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## The role of age in organizational knowledge sharing: A systematic literature review

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### Abstract

Many organizations emphasize the importance of sharing knowledge to create a supportive learning culture. However, motivating employees to share knowledge can be challenging, especially in an age-diverse organization. The purpose of this systematic literature review is to explore recent studies that focus on age and knowledge sharing to identify gaps in the literature and guide future research directions. With the recent increase in studies exploring the influence of age on knowledge sharing, this review categorizes articles from the Web of Science, IEEE, Science Direct, and the ACM Digital Library that focus on age and knowledge sharing into key elements of process improvement: people, process, and technology. Findings from this search process reveal most studies focus on people with a secondary focus on motivation, skills, and self-efficacy, as well as processes relating to knowledge sharing. Few articles have technology as a central focus. While age undoubtedly influences people and knowledge sharing processes, more research is needed to understand the influence of other factors, including technology and other age-related concepts.

**Keywords:** knowledge sharing, knowledge transfer, age, people, process, technology, SLR

### Introduction

According to the knowledge-based perspective of the firm theory, knowledge is the most strategically significant resource of an organization (Alavi, M. & Lediner, 2001). Knowledge is information that facilitates action and is what helps businesses maintain competitive advantage. Companies that prioritize intellectual capital are valued at three to eight times more than just their financial capital alone (Becerra-Fernandez & Sabherwal, 2014, p. 4).

Knowledge sharing is defined as “the process through which explicit or implicit knowledge is communicated to others” (p.61). Sharing knowledge drives innovation and improves decision-making capabilities, and can help organizations maintain sustainability. However, for knowledge sharing to occur, individuals in an organization must be willing and able to collaborate with others (Navimipour & Charband, 2016). Although similar to knowledge sharing, knowledge transfer is the “explicit knowledge that is transferred to a recipient from codified materials” and is only one process of knowledge transfer (Tangaraja et al., 2016, p. 660). While the distinction between knowledge sharing and knowledge transfer is important, for the purposes of this paper, the two terms will be used interchangeably as knowledge sharing is a subset of knowledge transfer (Tangaraja et al., 2016).

Getting individuals to share knowledge has been cited as the hardest part of knowledge management (Becerra-Fernandez & Sabherwal, 2014), and there are a variety of reasons for this reluctance. First, an organization's culture may not be conducive to sharing knowledge. This is particularly true in organizations that stress individual performance and competition (Becerra-Fernandez & Sabherwal, 2014). Some other factors that prevent individuals from sharing knowledge include job security (Becerra-Fernandez & Sabherwal, 2014), trust (Knoetze & Jantjies, 2019; MacCurtain et al., 2010), ability (Burmeister, Fasbender, et al., 2018) and differing values (Schmidt & Muehlfeld, 2017). Some other factors that prevent individuals from sharing knowledge include job security (Becerra-Fernandez & Sabherwal, 2014), differences in experience levels, and a general lack of time to share knowledge (Riege, A., 2005), trust (Knoetze & Jantjies, 2019; MacCurtain et al., 2010) ability (Burmeister, Fasbender, et al., 2018), differences in experience levels, and a general lack of time to share knowledge (Riege, A., 2005).

There has been a more recent emphasis in literature focusing on the influence of age on knowledge sharing. This focus is essential as age composition has important effects on the labor market dynamics (Wallace, 2021). Evidence suggests that younger individuals are likely to resist sharing knowledge when they lack motivation or their perceived ability to do so (Burmeister, Fasbender, et al., 2018), while older individuals have been shown to be more likely to share knowledge, regardless of their experience and expertise (Dunham & Burt, 2011). However, there is still limited empirical literature that directly addresses intergenerational knowledge transfer (Schmidt & Muehlfeld, 2017).

The Organizational Theory of Age Effects (Lawrence, 1987) explains the process by which age distributions drive the development of age norms in an organization. This theory states that actual age and perceived age both impact processes in an organization, such as hiring and tenure. Specifically, two employees that share high tenure may also share age-related experience. Likewise, two employees with low average tenure most likely share comparable age-related experience outside of the organization. The theory doesn't explicitly detail the influence of age on knowledge sharing behaviors within an organization. However, the theory does indicate that employees face different developmental tasks during different life stages and is one of the earliest theories to implicitly suggest the possible influence of knowledge sharing on age. However, since its origination, very few studies explore the influence of age on knowledge sharing, which is the topic of this literature review.

People, process and technology (PPT) have been widely recognized as the three key elements of the Process Improvement Model (Prodan et al., 2015). Not only can these elements improve processes, but they have also been shown to have significant effects on knowledge management (Hosseini, M. et al., 2014). To improve the process of knowledge sharing, the purpose of this systematic literature review (SLR) is to categorize common themes in recent literature that focus on age and knowledge sharing into the three components of the Process Improvement Model and answer the research question, "*What research is needed to advance knowledge sharing practices among age-diverse employees?*" Identifying these gaps may help highlight the need for additional research relating to age-related concepts and knowledge sharing.

### Methods

One of the main purposes for conducting an SLR is to discover gaps in the literature to inform future research areas (Kitchenham & Charters, 2007), which is the intent of this study. Systematic literature reviews require using a pre-defined protocol and structured process to ensure all research is synthesized and to limit the possibility of author's bias. For this review the author followed Kitchenham & Charters (2007) process for conducting a SLR, in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines (Page et al., 2021). This review process is well

supported and accepted in the Information Systems (IS) field as it provides clear steps to identify and screen all relevant peer-reviewed journal publications related to the desired topic.

## Search Process

The search process is the first step in conducting an SLR. To begin this research, the author completed a database search of peer-reviewed journals publications between 2001 and 2021 from Science Direct, IEEE Explorer, Web of Science, ABI/INFORM, and the ACM Digital Library. These databases are well-known and reputable databases for topics related to Information Systems.

## Inclusion Criteria

Academic databases were searched and filtered by peer-reviewed journals over the past two decades (2001-2021). Kitchenham & Charters (2007) mentions the process of identifying databases relevant to the topic being searched is critical. The databases searched are shown in the Table 1 along with the count of articles found from each. The following generic search terms were used in each of the selected databases: Knowledge Transfer, Age, Knowledge Sharing. These key terms were queried with inclusive conditional “AND” and “OR” statements to ensure all relevant articles were found: Title:(("Knowledge Transfer" AND "Age") OR ("Knowledge Sharing" AND "AGE")) OR Abstract:(("Knowledge Transfer" AND "Age") OR ("Knowledge Sharing" AND "AGE")) }  
"filter": { Publication Date: (01/01/2001 TO 12/31/2021) }

## Exclusion Criteria

During the initial search process, Web of Science and ACM, approximately 800 and 1300 publications respectively, appeared using the same key terms as IEEE. To reduce the number of articles relevant to this search, the author limited the key search terms to only the titles and abstracts of peer-reviewed journal articles in the English language.

Furthermore, if the full textual analysis did not contain information that explicitly linked age and knowledge transfer or knowledge sharing, or if the article didn't explicitly state that age was a contributing factor for knowledge transfer or knowledge sharing, it was excluded. Some of these articles mentioned things such as “digital age”, “information age” or the “age of the firm” and were therefore excluded. There were eight articles, as shown in Figure 1, that were excluded during the full textual analysis screening process.

## Review Process

All publications were reviewed to ensure articles were relevant to this SLR. These articles had to focus on knowledge sharing or knowledge transfer and had to have some aspect of age included in the text. This was completed by first reviewing if the words age, knowledge sharing, or knowledge transfer were in the title or abstract of the paper. Next, all articles that had these terms in the title and abstract were downloaded for full textual review.

## Data Extraction and Synthesis

After conducting a full textual analysis, the author discovered that all articles included had keywords in the title and abstract. The following data was extracted into an Excel document to inform the research: authors names, title of the article, year of publication, research question or aim of the study, and research findings.

The author then reviewed the data and identified age-related concepts, the primary and secondary focus of the article, and any other important or significant findings.

## Results

### Research Findings

Figure 1 depicts each step in the PRISMA process and shows there were nearly 170 articles identified from Science Direct (39), IEEE Explorer (48), Web of Science (73), ABI/INFORM (70), and ACM Digital Library (9). Twelve duplicate articles were then removed. Five were deemed ineligible as they were either a book chapter, conference workshops, conference mini track, or conference panel discussion. Six were misclassified and did not contain key words in the abstract or title.

Additionally, all 39 articles from Science Direct were removed as they were not related to age and knowledge sharing. These publications did not have knowledge sharing as a focus but rather on technology design and development (Li et al., 2013), only human data with little to no explicit reference to knowledge sharing/transfer (Abe et al., 2019), or had data with no relation to human beings (Mazumdar et al., 2019).

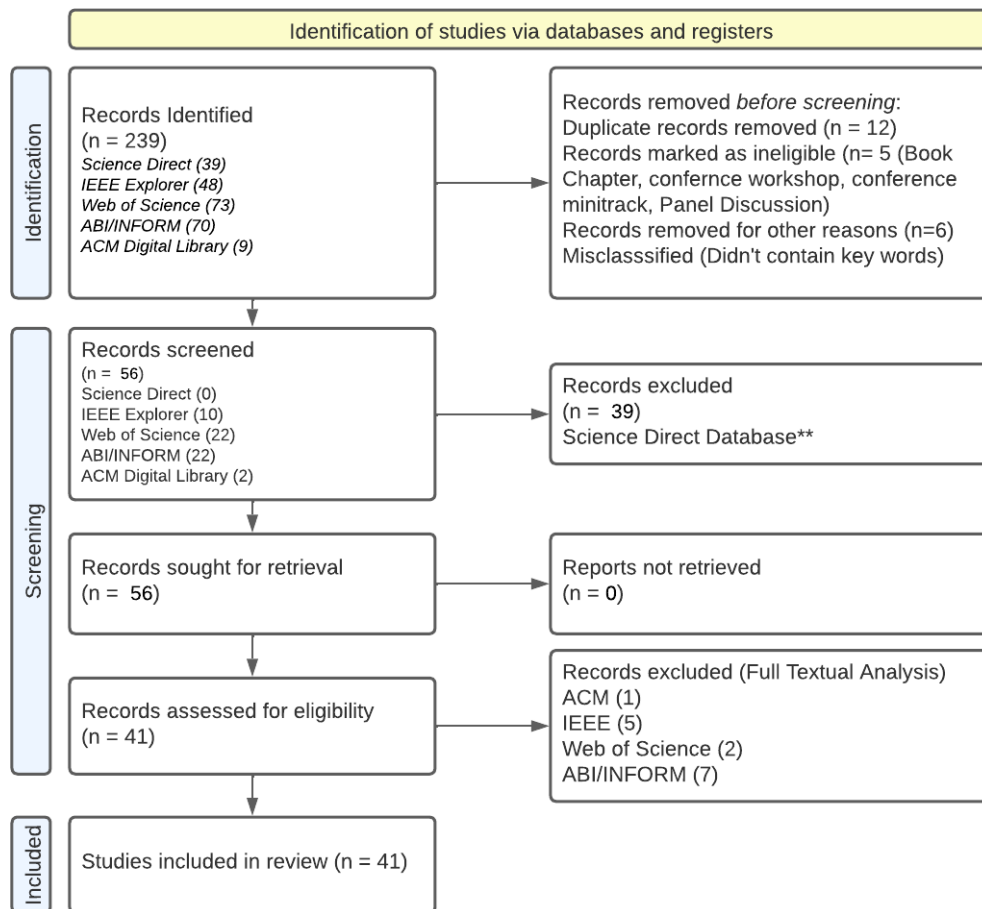


Figure 1: PRISMA Chart

After the full textual analysis, the remaining 41 articles were categorized into the three process improvement elements: People, Process, and Technology as seen in Table 1. Although some articles contained information relevant to more than one element, the purpose of each research was used to determine the main focus and influenced the categorization of the articles.

**Table 1: Primary Research Focus**

| FOCUS AREA   | PUBLICATIONS  |
|--|---|
| <p style="text-align: center;"><b>PEOPLE</b></p>     | <p>(Alismaiel, 2021; Burmeister et al., 2020; Burmeister, Fasbender, et al., 2018; Chang et al., 2018; Connelly &amp; Kelloway, 2003; D. P. Meher &amp; N. Mahajan, 2018; DEVECİ &amp; ÜNAL, 2021; Fasbender et al., 2021; Fasbender &amp; Gerpott, 2021; Hu, 2010; Killingsworth et al., 2016; Ku, 2019; Kuruppuge et al., 2018; Kuyken, 2012; Lazazzara &amp; Za, 2019; Nguyen et al., 2019; Palai, 2019; Srivastava &amp; Pradhan, 2019; Tien, 2018; W. Deng et al., 2010)</p> |
| <p style="text-align: center;"><b>PROCESS</b></p>    | <p>(Burmeister et al., 2021; Burmeister, van der Heijden, et al., 2018; Connelly &amp; Kelloway, 2003; Frerichs et al., 2012; Gerpott et al., 2021; Gratton et al., 2007, 2007; Gururajan &amp; Fink, 2010; Jain et al., 2007, 2007; MacCurtain et al., 2010; Rafique et al., 2018; Schmidt &amp; Muehlfeld, 2017; Trong Tuan, 2020, 2020)</p>  |
| <p style="text-align: center;"><b>TECHNOLOGY</b></p> | <p>(A. Kurniawati et al., 2016; Chang et al., 2018; Knoetze &amp; Jantjies, 2019; Moghavvemi et al., 2017; Mohammad Hossein Jarrahi &amp; Eshraghi, 2019)</p>   |

**People**

There were 21 articles that focused specifically on aspects related to people, as seen in Figure 2. The “People” dimension of the Process Improvement Model relates to anything that has to do with an individual’s knowledge, skills, or motivation (Prodan et al., 2015).

Many of the articles focusing on people had a secondary focus of motivation (Alismaiel, 2021; Burmeister et al., 2020; D. P. Meher & N. Mahajan, 2018; DEVECİ & ÜNAL, 2021; Fasbender & Gerpott, 2021; Kuruppuge et al., 2018; Nguyen et al., 2019; Tien, 2018). Fasbender & Gerpott (2021) conducted a study to better understand why older and younger employees share and receive knowledge with and from each other. These authors specifically focused on the motivation to teach, train and guide others as well as the motivation to grow, increase competence and master something new. Alismaiel’s (2021) researched age and cultural diversity, and motivators that influence knowledge and found these constructs directly impact Knowledge Management Sharing.

Other articles had a secondary focus on ability and trust (Fasbender & Gerpott, 2021), sense of the meaning of life (Chang et al., 2018), occupational self-efficacy (Fasbender & Gerpott, 2021), skills (W. Deng et al., 2010), and subjective age in the public sector (Kaminska & Borzillo, 2018).

## Process

There were 15 articles that focused specifically on aspects related to processes. A process can be defined as, “The set of ordered tasks needed to complete key objectives” (p.61). Knowledge sharing can “enable organizations to become more effective by helping them to select and perform the most appropriate processes” (Fernández, 2004, p. 79).

The different processes relating to knowledge sharing and age were broad, focusing on diversity training (Burmeister et al.) improving human resources processes (Burmeister, van der Heijden, et al., 2018), mentoring (Chand, 2018; Trong Tuan, 2020), retention (Frerichs et al., 2012), absorptive capacity (Rafique et al., 2018), diversifying top management team composition (MacCurtain et al., 2010), summarizing knowledge transfer process (Schmidt & Muehlfeld, 2017) and processes for improving learning outcomes (Gerpott et al., 2015)

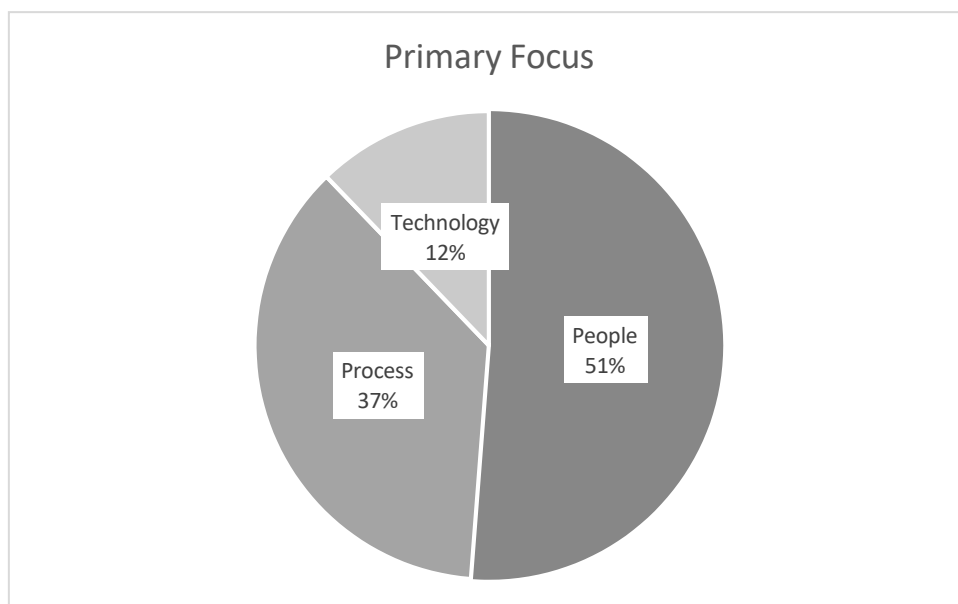


Figure 2: Primary Research Focus

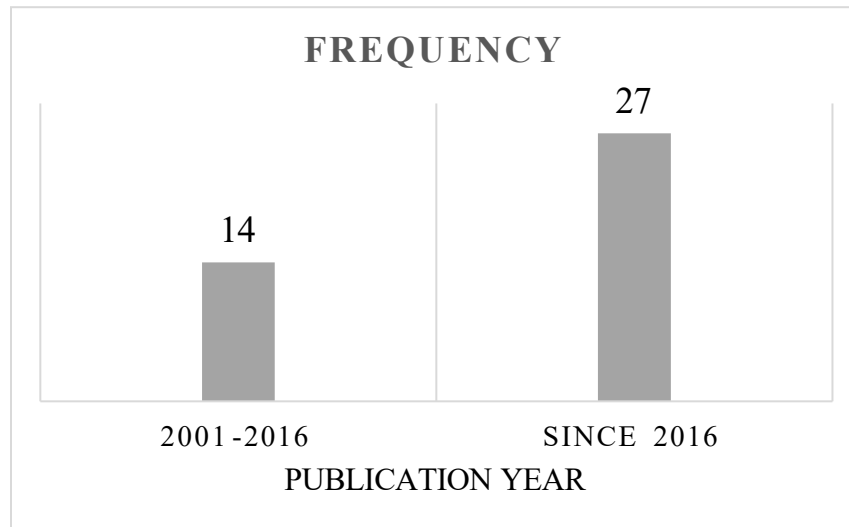
## Technology

There were only five articles that focused specifically on aspects related to technology. Technology is fundamental to people and processes as it improves process efficiency and effectiveness (Pearlson et al., 2019). Technology, in the form of a knowledge sharing system, can be described as systems that “enable members of an organization to acquire tacit and explicit knowledge from each other” (Fernández, 2004, p. 155).

Two of the articles that focused on technology specifically looked at motivating factors for using that technology (A. Kurniawati et al., 2016; Moghavvemi et al., 2017). Researchers Samantha Knoetze and Mmaki Jantjies (2019) explored variances in an organizational workforce and their use of technology in knowledge management. These researchers found baby boomers preferred to use explicit knowledge methods (like training and process documentation) and millennials preferred to use tacit knowledge tools (like instant messaging) indicating a distinct difference in the technology tools of those in different age groups.

The systematic literature review process identified only 14 publications before the year 2016 and 27 publications in the past five years (see Figure 3), indicating a rapid increase in research exploring the influence of age on knowledge sharing.

The increase of articles from 2017 focusing on age and knowledge sharing may have been a result of Schmidt and Muehlfiel's (2017) literature review which focused on various aspects of intergenerational knowledge transfer and called for future research to focus on the perspective of generational diversity and knowledge transfer. This increase in publications may have been an answer to these author's call.



**Figure 3: Count of Publications by Year**

## Discussion

People, Process, and Technology have been widely recognized as key elements of the Process Improvement Model and have significant effects on knowledge management (Hosseini, M. et al., 2014). People and process were the most heavily researched elements was no surprise and is consistent with the literature that postulates one of the most difficult aspects of knowledge sharing is motivating an individual to share (Becerra-Fernandez & Sabherwal, 2014). People was the most researched topic relating to age and knowledge sharing, specifically relating to an individual's motivation to share knowledge. Process was the next most research topic relating to age and knowledge sharing. Many of the processes identified in the literature review were processes to encourage individuals to share knowledge, such as training and mentoring employees.

Technology was the least researched topic relating to age and knowledge sharing. This may be an area for future research as the use of technology can assist in knowledge sharing, but must be developed in a way that all users perceive the technology as useful, as well as easy to use (Davis, 2000). Age must be taken in account when developing and implementing technology for knowledge sharing.

While age can undoubtedly influence an individual's willingness to share knowledge, there may be other confounding factors relating to age, including the career development stage of that individual. In all of the articles researched, only one article discussed the employability of workers as they age (Frerichs et al., 2012) and the authors found no previous studies focus explicitly on the influence of a career development stage on knowledge sharing.

Donald Super defined a career as “the combination and sequence of roles played by a person during the course of a lifetime” (Super, 1980, p. 1). These roles are described in different stages determined by one’s age and vocational maturity in Super’s Life-Span Life-Space Theory (Super, 1980). During the developmental stage (ages 4-13) individuals are focused on achieving positive attitudes toward behavior and work and developing their self-concept. The next stage is exploration (ages 14-24). During the stage of exploration, individuals narrow vocational interests by trying out part-time jobs and declaring majors based on their interests. Once a career path has been chosen, individuals enter the establishment stage (ages 25-44). Individuals in this stage must focus on both maintaining and advancing in their profession. During the maintenance stage (ages 45-65), individuals must maintain their place at work and compete with younger, more educated workers. The final stage is disengagement (ages 65+). During this stage, individuals begin planning for retirement and occupational activities begin to decline. Although individuals may transition between stages for a short time due to career interruptions, most commonly, individuals will follow these developmental stages in sequential order.

These stages indicate the possibility that younger workers may resist sharing knowledge for reasons other than age alone, and older workers may be more willing to share for other reasons. Future research should explore other age-related concepts, including the influence of a career development stage on knowledge sharing practices.

### Conclusion

Although knowledge sharing is crucial for the success of an organization, there are many influences that prevent this from happening. This paper contributes to the theory of knowledge sharing by categorizing the articles into themes relating to people, process, and technology. By reviewing peer-reviewed journal articles from information systems databases, this systematic literature review identifies current gaps in the literature. The biggest gap in the research is the limited number of studies that focus on the role of technology in relation to age and knowledge sharing. Additionally, other age-related concepts that may deter knowledge sharing was not explored in the same proportion as the other components of the process improvement model. This is significant as technology experience of younger generations undoubtedly differs from that of older generations. Other age-related concepts not explored includes the career development stage of an individual. This may be a potential area for future research. A person’s motivation to share knowledge was explored most extensively. Processes relating to age and knowledge sharing were also explored.

This study is not without limitations. First, the search was limited to the following academic databases Science Direct, IEEE Explorer, Web of Science, and the ACM Digital Library as these were the most familiar databases to the author. Other databases could have been explored which may have altered the results. Another limitation is the search query explicitly referencing ‘Age’. Although this helped narrow the search results, it may have eliminated research investigating knowledge sharing/transfer that includes ‘age’ as a moderator/control. Finally, the coding of the results may be subject to misclassification.

As this research area continues to grow, this paper can guide future researchers in the development of new research directions to improve knowledge sharing in an age-diverse organization.



## References

- A. Kurniawati, T. M. A. Arisamadhi, & I. I. Wiratmadja. (2016). Relationship among individual factors, knowledge sharing, and work performance: A model from baby boomers, generation X, and generation Y perspective. *2016 IEEE International Conference on Industrial Engineering and Engineering Management (IEEM)*, 6–10. <https://doi.org/10.1109/IEEM.2016.7797825>
- Abe, E. M., Xu, J., Tchuenté, L.-A. T., Sacko, M., Guo, Y., Li, S., & Zhou, X.-N. (2019). Institution-based Network on China-Africa Cooperation for Schistosomiasis Elimination (INCAS): Driving schistosomiasis elimination in Africa. *Global Health Journal*, 3(1), 16–20. <https://doi.org/10.1016/j.glohj.2019.03.002>
- Alavi, M., & Lediner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107–136. <https://doi.org/10.2307/3250961>
- Alismaiel, O. A. (2021). Adaptation of big data: an empirical investigation for sustainability of education. *Entrepreneurship and Sustainability Issues*, 9(1), 590–611. [https://doi.org/10.9770/jesi.2021.9.1\(37\)](https://doi.org/10.9770/jesi.2021.9.1(37))
- Becerra-Fernandez, I., & Sabherwal, R. (2014). *Knowledge Management: Systems and Processes* (2nd ed.). Routledge. <https://doi.org/10.4324/9781315715117>
- Burmeister, A., Fasbender, U., & Deller, J. (2018). Being perceived as a knowledge sender or knowledge receiver: A multistudy investigation of the effect of age on knowledge transfer. *Journal of Occupational and Organizational Psychology*, 91(3), 518–545. <https://doi.org/10.1111/joop.12208>
- Burmeister, A., Gerpott, F. H., Hirschi, A., Scheibe, S., Pak, K., & Kooij, D. (2021). Reaching the heart or the mind? Test of two theory-based training programs to improve interactions between age-diverse coworkers. *Academy of Management Learning & Education*, 20(2), 203–232. <https://doi.org/10.5465/amle.2019.0348>
- Burmeister, A., van der Heijden, B., Yang, J., & Deller, J. (2018). Knowledge transfer in age-diverse coworker dyads in China and Germany: How and when do age-inclusive human resource practices have an effect? *Human Resource Management Journal*, 28(4), 605–620. <https://doi.org/10.1111/1748-8583.12207>
- Burmeister, A., Wang, M., & Hirschi, A. (2020). Understanding the Motivational Benefits of Knowledge Transfer for Older and Younger Workers in Age-Diverse Coworker Dyads: An Actor-Partner Interdependence Model. *Journal of Applied Psychology*, 105(7), 748–759. <https://doi.org/10.1037/apl0000466>
- Chand, M. (2018). Aging in South Asia: Challenges and opportunities. *South Asian Journal of Business Studies*, 7(2), 189–206. <https://doi.org/10.1108/SAJBS-09-2017-0103>
- Chang, I.-C., Chang, C.-H., Lian, J.-W., & Wang, M.-W. (2018). Antecedents and consequences of social networking site knowledge sharing by seniors A social capital perspective. *Library HI Tech*, 36(4), 651–664. <https://doi.org/10.1108/LHT-11-2016-0144>

- Connelly, C. E., & Kelloway, E. K. (2003). Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal*, 24(5/6), 294–301. ABI/INFORM Collection. <https://doi.org/10.1108/01437730310485815>
- D. P. Meher & N. Mahajan. (2018). An Analytical Study of Use of Knowledge Sharing Methods in Education. *2018 International Conference on Current Trends towards Converging Technologies (ICCTCT)*, 1–6. <https://doi.org/10.1109/ICCTCT.2018.8551044>
- Davis, F. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>
- DEVECI, F. G., & ÜNAL, S. (2021). The Effect of Individual and Environmental Motivations on YouTube Followers' Behavioral Changes. *Istanbul Business Research*, 50(2), 435–463. ABI/INFORM Collection. <https://doi.org/10.26650/ibr.2021.51.844527>
- Dunham, A. H., & Burt, C. D. B. (2011). Organizational memory and empowerment. *Journal of Knowledge Management*, 15(5), 851–868. <https://doi.org/10.1108/13673271111174366>
- Fasbender, U., & Gerpott, F. H. (2021). To share or not to share: A social-cognitive internalization model to explain how age discrimination impairs older employees' knowledge sharing with younger colleagues. *European Journal of Work And Organizational Psychology*, 30(1), 125–142. <https://doi.org/10.1080/1359432X.2020.1839421>
- Fasbender, U., Gerpott, F. H., & Unger, D. (2021). Give and take? Knowledge exchange between older and younger employees as a function of generativity and development striving. *Journal of Knowledge Management*, 25(10), 2420–2443. <https://doi.org/10.1108/JKM-11-2020-0856>
- Fernández, W. D. (2004). *Chapter 5. The grounded theory method and case study data in IS research: Issues and design*. Information Systems Foundations: Constructing and Criticising Workshop.
- Frerichs, F., Lindley, R., Aleksandrowicz, P., Baldauf, B., & Galloway, S. (2012). Active ageing in organisations: A case study approach. *International Journal of Manpower*, 33(6), 666–684. <https://doi.org/10.1108/01437721211261813>
- Gerpott, F. H., Lehmann-Willenbrock, N., Wenzel, R., & Voelpel, S. C. (2021). Age diversity and learning outcomes in organizational training groups: The role of knowledge sharing and psychological safety. *International Journal of Human Resource Management*, 32(18), 3777–3804. <https://doi.org/10.1080/09585192.2019.1640763>
- Gerpott, F. H., Wenzel, R., Lehmann-Willenbrock, N., & Voelpel, S. C. (2015). Age-Diverse Training Groups: How Knowledge Sharing & Psychological Safety Promote Learning Outcomes. *Academy of Management Proceedings*, 2015(1), 11691. <https://doi.org/10.5465/ambpp.2015.64>
- Gratton, L., Voigt, A., & Erickson, T. (2007). Bridging faultlines in diverse teams. *MIT Sloan Management Review*, 48(4), 22+.
- Gururajan, V., & Fink, D. (2010). Attitudes towards knowledge transfer in an environment to perform. *Journal of Knowledge Management*, 14(6), 828–840. <https://doi.org/10.1108/13673271011084880>

- Hosseini, M., Tahsildari, H., Hashim, M., & Tareq, M. (2014). The impact of people, process and technology on knowledge management. *International Knowledge Sharing Platform*, 6(28). <https://www.iiste.org/Journals/index.php/EJBM/article/view/16022>
- Hu, L. (2010). Same bed, but different dreams? Comparing retired and incumbent police officers' perceptions of lost knowledge and transfer mechanisms. *Crime, Law and Social Change*, 53(4), 413–435. ABI/INFORM Collection. <https://doi.org/10.1007/s10611-009-9228-7>
- Jain, K. K., Singh, M., & Kaur, G. (2007). Relationship between Demographic Factors and Knowledge Sharing A Case Study of Business Schools in Klang Valley, Malaysia. *Journal of Contemporary Management Research*, 1(2), 38–56. ABI/INFORM Collection.
- Kaminska, R., & Borzillo, S. (2018). Challenges to the learning organization in the context of generational diversity and social networks. *The Learning Organization*, 25(2), 92–101. <https://doi.org/10.1108/TLO-03-2017-0033>
- Killingsworth, B., Xue, Y., & Liu, Y. (2016). Factors influencing knowledge sharing among global virtual teams. *Team Performance Management*, 22(5/6), 284–300. ABI/INFORM Collection. <https://doi.org/10.1108/TPM-10-2015-0042>
- Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering*. 2.
- Knoetze, S., & Jantjies, M. (2019). Transferring Knowledge to Digital Natives in a South African Organization. *Proceedings of the 2019 the 5th International Conference on E-Society, e-Learning and e-Technologies*, 16–21. <https://doi.org/10.1145/3312714.3312731>
- Ku, M. (2019). Similarity-dissimilarity and social capital in research knowledge networks: Explaining knowledge sharing in academic institutions. *Knowledge Management Research & Practice*, 17(3), 264–275. <https://doi.org/10.1080/14778238.2019.1595986>
- Kuruppuge, R. H., Gregar, A., Jayawardena, C., & Kudlacek, L. (2018). Demographic, individual, job diversities and knowledge sharing: a study of enterprising family businesses. *Foundations Of Management*, 10(1), 271–282. <https://doi.org/10.2478/fman-2018-0021>
- Kuyken, K. (2012). Knowledge communities: Towards a re-thinking of intergenerational knowledge transfer: Very Informal Newsletter on Library Automation. *VINE*, 42(3/4), 365–381. ABI/INFORM Collection. <https://doi.org/10.1108/03055721211267495>
- Lazazzara, A., & Za, S. (2019). The effect of subjective age on knowledge sharing in the public sector. *Personnel Review*, 49(1), 303–323. <https://doi.org/10.1108/PR-07-2018-0248>
- Li, Z., Liang, P., & Avgeriou, P. (2013). Application of knowledge-based approaches in software architecture: A systematic mapping study. *Information and Software Technology*, 55(5), 777–794. <https://doi.org/10.1016/j.infsof.2012.11.005>

- MacCurtain, S., Flood, P. C., Ramamoorthy, N., West, M. A., & Dawson, J. F. (2010). The top management team, reflexivity, knowledge sharing and new product performance: A study of the Irish software industry. *Creativity and Innovation Management*, 19(3), 219–232. <https://doi.org/10.1111/j.1467-8691.2010.00564.x>
- Mazumdar, P., Pratama, H., Lau, S.-E., Teo, C. H., & Harikrishna, J. A. (2019). Biology, phytochemical profile and prospects for snake fruit: An antioxidant-rich fruit of South East Asia. *Trends in Food Science & Technology*, 91, 147–158. <https://doi.org/10.1016/j.tifs.2019.06.017>
- Moghavvemi, S., Sharabati, M., Paramanathan, T., & Rahin, N. M. (2017). The impact of perceived enjoyment, perceived reciprocal benefits and knowledge power on students' knowledge sharing through Facebook. *International Journal of Management Education*, 15(1), 1–12. <https://doi.org/10.1016/j.ijme.2016.11.002>
- Mohammad Hossein Jarrahi, & Eshraghi, A. (2019). Digital natives vs digital immigrants: A multidimensional view on interaction with social technologies in organizations. *Journal of Enterprise Information Management*, 32(6), 1051–1070. ABI/INFORM Collection. <https://doi.org/10.1108/JEIM-04-2018-0071>
- Navimipour, N. J., & Charband, Y. (2016). Knowledge sharing mechanisms and techniques in project teams: Literature review, classification, and current trends. *Computers in Human Behavior*, 62, 730–742. <https://doi.org/10.1016/j.chb.2016.05.003>
- Nguyen, T.-M., Nham, T. P., Froese, F. J., & Malik, A. (2019). Motivation and knowledge sharing: A meta-analysis of main and moderating effects. *Journal Of Knowledge Management*, 23(5), 998–1016. <https://doi.org/10.1108/JKM-01-2019-0029>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ*, n71. <https://doi.org/10.1136/bmj.n71>
- Palai, D. (2019). A comparative study on multi-generational workforce in public and private sector banks. *Parikalpana: K I I T Journal of Management*, 15(1/2), 253–255. ABI/INFORM Collection.
- Pearlson, K., Saunders, C. S., & Galletta, D. F. (2019). *Managing and Using Information Systems: A Strategic Approach, 7th Edition* (7th ed.). Wiley.
- Prodan, M., Prodan, A., & Purcarea, A. A. (2015). Three new dimensions to people, process, technology improvementmModel. In A. Rocha, A. M. Correia, S. Costanzo, & L. P. Reis (Eds.), *New Contributions in Information Systems and Technologies* (Vol. 353, pp. 481–490). Springer International Publishing. [https://doi.org/10.1007/978-3-319-16486-1\\_47](https://doi.org/10.1007/978-3-319-16486-1_47)
- Rafique, M., Hameed, S., & Agha, M. H. (2018). Impact of knowledge sharing, learning adaptability and organizational commitment on absorptive capacity in pharmaceutical firms based in Pakistan. *Journal of Knowledge Management*, 22(1), 44–56. <https://doi.org/10.1108/JKM-04-2017-0132>
- Riege, A. (2005). Three-dozen knowledge-sharing barriers managers must consider. *Journal of Knowledge Management*, 9(3), 18–35.

- Schmidt, X., & Muehlfeld, K. (2017). What's so special about intergenerational knowledge transfer? Identifying challenges of intergenerational knowledge transfer. *Management Revue*, 28(4), 375–411. <https://doi.org/10.5771/0935-9915-2017-4-375>
- Srivastava, M., & Pradhan, A. (2019). Knowledge sharing and turnover intention in business management institutes: Do individual differences play a pivotal role? *Parikalpana: K I I T Journal of Management*, 15(1/2), 81–94. ABI/INFORM Collection. <https://doi.org/10.23862/kiit-parikalpana/2019/v15/h-2/190r75>
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 16(3), 282–298. [https://doi.org/10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1)
- Tangaraja, G., Mohd Rasdi, R., Abu Samah, B., & Ismail, M. (2016). Knowledge sharing is knowledge transfer: A misconception in the literature. *Journal of Knowledge Management*, 20(4), 653–670. <https://doi.org/10.1108/JKM-11-2015-0427>
- Tien, C. H. (2018). Demographic variables in knowledge sharing behavior among IT engineers in taiwan. *Proceedings of the 2018 International Conference on Information Science and System*, 69–74. <https://doi.org/10.1145/3209914.3209924>
- Trong Tuan, L. (2020). Can managing employee diversity be a pathway to creativity for four companies? *International Journal of Contemporary Hospitality Management*, 32(1), 81–107. <https://doi.org/10.1108/IJCHM-12-2018-0990>
- W. Deng, W. Shan, & F. Wei. (2010). Network structure and determinants of employee Tacit Knowledge transfer. *2010 International Conference on Networking and Information Technology*, 397–401. <https://doi.org/10.1109/ICNIT.2010.5508485>
- Wallace, A. (2021, September 6). *The US workforce has gotten significantly older and more diverse* | *CNN Business*. CNN. <https://www.cnn.com/2021/09/06/business/labor-day-american-workforce-composition/index.html>