

Implications of observed impediments on knowledge dissemination across employees in Sri Lanka's education sector: a case study on abc non-state degree awarding institute

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Abstract: It has been shown that while different technologies and methodologies are employed in the higher education sector to capture and process knowledge, successful knowledge dissemination is hindered by constraints. Impediments to knowledge distribution that result from many factors that are not properly acknowledged and untangled in the education sector. As a result, the criteria mentioned confirm that obstacles to knowledge dissemination lower staff productivity and effectiveness in knowledge management. As a critical information gap, the distinction between barriers and knowledge diffusion is explored in this study work. The study was created using a deductive methodology and a positivist epistemological stance. The study sample was selected as 181 members of the academic and non-academic staff across 46 branches of the ABC non-state university that awards degrees. The study found that organizational, individual, and technological hurdles obstruct the dissemination of knowledge. According to research findings, impediments to information distribution in the higher education sector should be removed by addressing those that exist in the contexts of organizations, individuals, and technology.

Keywords: knowledge dissemination; higher education sector; organizational; individual; technological

1. Introduction

Universities and educational institutions in Sri Lanka must address the drivers of knowledge management in advance to gain a sustainable competitive advantage in today's more competitive education sector (Awad and Ghaziri, 2013). In the educational sector, different technological approaches are being used to collect and process knowledge, but the final stage of knowledge management—knowledge dissemination—is not occurring beforehand, where organizations would have benefited from increased competition through proper knowledge management (Nonaka and Kujiro, 1991). This study serves as an excellent demonstration of the significance of studying the Knowledge Dissemination (KD) and the elements to be taken into account while conducting research that is organized and of sufficient scale.

A knowledge society has been developed in the modern era, where profit is now generated through knowledge rather than labor as it was in the industrial era. As technology developments are used to collect data and combine with organizational expertise to make informed judgments, decision-making has grown more complex within businesses. Understanding current organizational knowledge and managing it properly are essential for organizations in order to create competitive advantages (Awad and Ghaziri, 2013). Knowledge is generated by people, and people need to be inspired to share and spread it among others. To develop strategy, procedures, and technology, functional groups of the company must exchange knowledge with one another. The information ingrained in company culture influences how decisions are made in business. This stresses how important information is on its own in an organization.

When entering the education sector, special attention must be paid to determine whether the KD process is occurring appropriately inside the academic and non-academic staff members because it is dependent on providing services with the use of knowledge transfer. Technology has made it possible to gather, arrange, polish, and spread knowledge. The process of knowledge management isn't happening in the educational sector, resulting in the challenge. The organization's concern and assurance that KD has operated in an appropriate manner is the other crucial component. Since bad KD puts an organization's competitiveness and ability to stay in business at risk, it

must be given higher importance. In this study, the author is focusing on identifying the KD hurdles in relation to the case study of ABC non-state university that awards degrees.

1.1 Study Terminology

Knowledge: Knowledge has been defined from many different perspectives. According to Liyanage, et. al (2009), knowledge is information that is perceived by people and stored in their minds. Knowledge can be further divided into tacit and explicit forms. Similar to how explicit information can be easily documented, kept, and transferred because it can be codified, Nonaka and Takeuchi (1995), said that tacit knowledge is difficult to codify since it exists inside human minds. According to Awad and Ghaziri (2013), there are numerous categories in which knowledge can be divided. Authors also stated that organizational knowledge is a resource that results in long-term competitive benefits.

Knowledge Management: According to Gan et. al (2006), argument, knowledge management (KM) will improve the framework for knowledge development by capturing and organizing knowledge. According to Gray (1996), KM is an approach that combines and shares the intellectual property of an organization by creating, capturing, organizing, and making accessible. Awad and Ghaziri (2013), developed knowledge management under three overlapping components related to the knowledge economy, including people, organizational processes, and technology. The knowledge management life cycle or process is elaborated with four stages: capture, organize, refine, and transfer. The author will focus on the KM process and its effects on the education sector in the research's last section. the definitions of a few terms the author recognized connected to the research.

Knowledge Dissemination: According to Filemon and Uriarten (2012),s factors, KD is crucial since it helps an organization get better results. To effectively manage the dissemination of knowledge inside an organization, the tacit knowledge that transforms into explicit knowledge should be communicated or shared among others. KD is the area of knowledge transfer (KT) and knowledge sharing that can facilitate the diffusion of knowledge (KS).

Knowledge Sharing: Using current knowledge to generate new information or address organizational problems through the transfer of existing knowledge, as claimed by Christensen (2007), is a collection of actions known as knowledge sharing. As Filemon and Uriarte demonstrate, good communication and a conducive environment should be established within a company (2008).

Knowledge Transferring: According to Minshell (2009), knowledge transfer will help organizations create new opportunities by fostering idea exchange among staff members. As Malhotra (2002) explained, knowledge transfer is the act of transmitting knowledge for improved use, and the knowledge transmitted will be modified by the receiving end as they will not fully replicate the transferred knowledge.

1.2 Significance of the study to the education sector

Proceeding on to the factors affecting KD, it should be noted that due to KD obstacles, KD in the education sector does not align in an appropriate way for knowledge transfer and sharing between academic and non-academic personnel, senior and junior lecturers, top level to bottom, and vice versa. The KD barriers caused by various other factors that are not properly identified and solved in the education sector will be examined from different angles by the author, whose conclusions will help to remove these barriers in the sector's education and give educational institutions and universities the chance to compete with one another.

Knowledge disseminating barriers could lead to reduce the effectiveness and efficiency of academies and non-academies as most important resource in educational Sector is managing knowledge. The KD barriers occur due to various reasons as poor communication, inappropriate leadership, personal behavior, less technological awareness, and more where author concerns three main views that are directly affecting to KD barriers with relating to the educational sector in Sri Lanka concerning ABC non-state university that awards degrees. Despite the fact that numerous studies on KM in the school sector have been conducted, relatively few of them have particularly addressed KD hurdles. In addition, a great deal of other companies has studied KM and obstacles that don't affect academic and non-academic staff, peers, top management to bottom, and vice versa. The author of this study is interested in KD and barriers among universities in the education sector.

1.3. Research objectives

In consonance with secondary research findings, few studies conducted under knowledge dissemination barriers in Sri Lankan context, and none found related to education sector. Nevertheless, other research findings portrayed personal or individual, technological, and organizational barriers required to pay high attention compared to other knowledge dissemination barriers in education sector which identified and lead to generate study objectives of 1) To identify the organizational barriers that prevent KD in education Sector 2) To identify the individual barriers that prevent KD in education Sector and 3) To identify the technological barriers that prevent KD in education Sector.

2. Literature review

The objective of the research is to understand how identified knowledge distribution limitations affect Sri Lankan educational sector employees. In the context of the educational sector in Sri Lanka, there is a lack of pertinent and suitable literature for the knowledge dissemination barriers. However, Dharmasiri (2011) conducted research on "a Study of Knowledge Sharing Practices of Civil Society Organizations in Sri Lanka" and identified 1) individual capabilities—lack of thought and weak perception, language difference, communication, lack of motivation and incentive, and lack of skills—as factors affecting knowledge sharing in civil society organizations, 2) Time-consuming in reaching goals, 3) The nature of the job and the challenge it presents, 4) Organizational capacities: ineffective management, a lack of organizational cognitive processes, and inadequate documenting of experience and 5) Employees' lack of awareness of the knowledge's nature.

Moreover, Senaratne and Sabesan (2008) conducted research on the subject of "Managing knowledge as quantity surveyors: An exploratory case study in Sri Lanka" and identified dependencies, time constraints, a lack of industry experience, low recognition, and a lack of teamwork as the main obstacles to knowledge transfer and management. The following studies that were carried out in the educational sector in various nations to identify obstacles to knowledge transfer and sharing have been taken into consideration because there is a dearth of literature based in the Sri Lankan context.

The study of knowledge dissemination barriers dominated by various factors which indicted in the findings of Cheng et al. (2008), based on the research conducted upon "Knowledge Sharing in Academic Institutions: a study Multimedia University Malaysia". The study revealed sub variables of organizational, individual, and technological factors have an impact on knowledge dissemination and knowledge sharing as people-oriented process. The research findings of Per Paulin and Suneson (2001), confirmed that knowledge dissemination occurred because of lack understanding in knowledge sharing barriers, insufficient knowledge in specific subject area and communication issues, in education sector context. Based on the research findings of Goh and Sandhu (2013), attitude; subjective norms, perceived behavioral control, affective commitment and affect-based trust presented as barriers to knowledge sharing among Malaysian academics. According to Barson et al. (2000), study discovered knowledge sharing barriers as Technology, People and Organization. Study further disclosed importance of managing following mentioned sub categorized in knowledge dissemination.

Table 1 Barriers to Knowledge Sharing and Management

Technology	Organization	People
Existing resource Available technology Legacy system	Existing resources Need for rewards Culture targeting Costs Propriety knowledge distance	Existing resource Need for rewards Culture Internal resistance Self-interest Trust Risk Fear of exploitation Fear of contamination (Barson et al. 2000)

According to McLaughli et al. (2008), have explored 25 knowledge sharing barriers, relied on the organizational/national culture, social habits, interpersonal relationships, and level of technology availability. The

organizational and individual barriers in knowledge sharing have been identified by Hong et al. (2011) where study of Disterer (2001), focused on knowledge transferring barriers as individual and social barriers. Knowledge dissemination resistant has been founded by Gan et al. (2006), as organizational and professional boundaries with solutions to overcome the barriers and to implement proper knowledge management inside the organization. Further, different barriers to share knowledge has recognized by Yao (2007), as individual and organizational barriers with suggestions to overcome the identified barriers where Zawawi et al. (2011), identified knowledge sharing barriers as lack of knowledge self-efficacy, lack of information and communication technology and Lack of organizational reward. The findings of Riege (2005) emphasized that knowledge sharing barriers can be categorized as organizational, individual, and technological.

2.1 Effect of organizational aspects on KD

According to the findings of Barson et al. (2000), KD barriers are further classified as follows: 1) Existing resources—organizations need to enlarge with people, money, technology, skills, and data transfer, which involve pull culture; 2) need for rewards—individuals are motivated to share knowledge; 3) culture—knowledge generation and usage are push vs. pull cultures; 4) poor targeting of knowledge—information needs and what needs to generate as knowledge; and 5) lack of knowledge—information needs and what 5) Cost management of knowledge transfer - cost management barriers to interorganizational knowledge transfer, 6) Confidential information—disclosing organizational secrets exposes employees to risk; 7) distance—communication hurdles such as those related to geography, culture, language, and the law arise when knowledge is transferred inside an organization. According to the findings of Barson et al. (2000), KD barriers are further classified as follows: 1) Existing resources—organizations need to enlarge with people, money, technology, skills, and data transfer, which involve pull culture; 2) need for rewards—individuals are motivated to share knowledge; 3) culture—knowledge generation and usage are push vs. pull cultures; 4) poor targeting of knowledge—information needs and what needs to generate as knowledge; and 5) lack of knowledge—information needs and what 5) Cost management of knowledge transfer - cost management barriers to interorganizational knowledge transfer, 6) Confidential information—disclosing organizational secrets exposes employees to risk; 7) distance—communication hurdles such as those related to geography, culture, language, and the law arise when knowledge is transferred inside an organization. The research carried out by Riege (2005), founded 14 barriers associate with the organizations based on corporate environment and conditions. Researcher has suggested that the leaders should consider the clear knowledge flow, functions and resources which allow linking both organizational knowledge with knowledge sharing, understanding about the organizational culture, proper communication to get the benefits of knowledge sharing.

As per Herrmann (2011) found that organizational hierarchy has an impact on how information is disseminated since top-level choices are not adequately communicated to lower levels of the organization. As a remedy, researcher has advised a proper KM system employing the organizational intranet. Additionally, barriers in organizational routines and procedures have been addressed by Herrmann (2011) as companies develop routines and procedures, document them, but never put them into practice when it would demonstrate incorrect information transmission. In order for all employees to have easy access to organizational knowledge, Herrmann (2011) proposed disseminating the policies, rules, and regulations as well as meeting minutes over the organization intranet. According to the research findings of Hong, Sug and Koo, (2011), the organizational barriers are identified as language (use different languages in different departments), conflict avoidance (avoid change and risk), bureaucracy (high level of procedure and approaches minimize knowledge sharing) and distance (geography and the organizational culture). The solutions have given as usage of proper technological aspects to minimize the barriers, and which proved the solutions implemented are succeeded. According to the research finding of Dale (2011), researcher has recognized 12 barriers in knowledge sharing in organizational context. The purpose of research to identify barriers of knowledge sharing and suggestions or recommendations is not given to overcome the barriers. Based on the above-mentioned factors it is visible that the barriers for KD can be categorized mainly under organizational barriers and has produced the following mentioned hypothesis to be tested.

H_a1: There is a relationship between organizational barriers and knowledge dissemination

H₀1: There is no relationship between organizational barriers and knowledge dissemination

2.2 Effect of individual aspects on KD

Employee hurdles in knowledge transfer fall into the following categories, per Barson et al. (2000): 1) Internal resistance—information is concealed and the flow of knowledge is constrained for organizational safety, 2) Self-interest and the reluctance to share information Lack of trust—if the second party who received the information cannot be relied upon and it will negatively affect the organizational interest, 4) risk discovered in confidential information sharing between organizations, 5) Concern over exploitation - look for something in return, and 6) fear of contamination- fear of getting together with down market people who are currently in upper market. Riege (2005) said that there were 17 different variables that prevented knowledge from being disseminated among the appropriate parties at the appropriate time.

As Herrmann (2011) outlined four personal barriers that could affect KD: a lack of understanding, a lack of technological competence, a lack of sharing motivation, and a lack of strategic thinking. Researcher has suggested holding meetings, improving self-management abilities, and receiving training to get over technological obstacles. After examining the research findings of Zawawi et al. (2011), it is evident that in order to overcome this obstacle, attention should be focused on characteristics such as experience, values, motivation, and beliefs. Furthermore, incomplete information and time constraints had an impact on the fact that knowledge self-efficacy was lacking. Based on the above-mentioned factors it is visible that the barriers for KD can be categorized mainly under individual barriers and has produced the following mentioned hypothesis to be tested.

H₀2: There is a relationship between individual barriers and knowledge dissemination

H_a2: There is no relationship between individual barriers and knowledge dissemination

2.3 Effect of technological aspects on KD

The research results of Barson et al. (2000) showed the following barriers to knowledge transfer: 1) accessible technology - support of the present IT system in knowledge transfer; and 2) legacy system - influence on current legacy system in knowledge generation, sharing, and dissemination. The research findings of McLaughli, Paton, and Macbeth (2008) amply demonstrated the characteristics listed by them as those described by Barson et al. (2000) that have an impact on organizational knowledge sharing a According to Riege's results from 2005, technology has been referred to as a facilitator of knowledge sharing in situations where choosing the right technology and putting it into practice to forge connections between employees and the company have not been done in an acceptable way. In light of the aforementioned factors, Riege (2005) founded exiting 8 technological hurdles. Riege (2005) advised using current technology to provide a suitable platform for information sharing with a variety of internal and external knowledge in order to get beyond the obstacles he mentioned. Further, Dale (2011) identified 12 forms of technology impediments that can hinder the transfer of knowledge inside an organization. The Dale did not offer any remedies for the barriers that were highlighted. Thus, according to Herrmann's (2011) research findings, cost has been an issue when buying the necessary hardware and software for organizations to properly disseminate their knowledge. He recommended using open-source software to reduce the cost and improve the organization's knowledge dissemination through the use of technology.

The lack of information and communication technology, according to Zawawi et al. (2011), is a barrier to knowledge sharing inside a company. Information and communication technology (ICT) can be used to establish a user-friendly environment for knowledge sharing in an organization when most organizations are not using the technology efficiently, which can be used to boost the productivity of the originator. Researchers also stress the importance of putting in place a suitable IT system as one of the remedies for the barrier to knowledge sharing. Based on the above-mentioned factors it is visible that the barriers for KD can be categorized mainly under technological barriers and has produced the following mentioned hypothesis to be tested.

H₀3: There is a relationship between technological barriers and knowledge dissemination

H_a3: There is no relationship between technological barriers and knowledge dissemination

3. Methodology

The study has been designed with the epistemological standpoint of positivism and with deductive approach. The study was conducted using selected academic and nonacademic staff from ABC non-state university that awards degrees across 46 branches. The sample included academic and non-academic staff comprising 181 individuals and data has been collected through mixed methods. A structured questionnaire conducted to gather data and

quantitative methods utilized. In addition, structured interview conducted with four selected individuals from the sample to comply with the quantitative data finding and used open coding in order to perform the analysis.

4. Data analysis

The data was collected once in the study and quantitative data analysis conducted based on descriptive statistical analysis using SPSS 6.0. The survey questionnaire consisted of 24 questions on Likert scale basis, under organisational, individual, and technological categories. The reliability test conducted for the research questionnaire depicted the Cronbach's alpha is 0.875, which indicates a high level of internal consistency of the sample. The frequency statistical analysis, Correlation analysis and chi-square testings applied in the data analysis.

According to the frequency data analysis presented in figure 01, mean responses for the Organizational KD barriers shows as 2.07, 2.24, 2.31, 2.45, 2.33, 2.35, 2.03, 2.46, 2.63, and 2.78. According to the mean values and graph mentioned above clearly shows that the mean value is lesser than the highest value which is 5 (strongly disagree). When considering the Q1 (Superior/ Manager helps in solving issues arises) it shows that most of the responses as agreed (42.5%) that superior support has provided in solving issues and based on the standard deviation (0.919) it depicts the mean value dispersion is higher where strongly agreed is 29.3% and Neutral is 21%. According to the Q2 (Superior/ Manager perform his/ her duties properly) analysis it illustrates the most responses for agree (37%) criteria and the standard deviation of 0.981 shows higher diffusion among neutral (26.5%) and strongly agreed (25.4%) responses. The mean value of Q3 (Superior/ Manager has established trustworthy relationship among employees) express that respondent selected agreed (34.8%) as the response with the standard deviation of 0.958 which shows the distribution from the mean value is higher between neutral (32.6%) and strongly agree (22.7%).

Based on the further analysis of Q4 (Superior/ Manager Checks that employee receive information timely) the mean value depicts that most respondents selected agreed (36.5%) with the standard deviation of 0.985 emphasizing the higher diffusion among neutral (30.9%) and strongly agreed (17.9%). As per the analysis details Q5 (Superior/ Manager checks that employees understood the messages conveyed) mean value shows that more responses towards agree (45.3%) and standard deviation of 0.955 shows the diffusion of mean value among neutral (22.7%) and strongly agreed (18.2%). Conferring to the analysis of Q6 (Organisational environment has given freedom in sharing information among others) the mean value represents most respondents selected agreed (45.3%) and based on the highest standard deviation of 1.093 under organizational KD barriers variable the mean value has been scatter around strongly agree (22.1%) and disagreed (15.5%).

According to the analysis of Q7 (Employees are given chances to freely contact superiors whenever required) the mean value depicts that most respondents selected agreed (38.1%) with the standard deviation of 0.997 emphasizing the higher diffusion among neutral (16.8%) and strongly agreed (35.4%). When considering the Q8 (Employees are given a proper knowledge about organizational structure) it shows that most of the responses as agreed (39.2%) and based on the standard deviation (0.952) it depicts the mean value dispersion is higher where strongly agreed is 15.5% and Neutral is 29.3%. The mean value of Q9 (You have given proper training in Knowledge Dissemination by the organization) express that respondents selected neutral (34.3%) as the response with the standard deviation of 0.98 which shows the distribution from the mean value is higher between agreed (32.6%) to neutral. As per the analysis details Q19 (The communication channels established in the organization are visible) mean value shows that more responses towards neutral (37.6%) and standard deviation of 1.024 shows the diffusion of mean value among neutral and strongly agreed (20.4%).

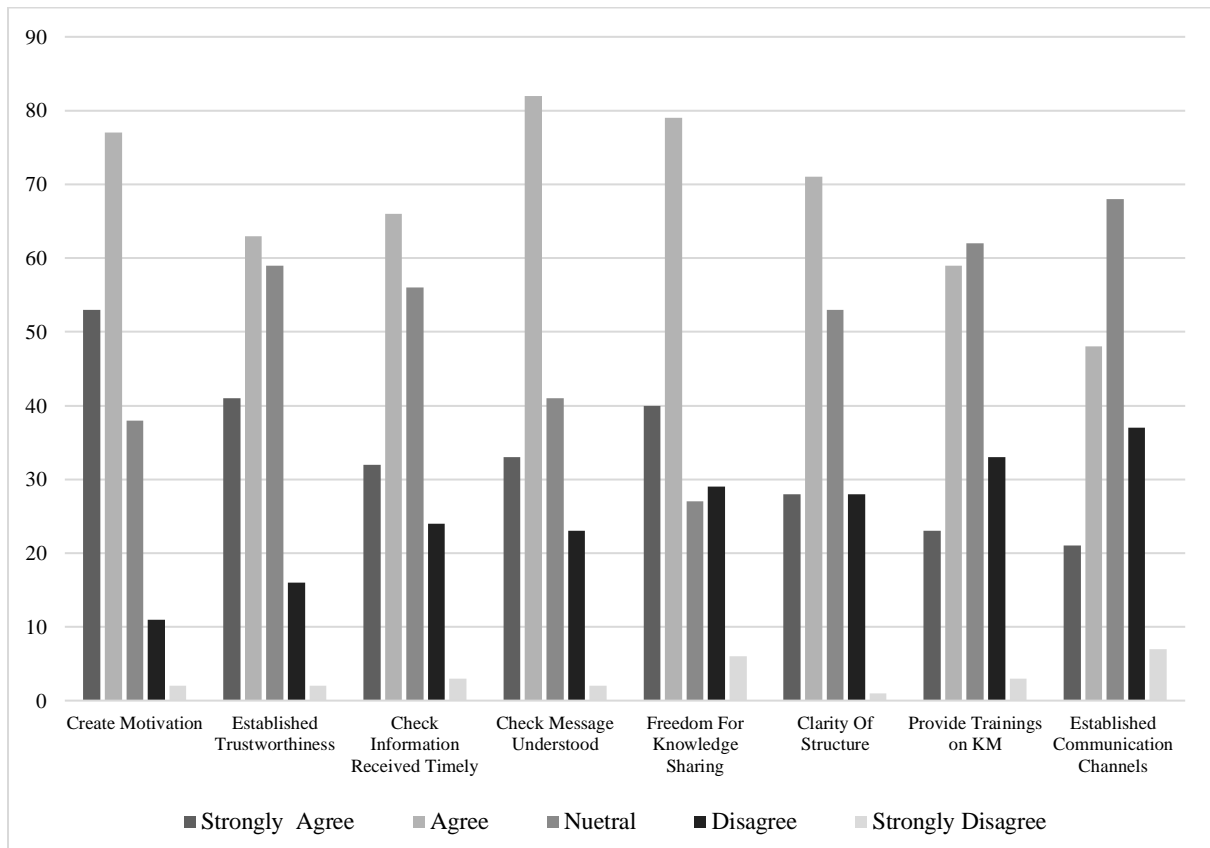


Figure 1. Frequency Statistical Analysis for Organizational Barriers

Fabricated on the interview responses, most respondents mentioned that there is an organizational issue in KD such as reporting and commanding issues related to unclear organizational structure. Whereas some respondents mentioned lack of time, communication issues, less empowerment to decision making, less process oriented and perceptions as the matters in KD. Overall ideas go towards the identified issues for KD in organizational perspectives which are needed to be addressed. Further describes the impact of the identified issues towards KD in organizational perspective as many identified that this can cause to the organizational performance where desired output will not achieve. Moreover, they have identified that this will cause in passing incorrect information which led to make incorrect decisions, generate misunderstanding and being irresponsible. With related to the organizational communication issues most respondents have given ideas that information will not convey to correct persons on time which will lead to make incorrect decisions and decisions could not made on time. According to the issues that identified by the respondents towards personal communication the affect in not sharing ideas, less group thinking, lack of people incentives and errors in interpreting ideas will again cause in business growth and performance. Further, some respondents mentioned that communication errors occur due to limited time with relates to inappropriate job description. Overall ideas show that currently there are personal and organizational communication matters in the organization which impact in KD.

Based on the frequency data analysis findings presented in Figure 2, mean responses for the Individual KD barriers, respectively are 2.17, 2.56, 2.43, 2.45, 2.59, 2.12, 2.20, 3.30, 3.15, and 2.55. According to the mean values and graph mentioned above clearly shows that the mean value is lesser than the highest value which is 5 (strongly disagree). When considering the Q10 (You are feeling free to exchange information with your peers) it shows that most of the responses as agreed (50.8%) and based on the standard deviation (0.862) it depicts the mean value dispersion is comparatively lesser where strongly agreed is 20.4% and Neutral is 20.4%. According to the Q11(You feel trust in exchanging information with your peers) analysis it illustrates the most responses for agree (41.4%) criteria and the standard deviation of 0.951 shows higher diffusion among neutral (27.1%) and strongly agreed (19.3%) responses. The mean value of Q12 (You are feeling free to exchange information with your superior/ manager) express those respondents selected agreed (44.8%) as the response with the standard deviation of 1.050 which shows the distribution from the mean value is higher between neutral (19.3%) and strongly agree (17.1%).

According to the further analysis of Q13 (You feel trust in exchanging information with your superior/ manager) the mean value depicts that most respondents selected agreed (40.3%) based on the highest standard deviation of 1.851 under individual KD barriers variable emphasizing the higher diffusion among neutral (23.8%) and strongly agreed (21.5%). As per the analysis details Q14 (You get sufficient time of knowledge dissemination) mean value shows that more responses towards agree (40.9%) and standard deviation of 0.882 shows the diffusion of mean value among agreed (neutral -33.7%) and disagreed (16%).

According to the analysis of Q15 (Employees are given chances to freely contact superiors whenever required) the mean value depicts that most respondents selected disagreed (49.7%) with the standard deviation of 0.947 emphasizing the higher diffusion among neutral (15.6%) and strongly disagreed (24.9%). When considering the Q16 (You have a desire to share and to transfer knowledge) it shows that most of the responses as disagreed (55.8%) and based on the standard deviation (0.933) it depicts the mean value dispersion is higher where agreed is 15.5% and Neutral is 18.8%. The mean value of Q17 (You feel risky in sharing knowledge to lose your competitiveness) express that respondent selected disagreed (43.1%) as the response with the standard deviation of 1.121 which shows the distribution from the mean value is higher between disagreed (neutral- 0.4%) to agreed (18.2%). As per the analysis details Q18 (You feel free of disseminating knowledge with all levels of employees in the organization) mean value shows that more responses towards neutral (28.1%) and standard deviation of 1.077 shows the diffusion of mean value among disagreed (28.2%) and agreed (27.6%). Conferring to the analysis of Q20 (You ensure that relevant information passed to all relevant personals) the mean value represents most respondents selected disagreed (47%) and based on the standard deviation of 0.951, the mean value has been scatter around disagreed (neutral-22.1%) and agreed (12.2%).

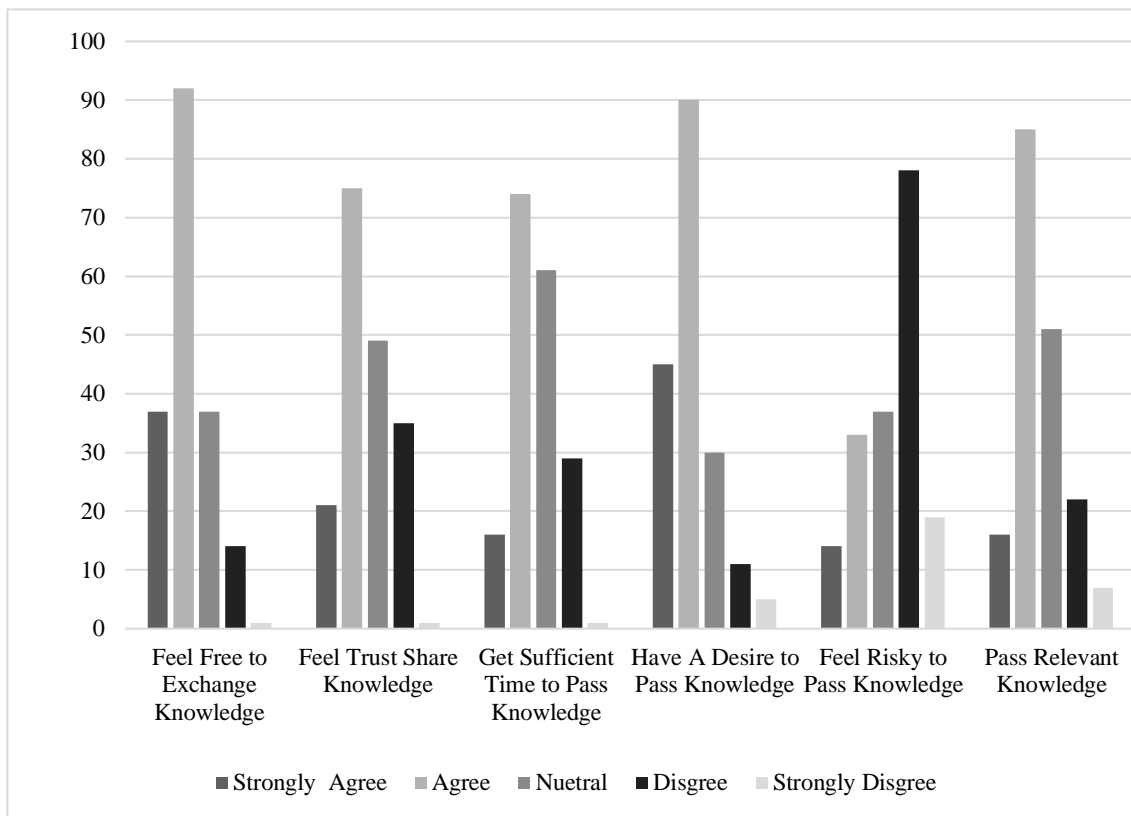


Figure 2. Frequency Statistical Analysis for Individual Barriers

Conferring to the responses given for the interview questions, it shows most respondents mentioned that they have to make necessary decisions, planning and need to have problem solving skills which are based on the tacit knowledge. Overall ideas represent the importance of KD in the organization to perform day to day activities. Responses depicted the importance of relevant knowledge should passed among the other employees of the organization, based on the data analyzed specially the experience (tacit knowledge) has been shared among the employees. Further, organizational rules and regulations have been passed among the other employees which author

concern as a responsibility of the Human Resource department. Overall idea is that KD is playing a major role in the organization. Moreover, most of the respondents mentioned that they transfer knowledge among others. This further confirmed that knowledge transferring happens related to the experience gathered from day-to-day activities. Overall idea shows the importance of proper KD is a must in the working environment. Further, the respondents accepted that the trust factor is playing a major role in as it identified as less trust an issue in KD. Further, two respondents have mentioned that there is an impact of Halo effect and poor listening skills of others in KD. However, the overall ideas represent that establishing trust among employees, important for KD. The majority of the respondents mentioned personal issues as issues in KD as resistance for teamwork and misinterpretation. Moreover, some other respondents mentioned that negligence, poor listening skills and trustworthiness, impact in KD as personal issues. Overall, ideas show that personal issues are mattered in KD in the organization. Interviewees further expressed that it is needed to be considered when disseminating the knowledge among other employees such as, person’s capabilities, attitude, perceptions, knowledge level and trust whereas some respondents have mentioned in addition time and skills also impact on the same matter. Overall ideas show that when disseminating knowledge, capabilities, attitude, perceptions, knowledge level and trust factors are mostly considered. As depicted by the frequency data analysis in figure 03, mean responses for the Technological KD barriers depicted as 2.80, 3.02 and 2.70. According to the mean values and graph mentioned above clearly shows that the mean value is lesser than the highest value which is 5 (strongly disagree). When considering the Q21 (Organization uses Information System in distributing messages among employees) it shows that most of the responses as agreed (34.3%) and based on the standard deviation (1.004) it depicts the mean value dispersion is comparatively lesser where disagreed is 19.3% and Neutral is 33.17%. According to the Q22(Organization provides required training programmes for handling Information Systems) analysis it illustrates the most responses for agree (38.1%) criteria and the standard deviation of 1.038 shows higher diffusion among neutral (34.8%) and disagreed (17.1%) responses. The mean value of Q23 (You feel ease of using Information System in Knowledge Dissemination) express that respondent selected agreed (38.1%) as the response with the standard deviation of 0.931 which shows the distribution from the mean value is higher between neutral (34.8%) and strongly agree (17.1%).

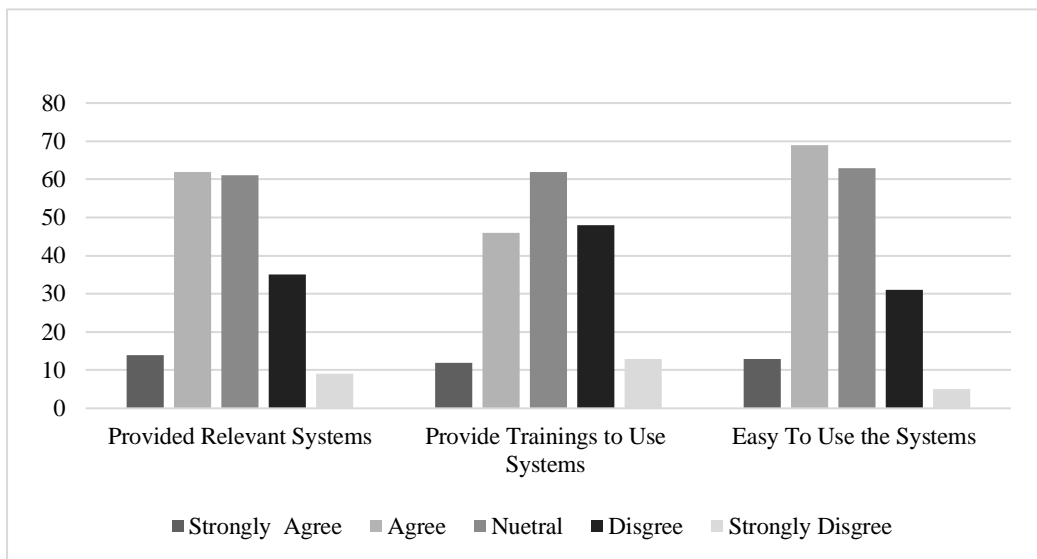


Figure 3. Frequency Statistical Analysis for Technological Barriers

Correlation analysis generated for organizational, individual, and technological respectively the Pearson correlation values 0.248, 0.300 and 0.445 confirmed that identified barriers have low positive relationship towards the knowledge dissemination. The regression test analysis depicted R values representations of 0.465, 0.420, and 0.502 which emphasized organizational, individual, and technological having moderate degree of correlation on knowledge dissemination. The quantitative analysis findings further corroborated by the qualitative data analysis which depicted those organizational, individual, and technological factors prevents knowledge dissemination. The qualitative analysis further emphasized that KD barriers directly affect the processes of the organization which will severely impact on the performance and quality of the service provides by ABC non-state university that awards degrees. The non-directional hypothesis tested using chi-square testing. Further, when refer to the chi-square testing conducted for the organizational, individual, and technological barriers with the knowledge dissemination; it

depicted the Pearson chi-square value as 0.000. This value is lesser than the alpha level, which is 0.05. As the Pearson chi-square value is smaller than the alpha level, it proves that organizational, individual and technological barriers, have a relationship with KD. Therefore, the following mentioned null hypothesis rejected. 1) There is no relationship between organizational barriers and knowledge dissemination, 2) There is no relationship between individual barriers and knowledge dissemination and 3) There is no relationship between technological barriers and knowledge dissemination.

5. Discussion and Conclusion

In light of the analysis of the respondents, it is apparent that there is a higher likelihood of job satisfaction among the employees who work as academic cum coordinators, which further supports the claim that the information was provided by respondents with a proper understanding of the entire system. Furthermore, descriptive, correlation and inferential statistical analysis demonstrates that KD obstacles are evident in the workplace, where they must be removed in the contexts of the organization, the individual, and technology. Additionally, research interview data analysis reveals some factors that can have an impact on KD, including employees who are less willing to share knowledge due to a lack of trust, employees with varying levels of knowledge in different fields, language barriers, a lack of leadership in making decisions and communicating them to the appropriate parties, a lack of employee motivation and empowerment, the failure to provide the necessary software and hardware in terms of technological aspects, and slower internet connections.

Eventually, KD barriers in the educational sector have been confirmed based on the barriers that have been identified and are illustrated in Table 03 as 1) Organizational barriers -Language, Motivation, Communication, Organisation Structure and Leadership, 2) Individual barriers – Trust, Fear, Time, Awareness, Power, Knowledgeand, and 3) technological barriers.

Table 2. Primary and Secondary research findings of KD barriers

Independent variables		Primary and Secondary research findings
Organizational barriers	Language	The qualitative research findings depicted that not using common language as a barrier for KD where Language barrier has also identified by Hong, Sug and Koo, (2011); Disterer (2001).
	Motivation	Both quantitative and qualitative research findings shows that the managers or the supervisors unable to create proper motivation among the employees in KD where Motivation barrier identified by Barson et al (2000); Yao et al (2007).
	Communication	Both quantitative and qualitative research findings depicted that organisation does not provide proper communication channel which support in KD where Communication barrier identified by McLaughli et al (2008); Riege (2005).
	Organisation Structure and Leadership	Most respondents have disagreed in qualitative and quantitative research in defining clear commanding and reporting path through Organization Structure and proper support and guidance provided by the manager through their Leadership in KD which also emphasized in the research findings of Riege (2005)
Individual barriers	Trust	High number of respondents in quantitative research agreed that they do not participate in KD due to lack of trust which the Trust barrier also identified by Barson et al. (2000); McLaughli et al (2008); Hong et al (2000); Riege (2005).
	Fear	The quantitative and qualitative research emphasized that the employees do not feel free for KD due to fear, and this further presented as a barrier by McLaughli et al (2008)
	Time	Specially the qualitative research highlighted that the employees have lack of time and strict schedule that they do not get sufficient time in KD which also focused by Yao et al (2007); Riege (2005); Zawawi et al. (2011).
	Awareness	Most respondents have disagreed in qualitative and quantitative research in defining clear commanding and reporting path through Organization Structure and proper support and guidance provided by the manager through their Leadership in KD which also emphasized in the research findings of Riege (2005)
	Power	The quantitative research findings provided evidence that lack of awareness of the importance of knowledge prevents KD which also pointed out by Hong et al (2000);

		Riege (2005).
	Knowledge	The qualitative and quantitative research findings showed less influence of power resides among individuals on KD which also has presented as a barrier by Disterer(2001)
Technological barriers		The lack of technological support and lack of relevant software availability has identified and addressed by the respondents during the qualitative and quantitative research which reduces the KD which Technological barrier also identified by Barson et al. (2000);Riege (2005); Zawawi et al. (2011).

The study findings confirmed the fact that identified knowledge dissemination barriers exist, contrasted to previous research findings based on higher education sector. Further, recommendations provided reflecting organizational, individual, and technological. In order to eliminate organizational barriers have proposed to establish better culture for knowledge dissemination with the use of configuration model, allocate time for knowledge dissemination, implementing SECI model, build trust and establish strong communication. Recommendations provided to eliminate individual barriers focused on provide sufficient trainings use of ADDIE model and eliminate fear of competitiveness among employees. Finally, the recommendations furnished to eliminate the technological barriers by installing necessary software, provide individual computers for academic staff, upgrading the MIS and upgrade existing system with new technological aspects. The Table 03, illustrated the evaluation of the primary and the secondary data findings of the study.

Table 3. Implementation of SECI and ADDIE models in overcoming barriers for KD

Overcome organizational barrier	SECI Model Implementation	For proper knowledge dissemination, it is very essential to capture organizational current knowledge, codify and distribute among the employees. It is recommended to implement the SECI model for this process where create better environment by allocating time for socialization (create opportunities for employees to get together with others, such as organize events, trips, and functions), externalization, collaboration, and Internalization (provide trainings, workshops, and discussions).
Overcome individual barriers	Implementation of ADDIE model	Employees should at least provide with training programmes once three months to improve their knowledge. Specially coaching and mentoring programmes should conduct where these help employees to further develop their skills and establish a trust about the organization and employees, develop effective teams which grant opportunities for KD among employees. The author recommends following the ADDIE model in employee training process

In any organization, the KM playing a major role where every activity related to business makes based on the organizational knowledge. The success of the KM is depending on KD that allows employees to share and transfer their knowledge among the other employees which leads making proper decisions, formulate correct strategy, problem solving, increase the efficiency and effectiveness, and increase the performance in the organizational context. In this research the major factor which analyzed was the barriers which prevent conforming the main objective of to identify the barriers upon knowledge dissemination.

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