

---

## **A Systematic Journal Review on Barriers upon Knowledge Dissemination in Organisations**

**Rathnayake H.<sup>a\*</sup>, Herath D.<sup>b</sup>**

<sup>a\*</sup> *IIC University of Technology, Cambodia*

<sup>b</sup> *ESOFT Metro Campus, Sri Lanka*

---

### **A B S T R A C T**

The definitive goal of any organization is to become a success among others whichever primes through harnessing the knowledge and knowledge dissemination. Organizations face many challenges due to poor management of knowledge dissemination whereas knowledge dissemination barriers indicate organization in lowering the effectiveness and efficiency of the employees. The research is to identify the knowledge dissemination barriers in supporting organizations to surmount those barriers. There are numerous numbers of studies published knowledge dissemination barriers where this research aim is in appraising, summarizing, comparing, and contrasting the existing studies in a single place. The methods applied to detect and appraise published reviews systematically. The process of identifying and appraising all published reviews of 21, accompanied by an inductive approach through grounded theory strategy. The systematic journal review conclusion stated based on the patterns identified through the different perspectives provided by various researchers who have conducted research in different contexts. The knowledge dissemination barriers have been identified and categorized as 1) organizational, 2) individual and 3) technological. Researchers have provided further the sub-factors under-identified main knowledge dissemination barriers that assist in understanding the influence of the barriers on knowledge dissemination. The findings accentuated that identified main and sub-knowledge dissemination barriers are needed to be concentrated on overcoming the disputes faced by organizations in strengthening the organization's performance. This paper is among the first attempts to conduct comprehensive and systematic research on the influential factors of knowledge dissemination. It contributes to the literature by offering a systematical empirical study with the consideration of the role of government in knowledge dissemination.

**Keywords:** Organizational, Individual, Technological, Knowledge dissemination

---

\*Corresponding author: dilinihir@gmail.com

**11<sup>th</sup> ICME at University of Ruhuna, Sri Lanka.**

**ISBN: 978-624-5553-28-0**

## **1. Introduction and problem statement**

The creation and dissemination of knowledge have become imperative in this competitive business world to exist in the business and to gain a sustainable competitive advantage. The knowledge fabricated by individuals in the organization that it is essential in motivating these individuals to share and transfer the knowledge among others. Organizational knowledge thrives the performance of the organization in various ways. There is a visible growth of knowledge workers past decade who capture, create, and share knowledge in the organization (Nonaka & Kujiro, 1991).

Working smart than working hard approached the organization to a knowledge society where knowledge works emerge in organizations rather than labor (Awad & Ghaziri, 2013). People be contingent on information and decision-making has become a complex process in organizations as advances in technology are used in collecting data and aligning with organization knowledge to make proper decisions. It is important that the organization is required to understand the existing organizational knowledge and manage it in a proper way to make competitive advantages (Awad & Ghaziri, 2013). Nevertheless, the knowledge dissemination predominant performance of functional units of the organization, the knowledge dissemination barriers adversely affect diminishing the organizational performance (Nonaka & Kujiro, 1991). The purpose of conducting the systematic journal review is to identify the barriers to knowledge dissemination in organizations by appraising, summarizing, comparing, and contrasting the existing studies in a single place. This systematic journal review finding would support the organizations to focus on lowering the identified barriers in increasing the organization's performance. The research has chosen 20 different approach research articles published between the years 2000 and 2020. The rationale for continuing research within the timeframe defined above was to research topical areas in the span of two decades. The research study concentrated on scholarly articles, which were more difficult to find other sources in the findings articles due to non-accessibility during the search. Consequently, information dissemination barriers, knowledge-sharing barriers, and knowledge transferring barriers were the most commonly searched keywords in finding articles for the systematic journal review.

## **2. Literature review**

The topical areas were not often researched in the Sri Lankan context and the findings included various sources and in innumerable contexts.

### **2.1. Knowledge dissemination barriers**

As per the findings of Barson et al., (2000), the knowledge sharing barriers are categorized under 1) Technology, 2) People and 3) Organization categories as following which will impact organizations' Knowledge Management. The identified barriers further have been divided into sub-barriers. Further, Barson et al., (2000), found people's barriers in knowledge transferring categories as; 1) Internal resistance- knowledge is hidden and restricted the flow of knowledge for organizational protection, 2) self-interest- fear of sharing information, 3) lack of trust- if the second party received the knowledge cannot be trusted and it will effect to the organizational interest, 4) risk- identified in trust and proprietary knowledge sharing among inter-organization, 5) fear of exploitation- seek something in return of knowledge transferring, and 6) fear of contamination- fear of getting together with down market people who are currently in upper market. The same other has further classified knowledge sharing barriers could motive through 1) Existing resources- organization requires to enrich with people, money, technology, skills and data transfer which involve pulling culture, 2) need for rewards- individuals motivation to share knowledge, 3) culture- push vs. pull culture where knowledge generation and usage, 4) poor targeting of knowledge- information need and what requires to generate as knowledge , 5) cost management of knowledge transfer- cost management

obstacles in knowledge transferring among inter-organization, 6) proprietary knowledge-exposure of risk in revealing organizational proprietary knowledge and 7) distance-communication barriers occur while transferring the knowledge inside organization such as geography, culture, language and legal.

According to Cantoni et al., (2001), their research findings show both 2) localization and 3) cultural effect on knowledge transferring as barriers. Further expansion of their findings shows that support of technological tools should be understood in the aspect of localization by people in knowledge sharing whereas proper communication and strong relationship should be established among the people who are working in the organization to disseminate knowledge in the aspect of culture. Further, based on the findings of Cantoni et al., (2001), the culture has been identified as a knowledge transferring barrier where employees used to hoard knowledge and it requires establishing trust in knowledge sharing. In order to overcome this barrier, they have further suggested 1) training- should schedule for managers and workers to evaluate new ideas, convincing ideas that help in problem-solving and statistical process control and 2) incentive-encouraging employees in knowledge sharing with reward systems. Further, they have recognized another barrier as localization which suggested to approach using 1) technologies- use Web in knowledge sharing, with implementing Intranet which allows employees to share information and knowledge easier (groupware internet) and 2) structures-creating a social network which allows employees to share knowledge using war rooms or talk rooms. The Disterer (2001), has mentioned in his research that it is highly efficient and effective in transferring knowledge inside the organization as it is a critical factor in the current economy to grow the business, and based on his findings the knowledge transferring barriers have been categorized as individual and social barriers. The discoveries of Riege (2005) emphasized that knowledge-sharing barriers can be categorized as organizational, individual, and technological. Further, Riege (2005), found 14 barriers associated with the organizations based on corporate environment and conditions. The 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 of the organizational culture, and proper communication to get the benefits of knowledge sharing. The researcher has identified that knowledge sharing has not been shared among the right persons at right time and barriers manifold into 17 factors. The researcher has suggested motivating, persuading, and inspiring employees to capture, disseminate, transfer and apply the tacit knowledge of the organization.

Additionally, Senaratne & Sabesan (2008), carried out research under the topic of “Managing knowledge as quantity surveyors: An exploratory case study in Sri Lanka” and found key challenges in knowledge transferring and knowledge managing as 1) dependencies, 2) time, 3) lack of experienced in the local industry, 4) low recognition and 5) less teamwork. The research results of Cheng et al., (2008), that the research conducted on “Knowledge Sharing in Academic Institutions: a study Multimedia University Malaysia” classified the knowledge sharing barriers as 1) organizational, 2) individual and 3) technological factors and further underlined that knowledge sharing is a people-oriented process.

The research findings of Dharmasiri (2011), under the topic of “a Study of Knowledge Sharing Practices of Civil Society Organizations in Sri Lanka” pointed out the factors of 1) individual capabilities (lack of thought and weak perception, language difference, communication, lack of motivation and incentive and lack of skills), 2) time (eventful in achieving targets), 3) nature of the job (challenge of the job) , 4) organizational capabilities (lack of management efficiency, lack of organizational cognitive process, and less documentation in experience recording), and 5) nature of the knowledge (lack of understanding among employees) as barriers in knowledge sharing specially in civil society organizations. As per the findings of Dale (2011), there are 36 knowledge-sharing barriers which are categorized under 1) individual, 2) organizational and 3) technological barriers. Sub barriers are further deemed under each category identified. According to the research finding of Dale (2011), he has recognized 12 barriers in knowledge

sharing in the organizational context. The purpose of research is to identify barriers to knowledge sharing and suggestions or recommendations are not given to overcome the barriers. Based on the above-mentioned factors it is visible that the barriers to Knowledge dissemination (KD) can be categorized mainly under organizational barriers. Further, based on the findings of Dale (2011), the knowledge-sharing barriers have been identified with different factors and suggestions and recommendations were not provided to overcome the barriers.

The research findings of Kukko (2013), emphasized that knowledge sharing is disturbed by individual level, organizational level, and individual level. The organizational level barriers further have been identified as 1) no proper connection between the knowledge sharing and the organizational goal, 2) ignorance of the managerial communication on gaining the benefits of sharing knowledge, 3) no proper infrastructure in sharing the knowledge, 4) absence of proper network connection, 5) team competitiveness, 6) inclining of the complexity and 7) increase of the distance. The researcher further has discovered that 1) less time, 2) issues in language, 3) lack of trust, 4) no proper understanding of the possessed knowledge, 5) less social interaction, and 6) power relationships as the individual hurdles in knowledge sharing. Moreover, the technological level barriers to knowledge sharing have been presented in the findings as 1) lack of training provided on the use of technology, 2) less time spent on understanding the technology, and 3) not sharing the technological development among others. Based on the findings of Hubert and Lopez (2013), barriers are explained as deterring the KD between people in a cultural manner where they further elaborated this as in 1) organizational perspectives it is important to concentrate 2) organizational cultural factors such as relationships, trust, awareness, measures, time, distance, sponsorships, knowledge hoarding, and experiences, where these factors identified as knowledge sharing barriers.

Based on the findings presented by Razmerita et al., (2016), it stressed that 1) individual, 2) organizational and 3) technological main barriers in knowledge sharing in the perception of social media communication in the organization which then has presented the sub barriers that affect on knowledge sharing as behavior changes, lack of trust among employees and lack of time. In the research findings presented by Jaffri (2017) have conducted a systematic journal review which the researchers have identified four different barriers to knowledge sharing as 1) individuals, 2) culture, 3) technology, and 4) organization where Juhariand & Izhar (2018) the research conducted based finding the knowledge sharing barriers in institutions as 1) individual barrier, 2) organizational culture barrier and 3) technological barrier with the recommendations to overcome the barriers identified.

## **2.2. Organizational barriers in knowledge dissemination**

As per the findings of Barson et al., (2000), KD barriers are further classified as 1) Existing resources- organization requires to enrich with people, money, technology, skills and data transfer which involve pulling culture, 2) need for rewards- individuals motivation to share knowledge, 3) culture- push vs. pull culture where knowledge generation and usage, 4) poor targeting of knowledge- information need and what requires to generate as knowledge, 5) cost management of knowledge transfer- cost management obstacles in knowledge transferring among inter-organization, 6) proprietary knowledge- exposure of risk in revealing organizational proprietary knowledge and 7) distance-communication barriers occur while transferring the knowledge inside organization such as geography, culture, language and legal. According to the findings of Disterer (2001), the KD barriers are identified as social barriers such as; 1) language - not using a common analogy to externalize tacit knowledge, 2) conflict avoidance -employees not willing to get new ideas for fear of changing, 3) bureaucracy and hierarchy-bureaucracy and hierarchy prevent knowledge sharing, and 4) incoherent paradigm -strategic issues of the organization might not be properly communicated to the employees where articulation hides by the paradigm. The findings were approached by other factors by

Disterer (2001) such as 1) Leadership aspect should be implemented as enabling mutual understanding with trust to share knowledge, 2) rewards & incentives will help employee motivation to share or transfer knowledge among employees, 3) communities of practice is where creating knowledge fairs or clubs where employees will enable to share knowledge through informal networks, 4) codification Vs. personalization is where careful management of organizational knowledge experts by codifying their knowledge to IT systems and 5) organizational Design of Enterprises which allowing employees to work in hierarchical environments and strong relationships. Moreover, he has explained the implementation of IT solutions will help in minimizing the barriers to share or transfer knowledge among other employees of an organization. Whereas based on the findings of Cantoni et al., (2001), the culture has been identified as a knowledge transferring barrier where employees used to hoard knowledge and it requires establishing trust in knowledge sharing. In order to overcome this barrier, they have further suggested 1) training- should schedule for managers and workers to evaluate new ideas, convincing ideas that help in problem- solving and statistical process control and 2) incentive-encouraging employees in knowledge sharing with reward systems. Further, they have recognized another barrier as localization which suggested to approach using 1) technologies- use Web in knowledge sharing, with implementing Intranet which allows employees to share information and knowledge easier (groupware internet) and 2) structures-creating a social network which allows employees to share knowledge using war rooms or talk rooms.

When referring to the outcomes of the research of Bundred (2006), he has branded knowledge dissemination barriers as cultural tensions- professional ranking according to seniority creates vertical barriers and close culture. Moreover, he has suggested overcoming the barrier by applying proper leadership in praising collaborative working and approaching problem-solving through individual criticism. The results of Yao et al., (2007), show that weak culture affected in knowledge sharing. Less motivation in sharing knowledge among employees is the factor that is emphasized under the weak culture barrier. Reducing the workload and pressure associated with the work, employee motivation, and establishing trust among employees have been identified as solutions. As depicted by the research findings of McLaughli et al., (2008), the following barriers exist in organizations that impact knowledge creation and sharing. Further, they mentioned that the impact of the barriers can differ, based on the organization type and cultural aspects; Existing resources, poor targeting of knowledge, knowledge cost, knowledge strategy implementation, proprietary knowledge, distance, unprovenness (knowledge rated as being of value), organizational context, info perceived as reliable, lack of motivation (not invented here), lack of motivation(knowledge as power), lack of retentive capacity, lack of absorptive capacity, arduous relationship (lack of communication) and culture (knowledge strategy). When moving to the research findings of Zawawi et al., (2011), they have found the lack of organizational rewards leads to knowledge sharing as monetary and non-monetary rewards or intensives will motivate sharing of knowledge. Further, they found that employees get fear sharing knowledge due to unfair recognition & accreditation and stealing intellectual property. As one solution for their findings, they suggested implementing proper rewarding systems in organizations for knowledge sharing. According to the findings of Herrmann (2011), the organizational hierarchical structure impacts knowledge dissemination as top-level decisions will not be properly distributed among the other levels of the organization, and as a solution, he has suggested a proper KM system using an organizational intranet. Further, barriers to routine and procedures of the organization have been explained by Herrmann (2011) as organizations create routines and procedures then document them but never implement where it shows inappropriate knowledge dissemination. As a solution, Herrmann (2011) suggested sharing the policies, rules and regulations, and minutes of the meetings through the organization's intranet so all the employees can easily access the organizational knowledge.

According to the research findings of Hong et al., (2011), the organizational barriers are identified as the 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.

### **2.3. Individual barriers in knowledge dissemination**

According to Barson et al., (2000), people's barriers to knowledge transferring categorized as; 1) Internal resistance- knowledge is hidden and restricted the flow of knowledge for organizational protection, 2) self-interest- fear of sharing information, 3) lack of trust- if the second party received the knowledge cannot be trusted and it will effect to the organizational interest, 4) risk- identified in trust and proprietary knowledge sharing among inter-organization, 5) fear of exploitation- seek something in return of knowledge transferring, and 6) fear of contamination- fear of getting together with down market people who are currently in upper market.

Relating to the research findings of Disterer (2001), the knowledge transferring barriers have been illustrated as the factors of 1) loss of power -employees not sharing the knowledge fear of losing their position in the organisation, 2) revelation -sharing knowledge through a stored database and if not share with all the employees' knowledge will not pass through, 3) uncertainty -employees feel uncertain where they cannot understand whether the knowledge is too general and too specific to be shared, and 4) motivation -employees consider knowledge transferring as additional work where they required to motivate in transferring knowledge. Further, he has founded that the above-mentioned factors need to be approached with other findings such as concern and trust, where employees share knowledge with trust and environment with ethical considerations. Further, he explained that this will help "falling Forward".

Relating to the outcome of Bundred's (2006) research, he has identified knowledge dissemination barriers as 1) lack of trust between professions – professional groups not willing to share the knowledge with other employees in the organization and 2) lack of awareness- the knowledge availability and how to be shared with whom is not properly understood by employees. Further, he has provided solutions such as implementing informal groups and horizontal groups. The outcome of the Yao et al., (2007) research shows that lack of 1) incentives/rewards – employees are not given rewards in sharing knowledge and employees fear losing the power of sharing knowledge and 2) lack of time. Research findings illustrated that most of the employees do not share information due to lack of time as long working hours and workload affected on lack of time. As solutions, they have suggested removing unnecessary fear to share knowledge and implementing the rewarding system. The reward for sharing and creating knowledge, internal resistance, self-interest, trust, risk, fear of exploitation, fear of contamination, and casual ambiguity are the knowledge sharing and transferring barriers that are identified by McLaughli et al., (2008) in their research. Further, they have mentioned that the research was carried out to identify the different types of barriers that can impact organizational knowledge sharing and transferring.

Personal barriers that could impact Knowledge Dissemination has been identified by Herrmann (2011) as lack of understanding, lack of technological knowledge, lack of willingness to share, and lack of strategic thinking. He has proposed meetings, enhancing personal management skills, and training to overcome the barriers to use technology. The individual barriers in knowledge sharing have been identified by Hong et al., (2011) as 1) internal resistance -passing knowledge to employees considered as revealed, 2) trust -if trust is not

there the employees will not fully use the knowledge received, 3) motivation -not accepting mutual benefits by sharing knowledge, 4) a gap in awareness and knowledge -unwillingness to listen to things as employees consider they already know the things based on their research findings. The research article illustrated that all these barriers can be minimized with the proper usage of up-to-date technology. When looking into the research findings of Zawawi et al., (2011), it clearly shows that a lack of self-efficacy such as the characteristics of experience, values, motivation, and beliefs should be concentrated to overcome this barrier. Further, providing wrong information and time restrictions affected the fact of lack of knowledge and self-efficacy. With regards to the findings of Paulin & Suneson (2012), they recognized that knowledge transferring holds by 1) lack of knowledge, 2) not enough knowledge area, and 3) not converting information into knowledge. Further, they have suggested implementing a proper technological system to overcome the identified individual barriers.

#### **2.4. Technological barriers in knowledge dissemination**

The research findings of Barson et al., (2000), illustrated barriers in knowledge transferring as; 1) available technology- support of the existing IT system in knowledge transfer, and 2) legacy system- impact on the current legacy system in creation, sharing, and distribution of knowledge. The research findings of McLaughli et al., (2008), clearly illustrated that the same factors were identified by them. Barson et al., (2000) impact on organization knowledge sharing and transferring relating to technological aspects (Available technology, legacy system). Relatively the research findings of Herrmann (2011), show that cost has been a problem for purchasing required hardware and software in proper knowledge dissemination of organizations. He suggested using open-source software reduced the cost and enhanced the knowledge dissemination of the organization with the use of technology. Zawawi et al., (2011), identified that lack of information and communication technology is a barrier to sharing knowledge in an organization. A user-friendly environment can be created to share knowledge in an organization using information and communication technology where most organizations are not using the technology effectively which can use to increase the productivity of the origination. Moreover, they have an emphasis on implementing a proper IT system as one of the solutions for the knowledge sharing barrier.

### **3. Methods**

The purpose of the study is to identify the organisational culture factors that influence KM where the method used as a systematic literature review through an inductive approach in which the literature findings are integrated and evaluated to provide the findings. The articles were selected based on the findings made through the keywords of information dissemination barriers, knowledge-sharing barriers, and knowledge transferring barriers. Further, the entire method of conducting the research is divided into four main phrases: 1) defining the purpose of conducting the research-As stated in the introduction, knowledge management is important in any industry since it is necessary to identify knowledge dissemination obstacles in order to reduce the impact of obstacles and improve the performance of organizations, 2) deciding the research approach where the systematic review through inductive has chosen- The study was conducted by evaluating articles in order to identify barriers to knowledge dissemination. A total of 60 scholarly research publications were reviewed in order to achieve the study's purpose, 3) data analysis was done on the chosen 21 articles among the mix of qualitative, quantitative, and systematic review articles that are published between the years 2000 and 2018 among 60 focused scholarly articles where the access granted only for the chosen articles which reviewed in this study, and 4) finally, the data findings appraised, summarized, compared, and contrasted through the main and sub-patterns identified as defined the analysis steps by Snyder (2019).

#### 4. Results and discussion

According to the data, the majority of the researchers recognized comparable elements that affect knowledge dissemination barriers in diverse situations in 21 of the publications. The data analysis was focused on the discovery of patterns in the findings of information diffusion barriers through the use of 21 papers. Individual, organizational, technological, and cultural issues have all been highlighted as prevalent hurdles to information diffusion.

Organizational impediments to knowledge transmission have been further classified as follows.

**Table 1: Organisational Barriers**

<b>Researcher</b>	<b>Organisational barriers</b>
Herrmann (2011)	Organizational hierarchical structure
Barson et al., (2000)	Individuals' motivation
McLaughli et al., (2008)	Arduous relationship (lack of communication)
Hong et al., (2011)	Language
Disterer (2001)	Language, conflict avoidance -employees not willing to get new ideas, incoherent paradigm
Cantoni et al., (2001)	Employees used to hoard the knowledge and it requires establishing trust
Yao, Kam & Chan (2007)	Less motivation, workload and pressure
Riege (2005)	Lack of leadership, shortage of appropriate infrastructure, communication and knowledge flows, hierarchical organisation structure
Dale (2011)	Lack of time, low awareness and communication issues, education level, lack of trust
Kukko (2013)	Ignorance of the managerial communication, absence of proper network connection, team competitiveness, inclining of the complexity, increase of the distance
Dharmasiri (2011)	Lack of management efficiency, lack of organizational cognitive process and less documentation in experience recording

It was discovered that ten out of twenty-one researchers found that organizational factors have an impact on knowledge sharing, transfer, and dissemination. Furthermore, the following sub-elements have been identified as prevalent organizational barriers: 1) organizational hierarchical structure, 2) lack of communication channels, 3) language, 4) weak leadership, and 5) lack of trust. Other components under organizational barriers have been offered by the



researchers, which differ from the conclusions presented above. Organizational barriers, on the other hand, may vary depending on the context.

Based on the identified patterns the individual barriers also have been identified through subcategories as given below.

**Table 2: Individual Barriers**

<b>Researcher</b>	<b>Individual barriers</b>
Herrmann (2011)	Lack of willingness to share
Barson et al., (2000)	Lack of trust and risk- identified in trust
McLaughli et al., (2008)	Trust, risk, fear of knowledge sharing
Hong et al., (2011)	Trust, gap in awareness and knowledge
Disterer (2001)	Loss of power, uncertainty, and less motivation
Yao et al., (2007)	Lack of time because long working hours and workload
Riege (2005)	Lack of time, low awareness, insufficient communication, differences in experience levels, lack of trust
Dale (2011)	Lack of managerial direction, inappropriate, communication and knowledge flows
Zawawi et al., (2011)	Time restrictions affected on the fact of lack of knowledge and self-efficacy
Bundred (2006)	Lack of trust between professions, lack of awareness
Paulin & Suneson (2012)	Lack of knowledge, and not enough knowledge in particular area
Kukko (2013)	Less time, language, lack of trust, less social interaction, power relationships
Dharmasiri (2011)	Lack of thought and weak perceptive, language difference, communication, lack of motivation and incentive and lack of skills

The results shown in the table show that the knowledge dissemination barriers that occur due to individual factors are also observed as common sub-factors by 11 authors: 1) lack of knowledge, 2) lack of trust, 3) lack of time, and 4) lack of awareness in knowledge generation and sharing. Other individual barriers have also been highlighted by the researchers, however not all researchers have recognized them in their research.

According to the analysis results, the technological barriers with the subcategories also identified by different researchers presented in the table given below.

**Table 3: Technological Barriers**

<b>Researcher</b>	<b>Technological barriers</b>
Herrmann (2011)	Not having required hardware and software
Barson et al., (2000)	Available technology- less support of the existing IT system
Riege (2005)	Lack of technical support, IT systems obstruct work routines and communication flows, lack of compatibility between diverse IT systems and processes, mismatch between individuals' need requirements and integrated IT systems
Dale (2011)	Lack of technical support, Lack of compatibility, mismatch between individual, Lack of communication and demonstration
Zawawi et al., (2011)	Not using the technology and proper communication
Kukko (2013)	Lack of training, less time spent on understanding the technology, not sharing the technological development among others

The last obstacle that affects information transmission is the technology barrier, which was further characterized by six researchers from various perspectives as seen in the table above. Among the several sub-factors identified under the technological hurdles, 1) lack of IT assistance, 2) lack of knowledge and training supplied to employees, and 3) failure to use appropriate technology in organizations were highlighted. With the exception of the aforementioned criteria, it appears that the researcher has identified a variety of technological hurdles, none of which are identical to those identified by all six researchers.

Apart from the aforementioned findings it accentuated that there are researchers who have recognized and have presented different barriers identified in their research on knowledge dissemination, such as Senaratne & Sabesan (2008), who have presented knowledge transferring barriers as 1) dependencies, 2) lack of experience in the local industry, 3) low recognition and 4) less teamwork. Though the individual and organizational barriers, also identified by Dharmasiri (2011), the findings 1) nature of the job and 2) nature of the knowledge has an impact on knowledge sharing. The knowledge-sharing barriers have identified as is 1) attitude, 2) subjective norms, 3) perceived behavioral control, and 4) affective commitment, by Goh and Sandhu. Further, Hubert & Lopez (2013), have identified apart from the organisational barriers organizational cultural factors also affect knowledge sharing.

## **6. Conclusion**

It is foreseeable that any organization's performance depends on the way they disseminate the knowledge inside the organisation to do the job correctly. Therefore, the study was conducted to find the barriers to knowledge dissemination by reviewing the findings presented by

different researchers. The research conducted with chosen 21 journal articles and researchers chosen similar topics related to the study reveals that most of the researchers have identified 1) organisational, 2) individual and 3) technological as the barriers that affect knowledge dissemination. The articles were chosen from different countries and different contexts as a mix. These journal articles' findings further revealed the sub factors of barriers identified by the researchers as similar factors and at the same time some dissimilar subfactors fell under the main barriers: 1) organizational hierarchical structure, 2) lack of establishment of communication channels, 3) language, 4) poor leadership, and 5) lack of trust under organizational barriers, 1) lack of knowledge, 2) lack of trust, 3) lack of time and 4) lack of awareness in knowledge creation and sharing under individual barriers and 1) lack of IT support, 2) less knowledge and training provided to employees, and 3) not using the suitable technology in the organizations as technological barriers. Findings depict that technological barriers are not further categorized into many sub-factors as done under the individual, and organizational barriers. However, this further pinpointed that organisations are required to closely monitor the organizational, individual and technological barriers in order to build a strong base on knowledge dissemination. The next important barrier which is identified by a few researchers and needs high attention is the organization's cultural barrier. Except for the three main knowledge dissemination barriers reviews in the study it emphasized that researchers have focused on 1) dependencies, 2) lack of experience in the local industry, 3) low recognition, 4) less teamwork, 5) nature of the job , 6) nature of the 7) attitude, 8) subjective norms, 9) perceived behavioral control, and 10) affective commitment also as the knowledge dissemination barriers and that can be considered as the knowledge gap recognized through the study. Due to limits in accessing other sources, the systematic journal review was confined to 21 scientific papers; nevertheless, if the restriction had not been enforced, the review may have presented even more insights. However, it should be noted that the aforesaid knowledge dissemination sub-factors presented under individual, organizational, and technological main barriers identified through the systematic journal review are not tested empirically. Hence it is recommended to investigate the identified barriers to knowledge dissemination by conducting an empirical study to prove the true barriers that affect knowledge dissemination. The identified other barriers which are not similar to any other researchers' findings also needed to be tested. The conceptual framework can be developed based on the selection of identified barriers which are organizational, individual, and technological that affect knowledge dissemination. In performing the empirical investigation, the focus could be on the gaps found in addition to the aforementioned key components.

## References

- Barson, R., Foster, G., Struck, T., Ratchev, S., Parwar, K., Weber, F., & Wunram, M. (2000). "Inter and intra organizational barriers to sharing knowledge in the extended supply chain", e2000 Conference Proceedings.
- Bundred, S. (2006). Solutions to silos: Joining UP Knowledge", *Public Money & Management*, April 2006.
- Bundred, S. (2006). Solutions to Silos: Joining Up Knowledge", *Public Money & Management*, 125 – 130
- Cantoni, F., Bello, M., & Frigerio, C. (2001). *Lowering the barriers of knowledge transfer and dissemination-the Italian Cooperative Banks Experiences*. Global Co-Operation in the New Millennium:9th European Conference on Information Systems, Bled, Slovenia, 665-673
- Cheng M., Ho, J., & Lau P. (2008). Knowledge sharing in academic institutions: A Study of Multimedia University Malaysia. *Electronic Journal of Knowledge Management*, 7 (3), 313 - 324

- Dale, S. (2011). 36 Knowledge Sharing Barriers. [online] Available from: <http://www.stephendale.com/2011/10/26/36-knowledge-sharing-barriers/>. [Accessed on 03 Aug 2021].
- Dharmasiri, A. (2011). A study of knowledge sharing practices of civil society organizations in Sri Lanka. [online] Available from: [https://www.researchgate.net/publication/262906494\\_a\\_Study\\_of\\_Knowledge\\_Sharing\\_Practices\\_of\\_Civil\\_Society\\_Organizations\\_in\\_Sri\\_Lanka](https://www.researchgate.net/publication/262906494_a_Study_of_Knowledge_Sharing_Practices_of_Civil_Society_Organizations_in_Sri_Lanka). [Accessed 03 Aug 2021].
- Disterer, G. (2001). *Individual and social barriers to knowledge transfer*. CA: IEEE Press 34th Annual Hawaii International Conference on System Sciences, 120, 30459
- Goh, K., Sandhu, M. (2013). Knowledge sharing among Malaysian academics: Influence of affective commitment and trust. *The Electronic Journal of Knowledge Management*, 11(1), 38-48
- Herrmann, N. (2011). Barriers for an efficient management of knowledge. Experiences from a Southern African Organization. *Open Journal of Knowledge Management*, 3 (1), 1-15
- Hong, D., Sug, E., & Koo, C. (2011). *Developing strategies for overcoming barriers to knowledge sharing based on conversational knowledge management: A Case study of Financial Company*. [case study] Expert Systems with Applications
- Hubert, C., & Lopez, L. (2013). *Breaking the barriers to knowledge sharing*. Houston: APQC, 01-06.
- Jaffri, R., & Aidi, R. (2017). Knowledge sharing and barriers in organizations: A conceptual paper on knowledge- management strategy. *Indian-Pacific Journal of Accounting and Finance*. 1. 10.52962/ipjaf.2017.1.4.26.
- Juhariand, N. N., & Izhar, T. A. T. (2018). A Study on knowledge transfer barriers in Private Institution. *International Journal of Academic Research in Business and Social Sciences*, 8(6), 828–845.
- Kukko, M. (2013). Knowledge sharing barriers in organic growth: A case study from a software company. *Journal of High Technology Management Research*, 24(1), 18-29.
- McLaughli, S., Paton, R.A., & Macbeth, D. (2008). Barrier impact on organizational learning with complex organization. *Journal of Knowledge Management*, 12(2), 107-123
- Nonaka & Ikujiro (1991). The knowledge creating company: *Harvard Business Review*, 69 (6) 96–104.
- Paulin, D., & Suneson, K. (2012). Knowledge transfer, knowledge sharing and knowledge barriers—Three blurry terms in KM. *Electronic Journal of Knowledge Management*, 10(1), 81–91.
- Razmerita, L., Kirchner, K. & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? A social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), 1225-1246.
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18–35.
- Senaratne, S., & Sabesan, S. (2008). Built-environment - Sri Lanka: A study of knowledge sharing practices of civil society organizations in Sri Lanka. *Built-Environment - Sri Lanka*, 08 (2), 41-45
- Yao, L.J., Kam, T.H.Y., & Chan, S.H., (2007). Knowledge sharing in Asian public administration sector: The case of Hong Kong. *Journal of Enterprise Information Management*, 20(1), 51 – 69
- Zawawi, A.A., Zakaria, Z., Kamarunzaman, N. Z., Noordin, N., Sawal, M. Z. H. M., Junos, N.M., & Najid, N.S.A., (2011). The study of barrier factors in knowledge sharing: A case study in public university. *Management Science and Engineering*, 5(1), 59-70