

Challenges of Implementing Knowledge Management at the Workplace: A Systematic Literature Review

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Abstract: Despite emerging as a progressive academic discipline, very few studies have so far been conducted on the challenges of implementing knowledge management (KM). Addressing this gap, the present study aims to identify the major challenges organizations typically confront while managing knowledge within the workforce. The study adopts a systematic literature review as a methodical approach to synthesize and evaluate accessible evidence relating to this research aim. A thorough search has been performed across academic databases and relevant journals, resulting in a selection of 54 pertinent research articles and review papers published from 1990 until early 2024, which are then critically reviewed to determine the key challenges. Based on the findings, it can be argued that transparentizing the KM concept; attaining leadership commitment and support; securing adequate managerial assistance; establishing robust technological base; overcoming employee resistance; and assuring effective time management are the major challenges of KM implementation. This review contributes to the literature by exploring the potential complexities involved in KM practices. It might also guide the practitioners in proactively strategizing to meet the challenges in an effective manner.

Keywords: knowledge management, implementation, challenges.

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1. Introduction

In today's global business world, knowledge has been widely considered as a key strategic asset for any organization to gain a competitive edge (Nonaka et al. 2000). Knowledge is a rudimentary factor by managing and applying which an organization can offer innovative products to the market (Gupta et al. 2000). Mining this valuable intangible asset can greatly contribute to the daily operations of an organization (Gupta et al. 2000), and thus knowledge management (KM) has become a common business practice (Zack et al. 2009). Managing 'corporate knowledge' which is viewed as the lifeblood of an enterprise has now become a formal and routine practice since technological progression has made it feasible for companies to gather, retrieve, and disseminate vast amounts of data throughout the

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organization in an efficient manner (Sharp 2003). Such KM practices have significant implications on effective organizational functioning and achieving expected return on Investment (ROI) in turn (Sharp 2003). Scholars therefore firmly argued that KM practices are indispensable for an organization to sustain and remain viable in the present competitive market (Asrar-ul-Haq and Anwar 2016). These practices are now broadly executed by managers of different types of organizations to enhance their productivity, effectiveness, and competitiveness (Schultze and Leidner 2002). Looking at the history, it can be seen that KM practices have particularly spawned extensive pursuit since Drucker (1999) contended that tangible assets are replaced by knowledge as the prime driver of economic advancement.

However, KM has not only attracted great interest among practitioners but also within the research community (Nonaka and Takeuchi 1995; Davenport and Prusak 1998; Hall and Paradice 2005; Massingham and Massingham 2014), though its integration process into the mainstream academia was somewhat sluggish. KM emerged as a progressive academic discipline in the early 1990s and from then several studies were performed by academics and scholars particularly in developed countries on diverse issues, trends, aspects, and dimensions of KM. In most of the studies conducted so far on KM, authors used the knowledge-based-view (KBV) of the firm as the foundational theory underpinning their research since KBV provides a theoretical base for KM (Grant 1996; Grant 1997; Storey and Barnett 2000; Kiessling et al. 2009). The KBV of the firm primarily suggests that firm value can be created through KM (Kiessling et al. 2009). The KBV also assumes that effective application of knowledge through KM implementation results in positive performance outcomes in terms of workforce development, product improvement, and firm innovation (Kiessling et al. 2009). Idrees et al. (2023) uttered that effective, efficient, and innovative performance of an organization lies largely in KM. However, implementing KM can pose onerous challenges. Findings of empirical studies indicate that while many organizations around the world have effectively adopted KM principles, the KM execution has not always been successful in every case (Sharp 2003). It is evident from the existent literature that implementing KM at the workplace is never a simple and easy task to accomplish (McCormick et al. 1999; Damodaran and Olphert 2000; Gupta et al. 2000; Sharp 2003; Akhavan et al. 2005; Massingham and Massingham 2014; Asrar-ul-Haq and Anwar 2016; Lo et al. 2021), however, an integrative approach for determining the major challenges of KM implementation is missing, which motivates this study for a more critical exploration. Based on a systematic review of the extant literature, the present study intends to identify and explain the key challenges that organizations usually face while implementing KM, regardless of any particular context. One such study was previously conducted by Kalkan (2008) on identifying KM challenges but from a specific global

business perspective. Asrar-ul-Haq and Anwar (2016) in their study also endeavored to examine several factors causing hindrances to KM practices, but they did not explicitly label and categorize them as challenges. This review paper aims to contribute to the KM literature by overtly demonstrating the major challenges of KM practices from a wider theoretical as well as practical perspective, that might eventually facilitate both the academics and practitioners in addressing and overcoming the potential complexities involved in KM execution.

2. Methodology

The present study adopts a systematic review methodology for analyzing, summarizing, and drawing inferences (Tranfield et al. 2003) from the extant literature relating to knowledge management. Following the work of Yong et al. (2020), four steps were conducted in this study to select 54 relevant articles for a critical review. This approach encompasses determining the time period, choosing appropriate online databases, selecting relevant articles, and classifying articles (Yong et al. 2020), which is illustrated in the following figure.

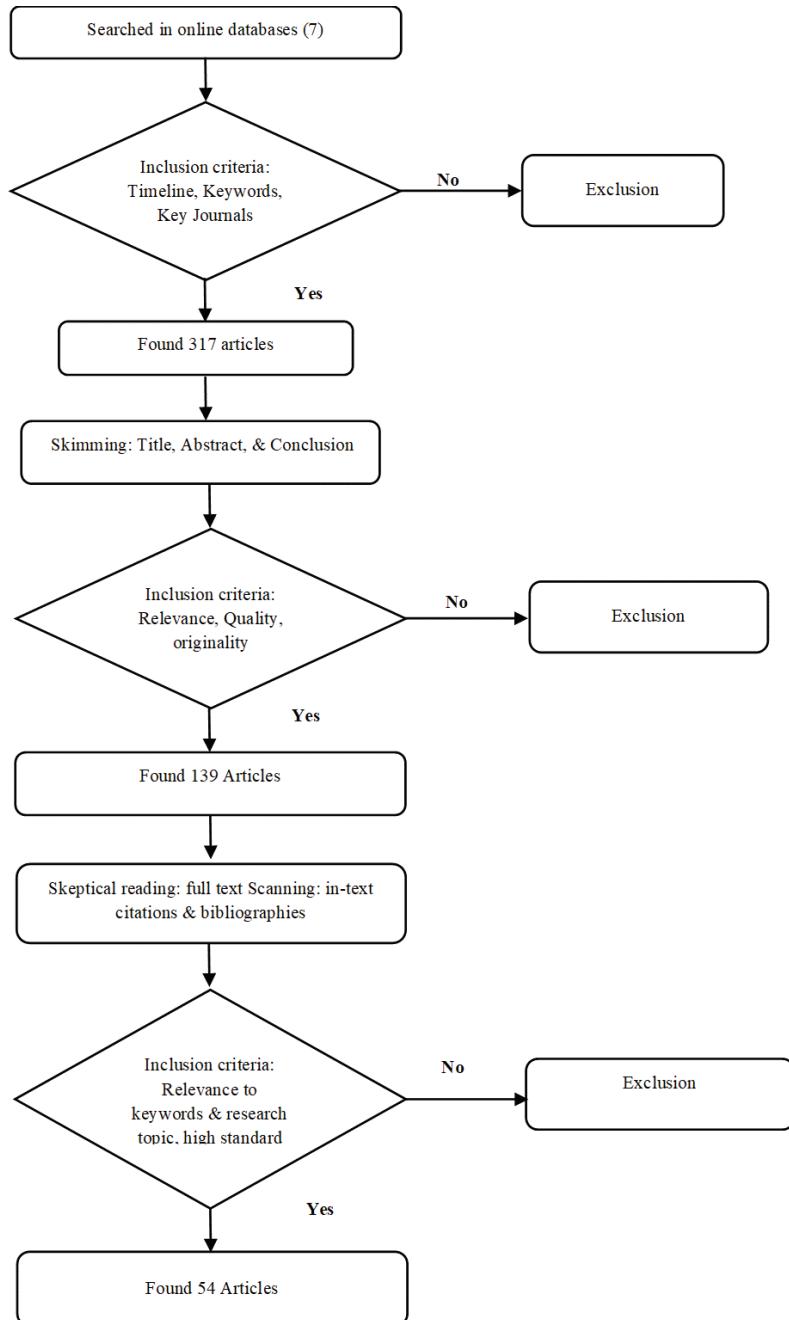


Figure 1: Outline of article selection process

2.1 Time horizon for paper selection: The publication period considered for this study to review and assess the journal papers was between 1990 and 2024. The author chose the year 1990 as the beginning point to collect pertinent secondary data since KM as a distinct discipline gained recognition both in academia and industry at this time. Moreover, the starting of 2024 was chosen as the ending point to incorporate the most recent publications of peer reviewed academic journals so that fresh thoughts and insights concerning KM can be embraced into this paper.

2.2 Database selection: To find recent and relevant literature on KM specifically published in English language prevalent online databases including Emerald Insight, Taylor & Francis, Wiley InterScience, Elsevier, ScienceDirect, SpringerLink, and SAGE publications were used in this study. Though the author tried the level best to accumulate every single paper relating to the research topic, it cannot however be claimed that these databases are comprehensive or all-encompassing.

2.3 Article selection: The standard procedure of conducting a systematic review as illustrated in Figure 1 and explained in the subsequent narrative was rigorously followed for this study. The author at first identified the keywords as search criteria in electronic databases. The keywords encompassed “knowledge management”, “knowledge creation”, “knowledge sharing”, “knowledge transfer”, “challenges”, and “barriers”. Each article containing either of these search terms published in leading academic journals by the above-mentioned electronic databases between 1990 and 2024 was considered. The outcome of this preliminary step included 317 articles. In the subsequent phase, the author skimmed through the title, abstract, and conclusion of each article to assess their quality, originality, as well as relevance to the theme of this study. The author deliberately eliminated those articles which were found to be irrelevant in order to confirm coherent focus on the research topic and to lower any form of predisposition. Moreover, no single paper was counted twice in the analysis process (Rashman et al. 2009) and thereby it resulted in 139 articles. Then the author skeptically read through the text of these papers including in-text citations and bibliographies. At this phase, the relevance of the articles and their overall standards were critically judged which resulted in 54 articles for a systematic review on the chosen research topic.

2.4 Article categorization: A classification scheme was developed at this stage after finding 54 relevant, original, and high-standard published articles. To organize the chosen databases of these publications, the author created a bibliographical list and an Excel spreadsheet file. The findings were then analyzed to determine the major challenges of KM implementation. However, the author has also consulted with 11 books and 2 conference

papers in this regard. Based on the review findings, six major themes relating to the challenges of KM have been identified, which are discussed in subsection 3.2.

3. Literature review

3.1 Conceptualization of knowledge management

Knowledge is classically viewed as the “justified true belief” (Audi 1998). It is the meaning made by human mind (Bhatt 2001; Lang 2001). Knowledge can be defined as the outcome of human reflection and experience (Roth 2003) that can be categorized into two categories: explicit and tacit knowledge (Polanyi 1966; Nonaka and Takeuchi 1995; Gupta et al. 2000). Explicit knowledge can be referred to as ‘know-what’ (Brown and Duguid 1998), while tacit knowledge implies ‘know-how’ which is however always complicated to explain (Brown and Duguid 1998). Explicit knowledge that typically includes policies and procedures, data, software, reports etc. can be easily articulated, codified, captured, documented, and shared in diverse formats (Gupta et al. 2000; Kalkan 2008). In contrast, tacit knowledge including attitudes, values, beliefs, skills, experiences etc. is implicit, subjective, and obscured in nature (Gupta et al. 2000; McInerney 2002; Botha et al., 2008). Since an individual cannot easily articulate this type of knowledge, it is complex to capture, codify, express, adopt, and share (Bhatt 2000; Kalkan 2008).

From the organizational perspective, integrating these two different types of knowledge together is imperative for smooth organizational functioning, that requires effective KM practices. In fact, the ultimate purpose of KM practices is to convert tacit knowledge into explicit knowledge so that tacit knowledge can be easily and meaningfully disseminated throughout the organization (Gupta et al. 2000). KM can hence be conceptualized as an art of transmuting information and other intellectual assets into persistent value for the customers and employees of an organization. However, Davenport (1994) defined KM as a process of capturing, spreading, and using knowledge effectively. Demir et al. (2023) offered a more comprehensive view on KM by explaining it as the systematic management of every single activity and process relating to the generation and development, creation and storage, communication and sharing, and application processes that enhance the organizational success. From this definition it can be understood that KM has a multi-faceted structure, making it more complex and challenging to implement at the workplace (Kalkan 2008) that subsequently impedes an organization in achieving its business objectives.

3.2 Challenges of knowledge management

Table: Major findings relating to KM challenges (themes)

Theme (Challenge)	Findings	Chief Contributors	Sources
Ambiguity	<p>KM is a highly complex process</p> <p>Assessing investment requirement for KM and ROI is extremely difficult</p> <p>Knowledge is inseparable from the person having that;</p> <p>Knowledge is intangible and incalculable asset;</p> <p>Measurement of ROI in KM is nebulous;</p> <p>KM impacts on performance and profitability is not conclusive.</p> <p>Managers working for knowledge-intensive organizations discard the term 'KM' as they feel it does not express the meaning appropriately.</p>	<p>Storey and Barnett (2000)</p> <p>Sharp (2003)</p> <p>Massingham and Massingham (2014)</p> <p>Nakash and Bouhnik (2024)</p>	<p>Journal of Knowledge Management</p> <p>Information Systems Management</p> <p>Journal of Knowledge Management</p> <p>VINE Journal of Information and Knowledge Management Systems</p>
Obstructive leadership	<p>A leader can trace the knowledge source and establish a support system for effective KM practice;</p> <p>Instigating employees for KM practice is difficult</p>	Gupta et al. (2000)	Industrial Management & Data Systems

	<p>due to the presence of obstructive leadership</p> <p>Leadership support is must for KM implementation</p> <p>Poor leadership practice is a major barrier to KM practice</p> <p>Leader has the biggest role to play in KM execution;</p> <p>Absence of dynamic leadership impedes KM practices</p> <p>Without leadership support, KM initiative fails</p>	<p>Sharp (2003)</p> <p>Qureshi and Evans (2015)</p> <p>Asrar-ul-Haq and Anwar (2016)</p> <p>Lo et al. (2021)</p>	<p>Information Systems Management</p> <p>Journal of Knowledge Management</p> <p>Cogent Business & Management</p> <p>Journal of Knowledge Management</p>
<p>Inadequate top management support</p>	<p>Knowledge acquisition and diffusion depends on top management support</p> <p>Senior managers' commitment is pivotal for KM execution</p> <p>Top managers support can positively impact knowledge creation and transfer</p> <p>Executives' noncooperation hinders knowledge sharing</p> <p>Top management support and commitment is a vital KM enabler</p>	<p>Gupta et al. (2000)</p> <p>Anggia et al. (2013)</p> <p>Cavaliere and Lombardi (2015)</p> <p>Asrar-ul-Haq and Anwar (2016)</p> <p>Ghasemi and Valmohammadi (2018)</p>	<p>Industrial Management & Data Systems</p> <p>International Conference on Advanced Computer Science and Information Systems</p> <p>Journal of Knowledge Management</p> <p>Cogent Business & Management</p> <p>Kybernetes</p>

	<p>Top management support and commitment is a vital KM enabler</p> <p>Senior managers often resist KM efforts for many reasons</p>	<p>Yip and Ng (2019)</p> <p>Lo et al. (2021)</p>	<p>International Journal of Knowledge and Learning</p> <p>Journal of Knowledge Management</p>
Lack of technological support	<p>Role of IT is crucial for effective engagement in KM</p> <p>Without IT support, integrating communication technology is not possible</p> <p>Knowledge sharing is impossible without modern technology adoption</p> <p>Poor IT setup cannot assure employees' access to explicit knowledge sources</p> <p>Technological changes are radical in nature</p> <p>Lack of technological support hinders the KM process</p> <p>Limited IT capacity is a significant constraint to KM</p> <p>Inadequate technological support is a critical obstacle to KM practice</p> <p>Capturing and disseminating information throughout the organization is a critical challenge</p>	<p>Demarest (1997)</p> <p>McCampbell et al. (1999)</p> <p>Song (2001)</p> <p>Kalkan (2008)</p> <p>Gururajan and Fink (2010)</p> <p>Ranjbarfard et al. (2014)</p> <p>Qureshi and Evans (2015)</p> <p>Asrar-ul-Haq and Anwar (2016)</p> <p>Idrees et al. (2023)</p>	<p>Long Range Planning</p> <p>Journal of Knowledge Management</p> <p>The Journal of Computer Information Systems</p> <p>Business Process Management Journal</p> <p>Journal of Knowledge Management</p> <p>Journal of Knowledge Management</p> <p>Journal of Knowledge Management</p> <p>Cogent Business & Management</p> <p>Journal of Innovation & Knowledge</p>

Employee resistance	<p>Employees' assumption that career progression doesn't depend on knowledge sharing with coworkers but rather on their own expertise</p> <p>Fear of losing competitiveness</p> <p>Trust-based relation is essential for KM which is difficult to establish</p> <p>Reluctance to accept KM system</p>	<p>Alavi and Leidner (2001)</p> <p>Stenmark (2002)</p> <p>Holste and Fields (2010)</p> <p>Li et al. (2016)</p>	<p>MIS Quarterly</p> <p>Thomson Learning</p> <p>Journal of Knowledge Management</p> <p>Computers in Human Behavior</p>
Time limitations	<p>Small or medium enterprises cannot afford time</p> <p>Tracing knowledge source takes time</p> <p>Sharing tacit knowledge needs longer time</p> <p>Time needed to learn knowledge is viewed as a hidden cost</p> <p>Sharing tacit knowledge needs longer time</p> <p>Busy working schedule of employees</p> <p>Knowledge access time needs to be reduced</p> <p>Time pressure is a serious deterrent to KM</p>	<p>McCormick et al. (1999)</p> <p>Gupta et al. (2000)</p> <p>Leseure and Brookes (2004)</p> <p>Powell (2007)</p> <p>Yang and Fran (2009)</p> <p>Gururajan and Fink (2010)</p> <p>Massingham and Massingham (2014)</p> <p>Qureshi and Evans (2015)</p>	<p>Journal of Knowledge Management</p> <p>Industrial Management & Data Systems</p> <p>Journal of Knowledge Management</p> <p>Information Today, Inc.</p> <p>International Journal of Information Management</p> <p>Journal of Knowledge Management</p> <p>Journal of Knowledge Management</p> <p>Journal of Knowledge Management</p>

	Knowledge sharing and transfer is time consuming Switching to KM system involves huge time cost (TC)	Asrar-ul-Haq and Anwar (2016) Li et al. (2016)	Cogent Business & Management Computers in Human Behavior
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Discussion on the key challenges:

3.2.1 Ambiguity: Though as a discipline KM has a deep historical root and firm theoretical ground (Serenko 2013), scholars as well as practitioners often feel a pressing need for rebranding this terminology particularly in organizational context (Nakash and Bouhnik 2024). The idea of KM has been intensely criticized over the years due to its ambiguous conceptualization (Nakash and Bouhnik 2024). The critics often treat KM as a management fad which promises more than it actually does. They argued that knowledge can never be segregated from the person having that knowledge and, hence no firm can manage knowledge in true sense (Massingham and Massingham 2014). They also contended that KM is a highly complex process involving numerous obstacles and, thus KM efforts often fail to generate any significant value for the practicing firm (Storey and Barnett 2000; Massingham and Massingham 2014). Moreover, KM by itself is an elusive concept given the fact that knowledge is an intangible asset which is hard to define and gauge (Massingham and Massingham 2014). Though knowledge can be measured applying different criteria like e-mail volume or human capital effectiveness, determining the exact amount of investment required for a KM solution and concurrently measuring the related return on investment are extremely problematic tasks (Sharp 2003). Measuring return on investment (ROI) in KM still remains an ambiguous and unlikely issue in both theory and practice (Massingham and Massingham 2014).

Despite being contemplated as a critical source of competitive advantage (Grant 2013), knowledge management, from an investment perspective remains challenging for managers since they often confront with the fundamental question concerning the actual return on such investment (Massingham and Massingham 2014). It is found in the extant literature that KM raises four key claims, such as: knowledge is the most valuable and distinctive resource of a firm and that KM is the ultimate source of long-term sustainable competitive advantage (Grant 1996; 2013; Durst 2024); KM can create inter-firm distinctions in terms of performance (Boisot 2002); KM enhances a firm's capability (Grant 1996) by increasing the organizational knowledge base (Massingham and Diment 2009); and KM can enable a firm to adopt Learning Organization Capacity (LOC) business model (Senge 1990; Coulson-Thomas 1996; Grant 1996). However, empirical evidence in respect of the impact of KM on firm performance and profitability is not conclusive (Massingham and

Massingham 2014). Overcoming all these ambiguities is the foremost challenge for any organization that needs to be critically addressed by the management to effectively adopt KM practices.

3.2.2 Obstructive leadership: Perhaps the most vital precondition for effective KM implementation is to gain leadership support and cooperation to the highest extent (Sharp 2003; Lo et al. 2021). It is evident in the extant literature that any KM initiative without leadership commitment and support is bound to fail (Lo et al. 2021). Asrar-ul-Haq and Anwar (2016) contended that leadership can play a crucial role in advancing the KM efforts and that a leader is primarily responsible for developing conviction among employees and motivating them to share and transmit their knowledge with others both within and outside the organization as required. The role a leader has to essentially play with respect to KM is to identify the employees having relevant explicit or tacit knowledge, and to establish a support system for knowledge creation and application (Gupta et al. 2000). To make KM efforts a success, a leader also needs to construct a knowledge map to locate the sources of knowledge and to subsequently determine which knowledge should be communicated with whom, how, and why (Gupta et al. 2000). However, the absence of dynamic leadership practice can impede knowledge sharing and transfer in an organization (Asrar-ul-Haq and Anwar 2016), which is pivotal for sustainable development of an organization (Budur et al. 2024). It should also be noted that without strong leadership backup, securing required human and financial resources for KM practices would be extremely difficult. Though Ma et al. (2014) found that leadership does not have any impact on knowledge sharing activities in the China's collectivist culture, Qureshi and Evans (2015) strongly argued that inappropriate leadership style or poor leadership practice can act as a critical impediment to KM. Convincing or coercing employees and then directing them to share knowledge with others in the workplace becomes a difficult task for the organization due to having obtrusive leadership (Gupta et al. 2000). The extant literature hence suggests that gaining a sturdy leadership backing with regard to KM implementation is crucially needed which is however often a complex matter for many organizations (Asrar-ul-Haq and Anwar 2016).

3.2.3 Inadequate top management support: Previous studies found that one of the vital KM enablers is top management's commitment and support (Connelly and Kevin Kelloway 2003; Migdadi 2009; Abbaszadeh et al. 2010; Lin 2011; Lee et al. 2012; Lin 2014; Asrar-ul-Haq and Anwar 2016; Ghasemi and Valmohammadi 2018; Yip and Ng 2019). The study conducted by Lo et al. (2021) though did not find any significant linkage of top management support with knowledge sharing, which is regarded as the most vital KM process, it is evident in their study that top management support when mediated by affiliation and trust can positively impact knowledge sharing practices of an organization. Based on the

evidence of prior research, it can be deduced that top management support acts as a dominant stimulator for knowledge sharing (McNichols 2010; Titi Amayah 2013; Cavaliere and Lombardi 2015). Anggia et al. (2013) evidenced that one of the pivotal success factors of KM execution is top management support and dedication. Gupta et al. (2000) argued that effective knowledge acquisition and diffusion requires top management commitment and cooperation to a great extent.

It is found in the extant literature that employee behaviors relating to knowledge creation and dissemination are positively impacted by the support received from top management (Cavaliere and Lombardi 2015). Since senior managers have the key role to play in KM execution, KM endeavors without their strong support will essentially lack the required drive and resources to succeed. Knowledge sharing and transfer in an organization can be hindered if the top management does not provide adequate support to KM practices (Asrarul-Haq and Anwar 2016). Senior executives may resist KM efforts specifically when they: fail to comprehend the implications of KM on organizational performance; prioritize on short-term gains over long-term benefits; confront unanticipated matters diverting attention away from KM; perceive KM efforts as expensive and resource-intensive; notice that KM practices threaten extant power structure or challenge conventional norms (Lo et al. 2021). Gaining wholehearted support and cooperation from top management is therefore a big challenge while implementing KM.

3.2.4 Lack of technological support: Though Gupta et al. (2000) considered technology as secondary to human aspect in the process of KM, McCampbell et al. (1999) and Mitchell (2003) argued that technology is a pivotal enabler for effective execution of KM. The application of suitable technology is an essential prerequisite for successful KM practices (Sharp 2003). However, knowledge acquired by employees is captured and disseminated throughout the organization, primarily through information technology (IT) (Gupta et al. 2000). The role of IT cannot be underemphasized in respect of knowledge management since it does not merely keep information but rather integrates communications technology (McCAMPBELL et al. 1999). Demarest (1997) discerned six vital questions that every organization should address for effective engagement in KM, one of which is concerning the role of IT in KM practices. It is obvious that managing corporate knowledge is the essence of an organization which is largely facilitated by the advancement of IT (Sharp 2003). Technological breakthroughs have made it feasible for organizations to gather, retrieve, and distribute big data regarding business operations (Sharp 2003).

However, knowledge sharing, and transfer can be severely hindered by lack of technological backing in the organization. Without adopting modern technology and utilizing knowledge-sharing channels such as intranet, extranet, database, website, bulletin board, and other

electronic forums, transferring knowledge within or outside the organization is quite unfeasible (Song 2001). Asrar-ul-Haq and Anwar (2016) thus contemplated inadequate technological support as a critical impediment to effective KM practices. It is evident in the extant literature that poor technical support impedes the process of knowledge creation, storage, diffusion, and application (Ranjbarfard et al. 2014). An organization having poor IT setup cannot truly provide its employees with the required accessibility to explicit knowledge resources (Kalkan 2008). Research findings denote that limited IT capabilities of an organization act as a major constraint to KM (Qureshi and Evans 2015). Hence, overcoming technological or more specifically IT related restraints can be regarded as a critical challenge for any organization in implementing KM practices effectively. Moreover, technological changes take place overnight and thereby pose a big challenge for an organization to cope up with the new technology (Gururajan and Fink 2010). For many organizations, capturing and disseminating vital information successfully throughout the organizational hierarchy thus remains a key challenge (Idrees et al. 2023).

3.2.5 Employee resistance: Employee willingness plays a crucial role in implementing KM at the workplace, and particularly in transferring tacit knowledge among employees (Nonaka and Takeuchi 1995; Holste and Field 2010). A strong interpersonal relationship therefore needs to be built among the whole workforce to ensure this willingness to knowledge sharing among each other. However, establishing such a trust-based relationship among the employees is not an easy but rather a challenging task (Holste and Fields 2010). Stenmark (2002) clarified the reason why at least some employees are always reluctant to share their acquired knowledge with coworkers. According to Stenmark (2002), employees show reluctance in this respect, fearing that they might lose competitive position over their colleagues by sharing specifically their tacit knowledge. Moreover, Alavi and Leidner (2001) stated that employees in many organizations assume that their career advancement within the organizational hierarchy does not depend on the degree to which they engage themselves in knowledge sharing to educate others, but rather relies on their own expertise. Hence, employees often resist engaging in KM initiatives like knowledge sharing, given that it does not add any value to their portfolio, nor does it help them to gain a competitive edge over others. Consequently, employee resistance to the organization's knowledge management system has been found in the existent literature as an underlying cause behind the failure of KM efforts (Li et al. 2016). Overcoming this resistance is a huge challenge for an organization in implementing KM practices successfully.

3.2.6 Time limitations: Asrar-ul-Haq and Anwar (2016) argued that KM implementation, particularly knowledge sharing, and transfer becomes challenging when employees' workload is heavy that needs to be completed within a limited timeframe. A serious

deterrant to KM implementation is thus time pressure (Qureshi and Evans 2015) that makes it tough for employees to actively engage in KM related activities (Asrar-ul-Haq and Anwar 2016). Gururajan and Fink (2010) in a study found that employees are so busy in their day-to-day activities at the workplace that they rarely find any time or opportunity to share knowledge with coworkers. Moreover, it is also a time consuming and overwhelming task for employees to determine who has exactly what knowledge (Gupta et al. 2000). Giant corporations like Microsoft invest ample time and financial resources to identify and maintain knowledge sources and competencies which are not feasible for many organizations to afford (McCormick et al. 1999). The extant literature suggests that traditional organizations intending to switch to modern KM system confront huge time cost given that employees during the switching process essentially require to put huge time and effort to learn how to cope up with the new culture and system of KM (Li et al. 2016).

Moreover, the time required for employees at the workplace to learn explicit or tacit knowledge from others is often contemplated as hidden costs that many organizations might try to avert (Powell 2007). It can thus be argued that lack of time and resources is one of the potential impediments to KM. Time limitations virtually poses a major challenge in transmitting and managing specifically the tacit knowledge since tacit knowledge needs longer time than explicit knowledge to be shared among employees (Leseure and Brookes 2004; Yang and Fran 2009). For instance, it typically takes prolonged time to be spent for reviewing post-project or framing lessons learned from such project (Leseure and Brookes 2004; Yang and Farn 2009). Reducing time for employees to access the required knowledge through search cycle acceleration (Massingham and Massingham 2014) is obviously a critical prerequisite for effective KM practices.

The above discussed KM challenges are shown in the following figure:

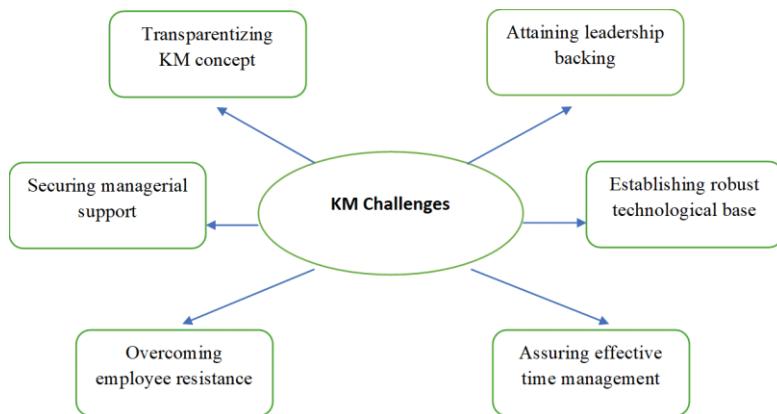


Figure 2: Challenges of Knowledge Management

4. Contributions, limitations and further research directions

This study contributes to the extant literature in various ways. First, it follows an objective approach in gathering data from leading journals and books, and thereby ensures a yardstick in the caliber of the data reviewed. Second, this review offers readers a novel and facile way of looking at the existent literature by categorizing and analyzing the findings of prior studies in a systematic manner with the use of explicit criteria. Third, this paper contributes to the KM literature by explicitly identifying and elucidating the key challenges of KM practices from both a conceptual as well as managerial perspective. It might provide a sound theoretical base for future researchers to conduct empirical studies on different dimensions of KM implementation. Another contribution is that the findings of this review in relation to the major challenges of KM implementation might guide the KM practitioners at workplace in proactively maneuvering to overcome the potential complexities involved in KM execution.

However, the scope of this systematic review is limited to determine and explain only those challenges of KM implementation that were previously discovered in multiple investigations. Moreover, this study is constrained to a review of selected peer-reviewed journal articles accessible only from online databases, comprising some chosen key words in the title. It is therefore suggested that future studies should gather more data from multiple secondary sources for enhanced data validation. Primary research on KM can also be conducted on exploring the identical issue in a particular industry context. However, based on the extant literature review, this study identified six significant issues that pose serious challenges to KM practices at the workplace: ambiguity, obstructive leadership, inadequate top management support, lack of technological support, employee resistance, and time limitations. It is evident in the literature that effective KM practices are essentially required for every organization to exploit the potential by utilizing employees' collective knowledge and experiences. Hence, it is of great importance to overcome these key challenges efficaciously in an effort to execute KM practices. It will eventually result in firm innovation, employee development, and product improvement. However, this paper might be useful for managers in comprehending the nature of KM implementation challenges and thereby prudently responding to the requirements KM process brings forth.

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