

KNOWLEDGE SHARING BARRIERS IN BULGARIAN COMPANIES – AN EMPIRICAL STUDY

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Abstract. Knowledge sharing, although a key process for achieving business success and competitive advantage, does not always run smoothly. A number of factors, also called knowledge sharing barriers, hinder this process. They are extremely diverse and sometimes hard to find. The manifestation of knowledge sharing barriers is highly dependent on the context and in each organisation they manifest in a different way depending on the individual characteristics of the employees, the organisational structure and culture, the relevance and adequacy of the information and communication technologies used, etc. They cannot be completely overcome or eliminated, but their negative impact on knowledge sharing can be mitigated or minimised. The aim of the present study is to identify and rank knowledge sharing barriers in Bulgarian companies based on a literature review and conducting an empirical study. The research revealed three main barriers to knowledge sharing – lack of time, inadequate organisational culture and lack of trust. At the same time, some of the most frequently discussed barriers to knowledge sharing in the literature were not highly rated by respondents. The results of the research can serve business management as a guide in building a knowledge management system and an environment in which people will be able to freely share their knowledge.

Keywords: knowledge; knowledge management; knowledge sharing; knowledge sharing barriers

1. Introduction

We live in a competitive world where both personal success and organisational prosperity depend on knowledge, the ability to absorb knowledge and generate new knowledge, and the ability of its possessor to properly use/activate it in performing a particular activity or taking certain decision. Today, organisations well understand that success depends on “the skills, knowledge and creativity of people” (Ivanov and Molhova 2023) and that they must concentrate attention and efforts on their key resource – knowledge, and take actions for its proper management.

Knowledge management (KM) is associated with producing, sharing, updating and using knowledge (Al-Qahtani and Aksoy 2022), it is a conscious and purposeful process of identifying the valuable knowledge of people in the organisation, made available to those who need it and is used to create new knowledge, to solve problems or to make better decisions (Jones and Mahon, 2018). A primary and ongoing task of KM is to transform the most valuable knowledge of employees into knowledge easily accessible to everyone else in the organisation. The knowledge sharing (KS) process plays a major role in achieving the task. The knowledge sharing process is the most important, the key process in the KM system. Riege (2005, p.18) called knowledge sharing “the corner-stone of many organisations’ knowledge-management (KM) strategy”. According to Cabrera & Cabrera (2002), without KS the company could not achieve its goals and competitiveness. In fact, it can definitely be argued that if there are no KS processes in an organisation, if there is no appropriate culture and atmosphere to encourage knowledge sharing, one cannot speak of KM. Of course, KS within the organisation should not become an end in itself. It must be thoroughly considered and thought out, well organised and clearly addressed so that the knowledge reaches the right person. And one more thing - the shared and acquired knowledge must be used in the work process. In the conditions of extraordinary dynamism and intensity of the world today, products, technologies and ideas quickly lose their relevance. The same is true of knowledge. Today, it become obsolete faster than ever. Therefore, in order to become a force, a significant factor of production, the shared and acquired knowledge must be used. If the person, whether the original possessor or receiver of knowledge, does not use that knowledge in work/decision making, the knowledge loses its value. Conversely, the more people use a certain shared knowledge, the more the value of that knowledge increases.

Knowledge sharing, although a key process for achieving business success and competitive advantage, does not always go smoothly or as company managers would like. The factors that hinder the progress of KS, also called knowledge sharing barriers (KSBs), are extremely diverse and sometimes difficult to grasp. Their existence and “weight” are highly context dependent. Most of them cannot be completely overcome or eliminated, but their negative impact on the course of KS can be mitigated or minimised. The importance and relevance of KSBs for the effective running of the KS process and, accordingly, for the success of KM in the organisation, predetermine the interest of researchers in these barriers. Since the turn of the century, many publications dealing with the problem of KSBs have appeared. Unfortunately, in Bulgaria the topic of knowledge management and in particular knowledge sharing does not enjoy interest from scientists and practitioners. A careful search for publications by Bulgarian authors on the topic was unsuccessful. From this point of view, the present study will fill this specific gap in the Bulgarian scientific space and can be considered as an attempt to provoke the interest of the

Bulgarian academic and business circles towards this theme. The aim of the present study is to identify and rank the main knowledge sharing barriers in Bulgarian companies based on a literature review and conducting an empirical study. The results of the research can serve business management as a guide in building a knowledge management system and an environment in which people will be able to freely share their knowledge.

2. Knowledge as a resource and object of management

For a proper understanding of the KS process, as well as the barriers to it, it is necessary to clarify the concept of “knowledge”, the main types of knowledge in the organisation and their characteristics. Attempts to define knowledge date back to antiquity (Plato, Aristotle). From a philosophical point of view, knowledge is related to truth, faith, wisdom. From the organisation’s point of view, it is an asset, albeit an intangible one, that contributes to the more efficient use of other assets and provides the company with a competitive advantage.

Data, information and knowledge are interrelated concepts and are in a certain hierarchy. Although related, they have different meanings and sometimes lead to confusion, as many people having difficulty distinguishing between them, and especially between data and information and between information and knowledge, and often seeing them as synonyms. The lowest position in the hierarchy is occupied by data. They are unsystematised facts existing in various forms (numbers, sounds, words, images), usable or unusable. They are the result of measurements, observations or events that have occurred. Data, by themselves and out of context, have no meaning and no value. They are a type of “raw information”. The volume of data generated globally every day is colossal. Their collection, arrangement, processing, systematisation, understanding, analysis, interpretation and inclusion in a certain context raise them to the next position in the hierarchy, i.e. turn them into information. Any mature person or organisation has a huge volume of information coming from different sources and existing in different forms. The targeted use of this information to perform a specific activity or to make a decision is knowledge. Knowledge always exists in a specific context and underlies the human ability to perform specific, purposeful actions or make decisions. People use their knowledge in their daily life or at work, and companies use it in the implementation of business processes, since every business process is based on knowledge. Knowledge is not homogeneous, but rather broad, complex, rich and multidimensional concept and is far from being associated only with contextualised and interpreted information, but also with experience, intuition, skills, experiences, understanding, insight.

The knowledge of an organisation is of two main types – explicit knowledge and tacit knowledge. They complement each other, as both types of knowledge are important to the organisation and the understanding of one type is not complete without the understanding of the other. Tacit knowledge, although difficult, can be

made explicit, and the accumulation of explicit knowledge forms the basis of tacit knowledge. Distinguishing them is necessary to understand the meaning, goals and problems of the knowledge sharing process, as well as the barriers to it. As noted by Ipe (2003), these two types of knowledge affect the way knowledge is shared within the company. They also affect the management of the KS process – when sharing tacit knowledge, the company should pay more attention to human relationships and remove obstacles to these relationships. The sharing of tacit knowledge requires physical proximity and building trust among employees within units of the company and among them.

Explicit knowledge is clear in our minds and easy to express, understand, record, process, store and share. It exists in various forms within the organisation and can be easily networked, stored and distributed. Formulated and expressed in writing, it is accessible to many employees in the organisation. Explicit knowledge can be spread within the company or even transferred outside its boundaries.

Tacit knowledge is hidden deep in people's heads and is difficult to express in full. It is contextual, situational, i.e. you may never know you have knowledge of innovation or solutions unless a problem arises or you are asked about it (Anyacho 2021). Tacit knowledge is sticky in nature (Szulanski 1996). This "stickiness" makes it difficult to capture, express, extract, describe or explain, making sharing more difficult and increasing the cost, when the source and receiver of knowledge work in different contexts and are engaged in different practices, it is "a natural impediment to the successful sharing of knowledge between individuals in organizations" (Ipe 2003, p. 344). Unlike explicit knowledge, tacit knowledge is impossible to transfer from one company to another without its owner, making it unique and difficult for competitors to access. Tacit knowledge occurs at both the individual and collective levels. An individual can acquire tacit knowledge inside and outside the company. Although both types of knowledge are important for the functioning of any organisation, researchers agree that tacit knowledge is more valuable to companies than explicit knowledge, "because tacit knowledge provides context for people, places, ideas, and experiences" (Anyacho 2021, p. 266) and is crucial for survival and long-term success (Jones and Mahon, 2018). The real challenge facing companies today is managing tacit knowledge, as some employees are reluctant to share their knowledge.

3. Literature review

Of all the processes that form KM, knowledge sharing is the most widely and thoroughly studied process. Zbucheá & Leon (2015) noted that over the past thirty years, the process of knowledge sharing has captured research attention. KS is one of the most researched topics in the literature devoted to KM (Hislop, 2010), and according to Intezari et al. (2017) more than half of the articles related to KM are focused on the KS problem.

Knowledge sharing is the activity through which knowledge is exchanged between people and organisations (Jones and Mahon, 2018). Bartol & Srivastava (2002) understood KS as an individual's intention to share relevant information, recommendation and relevant expertise with another individual to achieve the task objective. Rivera-Vazquez et al. (2009, p. 257) defined KS as a process "where individuals mutually exchange both tacit and explicit knowledge, and jointly create a new knowledge", and this process is "essential in translating individual knowledge into organizational knowledge". Ipe (2003, p. 341) defined KS as "the act of making knowledge available to others within the organization".

An important role for the success of KM, and in particular the KS process, plays the correct identification and recognition of knowledge sharing barriers (KSBs), regardless of whether the latter are a natural part of the organisation's culture or not (Riege 2005). Broadly speaking, KSBs are those factors that hinder the KS process. They are of a different nature and in each organisation they manifest in a different way depending on the individual characteristics of the employees, the organisational structure and culture, the relevance and adequacy of the ICTs used, etc. Over the past quarter century, KSBs have been the subject of numerous studies and empirical studies. For instance, Riege's (2005) triad of KSBs has received well-deserved attention and recognition and has inspired more than one researcher. In an extensive review, he presents more than thirty potential KSBs arising at the individual (lack of time, poor communication, lack of trust, gender, age, ethnic, etc. differences), organisational (lack of incentives, inadequate organisational culture, lack of leadership, hierarchical structure, etc.) and technological level (reluctance to use IT systems due to lack of knowledge and experience with them, lack of compatibility between different IT systems and processes, etc.). Certainly, Riege makes the caveat that many of the barriers, although presented separately, are actually intertwined, and different combinations of KSBs can be found in organisations.

Ardichvili (2008) divided KSBs into interpersonal (e.g., fear of criticism, fear of misleading others), procedural (e.g., lack of clarity on best ways of sharing; lack of clarity on what knowledge cannot be shared due to security and confidentiality considerations), technological (lack of technological aptitude or acceptance of technology as means of communication) and cultural (in-group orientation, saving face, modesty, power distance). Khakpour et al. (2009) presented KS as a communication model that includes source of knowledge, knowledge content, communication channel, the receiver of knowledge, feedback and culture and based on this model consider KSBs related to each of the above mentioned elements (factors). As a result of a literature review, Sharma et al. (2012) found over twenty KSBs (e.g., lack of transparent reward system, lack of organisational culture, emphasis on individual rather than team, fear of job security, reluctance to use IT system, lack of trust).

Research has also been conducted on KSBs in specific sectors. For example, studying the barriers to sharing tacit knowledge in the field of franchising, Cumberland & Githens (2012) indicated five main barriers: trust, maturation, communication, competition and culture. Reviewing research on KSBs in higher education in a number of countries, Karim & Majid (2018) concluded that there are multiple KSBs that hinder the success of the KS process; barriers to KS reduce the propensity of individuals to share knowledge; the lack of knowledge sharing is more pronounced in developing countries and especially in universities in Asian countries. While each university and country has its own specifics, the review identifies some of the most common KSBs – tendency to withhold and hide knowledge, lack of trust, time, motivation, free and open communication, rewards, KS culture, support from the side of the management, poor knowledge of ICT, etc. Also as a result of a literature review covering publications dealing with the topic of KSBs and adapted for non-academic staff of universities, the findings made by Ayodele et al. (2016) KSBs do not differ significantly from those found above by Karim & Majid (2018). Żywiołek et al. (2021) examined KSBs in the field of information security. The results are interesting as the perspectives of both employees and managers are presented. Examining KSBs in a non-profit organisation in the field of social services (Scottish Autism) Bloice & Burnett (2016) highlighted the need to revise KSBs identified in the literature to reflect contexts outside the private sector. The authors used Riege's analytical framework as a basis, and along with general barriers, they identified other barriers specific to the organisation that do not fit neatly into existing definitions of KSBs. In the study by Karagoz et al. (2020) on KSBs in Australian public sector ICT projects, only 2 of the 17 individual barriers from Riege's theoretical framework are confirmed. The results of these and other similar studies are a good reason to rethink the barriers – Riege's popular triad of KSBs can serve as a good basis for conducting empirical studies, but the KSBs need to be revised depending on the specifics and context of the study. Yao et al. (2007) found that KS has some unique characteristics in the public sector context. In the conditions of globalisation, language and religious barriers, geographical distance, peculiarities of national cultures, mentality, etc. are gaining increasing importance. For instance, Anwar et al. (2019) presented a systematic review of 42 studies of KSBs from 2010 to 2017 and, in addition to known individual, organisational, technological, and cultural barriers, added geographic KSBs.

4. Methodology

To achieve the aim of the present study, KSBs are defined, firstly, based on a thorough literature review, and, secondly, taking into account the results and findings of the author's previous empirical study on the topic of knowledge management in Bulgarian enterprises and in particular for knowledge sharing. The following knowledge sharing barriers were defined: Poor relationships; Lack of time; Lack

of trust; Inadequate organisational culture; Lack of support from management; Lack of rewards; I am afraid of losing my relevance and value to the company; Knowledge sharing is “outside the scope” of my duties; I spent a lot of time and effort to gain knowledge and I would not share it with anyone else; I do not know what kind of knowledge anyone needs.

It can be seen that the emphasis is mainly on KSBs at the individual level as well as on social, cultural and organisational factors. Guided by the thesis that the human is the main factor in the KS process, technological barriers were left out of the scope of the study. This decision to a certain extent also corresponds with the trend observed in recent years for the focus of researchers to be placed more on problems related to people and less on technological problems. This trend was noticed long ago by Hislop (2010), who years later noted that “human, social and cultural factors are often key in shaping the success or failure of knowledge management initiatives” (Hislop et al. 2018, p. 177). Almost at the same time, Al Hawamdeh & Al-edenat (2019) in their study found that technological KSBs, unlike individual and especially organisational ones, have a neutral or weak influence on KS.

An online questionnaire survey was conducted to assess the factors hindering knowledge sharing. It was carried out for the period 16 February 2023 – 17 March 2023 with the assistance of the German-Bulgarian Chamber of Industry and Commerce (GBCIC). The survey cards, together with the accompanying letter explaining the nature and objectives of the research and indicating the deadline for completing the survey, were sent to 420 companies operating in Bulgaria and included in the GBCIC database. The returned fully completed questionnaires are 57 (13,57 %).

For the purposes of the present study, a questionnaire was developed, structured in 4 main sections (general information about the company; knowledge sharing in the company; general information about the respondent; knowledge sharing – barriers and motivating factors). This approach made it possible to gather more information about the running of the knowledge sharing process in the studied enterprises, although this article only focuses on the factors hindering knowledge sharing. Respondents were asked to rate the indicated KSBs on a 5-point Likert scale where responses ranged from 1 (strongly disagreed) to 5 (strongly agreed). Calculating an average score allows KSBs to be ranked according to the degree of influence they have on the knowledge sharing process in the surveyed companies.

5. Results and discussion

The companies that responded were from diverse industries and from all size groups – large (31,58%), medium (31,58%), small (28,07%) and micro (8,77%) enterprises. They have different origin of the capital – Bulgarian (40,35%), foreign (40,35%) and mixed (19,30%), and more than half (52,63%) are part of a larger foreign organisation.

The respondents are managers (45,61%), as well as employed in the administrative (35,09%) and production (19,30%) units of the companies. Two thirds of them (66,67%) are female. With the exception of one, all respondents have a higher education, and 16 of them (28,07%) have more than one higher education or a doctoral degree (PhD).

Companies experience both a shortage of personnel with the knowledge required for business (Fig.1), and difficulties in securing such personnel (Fig.2).

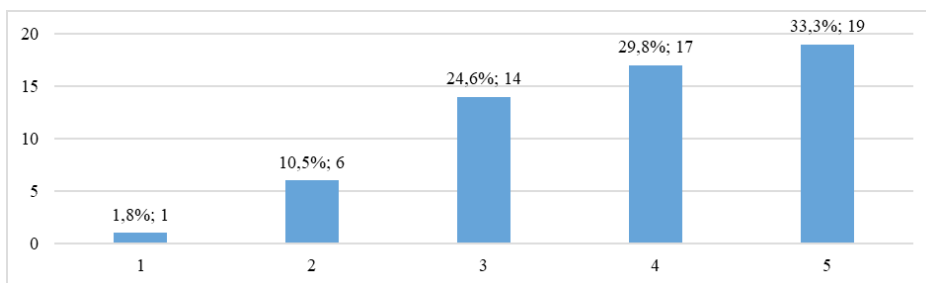


Figure 1. Lack of personnel with the necessary knowledge
(the scale is from 1 to 5 – from low to high)

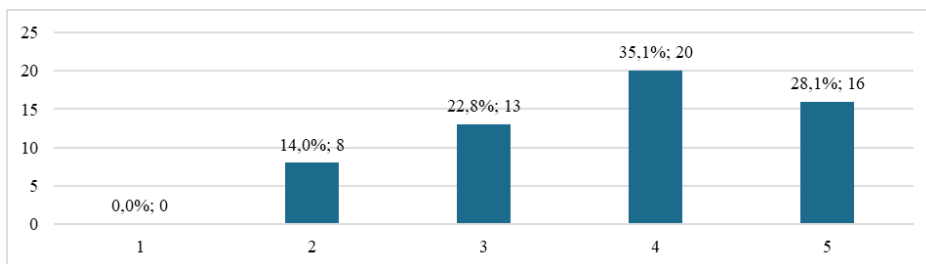


Figure 2. Difficulties in securing personnel with the necessary knowledge
(the scale is from 1 to 5 – from low to high)

In Table 1, the average scores given by the respondents to the specified KSBs are presented in descending order. While in response to other questions on the survey card respondents took the opportunity to add their own answer/s, on the question of KSBs no such case was reported, i.e. they rated only the pre-specified answers.

The study confirmed the influence of the mentioned factors on the knowledge sharing process. It is most strongly expressed in three of the potential KSBs – “Lack of time”, “Inadequate organizational culture” and “Lack of trust”. Although less pronounced, not knowing which colleague needs what knowledge (“I do not

know what kind of knowledge anyone needs”) also hinders effective knowledge sharing. This KSB is to a certain extent related to the first-ranked barrier “Lack of time”, as identifying the people in need of specific knowledge is also a time-consuming process. The present study did not aim to establish the reasons for the lack of time to share knowledge. They are of a different nature, as the lack of time for KS may be due to the nature of the work performed, an increase in the volume of work or the need to train new staff (Bloice and Burnett 2016). Employees, due to the high intensity and stress of work, concentrate their efforts and attention on their main duties and understandably cannot spare time for “additional” activities such as knowledge sharing. While all respondents are aware of the benefits of knowledge sharing and support the statement “Knowledge sharing improves unit/company performance” (22,81% – agree, and the rest 77,19% – strongly agree), the time constraints they experience hinder this process.

Table 1. Knowledge sharing barriers presented in descending order

Knowledge Sharing Barriers	Mean
Lack of time	4.5088
Inadequate organisational culture	4.3158
Lack of trust	4.2281
I do not know what kind of knowledge anyone needs	3.6316
Poor relationships	3.0351
Lack of rewards	2.9824
I am afraid of losing my relevance and value to the company	2.9473
Lack of support from management	2.9123
Knowledge sharing is „outside the scope“ of my duties	2.8947
I spent a lot of time and effort to gain knowledge and I would not share it with anyone else	2.7193

The study revealed problems in the trust relations among the workers in the studied enterprises. The degree to which people are willing to disclose their knowledge to their colleagues is largely determined by the level of trust. Trust is a must for people to share their knowledge. Building trust among employees is especially important when sharing tacit knowledge. Trust can be seen as both a barrier and a factor promoting knowledge sharing. A lack of trust dooms any KS initiative to failure, as trust underlies the willingness to communicate and is critical to team knowledge sharing (Mooradian et al. 2006). It is the key enabling factor between the individual and the organisation (Bartol and Srivastava 2002). The results of an empirical study conducted by Rahman et al. (2018) among non-academic staff of Malaysian higher

education institutions also showed that knowledge sharing behaviour is influenced by the degree of trust. The relationship between trust and the propensity to share knowledge is also highlighted by other researchers (Casimir et al. 2012; Kuo 2012). Hislop et al. (2018) believed that trust is based on an expectation of reciprocity or mutual benefit. This thesis was confirmed by the results of the present study. To the question “When sharing knowledge, do you expect reciprocity”, the average rating of the answers (on a 5-point Likert scale) is positive (3.6316).

The third most influential factor is “Inadequate organizational culture”. Sharing knowledge is a difficult task in an organisation where an adequate KS culture has not been built. Organisational culture is seen as a barrier when it does not support knowledge sharing or when there are different subcultures in the separate units of the organisation. These subcultures are in themselves a natural obstacle to effective communication between units, and communication is at the heart of knowledge sharing.

At the same time, the study did not confirm the strong influence of two of the most frequently discussed KSBs in the literature. The first of these is “Lack of rewards”. According to Al-Qahtani & Aksoy (2022), knowledge sharing, because of its unusualness, requires incentives and encouragement, and compensating employees affects their willingness to share their knowledge. Bartol & Srivastava (2002) argued that rewards and incentives (profit sharing, employee share options) are useful for improving knowledge sharing within teams and, respectively, between work units. However, the present study did not confirm that rewards play an important role in motivating employees to share their knowledge. In some cases, people act unselfishly by sharing knowledge without receiving any rewards. For example, some may share knowledge in order to establish themselves as experts and others want to share their experience and tutor new employees (Ardichvili 2008). We should note that in the current study, respondents rejected “Lack of rewards” as a barrier to knowledge sharing twice – first, directly, and second, indirectly, by giving a low rating to rewards as a motivating KS factor. In addition, the statement “Knowledge sharing is ‘outside’ the scope of my duties” was also not highly rated by respondents, meaning that employees do not expect to receive “something more” as a reward for participating in the knowledge sharing process.

“Knowledge is power, why share it?” is identified as one of the first reasons for reluctance to share knowledge (Ardichvili 2008, p. 543). Indeed, when viewed in the context of Francis Bacon’s popular phrase “Knowledge is a power”, people’s willingness to share their knowledge diminishes. According to Sterev (2023) the role of the “intellectual properties’ owner” become more and more important recently. Many employees see their knowledge as a competitive advantage, power over others, or simply as a kind of “insurance” on their jobs and are reluctant to share it. According to Serenko & Bontis (2016), one of the reasons why people hide their knowledge in their workplaces is the feeling of job insecurity. Our research

showed that employees are reluctant to “store” knowledge within themselves and do not think that sharing knowledge will make them less relevant and valuable to the company, which in turn will threaten their job security.

6. Conclusion

The present research revealed that employees in the studied enterprises, organised or spontaneous, formal or informal, share their knowledge. The respondents rated as the most significant three factors negatively affecting the knowledge sharing process in their companies – lack of time, inadequate organizational culture and lack of trust. Certainly, the results of this study are far from applicable to all Bulgarian enterprises, that would be too pretentious. Furthermore, KSBs are not static, even within a company they undergo changes over time depending on the phase of the company’s life cycle, the implemented policy in the field of knowledge management and its results, changes in the number and quality of personnel, changes in technologies supporting knowledge sharing, etc. However, these results can be used by business management as a guide in building a knowledge management system and in particular in managing the knowledge sharing process in the company.

Based on the thesis that knowledge cannot be managed, since we do not have control over people’s minds, but we can control and manage the environment, the efforts of companies should be directed towards building an appropriate environment and adequate to the objectives of KM sharing culture. This will lead to mitigating and minimising the influence of the factors hindering the effective running of the KS process and will allow maximising the benefit from the tacit and explicit knowledge existing in the company. It should not be forgotten that barriers impeding knowledge sharing exist and will always exist.

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