose government to pass on a few wanders. The association uses over 1,500 staff, incorporating in abundance of 300 building and specific unprecedented sits. Errands are normally gigantic (stretching out from millions to billions of Pakistani Rs.) plan, with up to 180 people wearing down an errand, and the endeavor time span going from pretty much two months to three years.

The second broaden based association particular in a wide extent of correspondence organizations, including compact, neighborhood, national and long partition telephony, business framework organizations, Internet and satellite indecencies, and enrollment TV. The affiliation gives organizations to extensive associations passing on little, medium, and broad assignments with a monetary arrangement extent of Aud\$20,000 to Aud\$1 million and over. The examination focused on task and program managers from HEC undertaking organization unit, which was responsible for the transport of two sorts of exercises: business change wanders and move and customer wanders.

The third expand based organization was a pioneer in giving communication organizations to government orgs by setting up telephone numbers, locales, or joined organization counters for a consistent or time-specific period. The affiliation passes on little to medium, organization sort undertakings to government orgs. We inspected an assignment organization alluded to as Communicators, embodied extend and project chiefs, and undertaking management office work force, all sharing the same area. Communicators was structured around four sorts of undertakings: (1) Internet, (2) phone, (3) counters, and (4) debacle administrations and fight ventures and inner procedure enhancement ventures. To guarantee straightforwardness and consistency crosswise over undertakings, venture chiefs were regularly pivoted to deal with distinctive task sorts.

Information were gathered from 25 informants, included from a choice of key respondents from the four venture administration units, including the leader of the undertaking administration unit, key task directors, and key supporting staff. Comparative to the study led by [12], project directors were chosen as the primary respondents because of their far reaching contribution in the knowledge sharing techniques and the limit crossing part between the task and organization, and between other ventures). Respondents likewise included other staff from the task administration unit— program directors, venture officers, and office work force, who gave a more extensive viewpoint on venture based knowledge sharing and practices, and enhanced understanding of the dynamics of staff working in the task administration unit.

Data analysis began with the coding of transcribed interviews and supporting documents, followed by data reduction and display. SPSS was used to assist in categorizing, recombining, and examining the data, based on suggestions for qualitative data analysis provided. Following the approach suggested by [12], we selected potential factors influencing knowledge-sharing behaviors, informed by previous literature as a starting point for our analysis, but we had no a priori hypotheses of the relationships between these elements.

During the cross-case analysis, we compared cases to determine similarities and differences between them for the purpose of building and strengthening the theory from cases. Explanation building logic, suggested by [13], was used to explain relationships between the factors and helped us to determine how and why certain events occurred. During this stage, SPSS queries assisted in data analysis. For example, the use of matrix queries allowed comparing several categories of data at the same time. Findings emerging from these analyses provided insights that linked culture and the choice of knowledge-sharing mechanisms. Comparing our findings to existing research revealed theoretical contributions and helped us to strengthen emerging propositions.

The survey explored the vicinity of manifestations of societies amid I-PKS tries. Respondents were asked to concentrate on the individual from whom they looked for learning the most and show the amount they concurred or couldn't help contradicting after proclamations in connection to that individual. The scale utilized extended from 1 to 5, where 1 demonstrated solid difference and 5 in number understanding. Little cases that brought about a lower specimen size for the poll were the motivation behind why survey results were chiefly graphic. OC was inspected by applying the Competing Values Framework (CVF) proposed

by [14] to survey each one organization s prevailing culture over six key attributes of a corporate society: Dominant Characteristics, Organizational Leadership, Management of Employees, Organizational Glue, Strategic Emphasis and Criteria of Success. From a scope of society models, CVF gives a comprehensive perspective of OC, it was accepted in the Pakistani setting (Lamond, 2003) and explored from the KM viewpoint.

Results demonstrated that respondents from PMO and HEC saw their associations as being extremely controlled and exceptionally structured situations, centered on accomplishment, requesting pioneers, winning and rivalry, exhibiting cultural values steered to a business sort culture. In both cases, PMO and HEC, respondents uncovered that despite the fact that knowledge sharing between venture supervisors was energized, there was no genuine activity or dynamic backing from the pioneers to advance knowledge sharing. Additionally, there was proof recommending that some task administrators saw knowledge as a source of force and profession progression, and accordingly were unwilling to impart their mastery. Others saw venture inadequacies as signs of shortcoming or even disappointment, and along these lines were more hesitant to impart encounters related to extend pitfalls. This confirmation showed that cultural qualities connected with business sector culture and identified with result introduction, concentrate on accomplishment, and accentuation on winning were those, which drove venture directors at PMO and HEC to knowledge accumulating.

The cultures watched in PMO and HEC stood out from those of Communicators and NHA, whose cultures, albeit all the more equitably adjusted over each of the four profiles, uncovered a pervasiveness of clan type cultural values. Generally, interviews uncovered that values normal for group cultures, , for example, familiarity, cooperation, coordinated effort, representative association, and non-aggressive well-disposed situations, were those that seemed to impact knowledge-sharing practices at Communicators and NHA.

Amid the interviews, the share of Communicators respondents (no less than ten) reported that extend chiefs cooperate and they are fair and eager to help their peers, with Communicators s culture being depicted "as a strong environment [where people] need to develop and show signs of improvement in the task administration." Similarly in NHA s case, the association made a community environment giving public regions (passageway, bottle, library, and exercise center) for project supervisors to meet and collaborate while grasping cultural estimations of familiarity, tutoring, and collaboration. This in turned seemed to have a solid impact on their knowledge sharing practices. A project scheme pioneer from NHA guaranteed, "positively inside the gathering everybody is exceptionally open and ready to impart knowledge even this identified with their business pitfalls."

In both cases, Communicators and NHA, there was an expansive accord from interview respondents that extend supervisors are open and eager to impart knowledge actually when identified with their ventures inadequacies, which were seen by undertaking administrators not as disappointments, yet as chances to learn and bring about a significant improvement later on.

Knowledge-Sharing Mechanisms shows inclination to utilizing knowledge-sharing instruments additionally contrasted crosswise over cases. The examination of information at PMO, demonstrated that venture chiefs esteemed natural sources of knowledge, expressing that a high extent of between undertaking knowledge sharing happens through casual eye to eye connection, activated by the representative s own drive. Notwithstanding, respondents additionally thought about the need to comprehend the essentialness of putting away extend knowledge and delivering lessons educated archives. In any case, at PMO, there were contrasts in knowledge-sharing practices between undertaking directors from Maintenance projects who were co-placed and those from development Projects, who worked in separate areas on venture destinations. Information uncovered that venture supervisors from public sector Development Projects imparted mastery as often as possible and casually among their nearly found associates, thought about their ventures inadequacies, and emulated the same undertaking procedures. Interestingly, there was a considerably decreased level of knowledge sharing between venture directors from education based Projects who reported that they experienced the same issues in their continuous ventures as in their past undertakings and seldom imparted knowledge between every other. The proof

additionally recommended that those venture chiefs who were co-placed kept up close living up to expectations associations with associates, which seemed to have a more immediate impact on knowledge sharing.

At HEC, on the other hand, staff esteemed express, arranged knowledge over implicit knowledge. Individuals were "cheerful to talk," yet knowledge was profitable when hard coded and reported: "When we later examine things with [the] executive, there is a need for information, for supporting confirmation" (HEC case). Indeed collective in nature wikis, executed to enhance knowledge sharing and communication between task directors, were utilized as a part of a formalized approach to store static knowledge. Agreeing to the dominant part of respondents from HEC, wikis were controlled, basically utilized as a database, rather than giving a stage to more "natural" and casual cooperation.

The circumstances were diverse at Communicators and NHA, where information from interviews gave a solid sign that vis-à-vis communications were focal to between venture knowledge sharing. In spite of the fact that Communicators had a settled venture administration documentation framework set up, task administrators at Communicators didn't seem hesitant to allude to the lessons learned database or different reports when scanning for knowledge, wanting to look for knowledge from their associates amid eye to eye associations:

#### 4. Discussions and Results

This section incorporates graphic examination; connection and relapse investigation of gathered information. The primary point of the part is to devise a satisfactory measure of exact proof to unmistakably answer examination question.

Correlation: It is major to check the connection between distinctive variables under investigation. Relationship lattice of variable included in the investigation is introduced in the table given beneath which is figured focused around information of 4 PBOS from Pakistan. Following Table 4.1 shows detailed picture.

Regression: Regression analysis is a statistical process used for estimating the relationships among variables. It includes many techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables.

Descriptive Statistics: Descriptive statistics is used to quantitatively describing the main features of a collection of information or the quantitative description itself. It aims to summarize a sample, rather than use the data to learn about the population that the sample of data is thought to represent.

##### 4.1. PMO (Project Management Organization)

A progressive organization was taken as one of the potential candidate in the research. This organization has more than 5,000 employees working for the development of various mechanics in form of different projects. These projects are assigned by the government of Pakistan as well as they take/win on their own. They have very strong and competitive environment and usually their budget increase in billions of dollars. A total of 25 questionnaires were filled by their higher ups including directors, managers and deputy/assistant managers. Few interviews were also conducted as part of research in which thorough investigation was done. Few case studies were requested since their inception till date so as to establish their links and streamline the research process. To find out the reliability of measures, Cronbach alpha was calculated. The scale comprised 32 items for PMO. Alpha reliability value of .700 means that higher inter-item consistency which in turn leads to higher reliability of measures.

**Table 1: Correlation of PMO culture**

	Clan Culture	Adhocracy	Hierarchy	Market Culture	KS
Clan Culture	1				
Adhocracy	.229	1			

<b>Hierarchy</b>	.354	.248	1		
<b>Market Culture</b>	.504*	.383	.378	1	
<b>KS</b>	.465*	.159	.389	.769**	1

PMO has very strong and competitive environment and usually their budget increase in billions of dollars. In addition to questionnaires, few interviews were also conducted as part of research in which thorough investigation was done. Few case studies were requested since their inception till date so as to establish their links and streamline the research process. Four cultures were taken into account as independent variables whereas Knowledge Sharing Mechanisms (KSM) is investigated as dependent variable and impact of their relationship was sorted. While going through the organizational values, norms and structure, it revealed that the prevailing cultures are market and hierarchy. They as an organization accept both innovation and competitiveness along with the highly formal and centralized structures which led to knowledge hoarding. As shown in the above table, Clan Culture depicting shared understanding, commitment, teamwork, employee involvement, participation, loyalty and commitment has strong Correlation 0.465 with KSM and significant with KSM at 0.05 level. This indicates an increase in the values of Clan culture will also increase the KSM values depicting positive impact with significance. Similarly, Adhocracy Culture has positive Correlation (r value = 0.179) with KSM. However, this culture is not significant with KSM (p value > 0.01). This shows with progressive organizations having strong hierarchy cultures, the factors entailing creativeness, flexibility, innovation, entrepreneurship and adaptability are not present. The hierarchy culture combining internal focus, documentation, stability, routine, centralization, continuity and control has positive correlation (r value = 0.389) with KSM. This culture suggests non significance (p value > 0.01) with KSM due to nature of the public sector organizations in Pakistan i.e., they tend to be more centralized rarely share knowledge in hierarchical manner. Furthermore, Market Culture characterized by the stability, competitiveness, productivity, goal clarity, efficiency and accomplishment is also discussed with respect to KSM and it is found that it has strong positive correlation (r value = 0.769) and highly significant (p value = 0.01). This suggests that PMO has strong market culture and has great significance with KSM.

**Table 2: Descriptive statistics of PMO culture**

	N	Minimum	Maximum	Mean	Std. Deviation
<b>Clan Culture</b>	25	2.17	3.17	2.6733	.26123
<b>Adhocracy</b>	25	2.50	3.67	3.0267	.24851
<b>Hierarchy</b>	25	4.00	4.50	4.2667	.18002
<b>Market Culture</b>	25	3.83	4.67	4.2467	.26840
<b>KS</b>	25	2.50	3.62	3.2150	.28759
<b>Valid N</b>	25				

The results reveal that our data set has a mean of 2.67 with a minimum value 2.17 and maximum of 3.17 in clan culture with a S.D of .262. The standard deviation shows that the variance in the responses is at a very small scale hence negligible. In Adhocracy culture we obtained a mean of 3.02 with a min value 2.50 and max 3.67 and a S.D of .24851. In Hierarchy culture the resultant mean is 4.27 with a min of 4.00 and max 4.50 respectively, S.D obtained is .1800. Market Culture has a mean of 4.24 with min of 3.83 and max of 4.07 respectively, the S.D of this very culture is .2084. Lastly KS states a mean of 3.215 with a min of 2.50 and max of 3.62, the highest deviation is of .29 in this case which shows that data and the responses received are reliable as all the results are in very low values and hence show some relativity and reliability.

#### 4.2 The Communicators

The second chosen organization is project based private organization running more than 15 departments which are geographically dispersed. It has more than 1000 employees working on various assigned projects (including recreational and education based). This organization is progressive and offers different marketing services regionally as well as nationally. Officials from Communicators are contacted to answer questions given on set questionnaire. The target respondents are general managers, managers, and assistant manager's heads of finance, and HR departments. After collecting their responses, standard reliability test is performed on 32 questions answered by 25 respondents and calculated alpha value is 0.700 as stated below which shows the reliability of the data collected. Further, correlation is performed to determine the exact relation among different cultures. In this study, four cultures are analyzed and their individual impact on knowledge sharing mechanisms is determined. To find out the reliability of measures, Cronbach alpha was calculated. The scale comprised 32 items for Communicators. Alpha reliability value of .700 means that higher inter-item consistency which in turn leads to higher reliability of measures.

**Table 3: Descriptive statistics of The Communicators culture**

	Clan Culture	Adhocracy	Hierarchy	Market Culture	KS
Clan Culture	1				
Adhocracy	.411*	1			
Hierarchy	.623**	.527**	1		
Market Culture	.131	.105	.359	1	
KS	.577**	.498*	.567**	.186	1

Communicators has very strong and competitive environment and usually their budget increase with various projects. In addition to questionnaires, few interviews and face to face meetings were conducted as part of research in which thorough investigation was done. Few case studies were requested since their inception till date so as to establish their links and streamline the research process. Four cultures were taken into account as independent variables whereas Knowledge Sharing Mechanisms (KSM) is investigated as dependent variable and impact of their relationship was sorted. While going through the organizational values, norms and structure, it revealed that the prevailing cultures is clan. They as an organization accepts team work, involvement and family like environment allowing participation and openness. Along with a much decentralized decision making process and structures which led to knowledge sharing ads to Lessons Learned database and avoiding cost overruns. As shown in the above table, Clan Culture depicting shared understanding, commitment, teamwork, employee involvement, participation, loyalty and commitment has strong positive Correlation 0.577 with KSM and significant with KSM at 0.01 level. This indicates an increase in the values of Clan culture will also increase the KSM values depicting positive impact with significance. Similarly, Adhocracy Culture has positive Correlation (r value = 0.498) with KSM. However, this culture is significant with KSM at 0.05 level. This shows with progressive organizations having Adhoc cultures, allowing creativeness, flexibility, innovation, entrepreneurship and adaptability. The hierarchy culture combining internal focus, documentation, stability, routine, centralization, continuity and control has strong positive correlation (r value = 0.567) with KSM significant at 0.01 level. Due to nature of the private sector organizations in Pakistan i.e., they tend to be more decentralized share knowledge in hierarchical manner. Furthermore, Market Culture characterized by the stability, competitiveness, productivity, goal clarity, efficiency and accomplishment is also discussed with respect to KSM and it is found that it has positive correlation (r value = 0.186) and is not significant This suggests that Communicators has strong clan culture and decentralized structure having great significance with KSM.

### 4.3. HEC (Higher Education Commission)

The third chosen organization is project based public sector organization running more than 15 departments amongst which some are regionally dispersed. It has more than 2000 employees working on various assigned projects (including academic especially scholarship based and telecom/ computer based). This organization is progressive and offers different quality assurance services, formation of different autonomous bodies, formulation of policies and guidelines for higher education institutes regionally as well as nationally. Officials from HEC are contacted to answer questions given on set questionnaire. The target respondents are Director Generals, Directors, Assistant directors, Project directors, & Project managers, heads of finance, and HR departments. After collecting their responses, standard reliability test is performed on 32 questions answered by 25 respondents and calculated alpha value is 0.710 as stated below which shows the reliability of the data collected. Further, correlation is performed to determine the exact relation among different cultures. In this study, four cultures are analyzed and their individual impact on knowledge sharing mechanisms is determined. To find out the reliability of measures, Cronbach alpha was calculated. The scale comprised 32 items for HEC. Alpha reliability value of .710 means that higher inter-item consistency which in turn leads to higher reliability of measures.

**Table 4: Descriptive statistics of HEC culture**

	Clan Culture	Adhocracy	Hierarchy	Market Culture	KS
Clan Culture	1				
Adhocracy	.283	1			
Hierarchy	.368	.502*	1		
Market Culture	.342	.042	.508**	1	
KS	.539**	.616**	.788**	.301	1

HEC has very strong and competitive environment and usually their budget increases in millions with various projects. In addition to questionnaires, few interviews and face to face meetings were conducted as part of research in which thorough investigation was done. Few case studies were requested since their inception till date so as to establish their links and streamline the research process. Four cultures were taken into account as independent variables whereas Knowledge Sharing Mechanisms (KSM) is investigated as dependent variable and impact of their relationship was sorted. While going through the organizational values, norms and structure, it revealed that the prevailing cultures is Hierarchy along with clan type. They as an organization accepts team work, involvement and family like environment allowing participation and openness. Along with a much centralized decision making process and structures which led to knowledge sharing at maximum adds to knowledge, Lessons Learned database and avoiding cost overruns. As shown in the above table, Clan Culture depicting shared understanding, commitment, teamwork, employee involvement, participation, loyalty and commitment has strong positive Correlation 0.539 with KSM and significant with KSM at 0.01 level. This indicates an increase in the values of Clan culture will also increase the KSM values depicting positive impact with significance. Similarly, Adhocracy Culture has positive Correlation (r value = 0.616) with KSM. However, this culture is significant with KSM at 0.01 level. This shows with progressive organizations having Adhoc cultures, allowing creativeness, flexibility, innovation, entrepreneurship and adaptability. The hierarchy culture combining internal focus, documentation, stability, routine, centralization, continuity and control has strong positive correlation (r value = 0.788) with KSM significant at 0.01 level. Due to nature of the public sector organizations in Pakistan i.e., they tend to be more centralized share knowledge in hierarchical manner follow a clan type structure and adhocracy. Furthermore, Market Culture characterized by the stability, competitiveness, productivity, goal clarity,

efficiency and accomplishment is also discussed with respect to KSM and it is found that it has positive correlation ( $r$  value = 0.301) and is not significant. This suggests that HEC has strong clan culture allowing innovation and creativeness and centralized structure having great significance with KSM.

## 5. Conclusion

The general discoveries from this proposition, as talked above, show that I-PKS relies on upon numerous factors, some of which are interrelated. The sharing of knowledge requires both environment (trusting connections and a culture that advances collaboration and an agreeable, non-aggressive air at work), and systems that encourage KS to happen. As needs be, this exploration offers various commitments to the collection of knowledge and the act of KS. This closing section condenses the study discoveries, giving responses to the examination inquiries, recognizing the study commitments and confinements, and giving bearings to future exploration.

Results from this examination demonstrated that OC influences I-PKS in no less than two ways. Firstly, cultures which show Market sort qualities, for example, aggressiveness and accomplishment, and which concentrate on execution measures are prone to show proof of reluctance to impart knowledge. Then again, cultures with Clan sort qualities, having a communitarian environment in which individuals are urged to impart, and which make a benevolent, non-aggressive air at work, are prone to transparently impart knowledge even identified with project weaknesses. Furthermore, topographically scattered PMS are more prone to show proof of cultural contrasts. These cultural contrasts, showed by the vicinity of storehouses, a qualification between us versus them', an absence of basic standards and methodologies in managing projects, and poor coordinated effort were seen to result in restricted KS between scattered PMS.

Four principle instruments have been distinguished as the favored approaches to enhance I-PKS: face-to-face, LL, collaborative tools and project management offices (PMO's). PMS lean toward conversing with one another as opposed to seeking through databases, and a few reasons were found to help this case. By and by, face-to-face communication is not generally conceivable (because of the geological scattering of PMS) or suggested (some knowledge obliges confirmation better stored in an archived structure).

Accordingly, this examination makes a critical commitment by giving rich experimental confirmation of the connections in the middle of OC and the readiness to impart knowledge, exhibiting which cultural qualities are more and which are less inclined to enhance I-PKS practices. The utilization of interviews and the Organizational Culture assessment Instrument (OCAI) in the interrogation of OC brought about rich observational commitments. Moreover, this proposition helps the project management writing by presenting Cameron and Quinn (2005) CVF to assess knowledge sharing in the between project connection.

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