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Why and How to Use Enterprise Social Media Platforms: The Employee's Perspective

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Abstract

Literature supports the relevance of knowledge sharing in a company. Considering that social media plays an important role in this process, this paper analyzes the antecedents and consequences of the use of enterprise social media platforms according to the employee's perceptions. Based on the Motivation-Opportunity-Ability framework and using two different methodologies (Partial Least Squares Structural Equation Modeling and fuzzy-set Qualitative Comparative Analysis), we find that three different combinations of motivation, opportunity and ability factors, combined in pairs, promote the use of enterprise social media platforms, leading to knowledge creation and task performance. These findings shed light on how a company can influence the use of enterprise social media platforms for achieving its objectives.

Keywords: Employee motivation, enterprise social media platforms, knowledge creation, task characteristic, task performance

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1. Introduction

Social media has been widely adopted by companies as a quick and cheap medium to connect with their actual and potential customers (Fischer & Reuber, 2011). By virtue of the large number of social media users, a company can increase its brand awareness and engagement, thus exhibiting the brand's personality, improving collaboration and, finally, boosting the amount of leads and sales (McCann & Barlow, 2015). Given these popularity and benefits of social media, in recent years, companies have been seeking social media technologies for internal use. This interest in Enterprise Social Media Platforms (ESMP) has been due to their potential to accomplish employees' work and company's business objectives; they appear as potential means to internally communicate, collaborate, and create content and share knowledge among employees (Abbas et al., 2018; Cai et al., 2018). Huang et al. (2015) showed that the use of ESMP enables employees to share work-related information and knowledge as well as build and integrate the shared knowledge within the firm into company-level work routines. Recently, Archer-Brown and Kietzmann (2018) further demonstrated that the use of ESMP enhances employees' work performance and the company's capability and competitiveness. However, more recently, Chin et al. (2020) stressed that the potential gains from ESMP usage are not achieved when employee's usage and participation are low. Hence, it is imperative to understand what can really favor the employees' usage of ESMP.

The topic of knowledge management appears repetitively in papers on social media. Noor et al.'s (2020) bibliometric analysis on the use of social media platforms in the context of knowledge management highlights the relationship between both domains and its relevance, not only for academia but also for the society. Therefore, its management is of vital importance. Among the relevant and complex activities involved in the knowledge management process, knowledge sharing plays a critical role to affect employees' performance and organization performance (Abdelwhab Ali et al., 2019). For individual employees, knowledge sharing deals with transferring knowledge (including experiences and skills) to colleagues and other members of the firm that can help them to "get something done better, more quickly, or more efficiently" (Lin, 2007, p. 137). Knowledge sharing can result in creating new knowledge (Van den Hoof & Van Weenen, 2004). From companies' perspective, knowledge creation is valuable since it has the potential to provide and maintain a competitive advantage through innovation (Alshanty & Emeagwali, 2019), new product development (Adomako et al., 2021) or dynamic capability evolution (Zollo & Winter, 2002), and improvement in organizational performance (Abdelwhab Ali et al., 2019). The existing research on factors affecting employee's usage of ESMP has primarily considered technological, organizational, and interpersonal antecedents while some research has been conducted to understand factors affecting technology acceptance. However, little is known about how its usage influences employee's perceived consequences of ESMP, such as knowledge creation and task performance. Given the increasing popularity of and limited research on ESMP usage, it is important to understand about the use of social media in companies, particularly, why and how to promote the use of ESMP from the employee's perspective. This can promote ESMP usage among employees and ensure better work performance in the company.

To fill up the above-mentioned gap, this study examines why ESMP is favored by employees when sharing knowledge and what are its consequences. Based on the Motivation-Opportunity-Ability (MOA) framework, this study analyzes the role of perceived improvement in reputation

by sharing knowledge, the enjoyment of helping others (motivational factors), task characteristics such as complexity and interconnectivity (opportunity factors) and the self-efficacy in sharing knowledge (ability factor) in ESMP usage, and the extent of increase in knowledge creation at the organizational level and task performance at the individual level. To verify the hypothesized relationships among these variables, data were collected from 444 employees of various manufacturing industries in China, which is a large sector in terms of workforce (over 112 million) and the share of the country's total economic output (nearly 30%). Two methodologies were employed for data analysis: Partial Least Squares Structural Equation Modeling (PLS-SEM) and fuzzy-set Qualitative Comparative Analysis (fsQCA). These methods are different; however, they complement each other, enabling the achievement of the research purpose. PLS-SEM tests the theoretical model by focusing on analyzing a group of proposed hypotheses regarding the antecedents and consequences of ESMP usage. FsQCA is performed on the ESMP usage variables to identify different combinations of MOA framework factors resulting in ESMP usage. The results reveal significant relationships between some of the variables under study and the possible combinations of the MOA framework factors for ESMP usage. This provides a clearer understanding of ESMP related sharing knowledge behavior in companies.

This research provides three main contributions to the literature. First, it conceptually proposes a research model built on the MOA theoretical framework, which explains the employees' behaviors (motivation to do so, opportunity to perform it, and ability to do it) while using ESMP. This study addresses the concern highlighted in a previous study, that the benefits of ESMP are not really achieved when employee's usage and participation is low (Chin et al., 2020). Second, it empirically analyzes the antecedents and consequences of ESMP usage. The results of PLS-SEM demonstrate the factors and consequences of ESMP usage while those of fsQCA show that different combinations of factors can affect ESMP usage. These results are complementary, offering valuable insights into employees' and organizations' knowledge management practices. Third, research on the MOA framework for understanding the sharing knowledge behavior through information and communication technologies is almost lacking. Probably, the underlying reason, considering Siemsen et al.'s (2008) arguments is that, empirical studies have failed to support evidence about the complementary role of the three components of the MOA framework in terms of individual's behavior. This study validates and provides evidence for the application of the theoretical framework of MOA in the context of ESMP usage.

2. Theoretical background and hypothesis development

ESMP usage refers to employees' use of enterprise social media as a communication tool in their work environment (Cai et al., 2018). Researchers in the fields of information management and knowledge management have asserted that ESMP usage provides several affordances (including association, editability, persistence, and visibility) for internal communication and collaboration in organizations (e.g., Cai et al., 2018; Pee, 2018; Rode, 2016; Treem & Leonardi, 2013). First, it promotes employee association and enables them to share information and knowledge with each other. Second, it permits employees to edit or modify the content of work-related information, thereby improving the quality of information shared. Third, ESMP facilitates the availability of the traces of employees' interactions and their shared information for future use. Fourth, the information shared in ESMP is visible, which helps other employees gain access to specific information and knowledge. These affordances are effectuated when employees use social media within their organizations and realize its benefits. Recent research

offers empirical evidence that ESMP usage is positively correlated with employee performance (Cai et al., 2018; Riemer et al., 2015). Riemer et al. (2015) found that employees gain social capital by using ESMP in their daily work. Cai et al. (2018) revealed that employees can attain better psychological work conditions and higher performance with regards to proactivity, adaptability, and resilience by using ESMP.

The MOA framework is a meta-theory that involves a high level of generalization regarding the variables that determine human behavior. Originally proposed by MacInnis and Jaworski (1989) in the context of advertisement processing, subsequent research has expanded its application to explain a wide variety of decision making and behaviors of individuals, not only as consumers (Gruenet al., 2007) but also as members of the company (Guenzi & Nijssen, 2020). The current research has adopted the MOA framework for explaining the factors that can drive an employee to use ESMP. This framework proposes that an individual will engage in a behavior if he/she is motivated to do so and has the opportunity as well as the ability to perform it.

Motivations are defined as “the processes that cause people to behave as they do”, and these happen when individuals have a need that they wish to satisfy (Solomon et al., 1999, p. 91). Motivations for engaging in knowledge sharing have been analyzed not only in the context of general social media (Lee, 2020), but also in ESMP (Rode, 2016). Among the many motivations of ESMP usage, this paper analyzes two types of motivations: the expected positive effects of knowledge sharing on employees’ professional reputation and the enjoyment they can feel by sharing knowledge and helping. Opportunity factors relate to the environmental or contextual variables (exogenous elements) that facilitate (or do not facilitate) a specific behavior; it captures whether the situation is helpful in achieving the individual’s need or goal (Gruen et al., 2007). Two opportunity factors are considered in this study: task complexity and connectivity. The task characteristics that the employee performs, and more precisely, its perceived complexity and need for connectivity, can push the individual toward ESMP usage. Ability depicts the individual’s skills or knowledge necessary to undertake the behavior. This research identifies self-efficacy in sharing knowledge as the ability factor that can condition ESMP usage.

2.1. Motivational factors: Perceived reputation by sharing knowledge and enjoyment in helping others

Reputation is defined as “a nucleus of interconnected impressions shared and expressed by a high proportion of members of a defined social network” (Bromley, 1993, p. 42). Zinko et al. (2012, p. 156) focused on the employees’ reputation regarding “issues related to individuals’ capacity to perform their jobs effectively, and to be cooperative and helpful towards others”, highlighting that this is formed over time. Literature supports that a good reputation positively affects job satisfaction, especially in men (Bellou, 2010), increases social recognition among peers (Lerner & Torole, 2002), attributes power to the individual (Zinko et al., 2012), decreases individual’s accountability, provides more autonomy (Hall et al., 2004; Zinko et al., 2012); and favors career success in terms of performance evaluations, promotions, and rewards (Ferriset al., 2003; Zinko et al., 2007, 2012). Accordingly, reputation is regarded as an asset that individuals can leverage (Graffin et al., 2012), enabling them to behave intentionally to protect or even enhance it (Gruber et al., 2015; Zinko et al., 2007). Social media is therefore a relevant tool, as it helps the individual to display his/her expertise (Utz, 2016) by connecting with a large audience that can play a role in the individual’s career (Gruber et al., 2015; Schuele, 2010).

Rode (2016) provides evidence that when the employees perceive an enhancement in their professional reputation by sharing knowledge through ESMP, they would do so. In the context of signaling theory (Spence, 1974), knowledge sharing can be considered a cue sent by the employee to influence other organizational members' beliefs about his/her knowledge, performance, and/or interest in helping other coworkers. Knowledge, skills, and expertise are important antecedents of an employee's reputation (Zinko et al., 2007, 2012). Evidence suggests that a regular use of professional social media displaying the individual's expertise in a specific field can increase the individual's reputation in that field (Utz, 2016). However, Leonardi and Treem (2012) observed that employees might use knowledge sharing technologies to make others perceive them as experts in areas that they are not; but they wish to be. Based on the above reasoning, we suggest that:

H1: The greater the expected positive effects of knowledge sharing on professional reputation, the more the employee uses ESMP.

Sometimes, motivation to share knowledge comes more from the sender's perception that it benefits the receiver, than from the sender's own perceived benefit (Siemsen et al., 2007); thus, altruism or specifically enjoyment in helping others can increase motivation toward sharing knowledge. Enjoyment in helping others is regarded as an essential part of altruism (Yoo & Gretzel, 2008) and an intrinsic motivation that pushes the individual to behave in a certain way due to his/her inherent interests, satisfaction, and pleasure (Ryan & Deci, 2000). According to Osterloh and Frey (2000), intrinsic motivation is more relevant in justifying an individual's behavior regarding knowledge contribution. Literature supports the positive relationship between enjoyment in helping others and knowledge sharing within the company (He & Wei, 2009; Huang et al., 2011; Lin, 2007; Obrenovic et al., 2020; Sedighi et al., 2016). Hence, we posit that:

H2: The greater the enjoyment in helping others by knowledge sharing, the more the employee uses ESMP.

2.2. Opportunity factors: Task characteristics - complexity and connectivity

Tasks are activities performed to fulfill a work responsibility (Li & Belkin, 2008). Performing a work-related task may require knowledge sharing activities among employees. These activities are triggered by employees as a whole, not by an individual employee; therefore, the employees' perception of the task plays a role in their involvement in knowledge sharing. From this viewpoint, a task's characteristics can create opportunities for employees to engage in knowledge sharing activities while ESMP provides a means for performing these activities. This paper focuses on two opportunity factors, task complexity and task connectivity.

Task complexity is considered an important dimension of task characteristics (Campbell, 1988; MacMullin & Taylor, 1984). In their comprehensive review, Liu and Li (2012) identified two perspectives to understanding task complexity. Objectively speaking, task complexity is directly associated with a task and is independent of task performers. Subjectively, task complexity is concerned with a conjunct property of a task and task performer. Grounded in this perspective, a task is perceived as complex when the performer feels (subjective) that it requires the capacity, which is beyond him/her-self. Speaking of the task itself, objective task complexity has theoretical implications based on how rigorous the formulation of the pure task is. Subjective task complexity has practical implications because it captures the interaction between the task and its performer. Researchers in the field of management are more prone to support the latter perspective, because of the inseparability of task from performer's behavior (Hærem et al., 2015). Moreover, they generally support that task complexity is associated with knowledge acquisition (Lankton et al., 2012) and knowledge sharing and exchange (Chae et

al., 2015) among employees. One possible explanation is that a task's complexity is concerned with the pre-determinability of, or uncertainty about, a task, that is imperative in determining whether information need is for knowledge sharing or not (Chae et al., 2015; Zeffane & Gul, 1993). Employees are more likely to using ESMP for complex or uncertain tasks, to ensure task performance through knowledge sharing. Hence, we suggest H3.

H3: The more complex the task involved in knowledge sharing, the more the employee uses ESMP.

Task connectivity concerns with to the degree of interdependence among subtasks to achieve task performance (Liu et al., 2017). The subtasks are closely interdependent and necessitate close coordination and information sharing among the concerned employees (Byström & Hansen, 2005). The connectivity usually continues to increase because information and work practices are continuously shared and updated in reciprocal processes among employees. Such phenomenon often exists in the contexts embedded in knowledge sharing and professional workforce (e.g., Liu et al., 2017; Nembhard & Tucker, 2011). The back-and-forth nature of task means that employees lack proper and/or sufficient information for dealing with the task without collaboration with other employees. Under such a situation, knowledge sharing among employees can be facilitated through ESMP. Accordingly, we hypothesize that:

H4: The more connected the task involved in knowledge sharing, the more the employee uses ESMP.

2.3. Ability factor: Self-efficacy in sharing knowledge

Self-efficacy refers to the "beliefs in one's capacity to organize and execute the courses of action required to produce given attainments", and it can condition the individual's behavior (Bandura, 1997, p. 3). This term, in the context of knowledge sharing at workplace, deals with the employee's self-perception of his/her ability and capacity to share valuable knowledge with others about his/her skills. As suggested by Bandura (1997) and supported by Lin (2007), Papadopoulos et al. (2013), and Rode (2016), those with higher self-efficacy in knowledge sharing and who are confident of their ability to contribute valuable knowledge, solve problems, and improve work performance, will actually engage in it. According to Safdar et al.'s (2021) systematic review of papers, most of the research shows a positive and significant relationship between both variables. Thus, we posit that:

H5: The greater the self-efficacy in knowledge sharing, the more the employee uses ESMP.

2.4. Consequences of ESMP usage: Knowledge creation and task performance

Recent research on knowledge management and organizational learning sheds light on the relationship between social media use and knowledge creation and sharing (Papa et al., 2018; Qi & Chau, 2018). According to Razmerita et al. (2014), knowledge has two dimensions: collective and personal. Collective knowledge concerns with organizational knowledge, common to all members of an organization; it is the result of individual contributions to the organization's systems and processes. The creation of organizational knowledge refers to "the process of making available and amplifying knowledge created by individuals as well as crystalizing and connecting it to an organizational knowledge system" (Nonaka & Krogh, 2009, p. 635). On the other hand, personal knowledge regards all kinds of knowledge that a person possesses; it can come from interpretations of information, interaction with other people, experiences, deeper engagement in an activity, and so on. ESMP allows people not only "to create, organize, and share their knowledge, but also to socialize, extend personal

networks, create an online identity, and collaborate on organizing and creating new knowledge” (Razmerita et al., 2009, p. 77). It contributes to generating synergy and facilitating the integration of personal and collective knowledge (Razmerita et al., 2009) that can result in knowledge creation. The present paper adopts an inclusive vision and conceives knowledge creation as the process of generating new knowledge by applying the existing knowledge resulting from personal and/or collective knowledge.

From a knowledge-based perspective, social interaction is the main process of creation and internalization of knowledge in the organization, as an individual cannot do it alone. Thus, ESMP usage can create knowledge through interaction among firm’s members and, as described by Nonaka (2007), make tacit knowledge explicit, enabling the employees to recognize the creation of new knowledge. Research by Sigala and Chalkiti (2015), Papa et al. (2018), and Qi and Chau (2018) provide evidence on how social media can influence knowledge creation. Accordingly, we propose that:

H6: The more the employee uses ESMP, the more the employee perceives that ESMP favors knowledge creation.

A review of research on the impact of ESMP usage on an employee’s individual performance revealed two different concepts—task performance and innovative performance (Ali-Hassan et al., 2015; Kuegler et al., 2015). Task performance impact refers to the influence of ESMP usage on completion of daily tasks while innovative performance impact refers to its influence on generation of new ideas. We consider that innovative performance belongs to the concept of knowledge creation mentioned previously. Accordingly, in this study, the term, task performance, refers to the ability to accomplish a task, and is related to job effectiveness and productivity.

Research has found evidence on the benefits of using ESMP on work-related task performance, in terms of employees’ job satisfaction and work efficiency (Liang et al., 2021), employee productivity (Munene & Nyaribo, 2013) or employee’s innovativeness (Dittes & Smolnik, 2019). Specifically, Dittes and Smolnik (2019) observed that employees’ ESMP usage impacts collaboration and networking, making them more efficient and innovative, which increases their task performance. As the authors highlight, when dealing with complex problems or tasks, collaboration and networking among employees can be essential. Therefore, we hypothesize as follows:

H7: The more the employee uses ESMP, the more the employee perceives that ESMP favors task performance.

Figure 1 shows the proposed theoretical model.

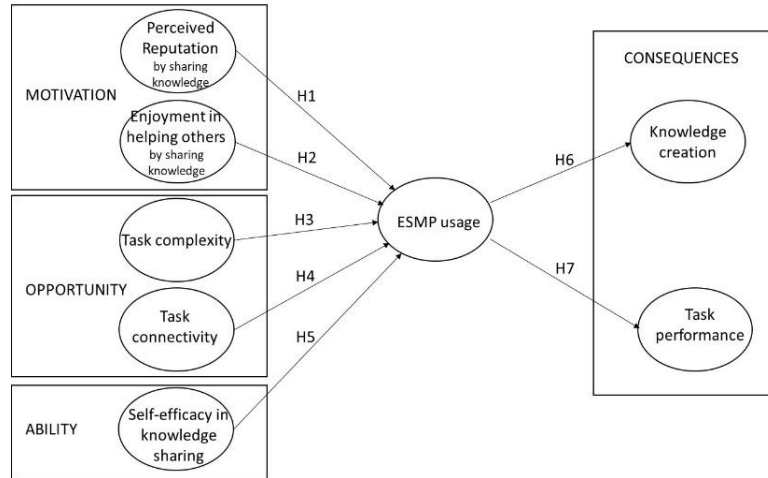


Figure 1. Proposed theoretical model

Apart from testing the set of hypotheses proposed in the theoretical model, we also focus on the complementary role of the three components of the MOA framework in ESMP usage. Therefore, we added a research question to complement the set of hypotheses posited:

RQ: How do the MOA factors collectively lead to ESMP usage?

We intend to examine whether the three components of the MOA framework (motivation-opportunity-ability) necessarily combine for ESMP usage or/and whether different configurations of the MOA framework are consistent with ESMP usage.

3. Methodology

3.1 Sample and data collection

We conducted a survey in the manufacturing industry of China between January and February 2020. This industry was chosen for two reasons. First, it is a large industry, accounting for nearly 30% of the country's total economic output (Statista, 2021) and a large workforce with over 112 million workers (Mike, 2021). Second, the use of social media platforms to share information for work purposes is a widespread organizational practice in China (Sun et al., 2020).

Our selection process for companies was based on two criteria. First, the companies should allow their employees to use social media as a platform for sharing business-related information and knowledge among organizational members. However, using social media platform was voluntary; thus, seeking or sharing knowledge had no monetary rewards. Second, the companies were small-to-medium sized manufacturing companies, not large in size. This was to ensure that the employees used the social media platforms developed for public use, rather than enterprise-developed platforms.

We adopted the key informant approach to collect data from employees (i.e., respondents), who were selected based on one criterion, that is voluntary usage of social media platform for work, justifying that they are the most relevant for providing information on social media usage, work motivation, task characteristics, and performance. Purposive sampling technique was employed to identify a representative sample of small subsets within the larger population to

adequately address the research questions (Jupp, 2006). This sampling technique has been widely proven to be reliable and robust (Tongco, 2007). The respondents were recruited by a professional survey company in China. A total of 404 responses were subjected to further analysis.

Table 1 shows the distribution of the sample in terms of industry type. For these sampled respondents, they were from major Chinese cities, 32.2% from first-tier cities (e.g., Beijing and Shanghai), 36.9% from new first-tier cities (e.g., Tianjin, Chongqing), 26.5% from second-tier cities (e.g., cities in Fujian and Sichuan), and 4.5% from other cities (e.g., Shandong and Jiangsu).

<Insert Table 1 about here>

3.2 Measurement scales and data analysis

The questionnaire was divided into two parts, demographic variables and main constructs. It comprised well-established multi-item scales from relevant literature that were adapted to the study's context (see Appendix). The respondents were asked to rate each item on a seven-point Likert scale, with 1 = "totally disagree" and 7 = "totally agree".

The PLS-SEM method was used to test the hypotheses. To check the results and consider other possible paths for ESMP usage, the same data were further analyzed using fsQCA. As Tho and Trang (2015) posit, qualitative comparative analysis can help support regression-based analysis. In fact, fsQCA relies on several complexity theory tenets that are not considered in regression-based analysis, which offer a different approach to data. By allowing asymmetrical relationships, admitting equifinality or testing necessity and sufficiency, among others, fsQCA provides relevant information available in a data set that regression-based analysis ignores (Pappas & Woodside, 2021). Structural equation modeling is a symmetric test that reports the net effects of a group of independent variables (in our analysis, the MOA factors) on the dependent variable (i.e. ESMP usage) (Pappas & Woodside, 2021). Accordingly, comparing and contrasting the PLS-SEM results with those obtained from fsQCA can offer a wider explanation of the role that each variable can play in ESMP usage, in the context of the MOA framework.

4. Results

4.1. Psychometric properties of the scales

Before testing our hypotheses, we evaluated the measurement model. For achieving the minimum threshold level and the scales to be valid and reliable, it was necessary to eliminate four items from two different scales (two from self-efficacy and two from ESMP usage). For the remaining items, the loadings of their respective factors were significant ($p < 0.01$), and the standardized loadings were greater than 0.7 (Bagozzi & Yi, 1988). As Table 2 shows, all scales met the criteria for reliability. The values of Cronbach's alpha and the composite reliability indicators (Werts et al., 1974) exceeded the accepted threshold of 0.6 (Nunnally, 1978). Table 2 displays the data used to verify convergent validity and discriminant validity. For all constructs, the average variance extracted (AVE) values were higher than the accepted

threshold of 0.5, confirming that convergent validity and the covariance between constructs was lower than the corresponding AVE, thus confirming discriminant validity (Fornell & Larcker, 1981).

<Insert Table 2 here>

4.2. Hypothesis testing using PLS-SEM

To test the hypotheses, we used bootstrapping with 5,000 subsamples (Hair et al., 2011; Henseler et al., 2009) to analyze the significance of the path coefficients. The significance of the proposed relationships, reflected by the *t* values, supports the hypotheses H1, H4, H5, H6, and H7, but rejects the hypotheses H2 and H3 (Table 3).

<Insert Table 3 here>

These results indicate that ESMP usage has a significantly positive effect on the analyzed consequences: knowledge creation and task performance (hypotheses H6 and H7, respectively), which is stronger its influence on knowledge creation. With respect to motivational factors and ability factors, the effect of perceived reputation by sharing knowledge through ESMP usage was higher than that of perceived self-efficacy in sharing that knowledge (hypotheses H1 and H5, respectively). No significant relationship was found between enjoyment in helping others by sharing knowledge and ESMP usage (hypothesis H2). Moreover, the results indicate that a greater need for task connectivity is associated with a greater usage of ESMP (hypothesis H4); yet, no significant relationship was found between task complexity and ESMP usage (hypothesis H3).

4.3. ESMP usage as outcome: Data analysis using fsQCA

The purpose of analyzing data using fsQCA was to identify different causal configurations conformed by causal conditions, leading to ESMP usage. Equifinality and causal complexity are explicitly allowed by fsQCA (Woodside, 2016). Hence, this technique can be considered a complementary analysis to PLS technique. “With regression analysis, researchers estimate a change in a dependent variable, on average, given a one unit change in the independent variable. With fsQCA, researchers identify whether the presence or absence of causal conditions (and their combinations) are consistent with the presence or absence of a particular outcome” (Fainshmidt et al., 2020, p. 457). Calibration enables fsQCA to operate on causal conditions that differ in kind (presence or absence) and degree (presence or absence), as it translates measures into fuzzy-set membership scores. In fact, calibration is required when data can take a spectrum of values and not just 0 or 1, as it happens with the causal conditions considered in this paper.

As fsQCA works with single-item causal conditions, a single average value was calculated for each multi-item scale of the MOA factors, adding the score of its items and dividing it by the number of items that make it up. In this procedure, only the items remaining after checking the psychometric properties of the scales were considered.

The cut-off points for calibration were taken from the original scale, ranging from 1 (completely disagree) to 7 (completely agree). Accordingly, for all the causal conditions and

the outcome, 6 was considered the value for full membership (fully present), 2 for full non-membership (fully absent), and 4 as the point of maximum ambiguity.

Once the data was ready, the analysis of necessity was performed before accomplishing the sufficiency analysis, as suggested by Schneider & Wagemmann (2012). Table 4 shows the results of necessity for ESMP usage. As the data suggests, each causal condition is necessary for the outcome to occur, as each of them achieve the recommended thresholds of consistency and coverage (.90 and .75, respectively) (Ragin, 2006).

<Insert Table 4 here>

Table 5 shows the intermediate solution in the sufficiency analysis, identifying different causal configurations leading to the outcome. ESMP usage is linked to (1) performance of complex tasks by employees who perceive that sharing knowledge improves their reputation (this solution identifies the biggest group of employees); (2) nonperformance of complex tasks, but only those tasks that need connectivity where employees trust their capacity and ability to share knowledge; and (3) performance of tasks that need connectivity although the employees do not enjoy helping others by sharing knowledge; in this last solution, the absence of enjoyment plays a core role in ESMP usage.

By matching these results with those from PLS, the causal configuration linked to ESMP usage in solution 2 shows task complexity as absent (the task is not perceived as complex), matching the results of rejection of H3 in the PLS model. The same applies to enjoyment in helping others by sharing knowledge; solution 3 shows an absence of this causal condition (the employee does not enjoy helping others by sharing knowledge), in accordance with how PLS supports H2 (enjoyment in helping others does not influence ESMP usage).

<Insert Table 5 here>

5. Discussion and conclusions

Social media is a big part of almost everybody's daily life and companies consider it very useful, not only for their interactions with customers but also among employees, helping the companies to achieve specific goals. This paper focuses on the organizational context, and attempts to explain the antecedents and consequences of ESMP usage among employees. Theoretically, we propose the outcomes/advantages of using ESMP at two levels, organizational and individual levels. At the organizational level, we study the impact of ESMP usage on knowledge creation, and at the individual level, on task performance. In addition, adopting the MOA framework, this research considers several factors affecting the employee's usage of ESMP and provides strong empirical evidence to validate the findings. It performs two different but complementary statistical methodologies. First, this study checks the proposed theoretical model using PLS-SEM, showing significant relationships between some analyzed variables. Second, fsQCA analyzes the role played by the antecedents of ESMP usage, identifying different possible combinations of the MOA framework factors.

Regarding the antecedents of ESMP usage, the PLS-SEM results suggest that the three components of the MOA framework positively influence ESMP usage—motivation, opportunity, and ability to share knowledge. These results are supported by fsQCA, confirming

that MOA framework is a robust approach for identifying the antecedents of ESMP usage as well as helping to understand some controversial findings regarding their roles. In accordance with Siemsen et al. (2008), this research contributes to identifying the complementary roles that the MOA factors play in ESMP usage.

Two motivational factors were analyzed, however, only one was significant in PLS-SEM analysis. In line with previous research (Rode, 2016), when the individual perceives that sharing knowledge through ESMP improves his/her reputation, the individual will engage in it. Nevertheless, this engagement does not result from only enjoying helping others, contrary to what literature suggests regarding the relevance of intrinsic motivation in explaining behavior (Osterloh & Frey, 2000). Rode (2016) also observed a lack of relationship between enjoyment in helping others and ESMP use, suggesting that the nature of ESMP which involves communication and collaboration justifies the main role that extrinsic benefits (i.e. influencing the professional reputation) play.

Although motivation can be considered a factor explaining individual behavior, fsQCA results suggest that sometimes motivation alone cannot be the source, rather, it is the combination of opportunity and/or ability factors that can justify the behavior. According to our results, majority of the employees engage in using ESMP because they are involved in complex tasks and perceive that using ESMP for sharing knowledge will boost their reputation. FsQCA shows that in some situations, the task complexity together with the perceived improvement in reputation pushes the individual to use ESMP. Having to perform a complex task, the employee may be challenged to reveal or share its complexity. This can turn out to be advantageous as it can bolster his/her own professional reputation. In other minority cases, none of the analyzed motivations play a specific role, and only the opportunity and ability factors combine to influence ESMP usage; when we talk about employees who do not perceive the task to be complex, they need approval and interaction to consider sharing knowledge.

The PLS-SEM results confirm that task connectivity, not task complexity, is positively associated with ESMP usage. As expected, the task characteristic of connectivity is indicative of an opportunity that leads to ESMP usage among employees for knowledge sharing activities. Regarding the lack of influence of task complexity on ESMP usage, a possible explanation could rely on the way individuals behave during uncertainty. As mentioned previously, task complexity from the employee's perspective incorporates uncertainty about the task and the need for information sharing when performing the task (Chae et al., 2015; Zeffane & Gul, 1993). When employees perceive the task as complex, they are likely to perceive uncertain about the kind of information that is necessary to accomplish it. Therefore, they tend to follow a formal medium, such as well-defined work procedure and formal written form, to exchange information, instead of relying on ESMP usage (Chae et al., 2015). The results of the fsQCA could justify that PLS-SEM analysis showed no relationship between task complexity and ESMP usage.

Finally, we identify a group of employees who admit to not enjoying helping others will use ESMP because they are involved in tasks that are connected. It is just the opportunity for task connectivity, what pushed the individual to use ESMP. This result shows an absence of enjoyment, which appears to complement PLS-SEM results, showing no relationship between enjoyment in helping others and ESMP usage.

Self-efficacy in sharing knowledge is the ability factor, which exerts a positive and significant impact on ESMP usage. Although few studies show that both variables do not influence each other (Lee et al., 2012), a majority of studies show that when the employees feel they can share knowledge, they will engage in it. Our research supports the latter view.

Finally, our data supports that ESMP usage has a positive and significant impact on knowledge creation and task performance. Based on our results, we propose several managerial implications. First, human resource managers should specify the skill requirements, task expectations, and the collegiality expected by the company, in the potential employees' job description, for them to perform their tasks well (Bizzi, 2020). Task connectivity requires close coordination and information sharing among employees, therefore is expected to enhance ESMP usage. Then, defining, supporting, and promoting the use of ESMP would play a relevant and important role in achieving the required interactions among coworkers as identified in the job description.

Considering the relevant role that reputation plays in ESMP usage, managers should recognize the valuable knowledge shared among employees through ESMP. Perhaps, the supervisors and coworkers could identify the shared knowledge. The behavior of employees who share valuable knowledge through ESMP could be communicated to the rest of the company, not only by ESMP but also through an offline mechanism. Additionally, managers could create groups of employees and challenge them to come up with solutions for complex tasks. Complexity can also stimulate the use of ESMP and positively influence the employees' reputation. Moreover, managers should define and include a set of activities to be performed in groups, within different tasks, and communicate the specific requirement to perform them, that is, network. The required connectivity will promote ESMP usage. To share knowledge, the individual has to believe that he/she has the required capacity and skills, which can be acquired through experience and improved with training. Accordingly, training courses on knowledge sharing should be offered to employees on a regular basis.

This research has a few limitations. First, it is merely based on self-reported data, as only perceptions are measured. This information has not been contrasted with more objective sources, for example, information from supervisors for assessing task complexity or the task performance, or the use of log file data regarding ESMP usage. Second, our survey has a cross-sectional design and the time frame for ESMP usage has not been considered. Since one of the dependent variables, knowledge creation, takes time, it would be interesting to check the proposed model over time.

Future research may extend our current study in several directions. Motivational factors leading to ESMP usage could consider not only the type of participants, that is, promoters, core users, and peripheral users, or their age, but also the group size. According to Bulgurcu et al. (2018), these are important predictors that contribute to ESMP communities. Current studies on enterprise social media are interested in knowing how social media usage can improve organizational performance (Qi & Chau, 2018). Yet, more research is needed on the effects of ESMP usage on employees' individual behavior, as the results are controversial (Bizzi, 2020). Using ESMP does not always result in positive consequences according to the employee's behavior (Luqman et al., 2021). Finally, it would be interesting to test the model and perform the fsQCA analysis taking into account the different groups based on gender and type of job to identify potential differences.

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Tables:

Table 1. Sample distribution

Types of Manufacturing Industry	Number of Respondents
Pharmaceutical manufacturing	103 (25.5%)
Aviation and spacecraft manufacturing	11 (2.7%)
Electronic manufacturing	162 (40.1%)
Automotive manufacturing	38 (9.4%)
Apparel manufacturing	48 (11.9%)
Others	42 (10.4%)
Total	404 (100%)

Table 2. Psychometric properties of the scales

Reliability and convergent validity			Discriminant validity								
AVE	CR	Cronbach's α		TCOM	TCON	MPR	ME	MSE	UUSEM	BKC	BTP
.602	.819	.679	TCOM	.776							
.672	.860	.756	TCON	.550	.820						
.711	.908	.865	MPR	.612	.542	.843					
.649	.881	.819	ME	.609	.581	.751	.806				
.793	.885	.739	MSE	.561	.625	.714	.685	.891			
.768	.908	.849	UESM	.567	.573	.743	.664	.674	.876		
.784	.916	.862	BKC	.550	.627	.705	.704	.705	.828	.885	
.682	.865	.767	BTP	.521	.564	.673	.704	.629	.658	.718	.826

Note: Correlations between constructs appear below the diagonal; the square root of the average variance extracted (AVE) appears on the diagonal.

TCOM=Task Complexity, TCON=Task Connectivity; MPR=Perceived Reputation; ME=Enjoyment in helping each other; MSE=Self-efficacy; UUSEM=Usage of Enterprise Social Media; BKC=Benefits of Knowledge Creation; BTP=Benefits of Task Performance

AVE=Average Variance Extracted; CR=Composite Reliability

Table 3. Structural equation modeling: Causal relations analysis

Structural relations	β	t value (bootstrap)	Test
H1 Perceived reputation → ESMP usage	.423	5.289***	Accepted
H2 Enjoyment in helping others → ESMP usage	.103	1.534	Rejected
H3 Task complexity → ESMP usage	.072	1.349	Rejected
H4 Task connectivity → ESMP usage	.134	2.330**	Accepted
H5 Self-efficacy in knowledge sharing → ESMP usage	.177	2.864***	Accepted
H6 ESMP usage → Knowledge creation	.828	44.305***	Accepted

H7 ESMP usage → Task performance	.658 22.417***	Accepted
R ² (Knowledge creation) = .685	Q ² (Knowledge creation) = .508	
R ² (Task performance) = .434	Q ² (Task performance) = .280	
R ² (ESMP usage) = .620	Q ² (ESMP usage) = .447	
Note: ***p < .01; ** p < .05 (based on a one-tailed student's t (4999) distribution)		

Table 4. Analysis of necessary conditions

Causal conditions	Consistency	Coverage
Perceived reputation	.94	.96
Enjoyment in helping others	.96	.93
Task complexity	.93	.93
Task connectivity	.96	.92
Self-efficacy	.94	.94

Table 5. Sufficiency analysis (intermediate solution)

Causal conditions (consistency cutoff: .93)		Solutions ^a		
		1	2	3
MOTIVATION	Perceived reputation by sharing knowledge	●		
	Enjoyment in helping others by sharing knowledge			∅
OPPORTUNITY	Task complexity	●	∅	
	Task connectivity		●	●
ABILITY	Self-efficacy in sharing knowledge		●	
Raw coverage		.89	.17	.14
Unique coverage		.68	.01	.01
Consistency		.97	.94	.93
Overall solution coverage:		.91		
Overall solution consistency:		.96		

^a Black circles ● indicate the presence of a condition, and ∅ indicates its absence. Large circles indicate core conditions, and small ones represent peripheral conditions. Blank spaces indicate “don’t care”.

Appendix: Questionnaire and the measurement properties

Responses to the following questions range from 1 = “Totally disagree” to 7 = “Totally agree”.

Perceived reputation by sharing knowledge (<i>Kankanhalli et al., 2005; Rode, 2016</i>)
I share my knowledge through ESMP as this improves my image within the organization.
People in my organization who share their knowledge through ESMP have more prestige than those who do not.
I share my knowledge through ESMP as this increases my colleagues’ recognition of me.
I share my knowledge through ESMP as this enhances my colleagues’ respect for me.
Enjoyment in helping others (<i>Lin, 2007; Rode, 2016</i>)
I enjoy sharing my knowledge with colleagues through ESMP.
I enjoy helping colleagues by sharing my knowledge through ESMP.
I feel good when I help my colleagues by sharing my knowledge through ESMP.
Sharing my knowledge with colleagues through ESMP is pleasurable.
Task complexity (<i>Luo et al., 2012; Stringfellow et al., 2008</i>)
The tasks are sophisticated and require a large workforce.
The tasks require specialized knowledge.
The tasks are difficult to standardize.
Task connectivity (<i>Luo et al., 2012; Willcocks & Lacity, 2006</i>)
The tasks need interdepartmental collaboration.
The tasks need coordination across different processes.
The tasks influence the processes of other tasks.
Self-efficacy in knowledge sharing (<i>Kankanhalli et al., 2005; Rode, 2016</i>)
I have confidence in my ability to provide knowledge through ESMP that others in my organization consider valuable.
I have the expertise needed to provide valuable knowledge to my organization through ESMP.
It does not really make any difference whether I add to the knowledge that others are likely to share through ESMP. (reversed)
Most people in my organization can provide more valuable knowledge through ESMP than I can. (reversed)
Usage of enterprise social media platforms (<i>Mäntymäki & Riemer, 2016</i>)
I use ESMP to obtain ideas and participate in work-related discussion.
I use ESMP to acquire solutions for work problems.
I use ESMP to manage and coordinate tasks with my colleagues.
I use ESMP to give and receive updates on events and issues in my work environment.
I use ESMP to discuss matters related to social interest that are not related to work, such as sports, news, and politics.
Knowledge creation (<i>Choo et al., 2007; Roth & Jackson, 1995</i>)
Using ESMP has enhanced the team’s ability and knowledge to perform future work.
Solutions discussed through ESMP are clearly unique and innovative to my organization.
Good ideas are created for my organization while communicating through ESMP.

Task performance (<i>Kuegler et al., 2015</i>)
Using ESMP enables me to accomplish tasks.
Using ESMP enhances my job effectiveness.
Using ESMP increases my productivity.
Using ESMP improves my job performance.