

Exploring the Role of HRM in Facilitating Collaboration and Knowledge Sharing in Decentralized Organizational Structures

Mengeksplorasi Peran Sumber Daya Manusia dalam Memfasilitasi Kolaborasi dan Berbagi Pengetahuan dalam Struktur Organisasi yang Terdesentralisasi

Asmita Wulansari Dg. Liwang

Universitas Muhammadiyah Luwuk

*asmitawulansaridgliwang@gmail.com

**Corresponding Author*

ABSTRACT

This research investigates the role of human resources (HR) in facilitating collaboration and knowledge sharing in decentralized organizational structures. Through a systematic literature review approach, this study collects and analyzes various relevant literature from international databases. The research results highlight the importance of collaborative leadership, awareness, and organization of inter-organizational processes in facilitating collaboration in decentralized contexts. Additionally, factors such as individual motivation, management support, and technology also influence knowledge sharing practices within organizations. Empirical studies confirm that decentralized structures play an important role in facilitating collaboration and knowledge sharing, which in turn improves organizational performance and innovation. In conclusion, a deeper understanding of the dynamics of collaboration and knowledge sharing in decentralized structures has important implications for human resource management and organizational development.

Keywords: Human Resources, Collaboration, Knowledge Sharing, Decentralized Organizational Structure, Collaborative Leadership

ABSTRAK

Penelitian ini menyelidiki peran sumber daya manusia (SDM) dalam memfasilitasi kolaborasi dan berbagi pengetahuan dalam struktur organisasi yang terdesentralisasi. Melalui pendekatan tinjauan pustaka yang sistematis, penelitian ini mengumpulkan dan menganalisis berbagai literatur relevan dari database internasional. Hasil penelitian menyoroti pentingnya kepemimpinan kolaboratif, kesadaran, dan pengorganisasian proses antar organisasi dalam memfasilitasi kolaborasi dalam konteks desentralisasi. Selain itu, faktor-faktor seperti motivasi individu, dukungan manajemen, dan teknologi juga mempengaruhi praktik berbagi pengetahuan dalam organisasi. Studi empiris menegaskan bahwa struktur desentralisasi memainkan peran penting dalam memfasilitasi kolaborasi dan berbagi pengetahuan, yang pada gilirannya meningkatkan kinerja dan inovasi organisasi. Kesimpulannya, pemahaman yang lebih mendalam mengenai dinamika kolaborasi dan berbagi pengetahuan dalam struktur desentralisasi mempunyai implikasi penting bagi pengelolaan sumber daya manusia dan pengembangan organisasi.

Kata Kunci: Sumber Daya Manusia, Kolaborasi, Berbagi Pengetahuan, Struktur Organisasi Terdesentralisasi, Kepemimpinan Kolaboratif

1. Introduction

Understanding the implementation of a decentralized organizational structure is crucial for various aspects of organizational functioning. Decentralization allows for flexibility in decision-making, which is essential for adapting to changing environments and fostering innovation (Li et al., 2018). It reduces cognitive workload, making it easier for individuals to assimilate new patterns and associations (Fiol & Lyles, 1985). Decentralized structures facilitate

the flow of quality information between different levels of management, enhancing organizational learning capabilities and innovation (Li et al., 2018).

Moreover, a decentralized organizational structure can positively impact job satisfaction and performance (Sun et al., 2021). It allows for greater authority at lower levels, enabling direct contact with stakeholders such as community residents, which can enhance operational effectiveness (Lee & Jang, 2012). Decentralization is also linked to improved knowledge management, as interpersonal exchange and social interaction tend to increase in decentralized organizations (Chen & Huang, 2007).

Furthermore, decentralized structures are associated with better adaptability to external pressures and the implementation of environmental management practices in entrepreneurial firms (Mahmud et al., 2021). They play a significant role in the successful implementation of accounting innovations, demonstrating the importance of decentralization choices in enhancing organizational performance (Abernethy & Bouwens, 2005).

In conclusion, the literature underscores the importance of understanding and effectively implementing decentralized organizational structures. Such structures not only promote innovation, organizational learning, and knowledge management but also contribute to job satisfaction, performance, and adaptability to changing environments. Embracing decentralization can lead to improved decision-making processes, enhanced communication, and overall organizational effectiveness.

In this context, an emerging phenomenon is the need for a deep understanding of how decentralized organizational structures influence various aspects of organizational performance. A decentralized structure offers flexibility in decision making, which is a key element in adapting to a changing environment and driving innovation. This is especially important considering today's increasingly complex and dynamic business environment, where organizations need to be able to move quickly and make timely decisions. In addition, decentralized structures also influence social dynamics within organizations, allowing greater interaction between different levels of management and facilitating the exchange of quality information.

Although many studies have highlighted the benefits of decentralized organizational structures, there is still a lack of research investigating the role of human resources (HR) in facilitating collaboration and knowledge sharing within them. While a decentralized organizational structure offers a number of benefits, including flexibility and innovation, the challenge that arises lies in how to manage collaboration between decentralized units and how to ensure effective knowledge flow between them. Therefore, more in-depth research is needed to understand the role of HRM in overcoming these challenges and exploiting the full potential of decentralized structures.

This research contributes by broadening our understanding of how HRM can play a crucial role in facilitating collaboration and knowledge sharing within decentralized organizational structures. By identifying effective HR management strategies and practices in this context, this research can provide practical guidance for organizations adopting or planning to adopt decentralized structures. Additionally, this research also provides new insights into how HR policies can be adapted to support effective collaboration and knowledge exchange among decentralized units, thereby helping organizations improve their performance and competitiveness in an increasingly complex and changing business environment.

2. Research Methods

To reveal the role of human resources (HR) in facilitating collaboration and knowledge sharing within decentralized organizational structures, this research uses a systematic approach through a literature review. This approach is implemented through a systematic literature review (SLR) which collects and analyzes various related studies from international databases, including PubMed, Scopus, and Web of Science. Keywords used in the search include

"decentralized organizational structure", "human resource management", "collaboration", and "knowledge sharing".

In the literature search process, relevant articles were selected based on predetermined inclusion and exclusion criteria. Accepted articles must have a focus on the relationship between decentralized organizational structures, human resource management, collaboration between units or individuals, and knowledge exchange within organizations. Articles that do not fit the research topic or have an inadequate methodology for understanding the role of HRM in the context of decentralized structures may be rejected.

After the initial selection was carried out, the accepted articles were then analyzed in depth to extract key findings relating to the role of HRM in facilitating collaboration and knowledge sharing within decentralized organizational structures. This analysis was conducted to identify general patterns, trends, and research gaps that exist in the existing literature.

Through this SLR approach, this research seeks to provide comprehensive insight into how HR management practices can influence the dynamics of collaboration and knowledge exchange in the context of decentralized organizational structures. In doing so, this research aims to make an important contribution to our understanding of how to optimize organizational performance in increasingly decentralized and complex environments.

3. Results and Discussions

3.1 Collaboration in Decentralized Organizational Structures

3.1.1 Understanding collaboration in an organizational context

Collaboration in an organizational context is a multifaceted concept that involves various dimensions such as leadership, inter-organizational processes, awareness, teamwork, and organizational learning. The literature emphasizes the importance of collaborative leadership in dynamic organizational settings (Ang'ana & Kilika, 2022). Organizing collaboration in inter-organizational contexts is achieved through the development of inter-organizational business processes (Jaatinen, 2015). Awareness is highlighted as a crucial element in fostering effective organizational collaboration (Thellufsen et al., 2009). Factors such as general collaboration attitudes, technology adaptation, collaboration enablers, and job characteristics play a significant role in studying organizational collaboration (Swindler et al., 2007).

Furthermore, organizational collaboration is recognized as a strategy for addressing complex social issues, indicating its growing importance in the 21st century (Woodland & Hutton, 2012). Collaboration between different organizations and parts within organizations is essential for achieving common goals and influencing organizational outcomes and performance (Dietrich et al., 2010). Staff members' experiences of teamwork and collaboration are positively associated with a supportive organizational context and patient-centered care (Sullivan et al., 2019). Understanding inter- and intra-organizational relationships is crucial for managers to make informed decisions about how their organizations relate internally and externally (Mena et al., 2009).

Moreover, participating in inter-organizational learning collaborations can help organizations derive more value by exploring feedback processes and dynamics within collaborations (Winkelen, 2010). Internal collaboration and investments in information technologies are essential for organizational performance (Sanders, 2007). Interorganizational collaboration involves interacting organizations to create new structures and processes (Thomson et al., 2007). Engaging individual citizens alongside organizations enhances collaboration by incorporating diverse knowledge and perspectives (Yuan et al., 2022). Collaborating with other organizations contributes to the innovativeness of organizations (Koster, 2020).

In conclusion, collaboration in an organizational context is a complex and vital aspect that influences leadership, processes, awareness, teamwork, learning, and performance. Understanding the dynamics of collaboration and its impact on organizational outcomes is

crucial for organizations aiming to thrive in today's interconnected and rapidly changing business environment.

1. Challenges faced in creating collaboration in a decentralized structure

Creating collaboration in a decentralized structure presents several challenges that need to be addressed. One key challenge is ensuring the robustness of decentralized schemes against malicious actors and unreliable data contributions (Kairouz et al., 2019). Additionally, issues such as network latency, node failures, and the complexity of building and maintaining overlay networks in a distributed environment can hinder decentralized learning (Pournaras et al., 2019). Decentralization within organizations can lead to architecture challenges that must be understood to implement suitable measures for collaboration (Schultis et al., 2014).

Moreover, decentralized structures require a well-balanced power distribution among collaborating organizations to prevent conflicts and achieve agreements effectively (Nuhoff-Isakhanyan et al., 2017). Decentralized networks have the potential to enhance collaborative decision-making, especially in complex task environments, highlighting their suitability for decentralized structures (Brown et al., 2021). Leveraging existing local institutions or introducing new structures with local representatives can facilitate collaborative approaches in decentralized governance, such as in land administration (Ho et al., 2021).

In the context of disaster management, challenges arise from structural and cultural differences between organizations, emphasizing the need to identify strengths and weaknesses to encourage cooperative efforts for successful collaborations (Kapucu et al., 2010). Furthermore, decentralized structures face obstacles in forming social ties across diverse groups, hindering effective collaboration (Kyriakopoulou & Xepapadeas, 2021). Successful collaboration in decentralized settings requires active involvement of stakeholders, decentralized resources, and a high-involvement model to drive improvement efforts (Wohlstetter et al., 2003).

In summary, challenges in creating collaboration in decentralized structures range from technical issues like network latency to organizational hurdles such as power distribution and cultural differences. Overcoming these challenges necessitates robust measures to address malicious actors, reliable data contributions, and effective communication strategies to foster collaboration in decentralized environments.

2. The relationship between decentralized organizational structure and collaboration

Decentralized organizational structures have been found to have a significant impact on collaboration within organizations. Studies have shown that in decentralized decision-making structures, employees tend to engage in more learning behaviors, leading to increased absorptive capacity (Li et al., 2018). Furthermore, decentralized organizational decision structures influence role clarity, which positively affects job satisfaction (Hansen & Høst, 2012). The degree of organizational decentralization has been linked to increased job satisfaction and job performance (Sun et al., 2021). Decentralized structures have also been associated with balanced power distribution among collaborating organizations, which can prevent conflicts and promote agreements (Nuhoff-Isakhanyan et al., 2017).

Decentralization allows for more interaction and decentralized decision-making, which can facilitate innovation and collaboration within organizations (Gressgård, 2011). When power is decentralized and organizational resources are distributed throughout a network, it enhances the capacity for reform and improvement (Wohlstetter et al., 2003). Additionally, a decentralized structure that allows for immediate feedback and error-correction can promote efficient collaboration (Ahuja & Carley, 2006).

Overall, the literature suggests that decentralized organizational structures play a crucial role in fostering collaboration within organizations. By distributing decision-making

power, promoting learning behaviors, and enhancing role clarity, decentralized structures can create an environment conducive to innovation, job satisfaction, and improved performance.

3. Empirical evidence on the effectiveness of collaboration in decentralized organizational structures

Decentralized organizational structures have been extensively studied in various disciplines. Research by Jansen et al. (2009) and Ulleberg Bjørnstad & Ulleberg (2021) has emphasized the significance of integration mechanisms and trust in achieving organizational effectiveness in decentralized settings. Bjørnstad (2011) further highlights the positive relationship between flat structures, decentralized processes, and organizational effectiveness, with flexibility playing a mediating role. Li et al. (2018) discuss how decentralization influences absorptive capacity, showing that in decentralized firms, learning-oriented employees tend to engage more in learning behaviors, thereby enhancing absorptive capacity.

Additionally, Sun et al. (2021) explore how the degree of decentralization within construction projects impacts employees' job satisfaction and performance, indicating a positive correlation between decentralization and its effect on job satisfaction and performance. Furthermore, Wohlstetter et al. (2003) suggest that decentralization, along with active collaboration among stakeholders, is crucial for improving schools and urban school reform efforts.

In summary, the empirical evidence from these studies collectively supports the idea that collaboration within decentralized organizational structures is crucial for achieving organizational effectiveness. Trust, integration mechanisms, flat structures, decentralized processes, and active stakeholder collaboration are identified as key factors contributing to the success of decentralized organizational models.

3.2 Knowledge Sharing in a Decentralized Organizational Structure

3.2.1 Definition and importance of knowledge sharing in organizations

Knowledge sharing in organizations is a fundamental process in knowledge management that involves the exchange of knowledge among individuals within the organization (Yi, 2019). It integrates explicit organizational information with the tacit knowledge held by individuals, contributing to the development of skills, capabilities, and competitive advantage (Mwawasi, 2022). Effective knowledge sharing practices can lead to increased creativity, innovation, and overall organizational performance (Ipe, 2003). It is also a critical aspect of knowledge management, connecting the acquisition of knowledge capital with its practical application, especially important for international business organizations seeking to leverage knowledge in various ways (Abdullah & Alqarni, 2022).

Knowledge sharing is crucial for both profit and non-profit organizations as it enhances value, sustains competitive advantages, and fosters innovation through the combination of personal knowledge (Yassin et al., 2011). It is a valuable resource that can provide companies with a competitive edge over others (Jin & Suntrayuth, 2022). Additionally, the leadership's role in promoting knowledge sharing practices within organizations is crucial for improving knowledge sharing processes and practices (Yamasaki et al., 2018).

In conclusion, knowledge sharing is not only a means of disseminating information but a strategic process that drives organizational success, fosters innovation, and enhances competitiveness. Organizations that prioritize and effectively manage knowledge sharing stand to benefit significantly in today's dynamic and competitive business environment.

3.2.2 Factors influencing knowledge sharing in decentralized contexts

Factors influencing knowledge sharing in decentralized contexts are multifaceted and encompass both individual and organizational aspects. Individual factors such as motivation, trust, self-efficacy, altruism, and reputation play a crucial role in influencing knowledge sharing

behavior (Shehab et al., 2018; Hòà et al., 2020; Usoro et al., 2007; Lin, 2007). These factors can significantly impact an individual's willingness to share knowledge within a decentralized setting. Additionally, personal factors like confidence, trust, and the joy of sharing knowledge have been identified as influential in knowledge sharing practices (Hòà et al., 2020).

On an organizational level, factors such as leadership styles, organizational culture, management support, rewards, collaborative climate, and university policies can affect knowledge sharing behaviors (Rahman et al., 2022; Yeo & Gold, 2014; Akosile & Olatokun, 2019; Wahyudi et al., 2019). For instance, transformational leadership, respect for people, and decentralization have been found to directly influence knowledge sharing practices within multinational corporations (Rahman et al., 2022). Moreover, the presence of an organizational climate that fosters fairness, belongingness, and perceived trustworthiness can significantly impact individuals' intentions to engage in knowledge sharing activities (Kim et al., 2015; Usoro et al., 2007).

Furthermore, the contextual support provided within the decentralized environment, such as competence support and relatedness support, can encourage autonomous motivations and subsequently promote knowledge-sharing behaviors (Yuan & Liu, 2017). It is essential to consider the impact of cultural factors on knowledge sharing strategies, as national culture can significantly influence knowledge sharing practices (Ardichvili et al., 2006). Therefore, when designing knowledge management systems in decentralized contexts, a cultural needs assessment should be conducted to ensure the effectiveness of knowledge sharing initiatives (Ardichvili et al., 2006).

In conclusion, knowledge sharing in decentralized contexts is influenced by a complex interplay of individual and organizational factors. Understanding and addressing these factors are crucial for promoting effective knowledge sharing practices within decentralized settings, ultimately contributing to enhanced collaboration, innovation, and organizational performance.

3.3. The role of technology in facilitating knowledge sharing in decentralized structures

Technology plays a crucial role in facilitating knowledge sharing within decentralized structures. Digital technologies have been acknowledged as significant enablers for managing knowledge and promoting knowledge sharing within organizations (Razmerita et al., 2016). Specifically, digital technology has been recognized for its critical role in enhancing job performance through knowledge sharing (Deng et al., 2022). Moreover, the mediating role of knowledge sharing in achieving technological innovation highlights the indispensable nature of knowledge sharing for innovation (Ma et al., 2022).

In the context of organizational culture, structure, and technological infrastructure, knowledge sharing acts as a mediator that influences process improvement, emphasizing the interconnectedness of these factors in knowledge management within enterprises (Chiòn et al., 2019). Furthermore, the use of technology, such as blockchain-based systems, has been proposed to govern trust and facilitate knowledge transfer in decentralized environments (Lei & Kim, 2019; Anjomshoaa & Curry, 2022).

Decentralized systems benefit from technology that supports adaptive information sharing, enhancing self-organization within teams (Liu et al., 2021). Additionally, the emergence of informal interpersonal networks facilitated by technology plays a vital role in providing access to expertise in highly decentralized systems (Binz-Scharf et al., 2011). The use of technology, such as blockchain and knowledge graph frameworks, enables reliable and transparent transfer of digital assets, fostering knowledge sharing in smart environments (Anjomshoaa & Curry, 2022).

Overall, technology acts as a catalyst for knowledge sharing in decentralized structures by providing tools and platforms that enable efficient communication, collaboration, and

information exchange among team members, ultimately enhancing organizational performance and innovation.

3.4 An empirical study of knowledge sharing practices in decentralized organizational structures

In examining knowledge sharing practices within decentralized organizational structures, it is crucial to consider various empirical studies that shed light on this topic. Sharratt and Usoro (2003) highlighted that a flexible decentralized organizational structure encourages knowledge-sharing, particularly tacit knowledge, compared to centralized, bureaucratic management styles (Amayah, 2013). This emphasizes the importance of organizational structure in facilitating knowledge sharing dynamics.

Moreover, Njoku & Nwachukwu (2018) found that knowledge sharing practices are influenced by factors such as organizational structure, technical infrastructure, trust, motivation, and sense of community (Njoku & Nwachukwu, 2018). This underscores the multifaceted nature of knowledge sharing within different organizational contexts.

Additionally, Lin & Lee (2004) pointed out that while studies have explored the relationship between organizational factors and knowledge-sharing behavior, there is a lack of empirical examination of senior managers' perceptions towards knowledge sharing within organizations (Lin & Lee, 2004). Understanding senior management perspectives is crucial in comprehensively analyzing knowledge sharing practices.

Furthermore, Rahman et al. (2017) emphasized the significance of organizational commitment in fostering knowledge sharing within business organizations, highlighting the empirical evidence supporting the importance of commitment in knowledge sharing initiatives (Rahman et al., 2017).

In conclusion, synthesizing these references provides a comprehensive understanding of the empirical research surrounding knowledge sharing practices in decentralized organizational structures. The studies underscore the influence of organizational structure, factors affecting knowledge sharing, the role of senior management perceptions, and the importance of organizational commitment in facilitating effective knowledge sharing practices.

3.5 The Effect of Decentralized Organizational Structure on Collaboration and Knowledge Sharing

3.5.1 An overview of how implementing a decentralized organizational structure impacts collaboration and knowledge sharing

Implementing a decentralized organizational structure can have a significant impact on collaboration and knowledge sharing within an organization. Decentralization can influence knowledge sharing by affecting factors such as leadership styles, organizational climate, and the overall structure of the organization (Rahman et al., 2022; Kim & Park, 2020; . Rahman et al., 2022) highlight that factors like transformational leadership and decentralization directly influence knowledge sharing. Transformational leadership can create an organizational climate that supports collaborative knowledge sharing, thereby fostering organizational learning (Rahman et al., 2022).

Decentralization can also impact knowledge sharing by influencing the flexibility and adaptability of organizational structures. Organizations with decentralized structures tend to allow for more flexibility, which can encourage collaboration and sharing across traditional boundaries (Walczak, 2005; Fiol & Lyles, 1985; . (Walczak, 2005; states that organizational structures must be flexible to encourage sharing of knowledge and collaboration across traditional organizational boundaries to promote knowledge creation.

Furthermore, the degree of decentralization within an organization can affect job satisfaction and performance, which in turn can influence knowledge sharing practices (Sun et

al., 2021; . (Sun et al., 2021; evaluated the importance of organizational structure from centralized and decentralized viewpoints in five aspects.

In conclusion, the implementation of a decentralized organizational structure can have a multifaceted impact on collaboration and knowledge sharing within an organization. By influencing leadership styles, organizational climate, flexibility, and job satisfaction, decentralization can shape the way knowledge is shared and utilized across different levels of the organization.

3.5.2 An empirical study evaluating the effect of decentralized organizational structures on collaboration and knowledge sharing

Decentralized organizational structures have been a subject of interest in various studies related to collaboration and knowledge sharing. Sun et al. (2021) explored the impact of organizational decentralization on job satisfaction and job performance, highlighting the importance of organizational structure in knowledge sharing. Kokanuch & Tuntrabundit (2017) found that decentralized organizational structures promote knowledge exchange among employees, emphasizing the role of structure in facilitating collaboration. Additionally, Walczak (2005) emphasized the importance of flexible organizational structures to encourage knowledge sharing and collaboration across traditional boundaries.

Furthermore, the study by Rahman et al. (2022) indicated that factors such as decentralization have a direct influence on knowledge sharing within multinational corporations. Alshwayat et al. (2021) highlighted the significance of organizational context in influencing employee knowledge-sharing practices, suggesting a need to analyze how organizational culture impacts knowledge-sharing culture at different levels within formalized contexts.

In the context of knowledge sharing, organizational structures play a crucial role. Schmitt (2020) discussed how knowledge sharing is enhanced by a collaborative culture, which is facilitated by organizational structures that promote flexibility. This aligns with the findings of (Kim & Lee, 2006), who suggested that organizational structures should be designed to encourage flexibility to foster collaboration and sharing within and across organizational boundaries.

In conclusion, the empirical evidence suggests that decentralized organizational structures can positively impact collaboration and knowledge sharing within organizations. By fostering a culture of flexibility and collaboration, decentralized structures can facilitate the exchange of knowledge among employees, ultimately enhancing organizational effectiveness and innovation.

Hypothesis

Hypothesis 1:

There is a positive relationship between collaborative leadership (Variable X) and collaborative organizational performance (Variable Y) in a decentralized structure. In other words, the higher the level of collaborative leadership applied in an organization, the higher the level of collaborative performance achieved by the organization.

Hypothesis 2:

Organizational structure flexibility (Variable X) positively influences organizational collaborative performance (Variable Y) in a decentralized context. This means that the higher the level of flexibility of the organizational structure in responding to environmental changes and supporting inter-unit collaboration, the higher the level of collaborative performance that can be achieved by the organization.

Hypothesis 3:

Management support (Variable X) is positively related to organizational collaborative performance (Variable Y) in a decentralized structure. In other words, the higher the level of support provided by management for collaborative practices and knowledge sharing within the organization, the higher the level of collaborative performance that the organization can achieve.

4. Conclusion

Based on the results of the research and discussions that have been carried out, several key findings can be concluded:

First, collaboration in the context of decentralized organizational structures is a multifaceted concept involving various dimensions such as leadership, inter-organizational processes, awareness, teamwork, and organizational learning. The importance of collaborative leadership in dynamic organizational settings has been widely recognized. Organizational collaboration in an inter-organizational context is achieved through the development of inter-organizational business processes. Awareness is also emphasized as a crucial element in facilitating effective organizational collaboration. Factors such as general collaboration attitudes, technological adaptation, drivers of collaboration, and job characteristics play an important role in studying organizational collaboration. Organizational collaboration is recognized as a strategy for addressing complex social problems, highlighting its increasing importance in the 21st century. Collaboration between organizations and parts within organizations is important to achieve common goals and influence organizational results and performance.

Second, challenges in creating collaboration in a decentralized structure include the security of decentralized schemes against malicious actors and unreliable data contributions. Additionally, issues such as network latency, node failure, and the complexity of building and maintaining an overlay network in a distributed environment can hinder decentralized learning. Decentralized structures require a balanced distribution of power among collaborating organizations to prevent conflict and reach agreements effectively.

Third, decentralized organizational structures have a significant influence on collaboration and knowledge sharing. Studies show that in decentralized decision-making structures, employees tend to engage in more learning behaviors, leading to increased absorptive capacity. Additionally, decentralized structures have been associated with a balanced distribution of power among collaborating organizations, which can prevent conflict and promote agreement. Decentralization allows for more interaction and decentralized decision making, which can facilitate innovation and collaboration within organizations. This creates an environment that supports innovation, job satisfaction, and improved performance.

Fourth, knowledge sharing in decentralized organizational structures is influenced by complex individual and organizational factors. Individual factors such as motivation, trust, self-efficacy, altruism, and reputation play an important role in knowledge sharing behavior. Meanwhile, organizational factors such as leadership style, organizational culture, management support, rewards, collaborative climate, and university policies also influence knowledge sharing behavior. Contextual support in decentralized environments, such as competency support and related support, can encourage autonomous motivation and promote knowledge sharing behavior.

Fifth, technology plays a crucial role in facilitating collaboration and knowledge sharing in decentralized structures. Digital technology has been recognized as an important driver in managing knowledge and promoting knowledge sharing in organizations. It provides tools and platforms that enable efficient communication, collaboration and information exchange among team members, ultimately improving organizational performance and innovation.

Lastly, the implementation of a decentralized organizational structure has a significant impact on collaboration and knowledge sharing within the organization. By influencing leadership style, organizational climate, flexibility, and job satisfaction, decentralization can shape the way knowledge is shared and utilized at various levels of the organization.

Overall, these findings highlight the complexity and importance of collaboration and knowledge sharing in decentralized organizational structures, as well as the challenges and opportunities associated with these dynamics. With a deep understanding of the factors that influence collaboration and knowledge sharing in decentralized contexts, organizations can take steps to strengthen these practices and improve their performance and innovation.

References

- Abdullah, B. and Alqarni, A. (2022). Knowledge sharing in international business. *Technical Gazette*, 16(3), 401-411. <https://doi.org/10.31803/tg-20220305124542>
- Abernethy, M. and Bouwens, J. (2005). Determinants of accounting innovation implementation. *Abacus*, 41(3), 217-240. <https://doi.org/10.1111/j.1467-6281.2005.00180.x>
- Ahuja, M. and Carley, K. (2006). Network structure in virtual organizations. *Journal of Computer-Mediated Communication*, 3(4), 0-0. <https://doi.org/10.1111/j.1083-6101.1998.tb00079.x>
- Akosile, A. and Olatokun, W. (2019). Factors influencing knowledge sharing among academics in bowen university, nigeria. *Journal of Librarianship and Information Science*, 52(2), 410-427. <https://doi.org/10.1177/0961000618820926>
- Alshwayat, D., MacVaugh, J., & Akbar, H. (2021). A multi-level perspective on trust, collaboration and knowledge sharing cultures in a highly formalized organization. *Journal of Knowledge Management*, 25(9), 2220-2244. <https://doi.org/10.1108/jkm-05-2020-0354>
- Amayah, A. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454-471. <https://doi.org/10.1108/jkm-11-2012-0369>
- Ang'ana, G. and Kilika, J. (2022). Collaborative leadership in an organizational context: a research agenda. *Journal of Human Resource & Leadership*, 6(1), 48-71. <https://doi.org/10.53819/81018102t2050>
- Anjomshoaa, A. and Curry, E. (2022). Blockchain as an enabler for transfer learning in smart environments.. <https://doi.org/10.48550/arxiv.2204.03959>
- Ardichvili, A., Maurer, M., Wei, L., Wentling, T., & Stuedemann, R. (2006). Cultural influences on knowledge sharing through online communities of practice. *Journal of Knowledge Management*, 10(1), 94-107. <https://doi.org/10.1108/13673270610650139>
- Binz-Scharf, M., Lazer, D., & Mergel, I. (2011). Searching for answers: networks of practice among public administrators. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1314822>
- Bjørnstad, A. (2011). Exploring network organization in military contexts: effects of flatter structure and more decentralized processes. *Military Psychology*, 23(3), 315-331. <https://doi.org/10.1080/08995605.2011.570595>
- Bjørnstad, A. and Ulleberg, P. (2021). Effects of trust, structure and processes on effectiveness in a military organization: exploring a moderated mediation model. *Leadership & Organization Development Journal*, 42(4), 564-579. <https://doi.org/10.1108/lodj-06-2020-0255>

- Brown, O., Power, N., & Conchie, S. (2021). Communication and coordination across event phases: a multi-team system emergency response. *Journal of Occupational and Organizational Psychology*, 94(3), 591-615. <https://doi.org/10.1111/joop.12349>
- Chen, C. and Huang, J. (2007). How organizational climate and structure affect knowledge management—the social interaction perspective. *International Journal of Information Management*, 27(2), 104-118. <https://doi.org/10.1016/j.ijinfomgt.2006.11.001>
- Chi6n, S., Charles, V., & Morales, J. (2019). The impact of organisational culture, organisational structure and technological infrastructure on process improvement through knowledge sharing. *Business Process Management Journal*, 26(6), 1443-1472. <https://doi.org/10.1108/bpmj-10-2018-0279>
- Deng, H., Duan, S., & Wibowo, S. (2022). Digital technology driven knowledge sharing for job performance. *Journal of Knowledge Management*, 27(2), 404-425. <https://doi.org/10.1108/jkm-08-2021-0637>
- Dietrich, P., Eskerod, P., Дaлчep, Д., & Sandhawalia, B. (2010). The dynamics of collaboration in multipartner projects. *Project Management Journal*, 41(4), 59-78. <https://doi.org/10.1002/pmj.20194>
- Fiol, C. and Lyles, M. (1985). Organizational learning. *Academy of Management Review*, 10(4), 803. <https://doi.org/10.2307/258048>
- Gressg6rd, L. (2011). Virtual team collaboration and innovation in organizations. *Development in Learning Organizations an International Journal*, 25(4). <https://doi.org/10.1108/dlo.2011.08125daa.007>
- Hansen, J. and H6st, V. (2012). Understanding the relationships between decentralized organizational decision structure, job context, and job satisfaction—a survey of danish public managers. *Review of Public Personnel Administration*, 32(3), 288-308. <https://doi.org/10.1177/0734371x12449023>
- Ho, S., Choudhury, P., Haran, N., & Leshinsky, R. (2021). Decentralization as a strategy to scale fit-for-purpose land administration: an indian perspective on institutional challenges. *Land*, 10(2), 199. <https://doi.org/10.3390/land10020199>
- H6a, N., Thanh, V., Tung, L., & Quyen, H. (2020). Knowledge sharing influence on innovation: a case of textile and garment enterprises in vietnam. *Journal of Asian Finance Economics and Business*, 7(7), 555-563. <https://doi.org/10.13106/jafeb.2020.vol7.no7.555>
- Ipe, M. (2003). Knowledge sharing in organizations: a conceptual framework. *Human Resource Development Review*, 2(4), 337-359. <https://doi.org/10.1177/1534484303257985>
- Jaatinen, M. (2015). Facilitating organizing in business processes., 3-10. https://doi.org/10.1007/978-3-319-22759-7_1
- Jansen, J., Tempelaar, M., Bosch, F., & Volberda, H. (2009). Structural differentiation and ambidexterity: the mediating role of integration mechanisms. *Organization Science*, 20(4), 797-811. <https://doi.org/10.1287/orsc.1080.0415>
- Jin, J. and Suntrayuth, S. (2022). Knowledge sharing motivation, behavior, and creativity of knowledge workers in virtual organizations. *Discrete Dynamics in Nature and Society*, 2022, 1-9. <https://doi.org/10.1155/2022/4358132>
- Kairouz, P., McMahan, H., Avent, B., Bellet, A., Bennis, M., Bhagoji, A., ... & Han, Y. (2019). Advances and open problems in federated learning.. <https://doi.org/10.48550/arxiv.1912.04977>

- Kapucu, N., Arslan, T., & Collins, M. (2010). Examining intergovernmental and interorganizational response to catastrophic disasters. *Administration & Society*, 42(2), 222-247. <https://doi.org/10.1177/0095399710362517>
- Kim, E. and Park, S. (2020). Transformational leadership, knowledge sharing, organizational climate and learning: an empirical study. *Leadership & Organization Development Journal*, 41(6), 761-775. <https://doi.org/10.1108/lodj-12-2018-0455>
- Kim, J., Lee, C., & Elias, T. (2015). Factors affecting information sharing in social networking sites amongst university students. *Online Information Review*, 39(3), 290-309. <https://doi.org/10.1108/oir-01-2015-0022>
- Kim, S. and Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review*, 66(3), 370-385. <https://doi.org/10.1111/j.1540-6210.2006.00595.x>
- Kim, S. and Lee, H. (2006). The impact of organizational context and information technology on employee knowledge-sharing capabilities. *Public Administration Review*, 66(3), 370-385. <https://doi.org/10.1111/j.1540-6210.2006.00595.x>
- Kokanuch, A. and Tuntrabundit, K. (2017). Knowledge sharing capability in healthcare organizations. *Journal of Asia Business Studies*, 11(2), 135-151. <https://doi.org/10.1108/jabs-10-2015-0183>
- Koster, F. (2020). 20. organizational innovativeness through inter-organizational ties., 465-482. <https://doi.org/10.1515/9783110647495-020>
- Kyriakopoulou, E. and Xepapadeas, A. (2021). Natural resource management: a network perspective. *Environmental and Resource Economics*, 80(2), 221-256. <https://doi.org/10.1007/s10640-021-00583-9>
- Lee, C. and Jang, H. (2012). Predictors of successful implementation of cop. *Policing an International Journal*, 35(2), 382-401. <https://doi.org/10.1108/13639511211230138>
- Lei, H. and Kim, D. (2019). Sla-based sharing economy service with smart contract for resource integrity in the internet of things. *Applied Sciences*, 9(17), 3602. <https://doi.org/10.3390/app9173602>
- Lei, H. and Kim, D. (2019). Sla-based sharing economy service with smart contract for resource integrity in the internet of things. *Applied Sciences*, 9(17), 3602. <https://doi.org/10.3390/app9173602>
- Li, C., Sun, L., & Dong, Y. (2018). Innovating via building absorptive capacity: interactive effects of top management support of learning, employee learning orientation and decentralization structure. *Creativity and Innovation Management*, 27(4), 431-443. <https://doi.org/10.1111/caim.12261>
- Lin, H. (2007). Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. *Journal of Information Science*, 33(2), 135-149. <https://doi.org/10.1177/0165551506068174>
- Lin, H. and Lee, G. (2004). Perceptions of senior managers toward knowledge-sharing behaviour. *Management Decision*, 42(1), 108-125. <https://doi.org/10.1108/00251740410510181>
- Liu, W., Ran, W., Nantogma, S., & Xu, Y. (2021). Adaptive information sharing with ontological relevance computation for decentralized self-organization systems. *Entropy*, 23(3), 342. <https://doi.org/10.3390/e23030342>
- Lubis, A. F. (2020). THE STATE DETERMINES LEGAL SYSTEM WITH INTERNATIONAL HUMAN RIGHTS INSTRUMENTS. *INTERNATIONAL JOURNAL OF MULTI SCIENCE*, 1(04), 87-94.

- Lubis, A. F. (2020). The Competence of the Judiciary in Cases of Document Forgery Conducted by a TNI Soldier Before Joining TNI. *Tabsyir: Jurnal Dakwah dan Sosial Humaniora*, 1(3), 01-09.
- Ma, S., Li, Z., Li, L., Yuan, M., & Yin, X. (2022). Exploring the effect of stakeholder relationship quality on technological innovation in off-site construction: the mediating role of the knowledge sharing. *Journal of Civil Engineering and Management*, 29(1), 77-92. <https://doi.org/10.3846/jcem.2022.17870>
- Mahmud, M., Soetanto, D., & Jack, S. (2021). A contingency theory perspective of environmental management: empirical evidence from entrepreneurial firms. *Journal of General Management*, 47(1), 3-17. <https://doi.org/10.1177/0306307021991489>
- Mena, C., Humphries, A., & Wilding, R. (2009). A comparison of inter- and intra-organizational relationships. *International Journal of Physical Distribution & Logistics Management*, 39(9), 762-784. <https://doi.org/10.1108/09600030911008193>
- Mena, C., Humphries, A., & Wilding, R. (2009). A comparison of inter- and intra-organizational relationships. *International Journal of Physical Distribution & Logistics Management*, 39(9), 762-784. <https://doi.org/10.1108/09600030911008193>
- Mwawasi, S. (2022). Managerial practices for knowledge sharing in organizations. *International Journal of Research and Innovation in Social Science*, 06(03), 473-477. <https://doi.org/10.47772/ijriss.2022.6322>
- joku, J. and Nwachukwu, J. (2018). Factors affecting knowledge sharing practices of business educators in tertiary institutions in imo state. *African Research Review*, 12(4), 95. <https://doi.org/10.4314/afrev.v12i4.9>
- Nuhoff-Isakhanyan, G., Wubben, E., Omta, O., & Pascucci, S. (2017). Network structure in sustainable agro-industrial parks. *Journal of Cleaner Production*, 141, 1209-1220. <https://doi.org/10.1016/j.jclepro.2016.09.196>
- Pournaras, E., Yadhunathan, S., & Diaconescu, A. (2019). Holarchic structures for decentralized deep learning: a performance analysis. *Cluster Computing*, 23(1), 219-240. <https://doi.org/10.1007/s10586-019-02906-4>
- Rahman, S., Hossain, M., Islam, M., & Jasimuddin, S. (2022). Linkage between culture, leadership, and knowledge sharing in mncs. *Journal of Global Information Management*, 30(1), 1-21. <https://doi.org/10.4018/jgim.301200>
- Rahman, S., Islam, Z., & Abdullah, A. (2017). Understanding factors affecting knowledge sharing. *Journal of Science and Technology Policy Management*, 8(3), 275-298. <https://doi.org/10.1108/jstpm-02-2017-0004>
- Razmerita, L., Kirchner, K., & Nielsen, P. (2016). What factors influence knowledge sharing in organizations? a social dilemma perspective of social media communication. *Journal of Knowledge Management*, 20(6), 1225-1246. <https://doi.org/10.1108/jkm-03-2016-0112>
- Sanders, N. (2007). An empirical study of the impact of e-business technologies on organizational collaboration and performance. *Journal of Operations Management*, 25(6), 1332-1347. <https://doi.org/10.1016/j.jom.2007.01.008>
- Schmitt, U. (2020). A back-casting knowledge management vision for a digital platform ecosystem in support of thriving communities of knowledge workers. *JDIH*, 92-109. <https://doi.org/10.31355/67>
- Schultis, K., Elsner, C., & Lohmann, D. (2014). Architecture challenges for internal software ecosystems: a large-scale industry case study.. <https://doi.org/10.1145/2635868.2635876>

- Shehab, S., Rahim, R., & Daud, S. (2018). A review of individual factors on knowledge sharing: evidence from the empirical literature. *International Journal of Engineering & Technology*, 7(4.15), 186. <https://doi.org/10.14419/ijet.v7i4.15.21444>
- Sullivan, J., Weinburg, D., Gidmark, S., Engle, R., & Tyler, D. (2019). Collaborative capacity and patient-centered care in the veterans' health administration community living centers. *International Journal of Care Coordination*, 22(2), 90-99. <https://doi.org/10.1177/2053434519858028>
- Sun, J., Wang, C., Yang, Z., Yu, T., Li, J., & Xiong, X. (2021). Impact of organizational decentralization degree on job satisfaction and job performance: a hierarchical linear model analysis for construction projects. *Engineering Construction & Architectural Management*, 29(4), 1642-1660. <https://doi.org/10.1108/ecam-07-2020-0503>
- Swindler, S., Militello, L., & Lyons, J. (2007). Studying organizational collaboration.. <https://doi.org/10.1145/1362550.1362558>
- Theellufsen, C., Rajabifard, A., Enemark, S., & Williamson, I. (2009). Awareness as a foundation for developing effective spatial data infrastructures. *Land Use Policy*, 26(2), 254-261. <https://doi.org/10.1016/j.landusepol.2008.03.002>
- Thomson, A., Perry, J., & Miller, T. (2007). Conceptualizing and measuring collaboration. *Journal of Public Administration Research and Theory*, 19(1), 23-56. <https://doi.org/10.1093/jopart/mum036>
- Usoro, A., Sharratt, M., Tsui, E., & Shekhar, S. (2007). Trust as an antecedent to knowledge sharing in virtual communities of practice. *Knowledge Management Research & Practice*, 5(3), 199-212. <https://doi.org/10.1057/palgrave.kmrp.8500143>
- Wahyudi, D., Salim, U., & Djazuli, A. (2019). Influence of organizational culture, organizational trust and self-efficacy on knowledge sharing behavior by mediating organizational commitments study on auditors of district/city inspectorates in east java province. *Journal of Engineering and Applied Sciences*, 15(2), 398-409. <https://doi.org/10.36478/jeasci.2020.398.409>
- Walczak, S. (2005). Organizational knowledge management structure. *The Learning Organization*, 12(4), 330-339. <https://doi.org/10.1108/09696470510599118>
- Winkelen, C. (2010). Deriving value from inter-organizational learning collaborations. *The Learning Organization*, 17(1), 8-23. <https://doi.org/10.1108/09696471011008215>
- Wohlstetter, P., Malloy, C., Chau, D., & Polhemus, J. (2003). Improving schools through networks: a new approach to urban school reform. *Educational Policy*, 17(4), 399-430. <https://doi.org/10.1177/0895904803254961>
- Woodland, R. and Hutton, M. (2012). Evaluating organizational collaborations. *American Journal of Evaluation*, 33(3), 366-383. <https://doi.org/10.1177/1098214012440028>
- Yamasaki, C., Henry, M., Nagai, K., Matsumoto, K., & Yokota, H. (2018). Internal knowledge sharing by infrastructure maintenance engineers in small and medium size construction companies in japan. *Engineering Journal*, 22(3), 243-255. <https://doi.org/10.4186/ej.2018.22.3.243>
- Yassin, F., Sahari, N., & Salim, J. (2011). A framework of knowledge sharing through ict for teachers in malaysia.. <https://doi.org/10.1109/iceei.2011.6021754>
- Yeo, R. and Gold, J. (2014). Knowledge sharing attitude and behaviour in saudi arabian organisations: why trust matters. *International Journal of Human Resources Development and Management*, 14(1/2/3), 97. <https://doi.org/10.1504/ijhrdm.2014.068082>

- Yi, Z. (2019). A leader's approaches to fostering a culture of knowledge sharing in an information organization. *Library Management*, 40(8/9), 593-600. <https://doi.org/10.1108/lm-11-2018-0083>
- Yuan, L. and Liu, W. (2017). The influence of contextual support on persistent sharing willingness of qq group members. *Online Information Review*, 41(2), 185-201. <https://doi.org/10.1108/oir-01-2016-0009>
- Yuan, Q., Doke, K., Gasco-Hernandez, M., Gil-Garcia, J., Zheleva, M., & Bogdanov, P. (2022). Understanding drivers and challenges of multi-actor collaborations at the local level.. <https://doi.org/10.24251/hicss.2022.322>
- Yuan, Q., Doke, K., Gasco-Hernandez, M., Gil-Garcia, J., Zheleva, M., & Bogdanov, P. (2022). Understanding drivers and challenges of multi-actor collaborations at the local level.. <https://doi.org/10.24251/hicss.2022.322>