

ISSN: 2316-6517

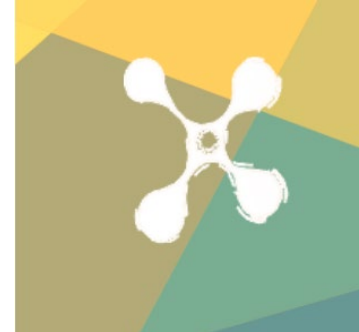


**International Journal of Knowledge
Engineering and Management**

v. 11, n. 29, 2022.

ijkem.ufsc.br





International Journal of Knowledge Engineering and Management,

Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

INFORMATION WITHHOLD AND THE DILEMMA BETWEEN THE POWER OF ACCESS AND THE ACCESS THAT EMPOWERS INDIVIDUALS AND ORGANIZATIONS

TEREZA RAQUEL MERLO

PhD in Organizational Management and Information Technology

University of North Texas, United States

tereza.merlo@unt.edu

<https://orcid.org/0000-0002-2042-5415>

SULIMAN HAWAMDEH

PhD in Information Sciences

University of North Texas, United States

suliman.hawamdeh@unt.edu

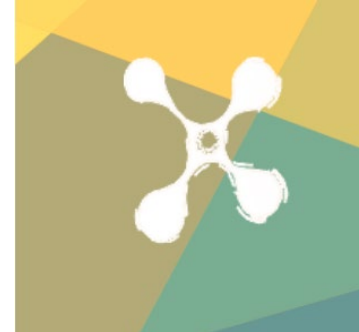
<https://orcid.org/0000-0001-7018-6945>

Submissão: 28 outubro. 2022. Aceitação: 22 de dezembro 2023.

Sistema de avaliação: duplo cego (*double blind review*).

UNIVERSIDADE FEDERAL DE SANTA CATARINA (UFSC)



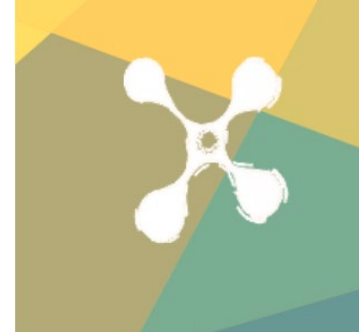


RETENÇÃO DE INFORMAÇÕES E O DILEMA ENTRE O PODER DE ACESSO E O ACESSO QUE EMPODERA INDIVÍDUOS E ORGANIZAÇÕES

Resumo

Objetivo: O objetivo deste estudo é justificar a necessidade de expandir os estudos e investigar o impacto da retenção de informações na organização e fornecer uma oportunidade de pesquisa que melhore a compreensão de como a gestão da informação, retenção, cultura e os complexos subconjuntos de informações, retenção nas organizações e na sociedade impactam o desempenho organizacional geral, a liderança e o aprendizado.

Design|Metodologia|Abordagem: Este estudo traz uma breve revisão da literatura fornecendo uma estrutura teórica para ajudar a abordar a questão de pesquisa sobre algumas das principais questões organizacionais relacionadas à retenção de informações e seu impacto na liderança, na cultura organizacional e nos processos gerais de negócios, incluindo a infraestrutura de sistemas de informação. Resultados: Depois de apresentar a análise oferecemos algumas questões para pesquisas futuras, expandindo os estudos em retenção de informações, compartilhamento de conhecimento e aprendizado. **Originalidade|Valor:** A contribuição original desta pesquisa é fornecer evidências de que quando os indivíduos e/ou a cultura organizacional encorajam ou permitem práticas conducentes à retenção de informações, os processos e operações organizacionais são impactados negativamente, levando a comportamentos desviantes e antiéticos que afetam o moral, a confiança na liderança e o aprendizado e compartilhamento de conhecimento. Espera-se que as conclusões apresentadas neste trabalho sejam usadas para aprofundar a investigação, compreensão e implicações dos resultados. Embora os estudos relacionados ao comportamento de uso da informação, compartilhamento de conhecimento e divulgação de informações sejam relativamente extensos no contexto do comportamento humano e da psicologia, há uma lacuna na literatura sobre a retenção de informações no contexto do impacto organizacional e o uso da informação para ganhar negócios e vantagem política. A aquisição parcial inicial das ações do Twitter pelo CEO e fundador da Tesla e da Space X em 2022 foi criticada por atrasar a divulgação de informações sobre a compra. Uma ação coletiva foi movida em nome dos acionistas, alegando que o atraso na divulgação obrigatória de



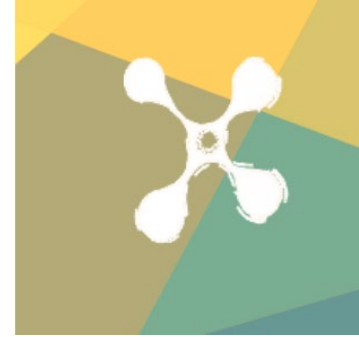
informações sobre a aquisição os colocava em desvantagem, exemplificando os problemas de retenção de informações. Neste estudo, examinamos a literatura referente à retenção de informações e propomos uma estrutura conceitual que considera questões comportamentais, estruturais e técnicas relacionadas a como as informações são usadas, acessadas, compartilhadas e retidas. Examina fatores que impactam as práticas de compartilhamento de informação e conhecimento nas organizações, como liderança, questões culturais organizacionais, aspectos da aprendizagem organizacional, uso e mau uso de aparatos tecnológicos e transparência deficiente que podem inibir a comunicação, o uso de sistemas de informação e a inovação e organização organizacional em geral. crescimento.

Palavras-chaves: Aprendizado organizacional. Retenção de informações. Compartilhamento da gestão do conhecimento. Comportamento de uso da informação. Liderança.

INFORMATION WITHHOLD AND THE DILEMMA BETWEEN THE POWER OF ACCESS AND THE ACCESS THAT EMPOWERS INDIVIDUALS AND ORGANIZATIONS

Abstract

Goal: The main goal of this study is to further justify the need to expand studies and investigate the impact of information withholding in organization, and to provide a research opportunity that improve the understanding of how information management, withholding, culture, and the complex subsets of information withholding in organizations, and society, impact the overall organizational performance, leadership, and learning. **Design | Methodology | Approach:** This study brings a brief literature review providing a theoretical framework to help address the research question on some of the main organizational issues regarding information withholding and its impact in leadership, organizational culture, and the overall business processes, including the information systems infrastructure. **Results:** After presenting the analysis, we offer some potentially fruitful questions for future research expanding the studies in information withholding in organizations, knowledge sharing, and learning. **Originality | Value:** The original contribution of this research is to provide evidence that when



International Journal of Knowledge Engineering and Management,

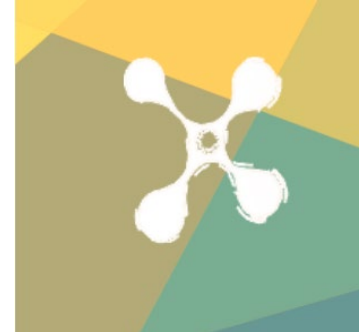
Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

individuals, and/or the organizational culture, encourage or enable practices conducive to information withholding, the organizational processes and operations are negatively impacted, leading to deviant and unethical behaviors that affect the morale, trust in leadership, and the learning and sharing of knowledge. The conclusions presented in this work will hopefully be used to further the investigation, understanding, and implications of the findings. While studies related to information use behavior, knowledge sharing, and information disclosure are relatively extensive in the context of human behavior and psychology, there is a gap in the literature regarding information withholding in the context of organizational impact and the use of information to gain business and political advantage. The initial partial acquisition of Twitter shares by the CEO and founder of Tesla and Space X in 2022 came under fire for delaying disclosure of information about the purchase. A class lawsuit was filed on behalf of shareholders claiming that the delay of the mandated disclosure of information regarding the acquisition put them at disadvantage exemplifying the issues of information withholding. In this study, we examine the literature pertaining to information withholding and propose a conceptual framework that considers behavioral, structural, and technical issues related to how information is used, accessed, shared, and withheld. It examines factors impacting information and knowledge sharing practices in organizations such as leadership, organizational cultural issues, aspects of organizational learning, the use and misuse of technological apparatuses, and deficient transparency that could inhibit communication, information systems use, and the overall organizational innovation and growth.

Keywords: Organizational learning. Information withhold. Knowledge management sharing. Information use behavior. Leadership.

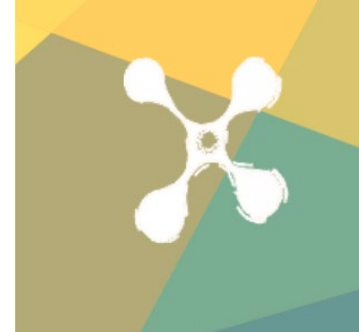


1. Introduction

The goal of most organizations small and big is to create a learning organization culture that promote transparency, open communication, and productive work environment where employees act as resource to each other. However, studies have shown that most employees in the organization resist the idea of freely share information. The problem with information withhold and knowledge hiding (hoarding) is the fact that it is prevalent in the workplace (Jiang, 2019; Peng, et. al., 2020; Serenko & Bontis, 2016). The study by Jian (2019) showed that 60% of employees had difficulty obtaining work related information from their colleagues. Studies have also shown the negative impact of information withhold and knowledge hiding on the organization productivity, continuity, and sustainability.

According to Serenko and Bontis (2016) job insecurity motivates knowledge hiding. Employees resort to information withhold and knowledge hiding as a means of job security which normally diminished creativity, affect organizational productivity and increase employee turnover due to hostile and less collaborative environment. Job security has been made worse with the increase reliance on information systems and cyber physical infrastructure dominated by technologies such as Internet of Things (IoT), Cloud Computing (CC), and Artificial Intelligence (AI). Cheng, et. al., (2016) describe the cyber physical infrastructure phenomenon as the industry 4.0. Industry 4.0 is a government initiative to promote connected manufacturing, logistics and digital data convergence between various industries and businesses.

The work by McKern (1996) discussed some of the issues that were shaping the economic and business development in the world and called at that time for a change in the way resources are managed in the organization. Globalization and complexity imposed by advanced technologies are affecting organizational competitiveness and increased customer



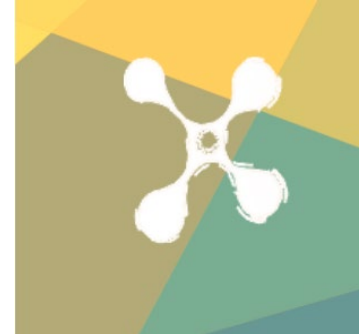
demands. The increased reliance on the use of data, information, and communication technologies controlled by intelligent machines in real time poses real challenges to individuals and organizations in terms, privacy, security, and reliability.

This paper aims to highlight the impact of information withhold and knowledge hiding on organizations productivity and competitiveness. The proposed conceptual framework considers behavioral, structural, and technical issues related to how information used, accessed, shared, and withheld. The self-actualization model combines certain aspects of the knowledge actor framework by Lee and Al-Hawamdeh (2002), the two-step factor theory by Frederick Herzberg (1959), and Abraham Maslow's theory of needs (1962). The new model is illustrated in Figure 1. The model illustrates how information withhold and knowledge sharing can affect the communication channels of the various actors within the organization.

2. Methodological procedures

This study has been undertaken as a literature review; the researchers examined appropriate studies of existing literature by performing keyword searches for relevant peer reviewed articles in databases on organizational management and information sciences, including the International Journal of Business Management,

European Journal of Work and Organizational Psychology, International Journal of Knowledge Management, among others. The qualification criteria for the existing literature included only scientific journals pertaining to human subjects and information withholding and management in organizations, published in English, mostly published in the past 10 years and some inclusion of seminal works in the field (e. g. the work of Herzberg, Mausner and Snyderman (1959) emphasizing the motivation to work and individuals' behaviors, and the theory of Maslow (1962) focusing on organizational psychology and the use and sharing of



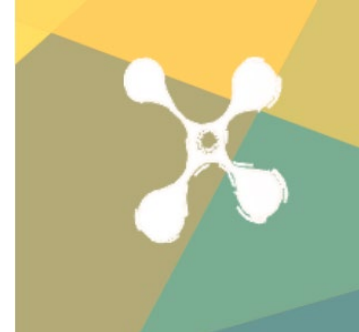
information). Recent studies included the investigation presented by Merlo (2022) approaching the dynamic in knowledge use and sharing in contemporary business settings, and how to expand understanding and optimize results.

This study will benefit from deeper or greater details from a systematic literature review investigation, and some experimental research analysis to draw more detailed and complex findings/results.

3. Results

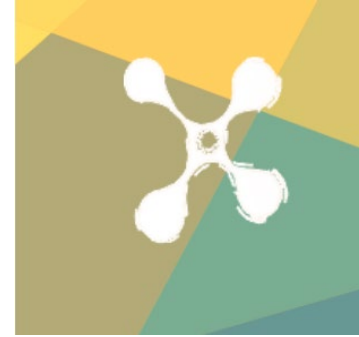
3.1. Organizational learning and sharing

The goal of any organization is to become a learning organism that fosters knowledge sharing as the cornerstones every process and operations. In a world where competitors are a click away, organizational learning has been regarded as a core capability of effective firms (Bamiatzi et al., 2016). In addition to learning from past experiences and avoiding mistakes, organizational learning is a method of generating and applying new knowledge to areas that affect organizational behavior and the interaction between different people within the organization (Wang & Yang, 2014). According to Purwihartuti, Sule and Muizu (2015): “Organizational learning requires valid information, transparency, issues-oriented, and accountability.” (p. 137), in addition to strong leadership initiatives that will ensure the availability and accessibility of organizational resources by employees, so employees are motivated, well trained, and informed about information systems designed for collaboration. Concurring with that theory, Wang and Hou (2015) find that: “managers often find it to be the most difficult KM practice to promote in various social contexts because knowledge sharing does not come naturally to most individuals.” (p. 1).



Noruzy et al. (2013), defends that organizational learning can help increase knowledge generation capabilities and skills in a way that will stimulate and support a knowledge sharing culture. In the investigation of Sergeeva and Andreeva (2016) focusing on the individual sharing behavior the knowledge sharing process is contextualized in a framework based on the 4 W's: Who? Where? Why? and What? leading to the conclusion that employees, managers, and professionals from different fields of knowledge will have different motivations to share or withhold knowledge. Those motivational factors are dependable on a variety of personal and professional reasons that establish a cultural pattern with some groups encouraging collaboration and innovation and others focusing on the replication of existing methods proven successful by similar groups in the business segment. Based on the conclusions of this study, it is reasonable to presume that the overlap in experiences, low innovation in product development, and low level of brainstorming and staff engagement are directly correlated to the lack of knowledge sharing initiatives. The authors Sergeeva and Andreeva (2016) also stress that in a highly competitive and politically driven environment the knowledge sharing process is lost or inhibited, defending that the extensive empirical of current studies demonstrate "an overly positive vide of reasons for sharing knowledge." (p.251)

In their investigation about the motivations of employees' knowledge sharing behaviors, Wang and Hou (2015) concluded that hard reward, soft reward, and altruism are significant influencing organizational factors with positive -personal and organizational-impacts in the level of satisfaction and collaboration. According to Connelly and Zweig (2014), employees may not share knowledge due to fear of losing their competitive advantage and status or power, while others might lack knowledge about the job, expectations, processes, and understanding to feel fully engaged and willing to share information. Merlo (2016) indicated

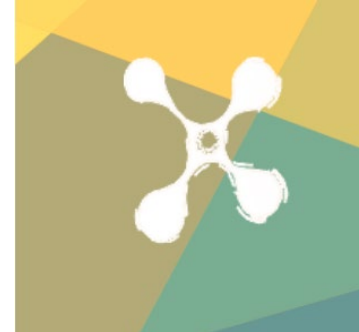


that the: “use and management of knowledge in organizations are decisive in the effective use of KMS resources and job performance” (p. 33), emphasizing the role of leadership in any knowledge sharing initiative, particularly in the optimization in the use of available information systems towards improving processes and production, while facilitating the flow of information.

3.2. Information Withhold

Information withhold and knowledge hiding are not new concepts. The intentional attempt to hide information, misrepresent the fact or conceal knowledge has direct impact on creativity and organizational productivity. They are increasing in relevance due to their impact on many aspects of information access and control in a society that is more dependable on data and knowledge production using multitude of information systems and intelligence. At different levels in the society, information withholding, and knowledge hiding can results in the spread of misinformation, conspiracy theories, peculiar concepts, and interpretations, varying in degrees of the suppression of truth, and deceitful management approaches and styles in organizations.

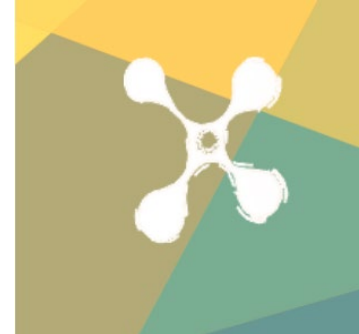
Hawryszkiewicz (2017) promoted the notion that organizations should strive to bring people to work together in productive ways that benefit everyone in the organization. The author emphasizes the role social structures and technology in supporting collaboration, knowledge sharing and innovation. Nonaka and Takeuchi (1994) described the knowledge spiral model and the interaction between tacit and explicit knowledge. They described a cyclic process that include internalization, socialization, externalization, and combination. The goal is to facilitate employees’ acquisition of knowledge and the application of that knowledge into the organizational strategy roadmap. Information withhold or knowledge hiding will undermine the transformation process at any one of these four stages in the spiral model. The distinction between information and knowledge is important as the majority of the organizational



knowledge is not held in documents and databases but rather resides in the minds of employees as tacit knowledge. The transformation of explicit knowledge into tacit knowledge in the organization and vice versa depends largely on the employees' willingness to share information and knowledge.

Several studies related to knowledge sharing in organizations discuss the factors that affect employees' knowledge sharing behaviors (Mohamed & Abdalla, 2020; Connelly & Zweig, 2014; Wang & Hou, 2015; Amayah, 2013) with many studies highlighting the problems and the issues focusing on why employees might not engage in knowledge sharing due to fear of losing power and affect their perceived competitive advantage within the organization. Additional studies in the field also show that factors like attitude, subjective norm, and self-efficacy positively affect the individuals' intentions to share knowledge in organizations. Mohamed and Abdalla (2020) state that: "knowledge resources principally reside in individual minds and organizations have to exploit this valuable resource to achieve sustainable competitive advantage. For that reason, organizations should leverage their employees' cooperation to share work-related knowledge." (p. 53)

In analyzing information withholding and how it impacts the decision-making process, which interferes with the organizational goals and strategies, Toma, Vasiljevic, et al. (2013) pointed out that individuals' attitudes are determinant in the information sharing/withhold processes. The authors argue that while increased collaboration enables information sharing, unhealthy competition can affect knowledge sharing intention and behaviors. Merlo (2022) defends that the role of leadership in fostering a culture of knowledge sharing in the organization is decisive and that: "the success of the design and implementation of Key Performance Indicators, KPI's, is strongly linked with the alignment between organizational strategies and business goals and objectives in response to internal and external factors." (p.220). Leaders play a key role in the

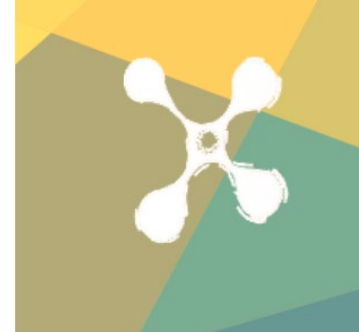


organizational learning and sharing processes and have the responsibility to foster an environment that will facilitate knowledge conversion (tacit to explicit and vice versa) through engagement cross-interaction, brainstorming, and increased collaborations.

3.3. Conceptual Framework

Exposure to accurate and timely information not only enhances personal experiences, but also impact organizational knowledge that could affect innovation and creativity. Wellman (2009) discussed personal knowledge factors that include motivation, organizational context, interpersonal characteristics, and cultural background. Knowledge creation is the process where processed data and information is enriched by personal and collective experiences (Sabherwal & Sabherwal, 2009). The process of transforming explicit knowledge to tacit knowledge and vice versa involved open communications, transparency, and a trust. Effective knowledge sharing practices encouraging collective intelligence and serves as the antidote to deviant information behaviors (Svabodova & Koudelhoka, 2011).

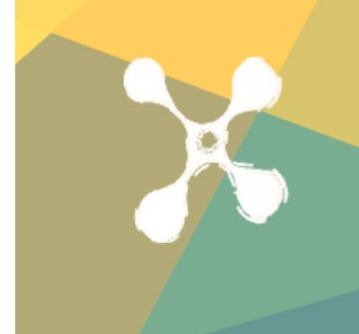
Lee and Al-Hawamdeh (2002) proposed the actor model for knowledge sharing that takes into consideration the social and economic issues affecting knowledge sharing practices within the organization. The framework looks at the factors arising from the actors participating in the knowledge-sharing activity, the types of knowledge being shared, the channel used, the organization concerned, and the broader climate. While this model takes a holistic approach to the factors that impact knowledge sharing, it does not take into consideration some of the factors that might cause information withholding in the first place. Information Withholding and the intentional attempt to hide or conceal knowledge is normally associated with job security or power grabbing, self-actualization, or social status (Connelly et al., 2012, p. 65). Das and Chakraborty (2018) stressed the point that knowledge withholding might be inspired by several different causes including prosocial, instrumental, laziness, etc.



Information withholding can be easily overlooked by management and leaders who are not involved with the day-to-day operations, or by those who simply do not prioritize or pay attention to honest communication. In their study investigating information withholding and decision making among a group of experts, Toma, et. al., (2013) stated that: “group members are in cooperation or in competition should influence the extent to which expertise assignment impacts information sharing.” (p. 162), because experts tend to exhibit a greater level of participation. The authors advocate that: “when members are unable to identify each one’s competence, the potential contributions of experts in groups is reduced.” (p. 163).

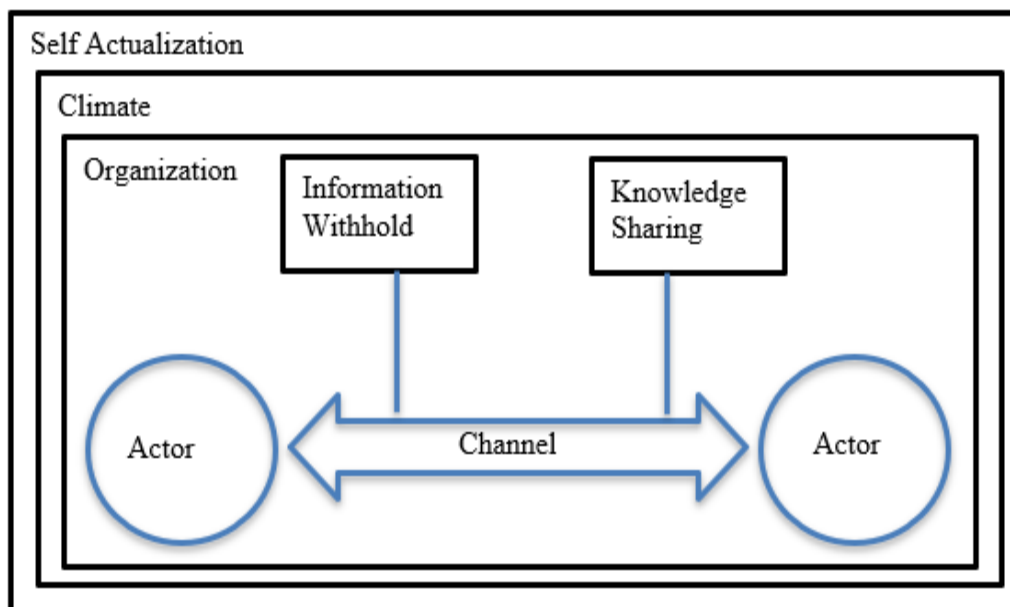
Das and Chakraborty (2018) used the two-factor theory to differentiate between knowledge and knowledge withholding. The two-factor theory was introduced in 1959 by the psychologist Frederick Herzberg (Herzberg et al., 1959). The theory states that there are certain factors that cause satisfaction while there are a separate set of factors that cause dissatisfaction. The theory finds its roots in Maslow's theory, where ascending the levels of needs, once needs are fulfilled in the hierarchy, they may eventually start to achieve self-actualization (Maslow, 1962). This could provide a clue to ascertain behaviors concerning information withholding beyond the basic needs, and greed could be viewed as a state of mind where there is no limit to pursuing self-actualization.

The self-actualization model discussed here combines certain aspects of the knowledge actor framework by Lee and Al-Hawamdeh (2002), the two-step factor theory by Frederick Herzberg (1959), and Abraham Maslow’s theory of needs (1962). The model illustrated in Figure 1 considers the factors arising from the knowledge-sharing activity, the channel used, the organization concerned, the broader climate, and eventually self-actualization. Information withhold and knowledge sharing are two different competing concepts. The model highlights how information withhold, and knowledge sharing can affect the communication channels of



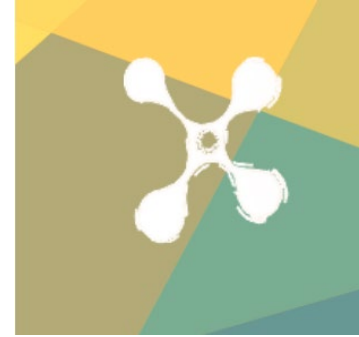
the various actors within the organization. Information withhold does not prevent knowledge sharing but it can affect certain aspects of it. Employees might withhold a document or a set of documents that they might perceived critical to their job security or their ability to control but still engage in knowledge sharing activities.

Figure 1. Self-actualization information withholding model



Source: from the authors (2022).

The differentiation between information and knowledge in this case is important. Knowledge resides in the mind of people and it difficult to engage the level of sharing that might take place. It is also situational, in the sense that employees might engage in knowledge sharing activities depending on the situation and the circumstances. Additionally, knowledge sharing could be personal, certain people feel more comfortable to share their knowledge with people who trust or acquainted with. Information withhold on the other hand is less personal.

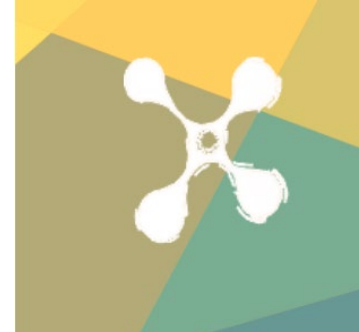


Hiding documents from others or misrepresenting information can be deliberate and intentional. In most cases and due to the complexity of the issue, it is difficult to differentiate information withheld from knowledge hoarding. Both are equally bad and driven by self-interest and self-actualization and satisfaction.

4. Conclusions

Research has shown that inaccurate information, or partial information prevents the effective flow of business operations and impacts the level of engagement and collaboration of individuals in organization. Organizations in the knowledge-based economy are increasingly focusing on data and how data can be used to drive decision making. Nevertheless, organizations need to examine their information withholding and knowledge sharing practices and policies to make sure that the results from data processing and data analysis are not intentionally or unintentionally misrepresented or concealed for reasons such as self-fulfilment or self-actualization. The approach to dealing with information withholding is founded in the idea that integrity is, or should be, an intrinsic part of business values and leadership. Individuals at all levels in the organization should be encouraged to voluntarily communicate and share information in a meaningful way. Deceitful behaviors around information withholding are evidence of a work environment that does not value or encourage collaboration and a positive dynamic between its members. Organizational learning will inevitably focus on creating a space where employees will feel safe to share thoughts and be encouraged to innovate by motivated and committed leaders who will lead by example.

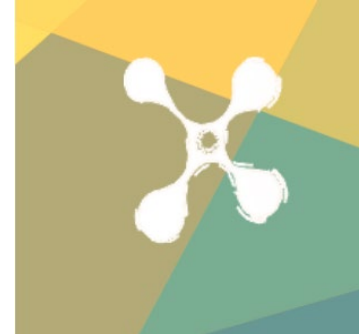
The role of effective leaders in empowering information and knowledge sharing is to create mechanisms for employees to acquire, access, manage, and share a reasonable amount of information in their roles, allowing them to successfully perform tasks and have a clear



understanding about key business processes, goals, and priorities, in addition to a solid business acumen, and about where the expectations lie through the performance assessment process. Discouraging deviant behaviors that will prevent information access such as withholding information by manipulating data, denying access to systems, allowing partial or deceiving amounts of data, engaging in gossip, centralizing information, providing little to no clarity regarding data and information processing, micromanaging etc., are pernicious information behaviors that once were considered systems of information power and organizational control, but are now viewed as disruptive and damning to business performance and the morale of employees. Innovative and desirable leaders are expected to empower, not execute power and intimidation over those below them in their chain of command.

There are many reasons why employees may feel unwilling, unmotivated, or are not knowledgeable enough to share their knowledge. Some of these include a lack of training, politics, inadequate information systems adoption, and poor management and leadership that does not discourage toxic behaviors unfavorable to collaboration and organizational learning. In a knowledge-based economy and highly competitive market, it is critical that those in leadership positions not only have business acumen and technical qualifications, but also the level of training, empathy, and personality to motivate and engage employees in productive and cooperative ways, aiming at empowering the workforce and ensuring competitive advantage. The power to access and share information and generate knowledge in organizations empowers individuals and organizations through growing innovation and higher level of engagement, collaboration, and communication.

It is important to note that the proposed model is largely conceptual based on the literature and previous work by the authors. The model has not been tested but we hope to develop an instrument in future work to test the model and validate the factors identified in this study.



International Journal of Knowledge Engineering and Management,

Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

While information withhold can be deliberate and intentional, this might not be the case with knowledge sharing where the lack of could be attributed to personal and organizational issues such as training, knowledge state, motivations, and trust.

References

Amayah, A. T. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454-471.

Bamiatzi, V., Bozos, K., Cavusgil, S. T., & Hult, G. T. M. (2016). Revisiting the firm, industry, and country effects on profitability under recessionary and expansion periods: A multilevel analysis. *Strategic Management Journal*, 37(7), 1448-1471.

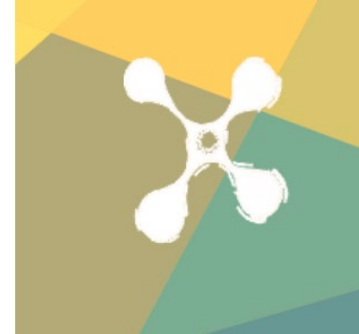
Bartol, K. M., & Srivastava, A. (2002). Encouraging knowledge sharing: The role of organizational reward systems. *Journal of Leadership & Organizational Studies*, 9(1), 64-76.

Cheng, G., Liu, L., Qiang, X., & Liu, Y. (2016). Industry 4.0 development and application of intelligent manufacturing. *International Conference on Information System and Artificial Intelligence*. Hong Kong, China, 407-410.

Connelly, C. E., & Zweig, D. (2014). How perpetrators and targets construe knowledge hiding in organizations. *European Journal of Work and Organizational Psychology*, 24(3), 479-489.

Connelly, C. E., Zweig, D., Webster, J., & Trougakos, J. P. (2012). Knowledge hiding in organizations. *Journal of Organizational Behavior*, 33, 64-88.

Das, A. K., & Chakraborty, S. (2018). Knowledge withholding within an organization: The psychological resistance to knowledge sharing linking with territoriality. *Journal on Innovation and Sustainability*, 9(3), 94.



International Journal of Knowledge Engineering and Management,

Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

Herzberg, F., Mausner, B., & Snyderman, B. B. (1959). *The Motivation to Work*. New York: John Wiley & Sons.

Hawryszkiewicz, I. (2010). *Knowledge management: Organizing knowledge-based enterprises*. London: Palgrave Macmillan.

Jiang, Z. (2019). Why withholding information at work won't give you an advantage. *Harvard Business Review Digital Articles* (pp.2-5). <https://hbr.org/2019/11/why-withholding-information-at-work-wont-give-you-an-advantage>_Retrieved October 14, 2022.

Maslow, A. (1962). *Notes on toward a psychology of being: Behavioral sciences institute*. Western.

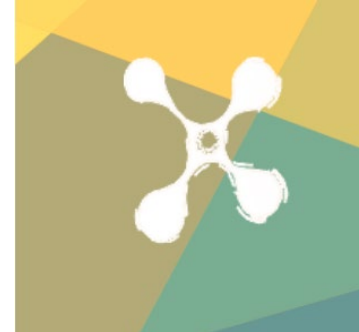
McKern, B. (1996). Building management performance for the 21st century. *Practicing Manager*, 17(1), 13-18.

Merlo, T. R. (2022). *Understanding, implementing, and evaluating knowledge management in business settings*. IGI Global.

Mohamed, S. M., & Abdalla, A. M. A. (2020). Knowledge sharing behavior of research institutions in Sudan. *International Journal of Business Management and Economic Review*, 3(3), 51-67.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge-creating company*. Oxford University Press.

Noruzay, A., Dalfard, V. M., Azhdari, B., Nazari-Shirkouhi, S., & Rezazadeh, A. (2013). Relations between transformational leadership, organizational learning, knowledge management, organizational innovation, and organizational performance: An empirical investigation of manufacturing firms. *The International Journal of Advanced Manufacturing Technology*, 64(5-8), 1073-1085.



International Journal of Knowledge Engineering and Management,

Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

Peng, H., Bell, C., & Li, Y. (2020). How and when intragroup relationship conflict leads to knowledge hiding: The roles of envy and trait competitiveness. *International Journal of Conflict Management*, 32(3), 383-406.

Sabherwal, R., & Sabherwal, S. (2005). Knowledge management using information technology: Determinants of impact on firm value. *Decision Sciences*, 36(4), 531-567.

Serenko, A., & Bontis, N. (2016). Understanding counterproductive knowledge behavior: antecedents and consequences of intra-organizational knowledge hiding. *Journal of knowledge management*, 20(6), 1199-1224.

Sergeeva, A., & Andreeva, T. (2016). Knowledge sharing research: Bringing context back in. *Journal of Management Inquiry*, 25(3), 240-261.

Svobodová, A., & Koudelková, P. (2011). *Collective intelligence and knowledge management as a tool for innovations*. https://www.researchgate.net/publication/229043959_Collective_intelligence_and_knowledge_management_as_a_tool_for_innovations
Retrieved October 25, 2022

Stenius, M., Hankonen, N., Ravaja, N., & Haukkala, A. (2016). Why share expertise? A closer look at the quality of motivation to share or withhold knowledge. *Journal of Knowledge Management*, 20(2), 181-198.

Toma, C., Vasiljevic, D., Oberlé, D., & Butera, F. (2013). Assigned experts with competitive goals withhold information in group decision making: Competitive experts withhold information. *British Journal of Social Psychology*, 52(1), 161-172.

Wang, W. -T., & Hou, Y. -P. (2015). Motivations of employees' knowledge sharing behaviors: A self-determination perspective. *Information and Organization*, 25(1), 1-26.

Wellman, J. (2009). *Organizational learning: How companies and institutions manage and apply knowledge*. London: Palgrave Macmillan.

International Journal of Knowledge Engineering and Management,

Florianópolis, v. 11, n. 29, p. 161-181, 2022.

• ISSN 2316-6517 •

• DOI: 1029327 •

