

The Influence of Informal Social Media Practices on Knowledge Sharing and Work Processes Within Organizations

Abstract. Contemporary information technologies such as social media have invigorated the way knowledge is shared within organizations to the extent that we have to rethink and reassess our understanding of the role and influence of technology in organizational processes and knowledge sharing. This paper uses the strategy as practice lens guided by the interpretivist philosophy to understand the influence of informal social media practices on knowledge sharing and work processes within an organization. The paper uses empirical evidence from the case study of a telecom organization in Tanzania to gain theoretical insight into informal social media practices and knowledge sharing. This research contributes to the Information Systems (IS) literature by asserting that organizational processes are achieved by mundane knowledge sharing mediated by informal social media use within the organization. Also, the study contributes to IS literature by highlighting how emerging informal practices are essential to daily processes within organizations.

Keywords: Knowledge Sharing Practice, Social Media, WhatsApp, Strategy as Practice

1 Introduction

The rise of social media and its increasing influence on knowledge sharing within organizations has garnered the interest of scholars and practitioners (Ahmed et al., 2019). The scale and scope of social media use within organizations on aspects such as knowledge sharing have prompted scholars such as Bharadwaj et al. (2013) and Henfridsson and Lind (2014) to emphasize the necessity of rethinking the role of Information Technology (IT) in organizations. This is due to the intertwining of new digital technologies and human actions. Specifically, schol-

ars argue that the increasing role of digital technologies is prompting further our understanding of the role of technology in organizations. Thus, one question that arises is how social media practices influence knowledge sharing and daily work processes within organizations (Ahmed et al., 2019).

Social media has the potential to change how an organization does its business in a dynamic and uncertain economic era because of how it facilitates knowledge sharing (Gaál et al., 2015; Zhang et al., 2019). Social media facilitates smooth and continuous knowledge sharing within the virtual world (Ahmed et al., 2019). Even though social media can facilitate knowledge sharing, Ipe (2003) suggests that an organization's ability to leverage its knowledge effectively is highly dependent on its people who create, share and use it. Thus, leveraging knowledge is possible when people share the knowledge they have and build on others' knowledge (ibid).

Studies on the effects of social media in organizations are gaining ground in the Information Systems (IS) field (Huang et al. 2014). Social media use for knowledge sharing has evolved rapidly with increasing attention and interest amongst practitioners and researchers (Ahmed et al. 2019). However, some aspects of social media for knowledge sharing have received limited attention and need further investigation (ibid). For example, there is limited understanding of how informal social media use influences knowledge sharing and work processes in an organization (Davison et al., 2013; Jarrahi and Sawyer, 2013) despite the fact most knowledge is shared in informal settings (Ipe, 2003). Therefore, it is important to conduct further research to understand how organizational members informally use social media for knowledge sharing. Such research will help to develop an understanding of the ways through which knowledge is shared in an organization through an informal mechanism facilitated by social media technology and how these impact upon daily processes.

In light of the above, this paper aims to understand *the influence of informal social media practices on knowledge sharing and the implications on daily work processes within organizations*. For this aim, the paper adopts the strategy as practice (SaP) perspective to understand the implications on an organization when technologies such as social media are highly integrated with human actions (Scott and Orlikowski 2014; Huang et al. 2014). The increasing intertwinement of digital technology and human actions highlights the SaP perspective's relevance within our

context as we seek to explain the actual ‘doing’ of strategy – in our context, strategy means the actual activity of knowledge sharing (Jarzabkowski and Spee, 2009). The SaP perspective allows us to understand the enactment of emergent structures of technology use, i.e., how individuals choose to use the technology rather than the appropriation of embedded structures within the technology, i.e., what people are supposed to do with the technology. Using the SaP perspective will enable us to recognize how employees within organizations choose to use technology to be able to share organizational knowledge via social media.

This study adopts an interpretivist philosophy to gather empirical evidence from a case study organization in Tanzania. The case study organization is a telecommunication company in Tanzania. The data were collected through semi-structured interviews with employees and managers of SIMU (a pseudonym of the company).

The study highlights how emerging informal social media practices play a vital role in knowledge sharing and assisting daily work processes within an organization.

The remainder of this paper is organized as follows: first, we discuss the literature on social media practice and knowledge sharing. Then follows a discussion on the strategy as practice perspective, which is the theoretical lens adopted for this research. Thereafter follows the methodology section, which discusses the research context, site selection and access, data collection, and data analysis. Following this, the findings and a discussion on the implications to literature and practice are presented. Finally, the paper ends with concluding remarks, limitations, and directions for future research.

2 Theoretical Foundation

2.1 Social media practice

Over the last decade, social media practice has advanced to mainstream practice within organizations (Pillet and Carillo, 2016). For example, McKinsey & Company reported that 83% of US companies used social media for organizational purposes such as marketing (Braojos-Gomez et al., 2015; Culnan et al., 2010). Social media is used for various reasons in organizations. For example, Hutchings (2012) suggests that organizations can use social media as a powerful means of communicating, promoting brands and products, selling as well as increasing knowledge

sharing in organizations. The use of social media for different purposes has implications across the organization. For example, Treem and Leonardi (2012) suggest that the effect of social media is mainly on knowledge sharing as it facilitates interactions and informal social connections among people within and across organizational boundaries. Social media differs fundamentally from other traditional Information Technologies (IT) in terms of its affordances as it consistently and simultaneously offers visibility, editability, persistence, and association (ibid) and influences knowledge sharing within organization in ways that previous forms of IT could not. For instance, social media increases ambient awareness (Leonardi, 2015) and metaknowledge (Leonardi, 2014) because of how it affords visibility to a third party (ibid).

Social media allows users with digital devices to create and exchange content instantaneously (Kaplan and Haenlein, 2010). The content can be disseminated in the form of words, images, videos, and audio (Dabner, 2012). In this way, social media enriches interaction by enabling the sharing of information and knowledge, which is continuously created and published in a collaborative and participatory approach (Berthon et al., 2012). Also, Boyd and Ellison (2010) assert that social media is rooted within the open-source ideology, which means users have free access to information and tools to create and extend the available resource base in collaboration with other participants. Thus, social media is a robust means for sharing information and creating knowledge within organizations. Despite our understanding of social media as a useful means of knowledge sharing within organizations, there is little understanding of how informal social media practices within organizations result in knowledge sharing and the impact on the daily work processes within organizations (Ahmed et al., 2019).

It is crucial to consider that social media applications come in different forms (Kaplan and Haenlein (2010), which engender different strategic practices (Kwayu et al., 2018) to understand the impact of informal social media practices on knowledge sharing. This suggests that there are potentially different ways in which users share knowledge when engaging with different platforms. For example, Kaplan and Haenlein (2010), when classifying types of social media, used the social presence and media richness theories to imply that different platforms offer different degrees of self-presentation/disclosure while at the same time they differ in the degree of solving uncertainty in communication between communi-

cating partners. Different degrees of self-presentation and levels of resolving ambiguity can dictate the nature of the interaction, hence influencing knowledge sharing. For example, some people in organizations share knowledge for the sake of being recognized (Hayes and Walsham, 2001); thus, when they are on a platform with a low degree of self-presentation, they are unlikely to share knowledge. Considering that different platforms have different levels of social presence and media richness, individuals/users can demonstrate different knowledge sharing behaviors depending on the platforms they are using. This implies the significance of understanding the actual practices of sharing knowledge within the organization as there can be multiple and overlapping means of sharing knowledge, considering that different platforms are used.

Knowledge sharing practices via social media can also be considered to be emergent rather than planned. Henfridsson and Bygstad (2013) suggest the pervasive use of digital technologies like social media has significantly contributed to increased recognition of emergent practices. Meanwhile, the recent body of literature indicates that strategy (a situated and socially accomplished activity (Jarzabkowski, 2005)) is emergent rather than planned; a strategy as practice field in IS is an example of this. This current literature conceives strategy as an emergent phenomenon that supports Ciborra's (1994) argument that the successful application of IT is more often due to serendipity than to any formal planning. Thus, the dominant thinking in IS strategy, such as the alignment view, where strategy is designed and mostly done by management is contrary to 'strategy as practice' where strategy is emergent and done with all members of the organization (Jarzabkowski, 2005). For instance, with the former thinking, the focus is on how management is responsible for designing, implementing, supporting, and encouraging the use of IT for knowledge sharing, whereas with the latter perspective, the focus is on how organization members use IT to share knowledge. Thus, with a collaborative technology such as social media, the organizational processes are substantively dependent on activities (practice) of its members that contribute to an emergent strategy. This suggests a paradigmatic shift that challenges our assumption of knowledge sharing, particularly with how IT is used within the organization.

The paradigm shift is also observed in practice. For example, Huang et al. (2014) suggest that social media can shift the site of activities within an organization; such an effect on practices can be integral to value creation. For example, the authors provide a case of how a ticketing

company was innovative in using social media, which removed tier-one ticketing agents' use. Also, Scott and Orlikowski (2012) suggest social media generates complex information dynamics that are forcing organizations into an unexpected direction, redrawing boundaries, and shifting relationships. With such effects of social media on organizational processes and practices, Bharadwaj et al. (2013) suggest the reality of traditional business strategy has changed to modular, distributed, cross-functional and global business processes that enable activity to be done across the limits of time, distance and space. Likewise, earlier on, Hendriks (1999) suggested that Information and Communication Technologies (ICT) could enhance knowledge sharing by lowering temporal and spatial barriers between knowledge workers while improving access to information about knowledge. He further argued that studying knowledge sharing with the dominant thinking has limited value as it ignores when and how the quality of knowledge sharing is enhanced, thus suggesting a need for a more encompassing perspective that will study ICT with relation to the motivation of knowledge sharing. Thus, with changing business dynamics that are centrally operated by these digital technologies. The traditional way of viewing organizations by separating the role of IT is no longer appropriate, especially when considering that social media is transforming how knowledge is shared and how knowledge is applied in the organization's mundane activities. This signifies the value of understanding the influence of social media knowledge sharing practices within an organization. The next section discusses the literature on knowledge sharing.

2.2 Knowledge sharing in organizations

Knowledge sharing is key for developing and leveraging organizational knowledge (Ipe, 2003). Knowledge is a critical resource for organizations, especially in an uncertain and dynamic economy (Wang and Noe, 2010). It is vital to define knowledge to understand the importance of knowledge sharing in organizations. Knowledge is a dynamic human process of justifying personal belief towards the truth (ibid). Knowledge is classified into two types: explicit and tacit knowledge. Tacit knowledge is a form of knowledge that is difficult to transfer from one person to another as it is intuitive and unarticulated (Lam, 2000). Tacit is highly personal, hard to formalize, and difficult to communicate. Explicit knowledge is a formal and systematic form of knowledge that can

easily be articulated and shared. In efforts to differentiate between explicit and tacit knowledge, Nonaka (1991) suggested that western management viewed organizations as machines for information processing. The western view suggests explicit knowledge, which is formal and systematic, as a kind of knowledge that is useful for organizations as it can easily be shared. Nonaka (1991) contrasts the western view with the Japanese view of organizations, a holistic approach that views an organization as a living organism rather than a machine. The Japanese approach emphasizes that knowledge creation is not a matter of processing objective information, but it is about tapping the tacit knowledge which is highly subjective, full of insights, includes intuition and hunches of individual employees, therefore, making these insights available for testing and use by the organizations as a whole (ibid). Although tacit knowledge is difficult to communicate and share, Nonaka (1991) suggests that when members of an organization share overlapping information, they can sense what others are struggling to articulate.

Knowledge sharing is important for facilitating daily work processes in organizations, as all forms of activity involve some type and application of knowledge (Lam, 2000; Mutch, 2008). Also, knowledge sharing is important since it supports employees in coping with daily routine works and dealing with new situations (Gaál et al., 2015). In the absence of knowledge sharing, knowledge tends to be sticky and firmly attached to individuals who hold it (Von Hippel, 1994). Therefore, unless knowledge is articulated and shared with other employees in an organization, it will only have a limited impact on the organization. Knowledge sharing is the task of helping others with knowledge, collaborating with others to solve problems, developing new ideas, and implement them in terms of processes (Gaál et al., 2015). Knowledge sharing can also be understood as a process or activity of exchanging information/knowledge or expertise between individuals and groups within organizations (Ahmed et al., 2019). This occurs when an individual in an organization converts his knowledge or acquires it from others (ibid). The process of sharing knowledge in an organization is multifaceted, complicated, and complex (Gaál et al., 2015; Pee, 2018) even under the best of circumstances (Ipe, 2003). Knowledge sharing can be complex and complicated because it takes place in both formal and informal communication (Ahmed et al., 2019). As pointed out earlier, most knowledge is shared in informal settings (Ipe, 2003). The informal setting highlights the nature of interaction and consequently influences knowledge sharing

practices. For instance, as aforementioned, different platforms provide different degrees of social presence and media richness; therefore, depending on the setting, individuals control how they present themselves and what sort of information they share.

Despite the complexity of knowledge sharing in an organization, knowledge sharing is critical for an organization's competitiveness as it helps to disseminate innovative ideas that enhance creativity and innovation (Cao and Ali, 2018). The absence of knowledge sharing in an organization has a potential risk against the life of the organization. If an individual with specific knowledge leaves the organization, the knowledge will also be lost. Moreover, when individuals within an organization do not share knowledge, the organization's potential to utilize it to its full extent becomes limited (Hinds et al., 2001).

According to Bellefroid (2012), there are three generations of knowledge sharing. The first generation is the traditional way of sharing knowledge with concepts of codification and storage. Traditional IT such as databases and intranets, easily support this type of knowledge. The second generation focuses on the social component, personalization, and the way people cooperate and communicate. It focuses on formal and informal opportunities such as mentoring and face to face interaction. The third generation of knowledge sharing refers to the use of social networks as the new ways of contacting experts and searching for knowledge outside of the organization. This generation is characterized by the use of social media tools that enable working across different geographical locations with less physical contact between employees (Panahi et al., 2016). Considering the current situation, where there is increasing use of social media for knowledge sharing (Lin and Wang, 2020) based on the increasing interaction of people and technology, a perspective that focuses on one agent - either people or technology - will be limited in providing insight on current practices of knowledge sharing in an organization. Thus, this paper intends to understand the impact of informal use of social media on knowledge sharing practices and the implication on daily work processes within an organization. Furthermore, it plans to do that in a perspective that is not people-driven nor technology-driven but a theoretical perspective that considers the intertwining of people and technology comprehensively. This is because a perspective such as strategy as practice (SaP) considers both agencies without undermining one over the other becomes useful at providing a better analysis and understanding of the phenomenon.

2.3 Strategy as Practice

The strategy as practice (SaP) perspective perceives strategy as a goal-directed activity (Jarzabkowski, 2005). SaP views strategy as a situated, socially accomplished activity (ibid). Jarzabkowski (2005) continues to explain SaP as a strategy under investigation since it focuses on actions, interaction, negotiation of multiple actors, and the situated context that contributes to the activity. Similarly, Whittington (2014) argues that SaP is concerned with how practitioners act and interact. Hence, SaP, in the context of knowledge sharing, is concerned with how knowledge sharing, is done, who shares the knowledge, what knowledge they share, how they share knowledge, what they use, and what outcomes it has on organizational processes (ibid). In this way, SaP distinguishes itself from other perspectives with its orientation towards 'how' knowledge sharing practices emerge (Henfridsson and Lind, 2014). The focus on how knowledge sharing develops positions SaP as a suitable lens for studying how organizational knowledge is realized as a result of knowledge shared through social media platforms, therefore making it an appropriate lens for this research.

Whittington (2014) identifies three elements of the SaP perspective: practitioners, practice and praxis. Practitioners are the people making strategy; they include direct practitioners (managers, consultants, and employees) and indirect practitioners (policymakers and researchers). Jarzabkowski and Spee (2009) classify practitioners into three groups: individual actors within an organization, aggregate actors within an organization, and external actors who are conceptualized as a total; thus, its external aggregate actors. A practitioner aims to reestablish the actor in strategy research (Jarzabkowski, 2005). Thus, by considering humans in strategy, SaP overcomes the weakness of other strategic approaches such as alignment, which are perceived as mechanical (Chan and Reich, 2007), while also appreciating strategy as a social construction.

'Practices' are defined as guidelines and routines of doing an activity (Huang et al., 2014). Leonardi (2012) claims that when IS researchers talk about technologies, they describe practices as well. Also, practices are explained as tools and artifacts that people use in doing strategy work (Whittington, 2003). Whittington (2014) suggests this is because even when improvised in praxis, technology practices tend to produce recognizable, imperfectly regular behaviors. This underscores the vital distinction which Orlikowski (2000) makes between information technology as artifact and technology in practice, which are patterns of repetitive and

situated use of technology. Thus, practices as an element of SaP consider both technical and social agency.

‘Praxis’ is the flow of activities in which strategy is accomplished (Jarzabkowski, 2005). It is a stream of activity that interconnects the micro action of individuals and groups with the broader institutions in which those actions are located to which they contribute (Jarzabkowski and Spee, 2009). Whittington (2014) explains praxis as what people do with technology in an ongoing and situated activity. Also, Whittington (2014) describes the implication of praxis in research as it needs close empirical observation of how technology is used, sensitive to all adaptation, and improvisation of practical life. Thus, SaP research is a useful lens for gaining insight within an organization while producing practical insights. Adopting the SaP lens for our research helps develop an understanding of how social media use influences knowledge sharing in organizations.

3 Methods

The research objective led to the selection of the case study method. A case study method is a valuable method for providing an in-depth understanding of a real-life phenomenon through combining both research phenomenon and context to produce a richer understanding of context and process in which it is enacted (Yin, 2013). The choice of case study allows this research to dig deeper into an organization to understand the micro-activities which constitute the life of the organization. This case study is guided by an interpretivist philosophy that argues that knowledge is socially constructed through language, shared meaning, and consciousness (Orlikowski and Baroudi, 1991). It helps to understand human thoughts and actions in a social and organizational context (Klein and Myers, 1999). This philosophy is adopted for this research as it advocates studying a phenomenon in its natural environment, enabling us to remove our predetermined views that may obscure the process of gaining new knowledge. Thus, it aims to eliminate biases. Also, the interpretivist philosophy is in line with the strategy as practice (SaP) perspective that views strategic activities as a social construction. The interpretive philosophy stands on the premise that our knowledge of reality is a social construction by human actors (Walsham, 1995, 2006). Furthermore, this research is a single case study aiming to understand the influence of informal social media knowledge sharing practices on daily work processes.

3.1 Research Context

The case study organization is SIMU (a pseudonym) is one of the largest telecom companies in Tanzania. It has more than a thousand employees with extensive infrastructure and branches all over the country. SIMU has adopted social media within its operations, making it a suitable case for this research. Furthermore, the context of Tanzania, a sub-Saharan country, provides the potential of harnessing the explanatory power of practice theory in explaining the role of information technology in a developing context (Avgerou, 2017). This context offers a different environment of understanding the impact of the informal use of social media on knowledge sharing practices compared to that of western developed countries with relatively more literature on social media practices and knowledge sharing practices. Walsham (2017) suggests that the rapid growth of Information Communication Technology use in developing countries that occurred in the last decade is mostly attributed to mobile phones and social media; before that, there was little literature on the use of IT in developing countries. This can suggest a difference in the use of IT due to historical path dependency as well as a different material arrangement. Also, this suggests that literature from the developing countries context is emerging. Hence, this context provides a novel opportunity to advance the literature on strategy as practice.

3.2 Case Selection

The selection of a case organization was based on the size of the organization and its use of social media. A large organization was preferable as it had greater possibilities of having departments and multiple strategies within the organization (Jarzabkowski 2005). Hence it would provide a good premise for studying the intricacies of the impact of informal use of social media on knowledge sharing practices within an organization. Following Belasen and Rufer's (2013) suggestion that high-tech industries such as telecom organizations are quicker in adopting new technology as they are faced with a fast-shrinking product cycle, this research opted for a telecom organization as a valuable case. Telecom organizations are appropriate for investigating knowledge sharing as the speed of adopting new technology requires new learning and sharing of knowledge.

Furthermore, for high-tech industries such as telecom organizations, knowledge sharing is critical to their survival as they need creativity and

innovation. Thus, a telecom organization is a suitable case for this research. While the organization supported formal and informal use of social media in its operations, we report the informal use for this paper.

3.3 Data Collection

The primary method of data collection was semi-structured interviews, which allowed the researcher to hear what each informant says on the topic and areas identified by the researcher (Saunders et al., 2009; Walsham, 2006). The interviews were carried out in 2017 with employees and managers of SIMU. The rationale for choosing managers and employees was based on the premise that strategy is something done by all members of the organization (Jarzabkowski, 2005; Golsorkhi et al., 2015). The choice of managers is based on the notion that they are the ones who oversee and make decisions regarding the use of social media and knowledge sharing, while the employees are the implementers, and their actions play a significant role in emergent strategy and the practice of sharing knowledge on social media. Interviewing the employees and managers provided their accounts of experiences regarding how their use of social media for knowledge influenced their daily work process. Also, interviewing different staff from different positions in the organization allowed data triangulation through the contrast of opinions expressed by the informants across different levels. Twelve semi-structured interviews were conducted with members from different departments (see table 1). Thus, the sampling was purposive (see Fusch and Ness, 2015). Following Guest et al. (2006), saturation was reached within the first twelve interviews, while elements of meta-themes are present as early as six interviews. The literature review also informed the interview questions (see Appendix 1: Interview Questions), which had three main parts: understanding the informants' role, their use of social media on sharing knowledge and information within the organization, and the implications of use on daily work processes. Also, an observation was made on the telecom's activities on social media platforms.

Table 1. Interviewee profile at SIMU

No	Profile	Gender	Role
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1	CEO	Male	Managing and overseeing overall organisation
2	Manager IT Operation	Female	In charge of all IT operations in SIMU
3	IT Staff	Male	Working with the billing system and providing IT support to other staff
4	Marketing Manager	Male	In charge of all marketing activities of SIMU
5	Marketing Staff	Male	Works on branding and advertisement
6	Finance Manager	Male	In charge of all financial operations
7	Manager Network Development	Male	Managing the network operations of SIMU
8	Manager Product Development	Male	In charge of developing products and managing performance of products in the market

9	Human Resource Head	Female	Managing industrial relations and staff welfare
10	Human Resource Staff	Female	In charge of staff training and development
11	Regional Manager	Male	Managing all SIMU activities in his assigned region
12	Public Relation Officer Communication	Male	Managing all public communication of SIMU, works closely with Marketing department

3.4 Data Analysis

The data analysis was done using an inductive approach that collects data and explores it to extract the themes and issues that arise (Glaser and Strauss 1967). The analysis follows a reflexive thematic approach, which is considered an entirely qualitative approach (Braun et al., 2019). The reflexive approach is centered on deep engagement, commitment, and rigor as it emphasizes meaning as contextual or situated, realist, or realities as multiple and researcher subjectivity is not just valid but a resource (Braun and Clarke, 2013). Braun et al. (2019) suggest that in a reflexive analysis, a researcher becomes a storyteller who actively interprets data through the lens of their cultural membership, social positioning, theoretical assumptions, ideological commitments, and their scholarly knowledge. Interviews were transcribed and translated as some interviews were conducted in a mix of Swahili and English. The first author is a Swahili speaker. After transcription, a coding process was conducted in which themes were developed. The coding process for this research was done manually on a Microsoft Word Document using comment tools

to assign tags on groups of text based on their meaning and informed by ideas from the literature review and the SaP perspective. Examples of codes include group composition, processes, sharing, and recognition (formal and informal) after assigning codes, themes were developed by clustering together similar codes based on their meaning. The knowledge sharing theme was developed by clustering sharing, group composition, recognition codes. The knowledge sharing data was arranged based on the elements of SaP: practitioners, practices, and praxis. Therefore, using the theme of knowledge sharing, a narrative of how informal social media practice influences knowledge sharing and work processes are formulated and presented in the next section using the elements of SaP as a framework.

This research was positioned from the perspective of practitioners, who live the experience of practicing informal social media knowledge sharing. The narrative was drawn from their experience, as stated in the interviews. This type of analysis is suitable for analyzing the practice of social action, which makes it an appropriate method for understanding how informal social media knowledge sharing practices influence daily work processes within the organization.

4 Social Media Knowledge Sharing Practices in SIMU

4.1 Practices

SIMU uses social media both for internal and external communication. For external communication, SIMU has official pages on major social media platforms such as Facebook, Twitter, Instagram, and YouTube. Observation showed that social media accounts of SIMU are active with regular posting and interaction with customers. The social media accounts are less associated with knowledge sharing within the organization because they are aimed for marketing and raising brand awareness amongst customers.

Internally, WhatsApp is the main social media used within SIMU, although it is an informal practice. Official communication within the company is conducted via the intranet and email communication. However, WhatsApp is popular with staff and predominantly used in the form of WhatsApp groups. The WhatsApp groups are popular for sharing information and knowledge between staff. Employees use WhatsApp groups

for social and work purposes. Staff can quickly form WhatsApp groups for their objectives. For example, the human resources manager explains this:

'On work, we now have WhatsApp for every department, the department has their information, and they may want to share it among themselves. For instance, it's a weekend, and there is information we need to share, WhatsApp becomes very useful in such instances.'

From the explanation of the human resources manager, we learn of the WhatsApp practice and how it is spread across different departments. It also shows how the use of WhatsApp is also functional, even outside of the organization boundaries. For example, the human resources manager explains how they can still share information about organizational matters on a weekend and how useful it is.

Similarly, the product development manager explains how WhatsApp communication practice is useful for organizational processes such as customer service as follows:

'Customer service people use a lot the WhatsApp groups, especially on hosting customers' queries, because the group has everyone. Even if someone is at home, they can easily know the customer's problem and offer a solution immediately. When you go in the street to campaign for products, we use WhatsApp to transfer the details of the customer quickly, and they are uploaded to the system. Because when you get the customers, you can get his information and take a photo of his ID, then send it to be printed and be attached to his official forms, then the customers become activated to the service. Therefore, WhatsApp is used on several official business operations.'

This explanation highlights that sharing of information via WhatsApp groups assists the transfer of information and knowledge between staff. Moreover, it is used to provide know-how on customer problems by offering solutions from the people who have the answers. It highlights how WhatsApp is used to share the knowledge used to support official business operations even though WhatsApp is an informal means of communication. Furthermore, this shows how knowledge is shared from the source to the knowledge seeker, which consequently completes the process. It implies that WhatsApp is not just a platform for sharing knowledge but also for seeking knowledge, hence showing the dual function of WhatsApp as a platform for seeking and sharing knowledge. Also, the quote highlights how social media has enabled knowledge sharing even when employees are at a different location, i.e., home, office,

and field. Lastly, the quotation shows the scope in which WhatsApp is used for knowledge and information sharing as it indicates that WhatsApp groups are an important means of communication.

4.2 Practitioners

WhatsApp groups can contain members of the same department and sometimes members from different departments (especially when working on a project). Also, the WhatsApp groups can have members from different levels of management or members from the same level.

The composition nature of WhatsApp groups affects how knowledge is shared in these groups. Groups formed with members of the same level/department – homogenous groups - are different from heterogeneous groups formed with members from different levels or departments in terms of sharing knowledge. For example, The IT manager of SIMU elaborates their differences in the following statements:

‘A WhatsApp group [heterogeneous] may contain engineers, manager, and heads, therefore, the chances of members withdrawing from main topics is minimized. There is some sort of order. In terms of knowledge, if there is a problem and management is in the group, people have to find solutions because they fear leaders. Matters are not taken lightly on the group depending on its composition.’

This implies that in heterogeneous groups, people contribute to knowledge by sharing what they know towards finding a solution. The presence of leaders in the heterogeneous group encourages the subordinates to prove their knowledge through sharing what they understand. Also, the comment implies a systematic sharing of information when the IT manager states that there is some order of sharing knowledge in the heterogeneous group. Furthermore, the IT manager continues to contrast the homogenous from heterogeneous groups as follows:

‘The positive thing about the subgroups [homogenous] is that it is discussed thoroughly when there is a situation. The negative part is that the perspective might be limited to that small group, but if it contained people from other groups, there is a potential of getting solutions from different views. Perhaps it could have saved time for finding a solution.’

The quotation by the IT manager highlights the different dynamics that occur when sharing knowledge. It shows how people are ready to disclose or present their knowledge to others in a controlled matter, depending on the nature of the group members. Also, the IT manager implies

extensive knowledge sharing in homogenous groups because topics and issues are discussed thoroughly, albeit with a limited perspective. The quote further implies the consequence of sharing knowledge in a homogenous group is that time can be wasted in a discussion. Furthermore, the quote implies that the heterogeneous group is effective in solving a problem because staff from different departments bring different perspectives that help articulate knowledge. This signifies how WhatsApp groups facilitate the sharing of overlapping information within the organization while enabling sharing and articulation of knowledge beyond a community of practice within the organization. For example, the knowledge that is common with engineers can be shared with managers, which means the impact of engineering knowledge within the organization is not limited among the engineering group, but its effect is spread within the organization as it is articulated and shared with other members of the organization through the heterogeneous WhatsApp groups.

4.3 Praxis

WhatsApp groups are used in assisting work processes within SIMU. The public relation manager of SIMU states that:

'WhatsApp is used in assisting work processes. When using WhatsApp, it is easy as you can take a picture and share it. The picture provides more explanations and thus it helps a lot in accomplishing our task'

This describes how WhatsApp facilitates effective knowledge sharing in the form of pictures which can be regarded as being more informative than text. Social media is novel as it allows for the sharing of information in different formats, such as audio, video, picture and text. Thus, from the actual act of sharing pictures, more explanations are provided which enable the completion of the task. Considering the wide use of WhatsApp in SIMU, it supports work processes in different ways. For example, WhatsApp is used to improve customer service. It is used in the customer registration processes. When a new customer subscribes to a telecom organization, the Tanzania Communications Regulatory Authority (TCRA) requires that the customer is registered before their number is activated. Sometimes, the registration process is done on the field with the sales team. Therefore, to ensure that the customer number is activated in time, they use WhatsApp to transfer information to the back office, which helps them complete the subscription process without losing a customer due to delayed activation.

Furthermore, knowledge sharing via WhatsApp has increased ambient awareness as well as metaknowledge – knowledge of who knows what and who knows who due to the visibility afforded to the members of the group. The consequence of increasing awareness and metaknowledge affects processes within the organization. For example, the IT manager of SIMU explains how people bypass the IT helpdesk to seek assistance directly from the IT support providers. The IT manager states:

‘Social media [WhatsApp] influences the structure because you can directly contact someone. For instance, here in IT we have a help desk, whereby if anyone has an IT problem, they call and are assigned to the engineer. Now instead of people going through the help desk, they contact the engineer directly and ask them to help. Somehow this bypasses the helpdesk, which is used to measure the engineers KPI's. Hence, it significantly affects their KPI's by not accounting the works which have been logged in the system.’

The explanation of the IT Manager shows how the metaknowledge, which is influenced by knowledge sharing practices in WhatsApp, can affect processes within the organization, such as the appraisal process of conducting KPIs.

Lastly, WhatsApp as a platform has gained prominence for sharing knowledge compared to other formal channels within the organization due to its ease of access and use. The human resources manager explains why it is crucial for knowledge sharing in the organization:

‘WhatsApp helps a lot in knowledge sharing. For instance, if all staff were in one group. If we had something in common, it could be very easy to disseminate. This is because WhatsApp you walk with it on your hand. Email you have to have computer, although you also can have it on your phone. I think WhatsApp is easier. It easy to send pictures, voice notes, etc. Also, it is something that many people are using it right now. I also recommend other platforms like Facebook to be used, but there needs to be a restrictions.’

The human resources manager expresses her desire to have a single group of WhatsApp in the organization, implying the multiplicity of WhatsApp groups. Although there is no single Whatsapp group in the organization as people belong to different and multiple groups, this helps information to move from one group to another. Also, the human resources manager implies that staff’s competence in WhatsApp is more compared to other communication channels. Further, the explanation of

the human resources manager distinguishes between different social media platforms showing how the social media platform's design affects their use. For example, the human resources manager implies that Facebook is not used because it is not as restricted as WhatsApp. The human resources manager implies that Facebook is designed as a public platform in that it offers visibility to others who are not members of the organization (SIMU) and that Facebook's privacy is not restricted as WhatsApp, which is more private. She further implied that acquaintances could search a name of a user on Facebook, but on WhatsApp, you can restrict this by providing a number to only friends and close colleagues. Thus, from the human resources manager's perspective, the platform's design defines/influences where they communicate and share their knowledge within the organization even when it is in an informal setting such as informal social media, i.e. in WhatsApp, which is not an official means of communication within the organization.

5 Discussion

From the findings, we gain insights on different dynamics of social media practices on knowledge sharing within SIMU. First, we learn the importance of emerged informal social media practices on knowledge sharing within the organization. Often, organizations invest a lot of resources on modern technologies that support knowledge sharing but they find it difficult to convince employees to use the technologies (Abubakre et al. 2017), let alone share their knowledge using the technologies (Zhu, 2016). Our findings highlight how organizations can achieve meaningful investment in knowledge sharing technologies by being more accepting of informal ways of sharing information that emerges between employees. For example, the human resources manager compares the use of WhatsApp compared to email. The latter is formal, and they have to use computers. Although both WhatsApp and email can be both accessed by mobile phones and computers, from the users' perspective (practitioners in SIMU), they find it easier to use WhatsApp because it requires a lower internet bandwidth connection compare to checking email on the go, which is essential for the Tanzanian context with its internet connectivity problem. This shows the significance of differentiating technology in practice rather than technology as artifacts (Orlikowski, 2000). This emphasizes the recognition of an emergent approach to organizational processes rather than formal planning. It underscores the argument that the

success of IT implementation is not due to formal planning (Doherty et al., 2016). Also, the emergent use of WhatsApp groups shows the significance of emerging informal social media practices that are key to the organization's realized strategy. The second lesson we gain from the case of SIMU is the significance of social factors on influencing the sharing of knowledge in WhatsApp groups. The findings revealed that the nature of group composition influenced the quality and depth of sharing knowledge.

The findings demonstrate the significance of Kaplan and Haenlein's (2010) classification of social media using social presence and media richness theory. In homogenous groups, there was a lot of knowledge sharing as people were more willing to disclose their knowledge, but there was high uncertainty in resolving issues due to the limited perspective of the members. Whereas in heterogeneous communication, ambiguity was quickly resolved, but people refrained from sharing a lot (self-disclosure). Therefore, our findings show that even within a single platform, there are varying degrees of self-disclosure/ presentation and resolution of uncertainties due to social dynamics occurring during the use of the platforms.

Bearing in mind the insights gained from the above findings, informal use of social media for knowledge sharing is essential for understanding how organizations can realize their objectives as it influences the organization's praxis (actual activities). The style, scope and scale in which knowledge sharing is happening in SIMU via WhatsApp proves that social media is not a support tool, but it is integral to the everyday activities in SIMU. For example, WhatsApp allows staff to exist in multiple groups with different compositions of members which facilitates overlapping information. Overlapping information is useful for articulating tacit knowledge which is difficult to communicate and share. Nonaka (1991) suggests that when members of an organization share overlapping information, they can sense what others are struggling to articulate. For example, heterogeneous groups benefit from a wider perspective which helps in solving problems. This implies that tacit knowledge in a homogenous group can be articulate when a new perspective is induced, which helps to clarify a matter or solve a problem. In this way, WhatsApp knowledge sharing in SIMU is not only helping to share explicit knowledge but also tacit knowledge. The informality of using WhatsApp for knowledge/information sharing echoes the Japanese view of organization that it is a living organism rather than a machine for knowledge

processing (Ibid). Our findings highlight that knowledge sharing through WhatsApp is not systematic and formal. The knowledge sharing through the informal use of WhatsApp becomes essential for ordinary activities in SIMU as it helps to solve the daily problems through explicit and tacit knowledge. This is why scholars of digital business strategy (El Sawy, 2003; Henfridsson and Bygstad, 2013) suggest that the increasing use of digital technologies in organizations is influencing the fusion of technology and business activities, consequently making IT an integral part of the daily operations of the organization. Also, our findings have shown how knowledge sharing practices via social media affect the sequence of processes within the organization. For example, knowledge sharing via WhatsApp has influenced how KPIs are recorded and thus influence the appraisal process. This echoes the findings of Huang et al. (2014) of how social media affects the sequence of activities in organizations.

Furthermore, the findings highlight how knowledge sharing influences the actual doing of activities - 'the praxis' - within the organization. It is the knowledge shared on the platforms that influence the actual practice occurring in the organization. If employees had not gained the metaknowledge (Leonardi, 2014) and ambient awareness (Leonardi, 2015), the IT help desk would have maintained its function of helping people to be directed to the right IT supporter and hence be able to record the KPI. Please see Table 2 below, which illustrates the impact of informal social media knowledge sharing practice on work processes.

Table 2 Influence of social media knowledge sharing practice on work process

SaP Elements	Meaning	Example	Impact
Practitioners	People involved in activity	IT staff (who provide IT support, i.e. engineers) and Non-IT Staff (employees who are seeking IT help)	People know who knows what because of WhatsApp Knowledge sharing Practice

Practices	Routines and guideline of doing activity	Ask help in the IT helpdesk, get assigned to the engineer, the engineer helps the staff, the engineer is assessed in the IT helpdesk log	Procedures and guidelines for seeking help are ignored It also reduces the bureaucracy of seeking help
Praxis	The actual doing of activity	The staff contact the engineer directly, the engineers helps the staff	The KPIs of staff cannot be measured because people are not using the helpdesk

6 Conclusion

Empirical evidence from this research highlights the widespread nature of social media knowledge sharing practice within a specific organization. This research shows how emerging informal practices through the use of social media are impacting knowledge sharing in an organization. This research demonstrates how informal use of social media influences knowledge sharing and work processes that become integral to the organization's emergent informal practices. Thus, this research contributes to literature and practice as explained next.

6.1 Contribution to Literature

Our study makes important theoretical contributions to literature. First, this research contributes to social media literature (e.g., Kaplan and Haenlein, 2010; Kietzmann et al., 2011) by highlighting how social presence and media richness can still differ even on the same platform due to social dynamics. Our study extends Kaplan and Haenlein's (2010) use of social presence and media richness theory to classify social media platforms by showing that the degree of self-disclosure or representation and resolution of ambiguity differs even within a single platform. Our research highlights this by showing how the composition of WhatsApp groups influenced how people disclosed themselves and how they solved communication ambiguities.

Second, this research is significant in showing how social media knowledge sharing influences work processes within the organization. The findings suggest that social media knowledge sharing is significant not only for sharing knowledge but also for seeking knowledge. This dual function of social media knowledge sharing practice is significant as it helps people to seek and share knowledge when it is needed. Through this dual function, it shows how social media knowledge sharing affects almost all processes within the organization. In respect to this, the paper contributes to the literature (e.g., Mutch, 2008; Ipe 2003) by arguing that the efficiency of organizational processes can be achieved by mundane knowledge sharing mediated by informal social media practices within an organization. For instance, Mutch (2008) explains the role of knowledge in organizational processes, but this research furthers it by showing the role of informal social media use in facilitating sharing knowledge that is essential for daily work processes in organizations. Likewise, Jarrahi and Sawyer (2013) suggest that most knowledge-sharing is done in an informal setting. Our research goes further by showing how information shared in a formal setting is mediated by the informal use of social media technology.

Lastly, we learn the importance of context in understanding informal social media knowledge sharing practices through digital devices. The use of social media through mobile technology enables the Tanzanian telecom company to leapfrog steps of technological advancement and overcome the constraints of fixed infrastructures typical in African societies. The human resource manager explains how WhatsApp, which is within a mobile phone, is on close range compared to email, which needs a computer (though both can be accessed on both the computer or mobile). Also, the human resource manager implies the current context in which people are familiar with WhatsApp. For the context of Tanzania, which is a developing country from sub-Saharan Africa, the use of IT is mainly a recent phenomenon and many people have experience with mobiles and social media (Walsham, 2017). Theoretically, this shows the significance of material arrangement (Orlikowski, 2007) and situated context (Jarzabkowski, 2005) in explaining how social media is used for sharing knowledge within the organization. The choice of WhatsApp over other communication channels like email highlights that a situated context also involves historical embeddedness (*ibid*). This is consistent with Walsham's (2017) view that ICT use in sub-Saharan Africa is a recent phenomenon, mainly associated with mobile phones and social media.

6.2 Implications for Practice

In practice, this research demonstrates the significance of emerging informal practices through the use of social media such as WhatsApp communication for knowledge sharing and organizational processes such as customer service. Also, it provides practical insight on IT investment; for instance, by showing how informal social media practices within an organization invigorate knowledge sharing among employees. This is significant when considering that organizations spend enormous time and financial resources on knowledge management systems (KMS), yet they still face a loss due to their failure to share knowledge (Wang and Noe, 2010). It is estimated that \$31.5 billion is lost per year by Fortune 500 as a result of failing to share knowledge (ibid). This research demonstrates the significance of informal social media use for knowledge sharing, such as WhatsApp communication to different processes across the organization. Furthermore, in practice, the recognition of informal social media use for knowledge sharing practices will help organizations save the money spent on developing knowledge management systems which, in most cases, employees do not use. Moreover, formal implementation and use of technologies for knowledge sharing arrangements often require a lot of effort from management to motivate users to share their knowledge (Mueller, 2015).

6.3 Limitations and future research

We acknowledge some limitations in our study that allows for opportunities for future research. First, the findings of this paper were limited to one organization; future research can benefit by comparing different cases from the same context or with a different context. A comparative case study will help with the generalization of the results. Also, it will help increase understanding of the practices embedded within a context, hence contributing to embeddedness and enactment concepts.

Furthermore, future research can benefit from longitudinal data, which can highlight the changing practices over time. A longitudinal study will help to understand how informal social media practices for knowledge sharing are enacting structures within organizations.

Lastly, future research can explore how informal social media practices engender knowledge sharing practices and how these practices influence structure and strategies within the organization. Future research can also explore the effectiveness of informal social media practices

upon knowledge sharing regarding transforming tacit knowledge to explicit knowledge within the organization.

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Appendixes

Appendix 1: Interview Questions

	Interview Questions
Part 1	1) What is your role in the organization?
Part 2	1) What social media do you use in work? 2) How does social media use influence your work? 3) How do you share knowledge in your organization? 4) Which social media application do you use to share knowledge with other employees? 5) What sort of knowledge do you share with colleagues via social media? 6) How does social media impact the way you share knowledge?
Part 3	1) How is informal use of social media for knowledge sharing influencing your work?