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#### Knowledge Sharing: Antecedent and Consequences Literature Review

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#### Abstract

Knowledge dissemination is a core component of Knowledge Management (KM) that profoundly influences the efficacy of KM initiatives. Numerous scholarly research underscores the pivotal role of KM and its procedures in affording organizations a competitive advantage. External entities such as consumers, vendors, advisors, rivals, or newly-inducted employees' previous employers can be sources of knowledge. With the increasing emphasis on a knowledge-driven economy, disseminating knowledge has emerged as a high-efficiency organizational behaviour. Rapidly transmitting and sharing knowledge, compared to one's competitors, is perceived as a crucial competitive benefit. This article seeks to consolidate prior research insights regarding the influencers and consequences of knowledge dissemination within firms. This review was orchestrated in a tripartite manner: establishing a review methodology, undertaking the review, and elucidating the review findings. Cultivating a culture that values knowledge dissemination is critical to optimized knowledge management. Earlier research has delved into knowledge dissemination through lenses like technological, organizational, and individual behavioral facets. The precursors to knowledge dissemination encompass Technology, Behavioral and Motivational aspects, Incentive Mechanisms, Organizational Configuration, and Corporate Culture. Evidence-based research implies that knowledge dissemination exerts a spectrum of effects across individual, group, and organizational echelons. At the singular level, it influences efficacy, educational acquisition, innovation, and mental implications. In a group context, it affects group efficacy, innovative tendencies, and the overall environment. On an overarching scale, the knowledge exchange among staff members plays a role in determining organizational outcomes.

Keywords Knowledge Sharing, Literature Review, Knowledge Management

#### **INTRODUCTION**

Knowledge management (KM) facilitates a competitive edge for organizations by aligning their objectives with knowledge-driven growth (Howell & Annansingh, 2013; Nonaka & Takeuchi, 1995; Kukko, 2013; Bello & Oyekunle, 2014; Amayah, 2013). Even though KM plays a crucial role in realizing organizational aims (Loh et al., 2010), the efficacy of KM is profoundly influenced by knowledge sharing, a central KM activity (Cabrera & Cabrera, 2005; Fullwood et al., 2013; Amayah, 2013). Its criticality notwithstanding, this area is relatively under-explored (Amayah, 2013; Jain et al., 2007). Elements such as trust, motivation, and a conducive organizational environment are essential for productive knowledge dissemination (Ipe, 2003; Suhaimee et al., 2006).

KM encompasses processes like identification, acquisition, dissemination, and application of knowledge (Becerra-Fernandez & Sabherwal, 2010). Scholarly work has consistently examined variables promoting knowledge sharing (Rivera-Vazquez et al., 2009; Mishra & Bhaskar, 2011) and its influence on organizational outcomes (Kamasak & Bulutlar, 2010; Mills & Smith, 2011).

In today's knowledge-centric economic landscape, knowledge sharing is fundamental for organizational excellence and innovation (Christensen, 2007). It provides a competitive edge by fostering swift knowledge distribution across entities (Matsuo & Easterby-Smith, 2008) and has a positive correlation with business outcomes (Vij & Farooq, 2014; Ritala et al., 2015). This manuscript seeks to amalgamate perspectives on the drivers and implications of knowledge



sharing.

#### LITERATURE REVIEW

Knowledge dissemination is vital for modern innovation and competitiveness, with IT advancements bolstering online knowledge sharing (Grant, 1996; Stewart, 2000; Yang & Chen, 2007; Leonardi et al., 2013). However, the intrinsic power dynamics of knowledge can hinder sharing. Online knowledge sharing encompasses donating, collecting, and lurking (Van den Hooff & de Ridder, 2004; De Vries et al., 2006; Ali et al., 2018). This study intends to delve into the motivators of online knowledge sharing, considering various aspects. In today's knowledge-centric era, organizations emphasize knowledge for competitive advantages, adopting robust KM strategies (Nonaka, 1994; Iqbal et al., 2011; Wei-Li et al., 2009; Nielsen & Cappelen, 2014; Begoña Lloria, 2008; Wang & Noe, 2010; Ragab & Arisha, 2013). Knowledge sharing, notably in HEIs, is crucial, with definitions varying among experts (McAdam et al., 2012; Cabrera & Cabrera, 2002; Riege, 2005; Wang & Noe, 2010). Despite the use of terms like "knowledge exchange" and "knowledge transfer", they have distinct meanings, with the former requiring both contributors and searchers and the latter emphasizing knowledge movement within entities (Wang & Noe, 2010).

### **RESEARCH METHOD**

The current literature review was conducted in accordance with the methodology recommended by Kitchenham (2004). As such, the review process was divided into three primary stages: formulation of a review protocol, execution of the review, and presenting the findings. The established protocol included these components: (a) criteria for inclusion and exclusion, (b) method of search, (c) sources of data, (d) selection of studies, (e) extraction of data, and (f) analysis and integration of the data.

### FINDINGS AND DISCUSSION

Various scholars highlight that fostering a knowledge-sharing culture is essential for effective knowledge management (Jolaee et al., 2014; Smith & McKeen, 2003; Taylor, 2013; Zhenyuan et al., 2016). In the modern knowledge economy, knowledge management offers a competitive advantage (Wei-Li et al., 2009). Smith and McKeen (2003) view it as a mechanism promoting idea challenges, active knowledge application, and a learning-teaching environment. Davenport and Prusak (1998) define knowledge sharing with the equation: Share = pass + absorb. Hendriks and Paul (1999) propose a two-phase knowledge-sharing approach, focusing on the externalization by the sharer and the internalization by the recipient. This process faces challenges, including temporal, spatial, and cultural barriers (Zhang, 2016). The research underscores the significance of an encouraging knowledge-sharing environment (Taylor, 2013; Zhenyuan et al., 2016; Jolaee et al., 2014; Smith & McKeen, 2003). Besides individual behaviours (Yi, 2009), knowledge sharing also emphasizes systems, tools, cultural dynamics, motivations, and trust. Achieving knowledge-sharing objectives requires holistic consideration of individual, organizational, technological, and behavioural factors (Wei-Li et al., 2009; Yi, 2009). The framework of knowledge-sharing antecedents and consequences is detailed in Figure 1.

### Technology

Knowledge sharing has been explored from technological, organizational, and individual behavioural perspectives. A significant emphasis is on individual behaviours (Yi, 2009) and technological systems and tools that facilitate sharing. Discussions include cultural perspectives, motivations, incentives, trust, and identity. Terms like "IT", "IS", and "KMS" are identified as crucial enablers of knowledge management (Alavi & Leidner, 1999; Berlanga et al., 2008; Davenport &

Prusak, 1998; Riege, 2005; Seba et al., 2012; Smith & McKeen, 2003). Effective technology must cater to employee needs and be supported by factors like trust, culture, climate, and leadership (Ahmad & Daghfous, 2010; Kim & Lee, 2006; Sharma et al., 2012; Siddique, 2012). Some research note potential hindrances caused by technology (Riege, 2005; Smith & McKeen, 2003). The right technology choice is contingent on the organizational culture (Berlanga et al., 2008; Seba et al., 2012; Tsai et al., 2013).

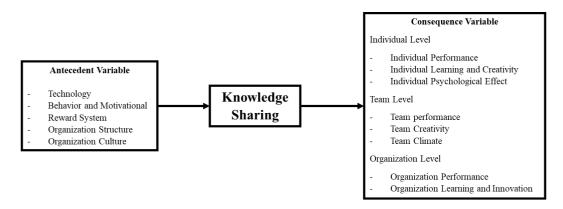


Figure 1. Conceptual Framework

### **Behaviour and Motivational**

The literature highlights multiple enablers and success factors for knowledge-sharing behaviour, such as trust, culture, rewards, innovation, leadership, technology, commitment, and job satisfaction (Alam et al., 2009; Aulawi et al., 2009; Casimir et al., 2012; Wang & Noe, 2010; Wickramasinghe & Widyaratne, 2012; Bock et al., 2005; Kanaan & Gharibeh, 2013; Tong et al., 2013; Von Krogh et al., 2012). However, barriers like a lack of time, trust issues, communication gaps, cultural differences, and unwillingness to use technology have also been identified (Arntzen & Worasinchai, 2012; Kukko, 2013; Riege, 2005; Santos et al., 2012). Most of these studies were qualitative, using surveys predominantly from Western and Asian contexts. Yoon et al. (2012) found that fulfilling the psychological needs of competence and relatedness positively influences knowledge-sharing, while autonomy has a lesser impact. Fear also inhibits sharing, as knowledge is often seen as a competitive asset, causing reluctance due to potential loss of advantage or imbalances in knowledge exchange (Cabrera, 2002).

#### **Reward System**

Reward systems aim to motivate employees towards organizational purpose. Lee and Ahn (2005) suggest extrinsic incentives suit codification strategies, and intrinsic incentives are apt for personalization strategies. Intrinsic incentives work best for tacit knowledge and extrinsic for explicit knowledge sharing. However, knowledge-sharing rewards have limited influence on formal and informal interactions, indicating the need for direct and indirect rewards. The efficacy of reward systems is debated among researchers. Key questions revolve around their role in different types of knowledge sharing and their overall effectiveness. Addressing these questions aids in designing efficient reward systems. Research shows that organizational rewards and culture bolster knowledge sharing (Durmusoglu et al., 2014; Lee & Ahn, 2005).

### **Organization Structure**

The organizational structure delineates how activities, encompassing coordination and

oversight, are orchestrated to fulfil the objectives of an organization. Given that organizations are perceived as knowledge-integrating entities, crafting their internal configuration, especially the hierarchical layout, becomes vital for facilitating decision-making, institutionalizing norms and protocols, and amalgamating personnel and tasks. Crafting a suitable organizational blueprint is imperative to genuinely discern the advantages of knowledge sharing. The efficacy of knowledge dissemination across managerial echelons hinges on both the organizational design and its culture (Islam et al., 2015). An adaptable and less formalized structure is conducive to knowledge sharing, whereas a structured and centralized one typically hinders it (Nooshinfard & Nemati-Anaraki, 2014). Organizational structuring can be viewed through three lenses: formalization, centralization, and integration. Academic discourse indicates that organizational culture stands as a significant determinant of knowledge dissemination (Nooshinfard & Nemati-Anaraki, 2014; Islam et al., 2015).

# **Organization Culture**

Multiple scholarly works have explored the influence of organizational culture on the propensity to share knowledge, assessing aspects like trustworthiness, the influence of national cultures, leadership dynamics, and the configuration of the organization (David & Fahey, 2000; Li et al., 2006; Sanz-Valle et al., 2011; Tong et al., 2013; Magnier-Watanabe & Senoo, 2010; Al-Alawi et al., 2007; Nguyen & Mohamed, 2011). There is also research probing the connection between subcultures, team-centric cultures, and knowledge dissemination (Ardichvili et al., 2006; Chen et al., 2010; Jackson et al., 2012; King, 2008; McAdam et al., 2012; Magnier-Watanabe & Senoo, 2010). Within Chinese firms, different tiers of culture bear a direct correlation with behaviours related to knowledge-sharing, with the overarching Chinese culture modulating these behaviours at varied layers (McAdam et al., 2012). Moreover, overarching national cultures exert influence on virtual knowledge exchanges in global scenarios, evident in interactions between American and Chinese entities (Li et al., 2006). Taylor (2013) characterizes a culture conducive to knowledge sharing as adept in managing and leveraging information for organizational advantage. Yet, while national culture undeniably intersects with knowledge-sharing practices, its precise impact remains somewhat nebulous. Much of the existing literature predominantly examines Western regions, Malaysia, and China, with scant attention to the Middle East, Africa, or South America. Although certain associations are observable, this regional focus skews the understanding of the interplay between expansive cultural contexts and behavioural tendencies. Moreover, a notable chunk of this research emphasizes the public domain, occasionally juxtaposing findings against the private realm.

# **Individual Performance**

Research data underscores a positive association between knowledge dissemination and the performance of employees, asserting that collaborative expertise augments operational efficiency and the quality of decisions made (Reychav & Weisberg, 2009; Masa'deh et al., 2016; Zhu, 2016; Kang et al., 2008). Nevertheless, this relationship can exhibit variability, influenced by elements such as managerial challenges (Kim & Yun, 2015; Ozer & Vogel, 2015; Park et al., 2015) and specific individual traits (Henttonen, 2016; Kim & Yun, 2015; Quigley et al., 2007). Adverse atmospheres can impede the internalization of shared knowledge (Tepper, 2007). Furthermore, Chow (2012) observed that the enhanced performance resultant from knowledge sharing is not contingent on one's standing within a network, thereby challenging the anticipations set by network theory (Burt, 1992).

## Individual Learning and Creativity

Ahmad and Widén (2018) emphasize that knowledge sharing helps employees express their knowledge. Such sharing has been linked to positive outcomes like knowledge creation (Hu et al., 2009; Iqbal et al., 2015; Ma et al., 2013; Park et al., 2014), innovative work behaviour (Hu & Zhao, 2016), and heightened creativity (Carmeli et al., 2014). It enhances absorptive capacity, promoting effective learning (Kang & Lee, 2017; Mura et al., 2016; Zhu, 2016). However, true creativity thrives on interactive dialogue, requiring reciprocity and exposure to diverse perspectives (Radaelli et al., 2014; Huang et al., 2014). The main factors impacting the knowledgesharing-learning relationship are reciprocity and individual diversity.

# Individual Psychological Effect

Only three studies in our analysis examined the link between knowledge sharing and psychological aspects. Knowledge sharing can boost personal and professional growth, improving autonomy and job satisfaction (Zhu, 2016). Jiang and Hu (2016) showed that knowledge-sharing enhances life satisfaction by fostering good relationships and reducing work stress. Another related aspect is the intention to leave a job. Reychav and Weisberg (2009) found that while tacit knowledge sharing reduces this intention, explicit knowledge sharing can increase it unless financially rewarded. Explicit knowledge sharing often does not contribute as much to personal growth, which might push employees to seek other job opportunities.

# Team performance

Modern organizations often use team-based structures, leading to numerous studies on how knowledge sharing affects team performance (Huang, 2009; Henttonen et al., 2013; Srivastava et al., 2006). Knowledge sharing in teams fosters a transactive memory system, improving work efficiency (Liu et al., 2011). Teams engaging in frequent knowledge sharing handle challenges more efficiently. Song et al. (2015) found that in Korea, more knowledge sharing in teams correlated with better sales performance. While Cummings (2004) found that diverse teams benefit from varied knowledge sources, Haas and Hansen (2007) highlighted the importance of adjusting shared knowledge to the expertise of team members. Customizing knowledge facilitates innovation (Choi et al., 2010).

# **Team Creativity**

In organizations, teams often handle complex tasks where knowledge sharing is crucial for creativity and learning (Kessel et al., 2012). Knowledge sharing aids teams in generating ideas and building absorptive capacity, a mental understanding of members' skills that fosters creativity (Lee et al., 2014). Cheung et al. (2016) found that sharing knowledge encourages the discussion of creative solutions. Contextually, project complexity and environmental instability influence the relationship between knowledge sharing and creativity. Wang et al. (2012) showed that in fluctuating environments, task-focused knowledge sharing is more crucial for creativity than interpersonal knowledge sharing. However, there is limited research on knowledge sharing's impact on team creativity.

# Team Climate

Knowledge sharing fosters a positive team climate by promoting interaction, reciprocation, and socialization, building trust among members (Radaelli et al., 2014). Flinchbaugh et al. (2016) found that active knowledge sharing enhances the perception of team collaboration, resulting in better service quality and satisfaction. Additionally, it encourages a positive attitude towards

diversity in diverse teams. Lauring and Selmer (2011) identified that knowledge sharing boosts employee interaction, fostering openness to various types of diversity making it essential for cultivating a positive diversity atmosphere in teams.

## **Organization Performance**

Studies have shown that knowledge sharing affects organizational performance metrics like profitability and sales growth (Gomes et al., 2017; McCurtain et al., 2016; Noor et al., 2015; Oyemomi et al., 2016; Rezaei et al., 2017; Wang & Wang, 2012). While tacit knowledge sharing benefits both financial and operational performance, explicit knowledge sharing mainly impacts financial performance (Wang & Wang, 2012). Effective outcomes necessitate aligning knowledge sharing with internal organizational processes (Oyemomi et al., 2016). While much research centres on mid and lower-level management, top-management knowledge sharing is vital. Given their grasp of industry dynamics, knowledge sharing at this level can enhance product performance and overall organizational market performance (McCurtain et al., 2010).

# Organization Learning and Innovation

Knowledge-sharing among staff members benefits organizational facets such as innovation, ideation, the capacity for knowledge absorption, and entrepreneurial endeavours (Kumar & Rose, 2012). Lin (2007) underscores that knowledge dissemination, whether imparting or acquiring, diminishes the barrier of knowledge rigidity, thereby fostering enduring innovative practices. This perspective gains endorsement from Wang and Wang (2012), contending that such sharing expedites and enhances the process of innovation and knowledge acquisition. Sharing knowledge stands central in augmenting an organization's ability to assimilate and apply existing knowledge innovatively (Iqbal et al., 2015; Yang, 2007; Khan et al., 2015; Liao et al., 2007). Wang et al. (2016) highlight its role in intensifying organizational learning, facilitating more seamless integration and utilization of knowledge in stakeholder engagements. Additionally, disseminating knowledge paves the way for a more entrepreneurial mindset within organizations. This sentiment is echoed by De Clercq et al. (2015) and Mustafa et al. (2016), who identified a constructive correlation between knowledge-sharing practices and entrepreneurial initiatives, particularly within the context of SMEs.

# CONCLUSIONS

A systematic literature review was conducted on knowledge-sharing outcomes, leading to a theoretical framework highlighting the field's current state. The review disclosed that knowledge sharing affects individual, team, and organizational levels. Its influence on creativity, learning, and performance is notable. Additionally, it promotes a positive team environment, trust-building, reciprocity, and appreciation for diversity, enhancing job and life satisfaction. However, more research is needed in this area. The majority of studies are quantitative, with only one qualitative research found. Practically, the consistent findings reveal that knowledge sharing boosts job satisfaction, commitment, and well-being. Organizations should emphasize knowledge sharing, especially in cultures valuing individualism, and leverage it for corporate entrepreneurship, as it aids in new business development and market entry. This review also responds to calls for more studies on knowledge-sharing impacts (Henttonen et al., 2016).

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