

Factors Inducing the Adoption of Knowledge Management System (KMS) In SMEs, Large and Government Organizations. What Are the Intercepting Factors? A Systematic Review

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Abstract: This paper aims to develop a systematic exploration of the literature investigating the factors that influence the adoption of the knowledge management system (KMS) in organizations as well as identifying the intercepting factors between different types of organizations such as small-medium enterprises (SMEs), large corporation and government organizations. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) is used to structure the research field. The proposed research used filtering scientific papers published in Emerald Insight and Scopus from 2018 to 2022. This paper presents empirical evidence from six articles that identify intercepting factors between small-medium enterprises, large corporations, and government organizations. Among the factors analyzed, only IT capabilities were found to be common across all three types of organizations. The findings and analysis section includes a Venn diagram that illustrates other relevant factors that intercept between the organizations. The accumulation of reviewed research papers is necessary for academia and organizations to analyze the factors influencing the adoption of KMS. This study also will assist in providing information that will offer insights to organizations, particularly those in the small and medium enterprises (SME), large enterprises and government, in the process of implementing knowledge management.

Keywords: *knowledge management system, PRISMA, SME, organization, intercepting factors.*

1. Introduction

Knowledge management, or KM, is the activity of acquiring, preserving, and distributing employee knowledge capital throughout the enterprise (Girard & Girard, 2015). People may now readily access the documents and data they need to perform their tasks, thanks to knowledge management. Additionally, it helps the business retain that information for use in the future, which increases productivity, creates a better work atmosphere, and decreases the need for repeating chores. On top of that, the majority of businesses have recognized how crucial it is to integrate knowledge management, and they are working to do so in SMEs, large businesses, and the public sector.

Issues, Research Problems and Research Question: While implementing a knowledge management system (KMS) can be beneficial, it can also pose challenges. Knowledge management is a systematic and organizationally specific process that involves gathering, organizing, sustaining, applying, sharing, and renewing employees' tacit and explicit knowledge to improve organizational performance and provide value (Samuel & Odor, 2018). By cataloging each employee's expertise and making it accessible to other staff members, a corporation can better leverage its collective knowledge and improve decision-making processes. To successfully implement a KMS, organizations need to consider various factors, including the development of a comprehensive knowledge management strategy.

The provision of adequate IT infrastructure, and the establishment of a supportive organizational culture. By addressing these factors, organizations can overcome the challenges associated with KMS implementation and effectively utilize their knowledge resources. With a knowledge management system, employees will have access to training materials, best practices, and fixes for common problems all in one location. Rao et al. (2022) identify management leadership and support, culture, strategy (including IT and HRM), and measurement as essential elements for the success of knowledge management in SMEs. The use of knowledge

by micro firms to expand their potential can result in an improvement in competitiveness and overall success (Duarte Alonso et al., 2021). Essentially, efficiency, effectiveness, and innovation within a business are all governed by KM (Chen et al., 2022). As SMEs become more aware of the importance of managing information to remain competitive in their markets, they have been concentrating on KM techniques (Adam et al., 2022). Today, KM has been elevated to the top of all companies' priorities due to its connection to various performance measurements (Zhang et al., 2023).

KM has also demonstrated its value in a variety of fields and industries, including the public sector (Jain & Jeppe Jeppesen, 2013), non-governmental organizations (Corfield et al., 2013), small-to-medium-sized enterprises (Durst & Edvardsson, 2012), the banking industry (Oluikpe, 2012), life insurance businesses (Huang & Lai, 2014), human service and professional services firms (Palte et al., 2012) and manufacturing organizations (Birasnav & Rangnekar, 2010). The parameters examined by research on KMSs in big enterprises, however, cannot be completely applied to SMEs without understanding their specific context. According to Durst and Edvardsson (2012), further research is needed to fully understand this issue. As a result, mastering KMS implementation remains of utmost importance, particularly given that management has made significant efforts to take KMS initiatives (Kuo & Lee, 2011). When applying and implementing KM, many companies run into issues and roadblocks (Hashim et al., 2014; Henttonen et al., 2016). As a consequence, eleven factors have been identified for KM implementation in SMEs (Wong, 2005). This can help companies handle KM difficulties in SMEs.

Yap and Lock (2017) go on to state that the major organizational and cultural issues preventing the adoption of knowledge management methods are a lack of motivation, bureaucracy, and hierarchy. Lack of confidence is another serious issue. It was challenging to make generalizations and decide whether the adoption was appropriate for other organizations, such as the government or big enterprises because both studies focused on SMEs. Batra and Anand (2014) found that the Malaysian government and private companies are still looking for solutions to problems related to KM practices, especially issues with information sharing, in their study of knowledge management trends in China, Malaysia, and India. This demonstrates the pressing need for an organization to conduct more extensive research into KM challenges. Therefore, this study's primary goal is to better understand the variables that affect the adoption of knowledge management systems (KMS) in small and medium-sized businesses (SMEs), big corporations, and governmental organizations. The research seeks to provide insights that can help organizations overcome obstacles and achieve successful KMS adoption by identifying these factors.

2. Literature Review

Researchers and policymakers are presented with a country-specific conundrum by the definition of SMEs since "small," "medium," and "large" are relative measurements that change depending on how robust the country's economy is. Definitions frequently refer to criteria related to income, assets, and personnel count, as noted by Steenkamp and Kashyap (2010).

KM in Small-Medium Enterprises: Because many smaller businesses experience resource limitations, it's imperative to carefully use the resources that are already accessible (Jarillo, 1989). This is so that bad choices won't have the same negative impacts that they would in large corporations. For instance, small companies encourage innovation and entrepreneurship through their flexible management methods and flat organizational structures. There are frequently few rules, no formalities, and a relaxed environment. Control in SMEs typically depends on the owner's personal supervision, and written procedures are rarely in existence (Daft, 2016). In many smaller businesses, owner-managers also hold a crucial role (Bridge & O'Neill, 2012). It is common in this situation for the firm's planning and decision-making processes to involve just one person (Culkin & Smith, 2000).

These people are also in charge of realizing the benefits of information management to support business operations, which is another consequence of their centrality. However, the day-to-day activities of SMEs necessitate special consideration (Hofer & Charan, 1984). This frequently results in situations where there is insufficient time for strategic issues. Due to this, as well as a lack of financial resources and expertise, the majority of information is typically kept in the owner's thoughts and those of a select few key employees

rather than being physically preserved or shared through substitute agreements (Bridge et al., 2003; Wong & Aspinwall, 2004). As a consequence, information sharing in SMEs may occur during casual conversations or birthday celebrations for staff members (Wong & Aspinwall, 2004; Durst & Wilhelm, 2012).

KM in Large Enterprises: The modern business world is essentially a knowledge-based economy, which places a strong emphasis on the production and application of knowledge. Knowledge management is an integrated, methodical strategy to categorize, manage, use, and share an organization's information about assets, such as databases, policies, procedures, and documents, as well as the tacit knowledge of its current and former workforce (Audretsch & Belitski, 2020). An efficient KM process produces a distinctive workplace where knowledge and experience are readily shared (Aldehayyat et al., 2021). KM has been implemented in large organizations for a number of years, and yet resistance to change still exists, especially from the perspective of the individual (Ganapathy et al., 2019). Each company should be able to gather intangible knowledge that is pertinent to its main goals (Cardoni et al., 2020). Given that the development of stakeholder relationships, brand image, and reputation are affected by sustainable sources of business advantage, corporations have recognized the importance of managing intangible assets (Abbas & Eksandy, 2020). In this sense, processing information is essential to a company's success. By ensuring that knowledge is applied effectively through strategies that develop, organize, communicate, and retain resources through knowledge management, the key to gaining and maintaining a competitive advantage is based on attainable goals (Aldehayyat et al., 2021).

KM in Government: The competitive advantage of a country depends on knowledge management. KM, according to many, is crucial to e-Government and the provision of public sector services. The majority of modern companies use ICT to fill out forms, evaluate data, gather data, look at data, compute data, plan data, clarify data, and send data they have collected. The administration then makes plans using this data (Sulistiaawaty et al., 2021). Because knowledge management has traditionally been associated with for-profit companies, the organizational culture that prevails in the public sector may be largely to blame (Ondari-Okemwa & Smith, 2009). Every government strives to use the public sector to deliver essential services as effectively as feasible. By reducing the expense of starting and running a company, the provision of basic services may contribute to improving the economic infrastructure, increasing effectiveness and efficiency, and fostering a business-friendly environment. Government-owned businesses frequently serve as levers to unleash development potential and promote macroeconomic stability.

3. Methodology

This systematic review, which adheres to the recommendations in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) document, aims to organize the research field by identifying the participants and variables that have been used in prior studies. This review will also go over how similar the factors are in big corporations, the government, and small to medium-sized businesses that affect the adoption of knowledge system management. This paper describes the steps that were done to reduce the possibility of bias using the PRISMA checklist. The systematic review process will be thoroughly explained in this section, covering subjects like the sources or databases used the screening procedures, and the selection of articles that were deemed appropriate for the current study.

Resources: Two examples of multidisciplinary electronic databases that were used for the paper search include Scopus and Emerald Insight. One of the most well-known digital publishers on the globe is Emerald Insight. It gathers published works from half a million researchers dispersed across 130 countries, and it gets 109 million visits annually in addition to 30 million downloads. As the largest abstract and citation collection of literature that has undergone peer review, Scopus is a sizable database as well. Scientific journals, books, and meeting proceedings all fall under this category. Scopus is used by more than 3,000 academic schools, governmental organizations, and private businesses worldwide.

Systematic Review Process for Selecting Articles

Identification: PRISMA states that there are four different stages to conducting a systematic review (SLR). To determine the search terms that would be used; the study was first started in the third quarter of 2022. Table

1 shows that various efforts were made to use a range of keywords and synonyms related to the adoption of KMS in organizations. At this stage, 57 items that were duplicates were removed after the thorough and meticulous screening.

Table 1: The Search String

Database	Keywords used
Emerald Insight	TS = (("knowledge management system" or "KMS") AND ("SME" OR "small medium enterprise" OR "large enterprise" OR "large corporation" OR "government" OR "e-government"))
Scopus	TITLE-ABS-KEY (("knowledge management" OR "KMS") AND ("SME" OR "small medium enterprise" OR "large enterprise" OR "large corporation" OR "government" OR "egovernment"))

Screening: The main goal of the initial screening step was to eliminate duplicate articles. 57 items, in this case, were not cleared to move on to the next stage. In comparison, during the second phase of the process, 372 articles were assessed using a number of inclusion and exclusion criteria that were developed by the researchers. The researchers only continued with journal articles because they serve as primary sources and provide real data, which is the first criterion. As a result, it can be inferred the present search did not look for any publications in the form of a systematic review, meta-analysis, meta-synthesis, book, chapter in a book, or conference proceedings.

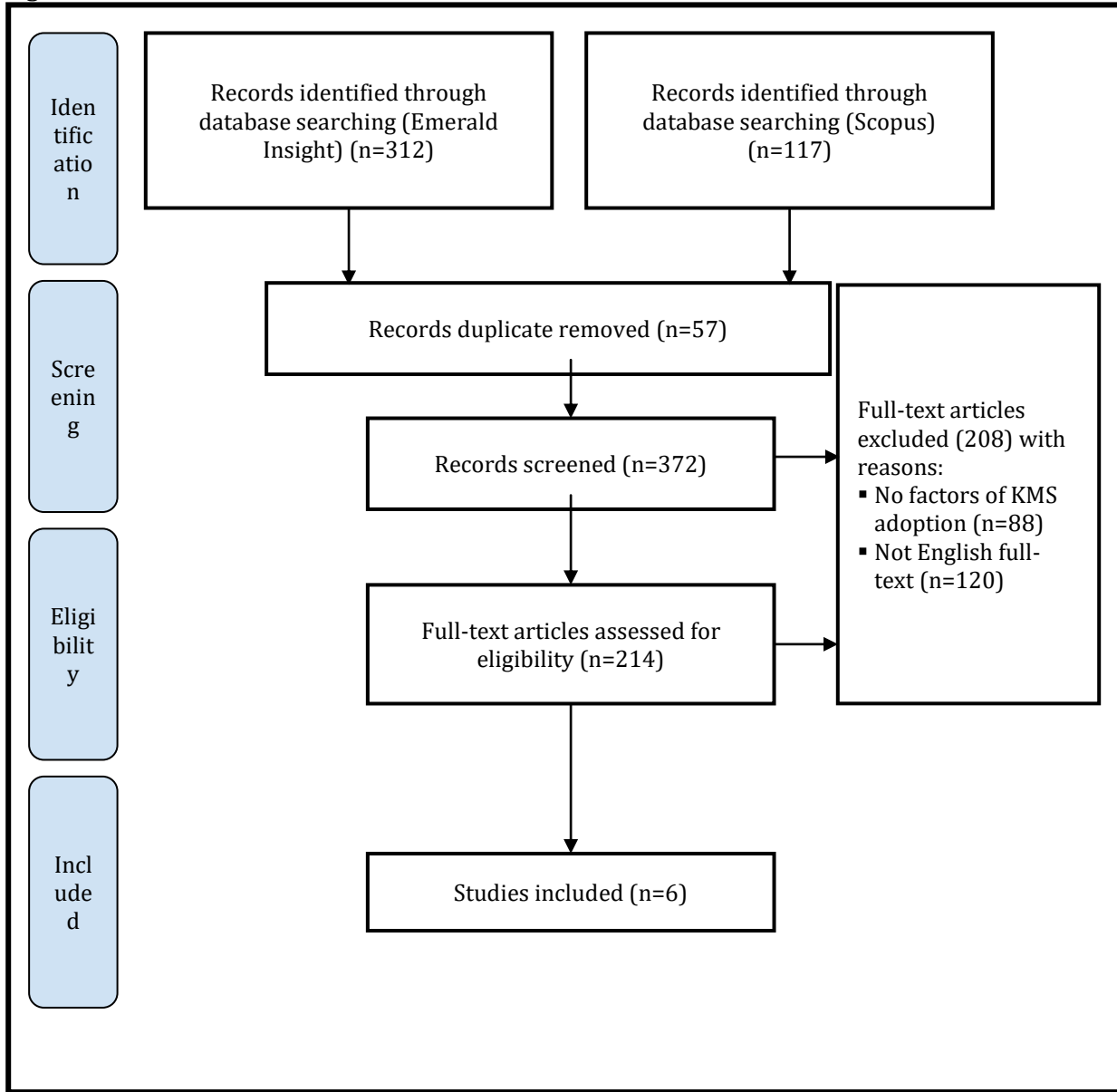
Eligibility and Inclusion Criteria: To decide whether existing and prospective publications could be subjected to analysis in this study, two criteria were used:

- a) The dependent variable in the study was the adoption of KMS in organizations, and the independent, moderating, or mediating variables were the variables that affected the acceptance of the system.
- b) The research only considers full-text articles written in English and released between 2018 and 2022.

Records must satisfy the first two requirements to be accepted in connection to the scoping view. Additionally, since English is generally acknowledged as a global language and the majority of scholarly publications are released in English, it was mandated that English be used as the research's primary language. Additionally, this lessens misunderstandings and facilitates a smooth translation of the entire content. After the search string was complete, the screening procedure was conducted. The data collection resulted in the elimination of 158 articles out of the 372 articles that passed the requirements for further examination. The next stage involved determining eligibility, which involved retrieving and reviewing all of the papers. 208 of the articles were determined to be unsuitable after a thorough review because specific criteria were not fulfilled. The final stage is then completed, which entails looking over six articles that will be beneficial for further research.

Data Abstract and Analysis: The remaining papers were examined, and appropriate evaluations of them were made; these evaluations centered on specific studies that provided answers to the established study goals. The abstracts will be examined first to extract the data, and then the complete pieces will be examined to identify pertinent topics and sub-themes. In addition, content analysis was used to conduct qualitative research to do a study that would discover the factors that influence the adoption of KMS.

Figure 1: PRISMA Selection Process



(Adapted from Moher et al., 2009).

4. Findings and Analysis

Table 2 indicates that the adoption of knowledge management (KM) systems in organizations has been a topic of significant interest both internationally and locally. Previous studies have predominantly used questionnaires to collect data from employees, with a minimum of 100 respondents typically involved. These questionnaires were often distributed physically or through email. Moreover, based on the systematic literature review performed on the literature found in Table 2, a Venn diagram (Ruskey & Weston, 2012) of factors influencing the adoption of KMS has been created as shown in Figure 2. The Venn diagram shows that the factor IT capabilities intercept with all organization types which means this is the most influential factor for an organization to adopt a knowledge management system regardless of the type of organization. IT capabilities are important to adopt any system due to its cost, stability and security of the system is crucial in protecting an organization's trade secret and process.

Table 2: Publication Related to the Types of Respondents and Factors Influencing Knowledge Management

Title / Authors (year)	Organization Size/ Type	Respondents	Factors / Determinants
Examining the factors influencing knowledge management system (KMS) adoption in small and medium enterprises (Shrafat, 2017)	SME	247 respondents. Respondents are from various SMEs, primarily based in Jordan.	1) Knowledge Management capabilities 2) Knowledge sharing 3) organizational learning capabilities 4) information technology capabilities
Success and failure factors in implementing quality management systems in small- and medium-sized enterprises: a mixed-method study. (Mohammadi et al., 2020)	SME	480 questionnaires were sent; 298 completed questionnaires were received in Iran.	1) IT capabilities 2) Process improvement 3) Organization structure 4) Culture 5) Behavior 6) Attitude
The Influence of Knowledge Management on the Smart Government Effectiveness: An Empirical Study in UAE. (Albreiki, 2019)	Government	650 questionnaires have been sent out to Ministries and Federal Authorities.	1) Knowledge Sharing 2) Knowledge Organization 3) Knowledge Accountability 4) Utilitarian Role of Knowledge Management 5) Engagement 6) Accessibility and Competitiveness.
The Impact of Knowledge Management, Administrative Management and Information Technology for E-Government Success. (Sulistiawaty et al., 2021)	Government	100 respondents. Respondents are managers who are leaders in implementing E-government services in the special region of Yogyakarta, Indonesia.	1) Security 2) Support 3) Trust 4) Convenience 5) Quality 6) Information 7) Benefits 8) comfort 9) Obstacles
Evaluation of the maturity level and critical success factors in the implementation of knowledge management in the national private construction service company in Indonesia. (Zain & Latief, 2020)	Large corporation	105 questionnaires were distributed to the targeted respondents and only 68 were returned and usable for analysis.	1) policies 2) HR planning and processes 3) KM culture 4) Information technology 5) training and improvement of human performance 6) approaches to capturing/using tacit knowledge 7) procedure methods & documentation processes

Title / Authors (year)	Organization Size/ Type	Respondents	Factors / Determinants
An evaluation of critical success factors for knowledge management in the Financial sector: evidence from developing country context. (Aldehayyat et al., 2021)	Large corporation	490 questionnaires were distributed equally among Jordanian banks and the insurance company. Of these, 310 were completed and useable	1) Leadership 2) organizational structure 3) ICT 4) Human Resource

Organizational learning skills or capturing tacit knowledge are the intercepts for SMEs and large corporations, along with knowledge management culture. Depending on an organization's culture of knowledge management and its learning capacity, these two factors help to explain why it is necessary to implement the KMS. Third, knowledge sharing is a key component in the adoption of KMS as evidenced by the parallels in knowledge-sharing factors between the SME and government when they interact. The likelihood of the organization adopting the KMS will be lower if it has no plans to share information with other organizations. Last but not least, process documentation or knowledge organization is a shared characteristic of both the government and big corporations. This element is crucial for both kinds of organizations to organize and document their knowledge for long-term process sustainability and knowledge transfer.

Figure 2: Venn Diagrams of Factors Influencing the Adoption of KMS in an Organization



5. Conclusion and Direction for Future Research

This research will help to broaden understanding, provide more information, and add to the existing body of knowledge by helping to provide more information about the factors that influence the adoption of knowledge management systems in companies. Regarding the study's practical contributions, they include material that will help organizations, especially those in the small- and medium-sized business (SMB), large businesses and government sectors, gain understanding as they implement knowledge management. In conclusion, knowledge management is an essential procedure for any company. It primarily encourages creativity and invention within the company, which improves performance across the board. To ensure that the knowledge is used properly, it is crucial to use the correct support systems to create, codify and distribute it among the organization's participants. Furthermore, it is essential to acquire the information to prevent competitors from copying you. Effectively managing knowledge enables a company to function well, which enables it to obtain a competitive edge in the market.

Depending on the size of the organization and the type of company they run, different factors can affect the adoption of KMS; however, it has been discovered that IT capability is the most important factor in determining whether an organization chooses to implement a KMS. A company must comprehend the motivation, goal, and effects of implementing KMS to guarantee that the system will be profitable for both the company and its users. However, even though many other variables affect how KMS is adopted in an organization, this does not mean that those other factors do not have an impact on their own particular organization type. Future studies should look for additional variables like leadership styles and human resource management techniques that can increase the volume of knowledge production. Then, a comparative study could cast some light on cultural variances, particularly when analyzing the impact of a constricting organizational structure. Thirdly, cross-sectional research makes it difficult to track advancements in the level of knowledge production. The respondents' assessments of the level of knowledge production in their organizations served as the study's primary data source. To test this model, future scholars might try to create a more accurate metric for knowledge creation.

References

- Abbas, D. S. & Eksandy, A. (2020). Economic Performance of Indonesian Manufacturing Companies with Factors. *International Journal of Science, Technology & Management*, 1(4), 252-263.
- Adam, S., Fuzi, N. M., Ramdan, M. R., Mat Isa, R., Ismail, A. F. M. F., Hashim, M. Y., Ong, S. Y. Y. & Ramlee, S. I. F. (2022). Entrepreneurial orientation and organizational performance of the online business in Malaysia: The mediating role of the knowledge management process. *Sustainability*, 14(9), 5081.
- Albreiki, S. & Bhaumik, A. A. A. (2019). The influence of knowledge management on the smart government effectiveness: An empirical study in UAE. *Dimension*, 11(12).
- Aldehayyat, J. S., Almohtasb, A. A. & Alsoboa, S. S. (2021). An Evaluation of Critical Success Factors for Knowledge Management in the Financial Sector: Evidence from Developing Country Context. *Academy of Strategic Management Journal*, 20(3), 1-20.
- Audretsch, D. B. & Belitski, M. (2020). The role of R&D and knowledge spillovers in innovation and productivity. *European economic review*, 123, 103391.
- Batra, G. S. & Anand, T. (2014). Review of studies as to knowledge management trends in China, Malaysia and India. *IMED*, 7(2), 43-55.
- Birasnav, M. & Rangnekar, S. (2010). Knowledge management structure and human capital development in Indian manufacturing industries. *Business Process Management Journal*.
- Bridge, S., O'Neill, K., Cromie, S. & O'Neill, K. (2003). *Understanding enterprise: Entrepreneurship and small business*.
- Bridge, S. & O'Neill, K. (2012). *Understanding Enterprise: Entrepreneurship and Small Business*. Palgrave Macmillan.
- Cardoni, A., Zanin, F., Corazza, G. & Paradisi, A. (2020). Knowledge management and performance measurement systems for SMEs' economic sustainability. *Sustainability*, 12(7), 2594.
- Chen, Y., Luo, H., Chen, J. & Guo, Y. (2022). Building data-driven dynamic capabilities to arrest knowledge hiding: A knowledge management perspective. *Journal of Business Research*, 139, 1138-1154.
- Corfield, A., Paton, R. & Little, S. (2013). Does knowledge management work in NGOs? A longitudinal study. *International Journal of Public Administration*, 36(3), 179-188.
- Culkin, N. & Smith, D. (2000). An emotional business: a guide to understanding the motivations of small business decision-makers. *Qualitative Market Research: An International Journal*, 3(3), 145-157.
- Daft, R. L. (2016). *Understanding the Theory and Design of Organizations with Coursemate*, 11th Edition. India: Cengage India.
- Duarte Alonso, A., Kok, S. K., Bressan, A. & O'Shea, M. (2022). Knowledge management and the business development journey: a knowledge-based view among micro firms. *Knowledge Management Research & Practice*, 20(2), 279-291.
- Durst, S. & Runar Edvardsson, I. (2012). Knowledge management in SMEs: a literature review. *Journal of knowledge management*, 16(6), 879-903.
- Durst, S. & Wilhelm, S. (2012). Knowledge management and succession planning in SMEs. *Journal of Knowledge Management*.
- Ganapathy, S., Mansor, Z. & Ahmad, K. (2019). Investigating factors affecting knowledge management practices in public sectors. *International Journal of Advanced Computer Science and*

- Applications*, 10(11).
- Girard, J. & Girard, J. (2015). Defining knowledge management: Toward an applied compendium. *Online Journal of Applied Knowledge Management*, 3(1), 1-20.
- Hashim, E. M. A. B. A., Talib, N. A. & Alamen, K. M. (2014). Knowledge management practice in Malaysian construction companies. *Middle-East Journal of Scientific Research*, 21(11), 1952-1957.
- Henttonen, K., Kianto, A. & Ritala, P. (2016). Knowledge sharing and individual work performance: an empirical study of a public sector organization. *Journal of Knowledge Management*, 20, 749-768.
- Hofer, C. W. & Charan, R. (1984). The transition to professional management: mission impossible? *American Journal of Small Business*, 9(1), 1-11.
- Huang, L. S. & Lai, C. P. (2014). Critical success factors for knowledge management implementation in life insurance enterprises. *International Journal of Management and Marketing Research*, 7(2), 79-89.
- Jain, A. K. & Jeppe Jeppesen, H. (2013). Knowledge management practices in a public sector organization: the role of leaders' cognitive styles. *Journal of Knowledge Management*, 17(3), 347-362.
- Jarillo, J. C. (1989). Entrepreneurship and growth: the strategic use of external resources. *Journal of Business Venturing*, 4(2), 133-147.
- Kuo, R. Z. & Lee, G. G. (2011). Knowledge management system adoption: exploring the effects of empowering leadership, task-technology fit and compatibility. *Behavior & Information Technology*, 30(1), 113-129.
- Mohammadi, M. M., Jalali, A. & Hasani, A. (2021). Success and failure factors in implementing quality management systems in small and medium-sized enterprises: a mixed-method study. *International Journal of Quality & Reliability Management*, 39(2), 468-494.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G. & PRISMA Group*, T. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *Annals of internal medicine*, 151(4), 264-269.
- Oluikpe, P. (2012). Developing a corporate knowledge management strategy. *Journal of Knowledge Management*, 16(6), 862-878.
- Ondari-Okemwa, E. & Smith, J. G. (2009). The Role of knowledge management in enhancing government service delivery in Kenya. *South African Journal of Libraries and Information Science*, 75(1), 28-39.
- Palte, R., Hertlein, M., Smolnik, S. & Riempp, G. (2012). The effects of a KM strategy on KM performance in professional services firms. *International Journal of Knowledge Management*, 7(1), 16-34.
- Rao, S. Nandini, A. S. & Zachariah, M. (2022). Knowledge management for SMEs: a pragmatic approach. *Knowledge Management Research & Practice*, 1-11.
- Ruskey, F. & Weston, M. (2012). Venn diagrams. The electronic journal of combinatorics, DS5-Jun.
- Samuel, A. P. & Odor, H. O. (2018). Knowledge Sharing: A Key Role in the Knowledge Management Process. *International Journal of Business and Management Research*, 6(2), 36-40.
- Shrafat, F. D. (2018). Examining the factors influencing knowledge management system (KMS) adoption in small and medium enterprises SMEs. *Business Process Management Journal*, 24(1), 234-265.
- Steenkamp, N. & Kashyap, V. (2010). Importance and contribution of intangible assets: SME managers' perceptions. *Journal of Intellectual Capital*, 11(3), 368-390.
- Sulistiawaty, T., Surahman, F., Puspaningrum, I. I. & Wicaksono, Y. (2021). The Impact of Knowledge Management, Administrative Management and Information Technology for E-Government Success. *Annals of the Romanian Society for Cell Biology*, 25(4), 12728-12741.
- Wong, K. & Aspinwall, E. (2004). Characterizing knowledge management in the small business environment. *Journal of Knowledge Management*, 8(3), 44-61.
- Wong, K. Y. (2005). Critical success factors for implementing knowledge management in small and medium enterprises. *Industrial Management & Data Systems*, 105(3), 261-279.
- Yap, J. B. H. & Lock, A. (2017). Analyzing the benefits, techniques, tools and challenges of knowledge management practices in Malaysian construction SMEs. *Journal of Engineering, Design and Technology*, 15, 803-825.
- Zain, A. H. & Latief, Y. (2020, April). Evaluation of the maturity level and critical success factors in the implementation of knowledge management in the national private construction service company in Indonesia. In *IOP Conference Series: Materials Science and Engineering*, 830(2), 022039.
- Zhang, W., Jiang, Y., Zhou, W. & Pan, W. (2023). Antecedents of knowledge-seeking intentions and efforts within new product development teams: Empirical evidence from knowledge-based Chinese companies. *Journal of Knowledge Management*, 27(2), 356-382.