# Knowledge Sharing Barriers in Organizations - A Review

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***Abstract* – Knowledge sharing (KS) enable employees exchanging necessary knowledge for their work such as perceptions, views, and ideas, then consequently creating a strong relationship between each other. Obstacles can be avoidable through a better understanding and determination of barriers which are able to increase organization business competitiveness and greater value creation. In this research, the result is to identify the factors that influencing the KS process in an organisation in terms of barriers. Thus, the obtained knowledge and findings will provide to the company management an idea of which barriers are significant to focus on in order to enhance KS levels.**

***Keywords – knowledge, knowledge sharing, knowledge sharing barriers.***

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## 1. Introduction

Knowledge is a resource or asset that allows individuals and organizations to enhance learning and decision-making through knowledge management (KM) [1]. Thus, KM has played a very important role in capitalizing the existing knowledge capital (information, skills, or expertise) manipulated in an organization. In short, knowledge can be captured by knowledge management system (KMS) which is an information system developed to increase the effectiveness of organization's KM for later reuse [2]. Nevertheless, the magnitude of knowledge contribution will be determined according to the scope and depth of KMS. There are two types of knowledge, which are tacit and explicit knowledge. Knowledge can be transferred through socialization, internalization, communications and various activities with different levels such as intra or inter organization, individual and technology [3]. Knowledge sharing (KS) behaviours within colleagues can be encouraged through promoting the organizational learning culture in order to sustain the competitive advantage and productivity [4]. If an organization with lacking knowledge transfer culture has caused barriers which affect and hindering the knowledge management process (KMP) in knowledge transmission or distribution.

KS is the fundamental activity in KMP which facilitating learning through sharing method and converting into usable ideas, processes and products. KMS unable to operate and manipulate without collected knowledge. Al-Busaidi and his colleagues [5] have stated that individuals in an organization don't know the work that has been done by the others and caused the duplication of effort in performing a similar work. According to Maurer [6], knowledge in employee's brains is the asset of an organization which is difficult to transfer. Hence, barriers to prevent activity of transferring knowledge process

occurred need to be determined and analysed thoroughly in order to secure the assets.

To achieve a high-performance organization, techniques of exploiting, transferring and increasing knowledge are the crucial factors in KMS [3].

***Problem statement***

KS acted as a creative and innovation medium as well as a facilitator to assist an organization to develop and grow with new planning and concepts. Thus, every institute should embed KS in business operation and working practice to achieve the benefits brought from the knowledge transfer. The strategy of KS needs to be developed in order to determine sources of knowledge, develop knowledge transferring skills, capture the best practices, motivate interaction, ensure content management, outline and communicate knowledge performance [7]. Without KS, a company will encounter difficulty in utilizing the specific resources and employee's abilities as well as producing the new knowledge efficiently.

The KS components consisted of codified information, experiences, images, opinions performance and so on. Inter-organizational research stated that organizations preformed practices of jointly held knowledge base resulting mutual knowledge creation which has facilitated mutual understanding among employees through interaction that considered critical for the mutual trust. Therefore, in order to develop a community, involvement and participation are essential as the community identity and trust are unable to be established without build-up of relationships [8]. According to Hinds and Pfeffer [9], sharing of knowledge or expertise can be enhanced by encouraging and supporting the sharing practice within communities. Even though community of practice (CoP) allows for wider broadcasting of knowledge, but its success of KS initiatives depends on the users to actively supply [10]. In a result, understanding the factors that affected the individual KS behaviour is important for the organization towards success of KMS.

As a conclusion, the aim of this research paper is to investigate the possible factors that affecting the KS process in an organisation in terms of barriers and facilitators from different researchers' perspectives. Thus, the obtained findings related to barriers and strategy which are significant to focus on for improvement of KS levels and promoting of KS perception for greater understanding in the organization.

## 2. Methodology

A systematic literature review (SLR) is a study of previous studies by reviewing relevant literature through a high standard and orderly process.

According to Thinakaran and Ali [11], SLR identifies, chooses and critically appraises research to answer a formulated research question. SLR should be conducted based on a clearly defined procedure or plan where the criteria are clearly stated. In short, the process not only involved the collection of all existing evidence and results on a specific topic to answer a specific research question, but also consisted of approaches of searching literature and type of search strategies [12]. In order to increase the reliability of findings, a criterion should be created and used to evaluate the literature found for deciding the inclusion or exclusion of evidence. The following is a detailed explanation of SLR process for this study as illustrated in Figure 1.

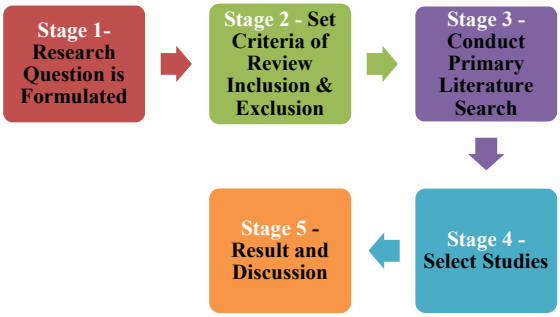


*Figure 1 Stages in SLR Process*

**Stage 1:** Research question is formulated. For this study the research question is "What are the existing barriers in an organization influencing the individual KS behaviour to employees?".

**Stage 2:** Set criteria of review inclusion and exclusion. For inclusion criteria of previous studies consists of i) published between 2000 and 2022; ii) related to organization; iii) discussed the importance of KS and iv) investigated barriers of KS. For exclusion criteria of previous studies consists of i) published in language other than English; ii) lab reports, summaries of tutorial, keynotes and posters; iii) duplicated studies and iv) not related to KS in context of organization.

**Stage 3:** Conduct primary literature search where to find wide-ranging of sources related to the following search criteria "barriers in an organization influencing the individual KS behaviour". A total of 164 articles was identified and Table 1 showed the summary of articles found from different data sources (Research Gate, Open Accesses Scopus Journals, Science Direct, SpringerLink, IEEEXplore and Acedemia) based on combination of search criteria's key words.

*Table 1 Summary of Data Sources*

| Data Source | | Results Found | Not Selected | Selected |
|---|---|---|---|---|
| Research Gate | | 52 | 40 | 12 |
| Scopus Journals | | 25 | 19 | 6 |
| Science Direct | | 31 | 22 | 9 |
| SpringerLink | | 16 | 12 | 4 |
| IEEEXplore | | 28 | 23 | 5 |
| Acedemia | | 12 | 9 | 3 |
| **Total** | **164** | **125** | **39** | |

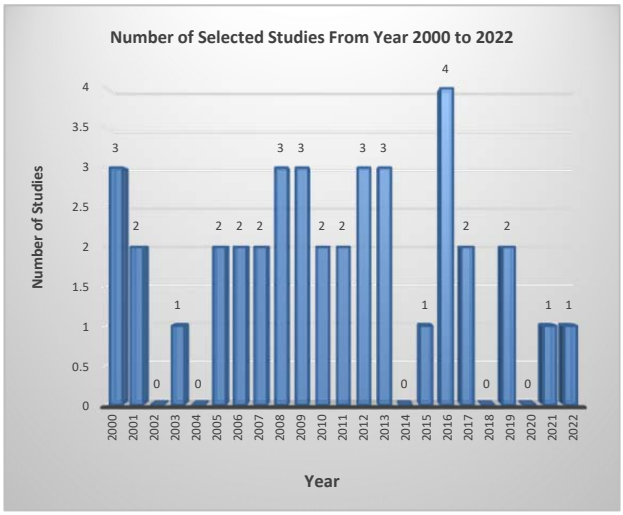


*Figure 2 Number of Selected Studies Form Year 2000 to 2022*

**Stage 4:** There are two stages in this step in which the first stage is to screen titles and abstracts, while the second stage is to screen the full texts for selected studies based on inclusion and exclusion. A total of 39 articles were identified according to search criteria. Figure 2 illustrated the selected studies from year 2000 to 2022 respectively where average of two articles were published per year.

**Stage 5:** Result and Discussion by considering the limitations of review, evidence strength, how the research question is answered, and implications for future practice. The following section is a detailed discussion of this stage.

## 3. Result and discussion

Refer to formulated research question in previous section, "What are the exist barriers in an organization influencing the individual KS behaviour to employees?". To answer this question, 39 articles have been identified according SLR process as shown in Table 2. From the articles four main KS barriers were identified which are individual, culture, technology and organizational.

*Table 2 Summary of Studies on Knowledge Sharing Barriers in Organization*

| No. | Authors(s) | Individual | Culture | Technology | Organizational |
|---|---|---|---|---|---|
| 1 | Barson et al. [13] | * | | * | * |
| 2 | Damodaran & Olphert [14] | | | * | |
| 3 | Argote & Ingram [15] | | | | * |
| 4 | McDermott & O'Dell [16] | | * | | * |
| 5 | Disterer [17] | * | * | | * |
| 6 | Bures [18] | * | * | | |
| 7 | Riege [19] | * | | * | * |
| 8 | Dignum, & Eijk [20] | * | | | |
| 9 | Daud & Abdul Hamid [21] | * | | * | * |
| 10 | Zhang & Dawes [22] | | | | * |
| 11 | Jarnagin & Slocum [23] | | * | | |
| 12 | Al-Alawi, Al-Marzooqi & Mohammed [24] | | * | | |
| 13 | Ardichvili [25] | | | * | |
| 14 | Harlow [26] | * | | | |
| 15 | McLaughlin, Paton & Macbeth [27] | * | * | * | * |
| 16 | Chen, Chen & Kinshuk [28] | * | * | * | * |
| 17 | Huang [29] | | | | * |
| 18 | Paroutis & Al Saleh [30] | | | | * |
| 19 | Chilton & Bloodgood [31] | * | | | |
| 20 | Keith, Demirkan & Goul [32] | | | * | |
| 21 | Zhang & Du [33] | | * | | |
| 22 | Hung, Lai & Chang [34] | | | | * |
| 23 | Paulin & Suneson [35] | | | * | |

| | | | | | |
|---|---|---|---|---|---|
| 24 | Wang & Wang [36] | * | | | |
| 25 | Gharakhani & Mousakhani [37] | | | | * |
| 26 | Wendling, Oliveira & Maçada [38] | * | * | | * |
| 27 | Nakano, Muniz & Batista [39] | * | | | |
| 28 | Kukko [40] | * | | * | * |
| 29 | Tortoriello [41] | | | * | |
| 30 | Razmerita, Kirchner & Nielsen [42] | * | | * | * |
| 31 | Attar & Shaalan [43] | * | * | * | * |
| 32 | John, Sarah & Ita [44] | * | * | | * |
| 33 | Sani et al. [45] | | | | * |
| 34 | Al-Busaidi & Olfman [46] | | | | * |
| 35 | Jones [47] | * | * | * | |
| 36 | Lin [48] | * | | | * |
| 37 | Anwar et al. [49] | * | * | * | * |
| 38 | Hyeon & Kun [50] | * | | | |
| 39 | Raudeliuniene & Matar [51] | * | | * | * |

### *3.1. Individual barriers*

An organization possessed knowledge resources will have better competitive advantage compared to the others who did not [31]. The knowledge resources access by individuals to perform an organizational duty and decision-making purpose and other job functions. An investigation done by Nakano, Muniz and Batista [39] stated that individuals are the important asset in an organization because their tacit knowledge are the main resources to retain and transfer. Harlow [26] emphasized that there is a correlation-ship between organizational performances and explicit KS. Besides that, tacit knowledge essential in organizations is important to know for development and financial measurement. The relationship between KS, innovation and organization's performance is highlighted by Wang and Wang [36] which revealed both explicit and tacit KS can facilitate on innovation and performance of company in term of speed and quality.

Trust deficiency is classified as individual barriers in KM because individuals are not willing to share and transfer knowledge without trusting relationships. Attar & Shaalan [43] stated that lack of trust among employees created weak relationships which able to interrupt the KS process. According to Dignum & Eijk [20], trust is categorised into 3 types which are personality-based trust, interpersonal trust and impersonal trust. The factors to create a strong trusting relationship important between employees are common language, common vision, discretion and strong ties. In terms of common language, individuals have better understanding with each other if using same lingo and terminology, while common vision indicated individuals possessed same goals, thoughts and perceptions.

Nevertheless, due to lack of motivation, some employees are reluctant to contribute their knowledge and personal skills. For those employees who are unwilling to share their knowledge voluntarily, some motivations and rewards are necessary to provide for them such as personal incentives in order to accelerate the knowledge transfer process [43]. Motivation is classified as intrinsic and extrinsic motivations to achieve successful KS [52]. Salary, benefits and bonuses are categorized as extrinsic rewards, but intrinsic rewards are non-monetary measures which generated from inside an individual in different formation [53]. A good reward system will bring additional benefits to the organization and enhance employees' working performance. Employees with extrinsically motivated often rewarded and contributory to reach company's goal. Extrinsic motivation typically supports explicit knowledge transfer but is unsuccessful with tacit knowledge [54].

Furthermore, an individual unable to share or pursue for new knowledge if he/she has overwhelmed with heavy workload due to time deficiency which caused he/she has less awareness to knowledge possessed by colleagues [49] and performance of company in term of speed and quality can be enhanced if sufficient time is provided for KS. A huge knowledge gad able to specifically be identified and observed from new and old employees.

Incompatible professional qualification is classified as one of the factors in individual barriers. An individual possessed different levels of professional qualification such as educational background, technical skills and capability of absorbent will have formation problems due to knowledge imbalance which might be impacted the efficiency of KS among employees in an organization [38].

In KS, fear is referred to as anxiety of losing one's unique value from knowledge contributors or being defeated by an enemy [50]. This factor has caused employees to feel unwilling to share their knowledge and hindered KS because they have a mutual understanding of losing self-value will lead to losing of job. Thus, knowledge contributors will tend to be more cautious and alert about KS in the knowledge networks.

### *3.2. Culture barriers*

Organizational behaviour depends on culture instead of management directions and implementation of strategies [23]. Thus, embedded strong culture practices is the key success to achieved high organizational performance. While Al-Alawi and his colleagues [24] revealed that KS culture is based on communication and trust between employees, information systems, rewards and organization structure. This study has described the relationships among employees and provided possibilities to resolve the barriers towards KS. An argument formed due to embedment of KS into organization culture didn't bond to the KM initiatives [16]. Regarding to this, a modification has been made to the KM approach to match the culture through networking sharing knowledge, binding sharing knowledge, presenting KM suited to the organization's style, and pressed supervisors to exercise sharing practices.

According to the previous studies [44], language as one of the culture barriers for KS. English is the lingua franca used for communication among people over the world. Language not only affects the communication quality, but also includes the choice of communication medium. An individual who prefers messaging or email might not be confident with their English language skills because text-based media provide more time to understand and response. However, text-based media are unable to convey visual or auditory queues which able to provide important information on understanding of a participant to a conversation. If the native language of an individual is not English, some communication issues will be resulted such as improper knowledge and information transfer as well as lead to several difficulties and misunderstandings.

Besides, culture will affect the interpretation of communication among people and become a challenge encountered in the KS process. In a global organization, cultural practices are different from country to country, for example, European and American colleagues might misinterpret the polite expressions of acknowledgement by Asian employees as agreement or commitment.

Zhang and Du [33] have conducted a survey to the employees working in a software park and revealed that greater cultural variance will bring negative impact to KS.

Although employees are implementing a common language with same nationality, cultural differences still able to occur in an organization due to variances in "corporate culture" which will be caused conflicts on communication, problem solving and decision making.

### *3.3. Technology barriers*

Nowadays, technology has become a main tool and platform to share knowledge among each other. However, individuals are required to possess knowledge in technology and apply in an organization [23]. Other than lacking knowledge on controlling and utilization of system, the issues of not user-friendly and insufficient technology will lead to low usability and become an obstacle to KS [2]. This might be caused by failure to deliver training and user support to individuals. Human Resource is significant to provide proper user support and initial training in technology implementation specifically [25].

Several previous studies [13], [14], [19], [21], [25], [27], [28], [32], [35] revealed that employees seldom use the available technological tools or resources in an organization even though technology is able to assist in KS process. According to Kukko [40], people are reluctant to utilize unfamiliar technology because they are more usual to perform the works in their normal practices. As well as the extremely developed expertise of software business specialists has become one of the factors in hesitating to use technology.

Jones [47] stated that training is beneficial in improving KS among an innovation team. Problems raised to KS if management doesn't take the initiative in conducting a regular training to the employees. Without proper user support and initial training in technology implementation provided by management to facilitate knowledge flows, processes and resources, it will lead to insufficiency and low usability of technology. Furthermore, the efficiency of KS will be enhanced if more employees are trained in a specified technology aspect [32]. Management should ensure the method of training instruction is compatible, as ineffective training on technology caused employees to be unable to gather and analyse knowledge [41].

### *3.4. Organizational barriers*

According to Zhang and Dawes [10], KS will be discouraged by conflicts, reward systems, power dynamics, organizational practices and evaluation. Exclusive values and culture are always represented as characteristics of an organization. Good relationships between employees creating a good organizational culture able to motivate them for knowledge contribution during formation of a learning organization [29]. Paroutis and Al Saleh [30] and Argote and Ingram [15] revealed that training, reward systems, management, guidelines and human resources are the most important aspects among the factors and motivation of KS encouragement.

Majority of people are unwilling to share their knowledge, capabilities, information and skills due to lack of reward system, unless they are requested by their superior or the receiver. Rewards are represented as encouragement which is important for internal psychological requirements specially focused on self-confidence and self-actualization [16]. A previous study stated that there is a formation of poor relationship amongst reward systems and KS in manufacturing and service firms [17]. A reward system as an effective motivation to share knowledge never recognised by those best practice companies but undeniable reward system enables the importance of sharing knowledge become visible and noticeable [16]. Employees with the attitudes and behaviours of possessed, shared and expertized personal knowledge, teamwork, creating new knowledge, proactive in problem solving are required to emphasized and rewarded. Kukko [40] reported that software developers have less motivation to share knowledge as they felt their works are not appreciated which interrelated to lack of recognition.

In addition, the relationship between top management support and KS has been examined by several researchers to identify the impact of the relationship. Gharakhani and Mousakhani [37] found that organizational factors including top management support and reward system are positively correlated with sub-processes of knowledge contribution and collection. A direct association among KS and top management support has been verified based on 118 samples collected from Taiwan technology industry in which organizational policies are recommended to be developed by top managers in order to provide sufficient resources for KS groups formation [33]. Furthermore, other recent studies such as [48] and [46] have yielded a consistent result with [33]. Thus, the head of organization should play a significant role in KM system and become the role model to boost and enhance the practice of KS within organization, as the employees are intensely influenced by behaviour of superiors.

## 4. Conclusion

Nowadays, knowledge is a main source for competitiveness and resources of a successful organization. Thus, well-trained employees efficiently used the obtained proper knowledge in decision making, problem-solving and to enhance working performance which will indirectly improve the organizational value. According to the literature review, an organization must pay attention to all four aspects such as individuals, culture, organizational and technological of an organization to be successful. By determining the factors hindered KS in terms of structural and cultural within the existing culture framework, these challenges can be overcome and solved. If employees are more passionate to share their knowledge, knowledge properties can be managed more efficiently.

This study was conducted to determine the factors that influence the knowledge sharing process in an organisation in terms of barriers. Based on the finding and results analysed, the barriers are to provide perceptions and recommendations to suit with the issues encountered in working environment. The discoveries from this study will help companies establish an objective to grow through KS for challenging task preparation of managing development. KS should prioritize by management and ensure proper communication to be provided as the understanding on importance of KS and its subsequent communication are insufficient. Management should ensure that the proper implementation successfully to be conducted crosses the boundaries of practice with required of management involvement and resource allocation.

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