

Organizational Conditions associated with the sharing of Tacit and Explicit Knowledge in the financial sector in Colombia

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Abstract: Knowledge sharing is understood as the social interaction through which individuals exchange their tacit and explicit knowledge with others. Tacit knowledge is difficult to formalize, transfer and communicate to other individuals, and it is a result of experience, talent, and reflections of individuals. Conversely, explicit knowledge is formalized, codified, and easier to transmit. The focus of this study was on four organizational conditions associated with knowledge sharing: culture, training, strategic clarity, and information technology support. Although the relationship between organizational conditions and knowledge sharing has been investigated, there are few studies about whether organizational conditions impact tacit and explicit knowledge sharing differently. In this research, 270 participants were surveyed, belonging to companies in the financial sector in Colombia. It was found that explicit knowledge had a significant positive relationship with strategic clarity, organizational culture, training, and information technology support. On the other hand, tacit knowledge correlated significantly only with organizational culture, and it was not related to strategic clarity, training, and information technology support. Additional research on information and communication technologies that facilitate the sharing of tacit knowledge is recommended, as well as exploration of other types of administrative support besides technology. Studies are also suggested on which elements of the strategy can be considered explicit and which are tacit, and the mechanisms to facilitate their successful sharing.

Keywords: Knowledge sharing, tacit knowledge, explicit knowledge, organizational conditions

1. Introduction

Knowledge sharing is understood as the social interaction through which individuals exchange their tacit and explicit knowledge with others (Nonaka and Takeuchi, 1995). This is the way how individual knowledge becomes organizational (Foss, Husted and Michailova, 2010) to achieve objectives and obtain results.

Knowledge sharing is a central process of knowledge management because this is the collective mechanism by which organizational knowledge is created and applied. The lack of knowledge sharing is a major obstacle to effective knowledge management (Davenport and Prusak, 1998). There is evidence of the influence of knowledge sharing on different organizational processes and results, for example, innovation (Sigala and Chalkiti, 2005), and performance (Navimipour and Charband, 2016).

There are multiple publications about the relationship between personal and organizational conditions and knowledge sharing behavior. For example, Arif, Qaisar, and Kanwal (2022) in Pakistan found that perceived reciprocal benefits, technological support, and the ability to share knowledge facilitated the knowledge sharing behavior. Henttonen, et al. (2016) identified some knowledge sharing enablers: organizational culture, technology, and rewards. In the opposite direction, some authors have studied blockers of knowledge sharing like abusive supervision style, and lack of management support (Kim and Yun, 2015).

The focus of this study was on four organizational conditions associated with knowledge sharing: culture, training, strategic clarity, and information technology support. Some authors have reinforced the hypothesis that organizational culture impacts knowledge sharing (Kucharska, 2017; McDermott and O'dell, 2001). In addition, some studies link training and knowledge sharing (Al Saifi, et al., 2016). There is also a connection between knowing the organizational strategy and the quality of shared knowledge. It is also known that technology infrastructure, which is part of information technology support, is a facilitator of knowledge sharing (King and Marks, 2008). In the same direction, information technology systems support organizational knowledge sharing (Del Giudice and Della Peruta, 2016).

Although the relationship between organizational conditions and knowledge sharing has been investigated, there are few studies about whether organizational conditions impact tacit and explicit knowledge sharing differently. In a systematic review, Ahmad and Karim (2019) found that research on the differential impacts of sharing various types of knowledge is scarce and contradictory and proposed further research on this topic. This research contributes to reducing the gap, investigating if the chosen organizational conditions equally influence the tacit and explicit knowledge that individuals share.

2. Literature Review

2.1 Knowledge sharing

In today's information age, knowledge is the most valuable asset for achieving organizational goals. It is an interactive activity, which involves exchanging information and know-how to help individuals work together to solve problems and develop new ideas (Cummings, 2004). In the same direction, Camelo-Ordaz et al. (2011) described knowledge sharing as the act of making individual knowledge available to others within an organization, so that it can be assimilated and used. Whitherspoon et al. (2013) defined knowledge sharing as a process of knowledge management used to create, harvest, and sustain business processes. Knowledge sharing has been conceptualized as converting an individual's knowledge to a form understandable and usable by others (Mishra and Pandey, 2018).

2.2 Tacit and explicit knowledge sharing

Polanyi (1962) defined two types of knowledge: tacit and explicit. The first one is difficult to formalize, transfer and communicate to other individuals (Nonaka, 1991). This knowledge is a result of experience, talent, and the reflection of individuals (Haldin-Herrgard, 2000). It is also part of tacit knowledge values, individuals' beliefs, and perspectives (Nonaka and Takeuchi, 1995), hunches, intuitions, and insights that are hard to express (Becerra and Sabherwal, 2001). This knowledge is easy to lose in organizational turnover (Nonaka and Van Krogh, 2009). Conversely, explicit knowledge is codified and easier to transmit. Explicit knowledge is organized information adjusted to tangible forms such as databases or documents (Thomas and Gupta, 2021).

Knowledge sharing is fundamental in the exchange of tacit and explicit knowledge. Van den Hooff and de Ridder (2004) defined knowledge sharing as the exchange of tacit and explicit knowledge. According to Nguyen (2021), transferring explicit knowledge does not lead to the loss of privileged status in an organization, but transferring tacit knowledge may do. Therefore, employees seem to be more willing to share explicit than tacit knowledge. Humphreys et al. (2008) found that explicit knowledge was positively associated with online knowledge sharing, whereas the relationship with tacit knowledge was negative. Malik (2021) stated that emotional intelligence has a stronger positive effect on tacit knowledge sharing compared to explicit knowledge sharing. Wang et al. (2022) showed that virtual rewards have a significantly positive linear relationship with explicit knowledge sharing and an inverse U-shape relationship with tacit knowledge sharing.

2.3 Organizational conditions and knowledge sharing

Literature on the direct link between organizational culture and tacit and explicit knowledge is still lacking (Le et al., 2020; Yang et al., 2018). This statement is also valid for other organizational conditions like training and strategic clarity.

Organizational culture is one of the foundations of organizational life (Castaneda, 2015). Values, beliefs, and practices form culture. In this framework, reciprocity and interaction are crucial determinants of knowledge sharing (Nguyen, 2021). Another value that impacts knowledge sharing positively is trust (Andrews and Delahaye, 2000). De Long and Fahey (2000) expressed that trust and cooperation contribute to employees' willingness to share knowledge as part of the organizational culture. Kucharska and Kowalczyk (2016) pointed out the relationship between collaborative culture and knowledge sharing. Based on the above, the following hypothesis is proposed:

H1: Organizational culture significantly influences the tacit and explicit knowledge that individuals share.

Investment in training enhances individuals' capital (Malik, 2018), which facilitates sharing knowledge and not ignorance. A learning environment is required for effective knowledge sharing (Dong, et al., 2016). Training equips workers with new knowledge, improved levels of skills, and positive attitudes to sharing knowledge. Training in organizations occurs not only through courses but also via work activities (Watkins and Kim, 2017). Individuals who engage in knowledge sharing expect to attain learning and expertise (Zaqout and Abbas (2012). In a complementary way, training enables individuals to share up-to-date knowledge. However, following the line of related studies, where there is a greater commitment to share explicit knowledge than tacit (Humphreys et al., 2008), the following hypothesis is proposed:

H2: Organizational training significantly influences the explicit knowledge that individuals share, but not the tacit knowledge.

Critical knowledge is only valuable to the organization if the employees know it (Ling et al., 2009). Strategic clarity means that workers know the mission, vision, and objectives, especially the strategic ones, which are types of explicit knowledge. Mohammed and Ismael (2021) defined organizational clarity as the comprehension an employee has of the strategy, challenges, and priorities of the organization. To the extent that workers have strategic clarity, the probability of sharing valuable knowledge increases, which not only facilitates completing tasks successfully but also contributes to the achievement of the first-level organizational objectives. Organizational knowledge resides in the interactions between individuals, and it forms the basis of competitive advantage (Argot and Ingram, 2000). Riege (2005) found that one of the main barriers to sharing knowledge is unclear integration between knowledge management initiatives and organizational goals. Bakonyi (2018) found an interrelation between knowledge-sharing failures and organizational ignorance. Israilidis et al. (2021) defined organizational ignorance as the lack of employees' awareness of organizational characteristics. This factor affects the type and quality of knowledge that workers share. Based on the previous literature it is hypothesized:

H3: Organizational clarity significantly influences the explicit knowledge that individuals share, but not the tacit knowledge.

Perceived organizational support is an antecedent for knowledge sharing (Ali et al., 2019). One of the main organizational tools to support knowledge sharing is information technology. Information technology has been considered a way to increase knowledge sharing among employees (Leonardi, et al., 2013). However, knowledge needs to be codified to be shared, and technology helps to share mainly explicit knowledge (Vuksic, et al, 2015). Crugh (2019) found a lack of use of technologies of information to transfer tacit knowledge. Social media technologies impact knowledge sharing, especially tacit knowledge, which is shared through social interactions (Ali et al., 2019). Perceived ease of use is also a facilitator in applying information technology in knowledge sharing (Chang et al., 2013). Castaneda and Toulson (2021) found that not all information and communication technologies let tacit knowledge be shared, but those that facilitate dialogue, for example, text messaging and video conferences. From the above it is hypothesized:

H4: information technology support significantly influences the tacit and explicit knowledge that individuals share.

3. Methodology

3.1 Participants

In total, 297 participants were surveyed, belonging to companies in the financial sector in Colombia. Twenty-seven of the participants did not answer all the questions, for which they were excluded from the sample. The final number of participants for this research was 270. Table 1 shows their demographic characteristics.

Table 1: Demographic characteristics of the participants

Characteristics	Number	Percentage (%)
Gender		
Male	152	56,30%
Female	118	43,70%
Position		
Director	55	20,37%

Characteristics	Number	Percentage (%)
Adviser	105	38,89%
Professional	84	31,11%
Administrative	26	9,63%
Educational level		
Graduate	94	34,81%
Undergraduate	110	40,74%
Technical	66	24,44%
Time of experience in the company in months		
0-12	134	49,6%
13-24	42	15,6%
25-36	24	8,9%
37-54	20	7,4%
Over 54	50	18,5%
Time of experience in the position in months		
0-12	159	58,9%
13-24	39	14,4%
25-36	25	9,3%
37-54	24	8,9%
Over 54	23	8,5%

3.2 Instruments

The instrument used in this study for measuring tacit and explicit knowledge that workers share was the one designed by Castaneda et al. (2015). The instrument uses a Likert scale with five levels of response and has 12 items. The validation of this instrument obtained a Cronbach’s alpha reliability score of 0.94. The instrument used to evaluate organizational conditions was published by Castaneda (2015). The instrument consists of 16 items, of which four measure organizational culture, four training, four strategic clarity, and four information technology support. The instrument uses a Likert scale with five levels of response. The validation of this instrument obtained a Cronbach’s alpha reliability score of 0.92.

4. Results

To assess whether the type of knowledge that is shared is related to the organizational conditions of this study, a Pearson correlation was run. As shown in table 2, tacit knowledge correlated significantly only with organizational culture ($r=0.342$, $p=0.000$). This knowledge was not related to strategic clarity ($r=-0.102$, $p=0.080$), training ($r=-0.079$, $p=0.175$) or information technology support ($r=-0.025$, $p=0.667$).

Explicit knowledge had a significant positive relationship with strategic clarity ($r=0.208$, $p=0.000$), organizational culture ($r=0.278$, $p=0.000$), training ($r=0.119$, $p=0.04$), and information technology support ($r=0.156$, $p=0.007$).

Based on the results, there is full support for hypotheses 1, 2, and 3, and partial support for hypothesis 4.

Table 2: Correlations between types of shared knowledge and organizational conditions

Organizational Conditions	Type of knowledge: tacit	Type of knowledge: explicit
Strategic clarity	-0.102	0.208**
Organizational culture	0.342**	0.278**
Training	-0.079	0.119*
Information technology support	-0.025	0.156**

Note: * significant correlation $p<0.05$ (bilateral). ** significant correlation $p<0.01$ (bilateral).

5. Discussion

According to the results, explicit knowledge had a significant positive relationship with strategic clarity, organizational culture, training, and information technology support, while tacit knowledge correlated significantly only with organizational culture, and it was not related to strategic clarity, training, and information technology support.

Based on Nguyen (2021), a possible explanation for results in the case of culture, this is hypothesis 1, is that sharing explicit knowledge does not lead to the loss of privileged status in an organization but transferring tacit knowledge may do. In this sense, employees seem to be more willing to share explicit than tacit knowledge. Therefore, an organizational culture that strongly promotes values and practices aimed at exchanging knowledge, will facilitate workers to share tacit and explicit knowledge without fear of losing privileges, competitiveness, or job stability. There is evidence of the positive influence of trust in knowledge sharing (Andrews and Delahaye, 2000). Trust as a core value of the culture reinforces beliefs in workers that sharing tacit and explicit knowledge is considered valuable and desirable in the organization.

Training is often related to improving performance measured through processes, procedures, protocols, and other types of explicit knowledge. In contrast, training in tacit knowledge is minimal. Rather, it is acquired through dialogue and observation. In addition, there is evidence that there is a greater commitment to sharing explicit knowledge than tacit (Humphreys et al., 2008). As proposed by hypothesis 2, these are possible explanations why there is a relationship between training and explicit knowledge, but not with tacit knowledge.

One of the least studied variables concerning explicit and tacit knowledge is strategic clarity. The strategy is mainly explicit knowledge embodied in the vision and strategic objectives. This is why in this research, it was hypothesized that strategy is shared as explicit knowledge, while tacit knowledge associated with the strategy is not shared. Examples of tacit knowledge associated with the organizational strategy are expertise, intuitions, and hunches. Results confirmed hypothesis 3.

Finally, It was raised as hypothesis 4 that information technology support, constituted mainly by information and communication technologies, could be associated with both types of knowledge: tacit and explicit. Results supported the second type of knowledge, but not the first. The above agrees with the findings of Vuksic et al., (2015) who stated that to be shared, knowledge needs to be codified, and technology helps to share mainly explicit knowledge (Vuksic et al, 2015). Castaneda and Toulson (2021) formulated an exception, who found that not all information and communication technologies let tacit knowledge be shared, but those that facilitate dialogue, for example, text messaging and video conferences.

6. Conclusion and Recommendations

It can be concluded that culture, training, strategic clarity, and information technology support are organizational conditions that influence the explicit knowledge that is shared. Likewise, that culture is an organizational condition that influences the tacit knowledge that is shared.

Additional research on information and communication technologies that facilitate the sharing of tacit knowledge is recommended, as well as exploration of other types of administrative support besides technology. New studies are also suggested about which elements of the strategy can be considered explicit and tacit, and the mechanisms to facilitate their successful sharing.

A limitation of this study is it used only a sample of workers from the financial sector in a Latin American country, therefore the scope of findings is restricted.

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