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Article abstract

This study investigates the effects of social media use on employees' social capital and knowledge sharing. A research model is proposed and empirically tested with an online survey study of 288 working professionals using social media at a Saudi Telecom Company. Results reveal that social media use in the workplace positively influence knowledge sharing. The findings contribute to clarify the importance of the different dimensions of Social Capital especially shared vision and trust, and their role in enhancing profitable knowledge sharing practices. This study offers effective and valuable HR policies regarding the use of social media at workplace within the MENA context.

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ABSTRACT

This study investigates the effects of social media use on employees' social capital and knowledge sharing. A research model is proposed and empirically tested with an online survey study of 288 working professionals using social media at a Saudi Telecom Company. Results reveal that social media use in the workplace positively influence knowledge sharing. The findings contribute to clarify the importance of the different dimensions of Social Capital especially shared vision and trust, and their role in enhancing profitable knowledge sharing practices. This study offers effective and valuable HR policies regarding the use of social media at workplace within the MENA context.

Keywords: Social Media, Social Capital, Knowledge Sharing, Structural Equation Modeling, Saudi Arabia

Résumé

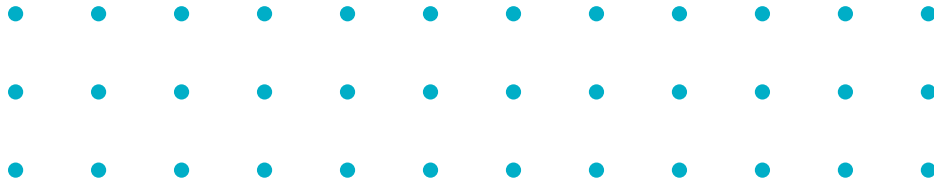
Ce papier examine les effets de l'utilisation des réseaux sociaux sur le capital social et le partage des connaissances dans le milieu professionnel. Un modèle conceptuel est proposé et testé empiriquement suite à une enquête en ligne auprès de 288 employés d'une entreprise saoudienne du secteur télécommunication. Les résultats révèlent que l'utilisation des réseaux sociaux au travail influence positivement le partage des connaissances. Les résultats contribuent à clarifier l'importance des différentes dimensions du capital social, en particulier la vision et la confiance partagée et leur rôle dans l'amélioration des pratiques du partage des connaissances rentables. Cette étude propose des recommandations RH utiles quant au recours et usages des réseaux sociaux sur le lieu du travail dans le contexte MENA.

Mots-Clés : Réseaux sociaux, Capital Social, Partage de Connaissance, Equations structurelles, Arabie Saoudite

Resumen

Este estudio investiga los efectos de uso de las redes sociales en el capital social de los empleados y el intercambio de conocimientos. Se propone un modelo de investigación y se prueba empíricamente con un estudio de encuesta en línea de 288 profesionales en actividad en una empresa de telecomunicaciones de Arabia Saudita. Los resultados revelan que el uso de las redes sociales en el lugar de trabajo influye positivamente en el intercambio de conocimientos. Los hallazgos contribuyen a aclarar la importancia de las diferentes dimensiones del Capital Social, especialmente la visión y la confianza compartidas, y su papel en la mejora de las prácticas rentables de intercambio de conocimientos. Este estudio ofrece políticas de recursos humanos efectivas y valiosas con respecto al uso de las redes sociales en el lugar de trabajo dentro del contexto MENA.

Palabras Clave: Redes sociales, Capital social, intercambio de conocimientos, modelado de ecuaciones estructurales, Arabia Saudita



In today's knowledge-intensive economy and increasingly networked global society, knowledge is considered as one of the most significant valuable assets, and strategic resources for organizations (Nguyen *et al.*, 2020). Several researchers argue that in most organizations, knowledge management is a necessary premise for success (Balle *et al.*, 2020; Le & Lei, 2019). Knowledge is a key source that impacts the ability of an organization to develop skills, solve challenges, improve organizational learning, and preserve the company's sustainable growth. Therefore, improving the capacity of companies to create, gather, share, knowledge will contribute to sustained competitive advantage over other organizations (Pitafi *et al.*, 2020; Song *et al.*, 2019; Cao & Ali, 2018). Knowledge sharing, is defined as "the exchange of knowledge and experience between and among individuals, and within and among teams, organizational units, and organizations" (King, 2006, p. 498), helps to maximize the capacity of a business to manage knowledge and encourages people to collaborate effectively and accomplish goals (Le & Lei, 2018). These insights lead some researchers to recommend using both formal and informal channels to help access knowledge, such as social media networks (Nisar *et al.*, 2019, Jarrahi, 2018). The use of social media (SM) at workplace establishes social ties between employees and encourages "informal networks" of relationships that contribute to more open and informal discussions, which are considered crucial for employee collaboration (Lee & Lee, 2020; Ewing *et al.*, 2019). The expansion of SM' use within society has formally and informally permeated organizations (Nisar *et al.*, 2019). SM is becoming a powerful medium for promoting and knowledge sharing at individual, and organizational level (Oksa *et al.*, 2020; Ellison *et al.*, 2015).

Nowadays, driven by new management patterns and developments, a growing number of businesses are using SM to promote communication and collaboration, and take advantage of new business opportunities (Dong *et al.*, 2020). Consequently, SM platforms are becoming more than just mere means of communication and operate as social interaction networks for managing human resources, communication, and knowledge sharing (Sun *et al.*, 2019; Leonardi & Vaast, 2017). While over the past few years, the notion of SM for knowledge sharing has gained increasing attention, research about SM's use in knowledge sharing is still at an early stage of development (Ahmad *et al.*, 2019). Particularly, there is limited research that examines the impact of SM on knowledge sharing practices among employees in the workplace within the MENA Region and especially in Saudi Arabia's context. Therefore, the main objective of this study is to investigate the impact of SM use at the workplace on employee's knowledge sharing in the telecommunication sector in Saudi Arabia. Consequently, this study aims to answer the question, "How does SM usage impact employee's knowledge sharing?" This research question will be examined from the perspective of employees.

To answer this research question, the Social Theory will be applied. Specifically, in this research we are interested in understanding how SM use at workplace can foster the social capital of employees, and subsequently facilitate knowledge sharing. Thus, the

paper is organized as follows: the next section presents an overview of related literature. A research model on the effect of SM use in the workplace on work performance will be proposed. The subsequent sections describe the research methodology, the data analysis, and findings. We wrap up the paper with discussion, conclusion, and potential directions for future research.

Literature review: social capital theory

SM is defined as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content" (Kaplan & Haenlien, 2010, p.61). Based on this definition, SM has two defining features. Firstly, SM promotes relationships between groups of users. This relation can be established through messages, comments, and content sharing. Secondly, SM enables social connections, interactions, and discussions to be formed between users (Capriotti *et al.*, 2021; Hadoussa & Menif, 2019). Today, SM is an integral part of employee's work that its use is now commonplace for communication and knowledge sharing among co-workers.

This study is guided by the Social Capital Theory, which is considered as "a resource that actors derive from specific social structures and then use to pursue their interests; it is created by changes in the relationship among actors." Baker (1990, p. 619). Social capital is also considered as "resources embedded in relationships", like "friends, colleagues, and more general contacts through whom you receive opportunities to use your financial and human capital" (Burt, 2009, p. 9). Thus, social capital is the set of links, interactions, and assets embedded in a social network. It is generally described as a multidimensional framework comprising three main dimensions: structural capital, relational capital, and cognitive capital (Chiu *et al.*, 2006). In a social system, structural capital refers to the type and structure of relationships and interactions between people. Cognitive capital reflects the common goals, norms, values, and shared understanding formed through the interactions between network members, and relational capital represents the relational resources generated by these interactions (Nahapiet & Ghoshal 1998). This dimension describes qualities that are part of the social relationship, such as trust, shared identity, or reciprocity. The driving concept behind the theory of social capital is that people's social relationships allow productive results. Social capital may, therefore, be considered an essential instrument that provides organizations with various benefits. It enables collaboration and the accomplishment of common goals and promotes the exchange and development of intellectual capital (Bhatti *et al.*, 2021; Barlatier & Mention, 2019). The benefit of social capital is addressed through its effect on knowledge sharing, considered as a mechanism for transmitting or disseminating knowledge from one individual or group to another and acquiring and receiving knowledge from others (Hadoussa, 2020; Allameh, 2018; Lefebvre *et al.*, 2016; Chang *et al.*, 2012).

Conceptual model and research hypotheses

The impact of SM use at work on social capital

Since the key characteristic of social capital is its emphasis on individual relationships (Nahapiet & Ghoshal, 1998), and since SM is the primary source of connection among people, many researchers claim that SM use plays a role in promoting and fostering the growth of social capital (Marengo *et al.*, 2020; Williams, 2019; Cao *et al.*, 2016), as it encourages social interaction and sharing of knowledge (Ellison *et al.*, 2015; 2014). SM consist of various working and communication tools and platforms, providing users means to search and share information as well as to communicate and develop relationships among different users in work environments (Oksa *et al.*, 2020; Ewing *et al.*, 2019). The use of SM is appropriate for the accumulation and preservation of social capital by users as it promotes contact, strengthens relationships, reinforces connections with peers, preserves and enhances their social networks (Cao & Ali, 2018; Carlson *et al.*, 2016). Several research consider a common classification of social capital which is categorized into three dimensions: structural capital, cognitive capital, and relational capital, to explore the relationship between SM use and social capital. This dimensional analysis, particularly applied in the field of knowledge management, is important because, each dimension has significant and independent effects (Berraies *et al.*, 2020; Ganguly *et al.*, 2019).

First, the structural dimension of social capital refers mainly to *“the overall pattern of connections and interactions between individuals and is characterized by the number and strength of the existing network ties between individuals and by the network’s configuration”* (Ali-Hassan *et al.*, 2015; p. 68). It reflects the breadth of the relationships, as well as the amount of time spent, and communication frequency between members (Chang *et al.*, 2012). Several researchers argue that employees who participate in online social interactions with coworkers through SM tend to build close network ties (Sun *et al.*, 2019). SM networks have made profound changes in the way people communicate and interact. In today’s digital age, people have more and more interactions with others online as opposed to in-person. The deployment of SM strengthens working relationships and facilitates the development of new working relationships with other peers, which can help to establish and enhance employee social network ties. Thus, we hypothesize that:

H1: SM use at work has a positive impact on structural social capital.

H1a: SM use at work has a positive effect on social interaction ties.

The relational dimension of social capital focuses on the character and nature of the connection among people and refers to important aspects that are embedded in interactions, such as trust, norms of reciprocity, and identification (Kamboj *et al.*, 2017). Identification is *“an individual’s sense of belonging and positive feeling toward a virtual community”* (Chiu *et al.*, 2006, p.1877). It refers to the perception of belonging, membership, and attachment to a specific human community or a group of people (Tsai & Hsu, 2019). Individuals may identify with a certain category based on their similarity with other group members and on the importance or distinctiveness of their membership in the group (Ashforth & Mael, 1989). SM users often use these networks to connect with their peers on concerns of mutual interest, and are likely to continue to connect with each other, which leads to the creation of specific connections and relationships that contribute to a sense of status-group membership. Discovering and debating topics of mutual interest promotes cooperation with other workers and creates a sense of belonging and develops

identity. Besides, norms of reciprocity are the standards of human behavior, which refer to the mutual expectation that favor or benefit currently provided that should be compensated in the future (Le & Lei, 2018). The face-to-face contacts establish norms of reciprocity because, through these exchanges, expectations about others’ reactions are built up and transmitted. However, even if face-to-face interaction is different from online communication through SM, norms of reciprocity can be also formed online, since individuals are constantly exposed to social interaction with other connected users and then expectations are established and norms of reciprocity are formed (Pai & Tsai, 2016). Finally, Trust is defined as: *“the belief that the results of somebody’s intended action will be appropriate from our point of view”* (Misztal, 1996, p. 9–10). Trust is one of the key facets of relational social capital that can be improved through repeated social exchanges among people (Nahapiet & Ghoshal, 1998). The use of SM at work enables relational social capital to be created, as it strengthens overall connections with employees and provides an adequate context in which social relations can take place (Ali-Hassan *et al.*, 2015). SM is mainly important for the generation of trust at the workplace, as it allows for more regular and frequent social connections and relationships among co-workers, enabling them to recognize each other, reducing uncertainty and generating a positive attitude, and ultimately, reinforcing their trust (Cao *et al.*, 2016). Consequently, we assume that SM use at the workplace is likely to promote identification within the virtual community. Based on the above-mentioned arguments, the following hypothesis is proposed:

H2: SM use at work has a positive impact on relational social capital.

H2a: SM use at work has a positive effect on norms of reciprocity.

H2b: SM use at work has a positive effect on identification.

H2c: SM use at work has a positive effect on trust.

The cognitive dimension is related to shared values and meanings as well as common assumptions among parties. Particularly shared vision is commonly mentioned as the main element of the cognitive dimension of social capital. The shared vision *“embodies the collective goals and aspirations of the members of an organization”* (Tsai & Ghoshal, 1998, p. 467). It reflects the members’ common goals and purposes within the organization. In virtual settings, number of studies outline that the use of SM supports the creation and maintenance of a shared vision (Yen *et al.*, 2020; Tijunaitis *et al.*, 2019; Cao *et al.*, 2016; Ali-Hassan *et al.*, 2015). In the workplace, SM promote the creation of informal relationships between co-workers, which fosters collaboration, and develops a shared vision for team members (Sun *et al.*, 2019; Cao *et al.*, 2016). Therefore, we hypothesize that:

H3: SM use at work has a positive effect on cognitive social capital.

H3a: SM use at work has a positive effect on shared vision.

The impact of SM use at work on knowledge sharing through social capital dimensions

Knowledge sharing is an integral aspect of knowledge management, resulting in several benefits at the individual and organizational levels. It is defined as a process that includes two dimensions: collecting and donating, tacit and explicit knowledge (Al-Husseini & Elbeltagi, 2018). Knowledge donating is *“communicating to others what one’s personal intellectual capital”*, whereas knowledge collecting is the fact of *“consulting colleagues in order to get them share their intellectual capital”* (Van Den Hooff & De Ridder, 2004, p. 118).

Several previous studies have examined the effect of social capital dimensions on knowledge sharing (Ganguly *et al.*, 2019; Polyviou *et al.*, 2019; Allameh, 2018). Todo *et al.*, (2016) emphasized the importance of social networks ties (i.e. structural Social Capital), for encouraging organizational knowledge sharing. Social interaction ties, reflecting the connections between members in the social network, promote inter-member social interactions, as well as the exchange of information between individuals and the amount of time and energy people need to access information sources, which facilitates knowledge sharing among people (Chui *et al.*, 2006). Therefore, we hypothesize that:

H4: Structural social capital has a positive impact on Knowledge sharing

H4a: Social interaction ties have a positive impact on Knowledge donating

H4b: Social interaction ties have a positive impact on Knowledge collecting

Furthermore, many researchers consider that individuals are more likely to provide and share valuable knowledge when relationships of trust exist (Le & Lei, 2018; Razak *et al.*, 2016). This can be explained by the fact that when individuals trust each other, they are more likely to cooperate and share resources without worrying that their peers will profit from them. It may, also, reduce the adverse effects of differences between partners (Lavie *et al.*, 2012). Trust is, then, viewed as “a central characteristic of relationships that promotes effective knowledge creation” (Abrams *et al.*, 2003, p.65). Trust creates and retains exchange relationships that, in turn, lead to knowledge sharing. Additionally, knowledge sharing is recognized to be the consequence of the profit and cost analysis, meaning that people “will not share unless they perceive the benefits of sharing, such as reciprocal benefits, rewards, and stronger interpersonal ties” (Chen & Hsieh, 2015, p.814). Thus, individuals expect to receive reciprocal benefits that justify their expense in terms of time and effort spent when sharing their knowledge (Moghavvemi *et al.*, 2018). Moreover, in online networks, norms of reciprocity are one of the main factors that influence students to share knowledge through Facebook groups (Moghavvemi *et al.*, 2017). In addition, identification acts as a resource influencing the motivation to combine and exchange knowledge (Nahapiet & Ghoshal, 1998). In fact, when a person develops strong identification with the organization, she/he is likely to make efforts for the organization’s benefit. These efforts are manifested in such collaborative behaviors as knowledge sharing. In social networks, users tend to search for people with whom they have connections, and they share knowledge for reasons of identification and social integration. As a result, identifying with a group or community explains the readiness to remain an active member of the network and is considered as important in stimulating knowledge sharing behaviors (Chiu, *et al.*, 2006). It is therefore expected that within SM networks, employees will share their knowledge when they feel a sense of belongingness to a virtual community. So, it is hypothesized that:

H5: Relational social capital has a positive impact on Knowledge sharing

H5a: Identification has a positive impact on Knowledge donating.

H5b: Identification has a positive impact on Knowledge collecting

H5c: Norms of reciprocity have a positive impact on Knowledge donating.

H5d: Norms of reciprocity have a positive impact on Knowledge collecting.

H5e: Trust has a positive impact on Knowledge donating.

H5f: Trust has a positive impact on Knowledge collecting.

Finally, the cognitive dimension of social capital has also been recognized as a predictor of knowledge sharing among network members. Several studies use the notion of shared language or culture and shared vision or common goals to represent this dimension (Hadoussa *et al.*, 2022). In this study, the cognitive dimension focuses on the shared vision of the members of a social network. Previous researchers argue that when employees have a common vision, it is easier for them to share knowledge. In fact, the employee’s common goals and vision lay to a strong base for the exchange and integration of resources into the community. Organization members who share a vision are more expected to become partners in sharing knowledge (Tsai & Ghoshal, 1998). Consequently, mutual vision can be seen as the mechanism that connects individuals together and inspires them to share their knowledge (Todo *et al.*, 2016).

H6: Cognitive social capital has a positive effect on knowledge sharing.

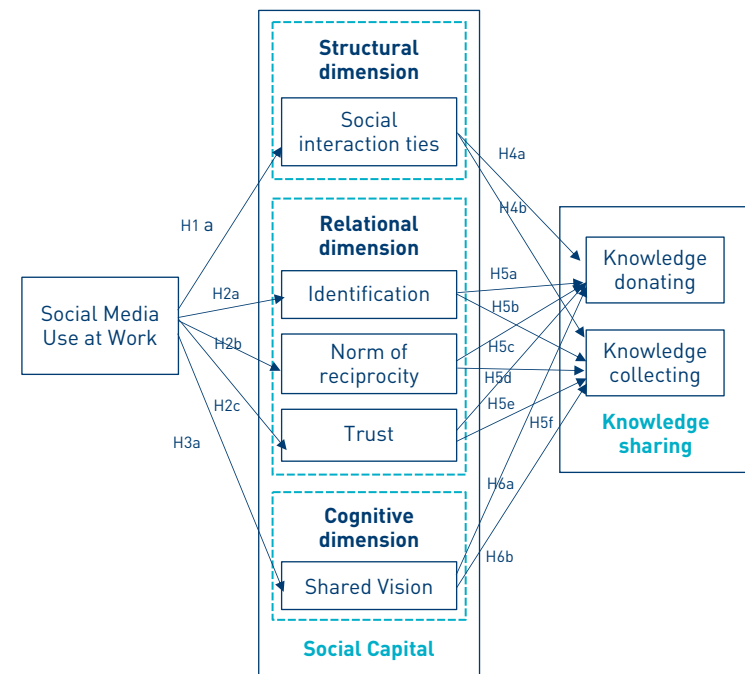
H6a: Shared vision has a positive effect on knowledge donating.

H6b: Shared vision has a positive effect on knowledge collecting.

Figure 1 illustrates the proposed research model.

FIGURE 1

Research Model: SM effects on knowledge sharing



Research methodology

This study applies a positivist paradigm as it is more suitable for theory testing rather than theory generation to test the proposed hypotheses and their causal relationships and the scale validation (De Vaus, 2002). This study is based on a quantitative research methodology that explains an issue or phenomenon by gathering data in numerical form and analyzing it with the assistance of mathematical methods and statistics (Aliaga & Gunderson, 2006). Quantitative research starts with a statement of a problem, generating a research question, reviewing related literature to construct a research model, formulating a hypothesis, collecting data, and conducting a quantitative analysis (Williams, 2007). To test our research question, we conducted a survey at a Saudi Telecom Company which is a leading telecom and technology services provider for individuals and businesses based in Saudi Arabia and founded on 1998. The company was owned by the Saudi Government who sold 30% of its shares in 2002. In the following paragraphs we expose relevant details regarding data collection and hypothesis tests using the structural equation modeling (SEM) method with SPSS and AMOS statistical package.

Study sample and data collection

According to Sukamolson (2007), the survey encompasses the use of scientific sampling method with a designed questionnaire (Appendix 1) to measure the population's characteristics using statistical methods. An online survey was developed and administered to a population of 500 employees of the company. The respondents are professionals who used SM for job-related purposes at work. The participation to the survey is anonymous and voluntary. After eliminating the invalid responses, a final sample of 288 exploitable responses (57.6% response rate), is retained. The respondents' demographic profiles show that our sample is composed of 66% male and 34% female employees which is explained by a local culture of male favoritism in job market. The sample's median age is in the range of 25–35 with 61.6%. Most respondents have an experience below than five years (61.6%) and get access to their position with a bachelor's degree (61.9%). More details about the respondents are available in the Table I (Appendix 2).

Measures

To measure the different constructs of our conceptual framework, we diffused an online survey. The questionnaire is a research instrument consisting of a series of questions to gather relevant information from respondents. The online questionnaire provides a quick, cheap, and efficient way to obtain responses to our research question. It adapts items from previous studies, based on a 5-point Likert-type scale; ranging from "strongly disagree", to "strongly agree". Appendix 1 presents the questionnaire and lists all the constructs and their related sources as well as the number of items used per construct. Regarding the research context, all items were translated into Arabic language by a professional translator.

Data analysis and results

The data analysis is performed through structural equation modeling (SEM). For this purpose, two statistical software are used: SPSS V.28 is used to solve the basic encoding process and descriptive statistics analysis, and AMOS V.28 is used to test the fit of the model and for estimating causal models with latent variables and proposed hypotheses. SEM can simultaneously test a set of interrelated hypotheses by estimating the relationships between multiple independent and dependent variables in a structural model.

APPENDIX 2

Table I: Sample Description

Criteria	Frequency	Percentage
Gender		
Male	190	66%
Female	98	34%
Age		
Below 25 years	18	5.5%
Between 25 – 35 years	202	61.6%
Between 35 – 45 years	62	18.9%
More than 45 years	6	1.8%
Position		
Subordinate staff	30	9.1%
Junior staff	109	33.2%
Senior staff	115	35.1%
Department manager	24	7.3%
Senior manager	10	3%
Experience		
Below 5 years	202	61.6%
Between 5 – 10 years	51	15.5%
More than 10 years	35	10.7%
Academic level		
High School	12	3.7%
Diploma	11	3.4%
Bachelor	203	61.9%
Master	62	18.9%
Total	288	100%

Scales reliability and Constructs validity

To determine the scales' reliability and constructs validity, a scale purification is carried out. To eliminate weak and non-representative items, Cronbach's Alpha and item-to-total correlations are calculated (Churchill, 1979). Therefore, the evaluation of scales reliability and constructs validity is based on three criteria: (1) composite reliability (CR) and Cronbach's Alpha (α) should be greater than 0.7 in reliability testing; (2) all communalities should exceed 0.4, and the average variance extraction (AVE) of the convergence validity test should exceed 0.5; (3) the square root of each AVE should be greater than the inter-structure correlation for discriminant validity testing (Costello and Osborne, 2005). Table II (Appendix 2) shows the reliability and convergence validity results. The Cronbach's Alpha for all variables ranged from 0.731 to 0.946, and the composite reliability was between 0.678 and 0.843, indicating satisfactory reliability. In addition, all communalities were above 0.4 and the AVEs were above 0.5, indicating an acceptable results and favorable convergence validity (Fornell & Larcker, 1981). Finally, according to Table II (Appendix 2), the square root of the AVEs (the number on the diagonal of the matrix) was greater than the correlation between the constructs in all cases, indicating sufficient discriminant validity. Furthermore, to test the factorial

structure of the scales, a confirmatory factor analysis is conducted. The construct validity indicates the extent to which a given construct is different from other variables. With reference to Fornell & Larcker, (1981), we calculate the discriminant validity through AMOS V.28. The Criteria of discriminant validity is to examine whether the square root of the AVE for each construct exceeds the correlation shared between the construct and other constructs in the model. As shown in Table III Appendix 2, all

diagonal values exceeded the inter-construct correlations, thereby demonstrating adequate discriminant validity of all constructs and confirming our previously presented results. Finally, the results indicate that eight factors (SM use at work, Social interaction ties, identification, norms of reciprocity, trust, shared vision, knowledge donating, and knowledge collecting) are identified and used subsequently as the latent variables for the analysis conducted (Table III, Appendix 2).

APPENDIX 2

Table II: Measurement Construct

Indicator variable		Variable	Standardized loadings	Square of standardized loadings	Sum of the squared standardized loadings	Number of indicators	AVE	Square root of AVE	Cronbach's α
TRUST2	<---	TRUST	0.876	0.767376					
TRUST3	<---	TRUST	0.904	0.817216					
TRUST5	<---	TRUST	0.758	0.574564					
TRUST4	<---	TRUST	0.745	0.555025					
TRUST1	<---	TRUST	0.728	0.529984	3.244165	5	0.648833	0.805501707	0.899
IDENT1	<---	IDENTI	0.913	0.833569					
IDENT2	<---	IDENTI	0.932	0.868624					
IDENT3	<---	IDENTI	0.927	0.859329					
IDENT4	<---	IDENTI	0.842	0.708964	3.270486	4	0.817622	0.904224253	0.946
KCOLL2	<---	KCOLL	0.942	0.887364					
KCOLL1	<---	KCOLL	0.908	0.824464					
KCOLL3	<---	KCOLL	0.775	0.600625					
KCOLL4	<---	KCOLL	0.763	0.582169	2.894622	4	0.723656	0.850679434	0.914
SMUW1	<---	SMUW	0.732	0.535824					
SMUW3	<---	SMUW	0.738	0.544644					
SMUW5	<---	SMUW	0.765	0.585225					
SMUW2	<---	SMUW	0.769	0.591361					
SMUW6	<---	SMUW	0.693	0.480249					
SMUW4	<---	SMUW	0.728	0.529984	3.267287	6	0.544548	0.737934844	0.789
KDON3	<---	KDON	0.865	0.748225					
KDON1	<---	KDON	0.892	0.795664					
KDON2	<---	KDON	0.893	0.797449	2.341338	3	0.780446	0.883428548	0.914
SOINTER1	<---	SOINTER	0.738	0.544644					
SOINTER3	<---	SOINTER	0.563	0.316969					
SOINTER4	<---	SOINTER	0.807	0.651249					
SOINTER2	<---	SOINTER	0.722	0.521284	2.034146	4	0.508537	0.713117452	0.794
NRECIP3	<---	NRECIP	0.862	0.743044					
NRECIP2	<---	NRECIP	0.727	0.528529					
NRECIP1	<---	NRECIP	0.596	0.355216					
NRECIP4	<---	NRECIP	0.673	0.452929	2.079718	4	0.51993	0.72106137	0.784
SHAV2	<---	SHAV	0.729	0.531441					
SHAV3	<---	SHAV	0.789	0.622521					
SHAV1	<---	SHAV	0.695	0.483025	1.636987	3	0.545662	0.738689606	0.713

APPENDIX 2

Table III: Discriminant validity of the theoretical construct measurement

	SMUW	SOINTER	IDENT	NRECIP	TRUST	SHAV	KDON	KCOLL
SMUW	0.738							
SOINTER	0.438	0.713						
IDENT	0.470	0.578	0.904					
NRECIP	0.351	0.361	0.475	0.721				
TRUST	0.377	0.378	0.538	0.534	0.806			
SHAV	0.542	0.452	0.572	0.428	0.616	0.738		
KDON	0.320	0.322	0.336	0.390	0.460	0.493	0.882	
KCOLL	0.225	0.156	0.294	0.255	0.307	0.294	0.417	0.851

Diagonal elements are the square root of average variance extracted (AVE) between the constructs and their measures.

Off diagonal elements are correlations between constructs.

Structural Model

This study used Structural Equation Modelling (SEM) with Amos V.28 to apply the inferential analysis and test the hypotheses. This study uses p-value criteria with a 95% confidence level that should be less or equal to 0.05 for the significance result to test the different hypotheses using all available observations in group analysis. Furthermore, as suggested by previous authors (Byrne, 2016; Hair *et al.*, 2016), this study refers to some relevant indices (absolute, incremental and parsimony) to evaluate the overall fitness to test the Model Fit. These indicators consist of Goodness of Fit Indices, Adjusted Goodness of Fit Index, Comparative Fit Index, Incremental Fit Index, and Normed Fit Index (GFI, AGFI, CFI, IFI, and NFI > 0.90), Root Mean Square Error of Approximation (RMSEA) ($0.05 \leq \text{RMSEA} \leq 0.08$), RMR with the smaller value (Yen *et al.*, 2014). The model fit represents the fitness of the data collected from the survey with the theoretical model. The observed indices compared to the recommended values (Fornell, 1987) indicate a good fit of the optimal model. The Chi Square/df ratio is less than 5 (3,118). The observed absolute fit indices GFI (0.934 > 0.90), AGFI (0.929 > 0.90), RMR (0.009), and RMSEA (0.062) indicate very acceptable results and provide sufficient information to evaluate the model's fitness (Hair *et al.*, 2016). Moreover, the observed incremental indices NFI (0.958), CFI (0.961), and IFI (0.946) indicate a good and acceptable values (>0.90) as suggested by (Hair *et al.*, 2016). In addition, the observed parsimony indices measured by the normed χ^2 (χ^2/ddl) indicates a value of $3,118 < 5$ (recommended value). According to these results summarized in Table IV (Appendix 2), the goodness of fit of the structural model can be confirmed. Thus, the observed model is accepted as the study's optimal measurement model as shown in Figure 2.

After examining the relationships between the causes and the latent variables, the results agree with the previous literature mentioned above and highlight the positive relationship and causality between the use of SM at work, the social capital' dimensions and knowledge sharing.

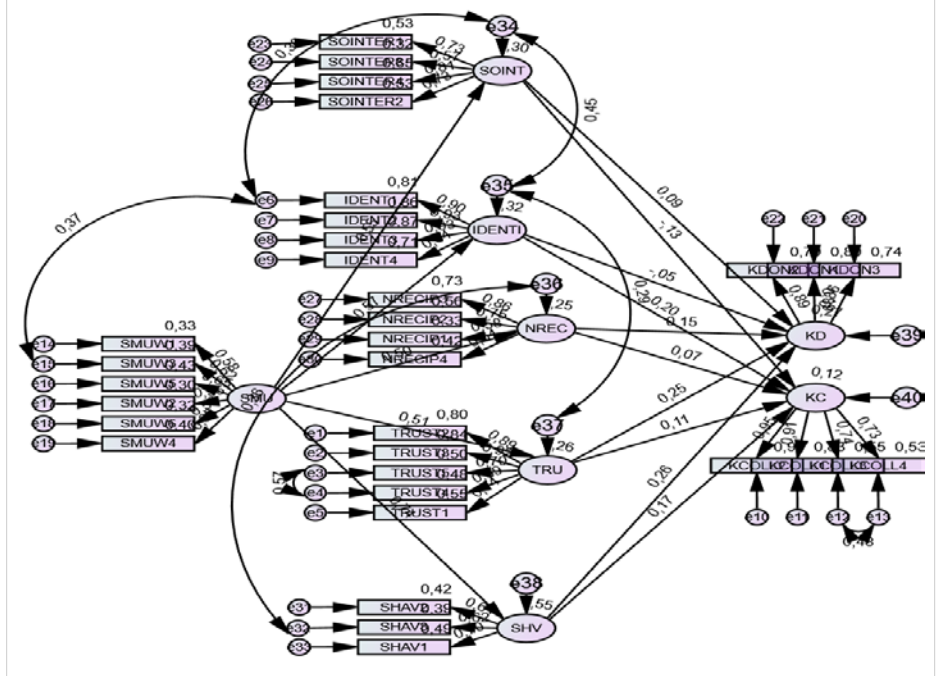
APPENDIX 2

Table IV: Adequation indices – AMOS V.28 Output

Fit indices	Observed indices	Recommended values
Absolute Fit Indices		
Discrepancy (χ^2)	18.711	–
P (χ^2)	0.257	–
ddl	6	–
GFI	0.934	> 0.90
AGFI	0.929	> 0.90
RMR	0.009	The smaller the RMR value the better
SRMR	0.0087	
RMSEA	0.062	0.05 to 0.08
Incremental Fit Indices		
NFI	0.958	> 0.90
CFI	0.961	> 0.90
IFI	0.946	> 0.90
Parsimony Indices		
Normed χ^2 (χ^2/ddl)	3.118	<5

FIGURE 2

Optimal Model Fit – AMOS V.28 Output



As shown in Table V (Appendix 2), the results of the structural model emphasize the validation of 11 hypotheses. The results in Table V, show that the SM use at work (SMUW) has a positive impact on social interaction ties (SOITER) ($\beta = 0.610$, $t\text{-value} = 6.095$), identification (IDENT) ($\beta = 0.773$, $t\text{-value} = 7.002$), norms of reciprocity (NRECIP) ($\beta = 0.417$, $t\text{-value} = 6.090$), Trust (TRUST) ($\beta = 0.652$, $t\text{-value} = 6.423$) and shared vision (SHAV) ($\beta = 0.596$, $t\text{-value} = 6.710$). Based on these results, H1a, H2a, H2b, H2c, H3a are supported. These findings corroborate previous research (Cao & Ali, 2018; Cao *et al.*, 2016; Ali *et al.*, 2015; Ellison *et al.*, 2014; Carlson *et al.*, 2012). In addition, the results indicate that most of the social capital dimensions are strongly correlated with knowledge sharing dimensions. The results demonstrate an important impact of shared vision (SHAV) on both employees' knowledge donating (KDON) ($\beta = 0.374$, $t\text{-value} = 3.654$) and knowledge collection (KCOLL) ($\beta = 0.205$, $t\text{-value} = 2.768$). Moreover, the results highlight the positive impacts of trust (TRUST) on knowledge donating (KDON) and knowledge collecting (KCOLL) with respectively $\beta = 0.227$, $t\text{-value} = 3.265$, $p < 0.001$; $\beta = 0.084$, $t\text{-value} = 2.412$, $p < 0.005$. However, the results illustrate that identification (IDENT) only impact positively knowledge collection (KCOLL) with $\beta = 0.140$, $t\text{-value} = 2.337$, $p < 0.005$. Besides, the results emphasize only the positive impact of norms of reciprocity (NRECIP) on knowledge donation (KDON) with $\beta = 0.207$, $t\text{-value} = 2.956$, $p < 0.001$. These findings allow to support only hypotheses H5b, H5c, H5d, H5e, H5f, H6a, and H6b. The research findings corroborate with some previous studies (Berraies *et al.*, 2020; Cao *et al.*, 2016; Chiu *et al.*, 2006). Only four hypotheses H4a, H4b, H5a, and H5d are not supported. In fact, the results show that there are no causality and no implications of identification on knowledge donation, and norms of reciprocity on knowledge collection. Furthermore, instead of different previous studies, the findings show that social interactions ties have no causality and no implications on knowledge sharing dimensions. Table V (Appendix 2) below summarizes the details of the hypotheses test.

APPENDIX 2

Table V: Results of the structural model – Hypothesis Test

Hypothesis	Correlation relationship	β	t-value	p	Result
H1a	SMUW ----> SOINTER	0.610	6.095	***	Confirmed
H2a	SMUW ----> IDENT	0.773	7.002	***	Confirmed
H2b	SMUW ----> NRECIP	0.417	6.090	***	Confirmed
H2c	SMUW ----> TRUST	0.652	6.423	***	Confirmed
H3a	SMUW ----> SHAV	0.596	6.710	***	Confirmed
H4a	SOINTER ----> KDON	0.088	0.959	.338	Infirmed
H4b	SOINTER ----> KCOLL	-0.111	-1.344	.179	Infirmed
H5a	IDENT ----> KDON	-0.038	-0.501	.516	Infirmed
H5b	IDENT ----> KCOLL	0.140	2.337	.005	Confirmed
H5c	NRECIP ----> KDON	0.207	2.956	.001	Confirmed
H5d	NRECIP ----> KCOLL	0.079	0.845	.298	Infirmed
H5e	TRUST ----> KDON	0.227	3.265	.001	Confirmed
H5f	TRUST ----> KCOLL	0.084	2.412	.005	Confirmed
H6a	SHAV ----> KDON	0.374	3.654	***	Confirmed
H6b	SHAV ----> KCOLL	0.205	2.768	***	Confirmed

Discussions and implications

This study contributes to MIS and HR literature by investigating the impacts of using SM at work on knowledge sharing through implications on social capital' dimensions. The study's findings here support the preceding literature (Leonardi, 2014) that SM use is associated with employees' knowledge sharing measured by knowledge donation and knowledge collection (Faraj *et al.*, 2016; Aksoy *et al.*, 2016).

Nonetheless, this study complements earlier research in business digitalization and the integration of SM at work which enable organization to modernize their practices and provide them competitive advantage (Theiri & Hadoussa, 2023; Hadoussa, 2022; Mazurchenko & Maršíková, 2019; Barlatier & Mention, 2019). By applying a confirmatory approach, the findings enhance the social capital theory within the diffusion and use of SM at work (Ellison *et al.*, 2015 and 2014). The contribution of this study is to emphasize the significant improvement of knowledge management resources especially the employees' knowledge sharing practices through SM use. This study extends knowledge in the relatively understudied area of SM use at work and its effects on HR practices, especially within knowledge sharing practices at work.

This study reveals that all the hypotheses are supported except for four hypotheses: social interaction which was found to have no causality and no implications on knowledge donation and collection (H4a and H4b); identification which was found to have a significant relationship with only knowledge collecting and no causality with knowledge donating (H5a), which means that the assumption of the effect of relational capital dimension on knowledge sharing is partially supported. Moreover, norms of reciprocity which also was found to have only a significant implication with knowledge donating and no causality with knowledge collection (H5d).

The findings validate the assumptions made by researchers in digital management (Capriotti *et al.*, 2021; Berraies, *et al.*, 2020; Cao & Ali, 2018; Cao *et al.*, 2016; Carlson *et al.*, 2012). The findings support that the social characteristics of SM promote employees' social capital dimensions (Lu & Dzikria, 2020; Ellison *et al.*, 2015). Accordingly, a SM professional environment characterized by an important shared vision, trust, norms of reciprocity, and identification, enhances the knowledge sharing practices between employees. The study highlights the crucial role of shared vision as the most important factor affecting knowledge sharing. This cognitive dimension of social capital means that team members are more likely to share their knowledge when they think that they have the same vision, which confirms Chiu *et al.*, (2006) findings. In addition, shared vision occupies an important place in the Middle Eastern culture specially in the Saudi economic tissue and government institutions. This issue explains the fact that shared vision is the most important factor impacting employees' knowledge sharing practices.

This study reveals also that trust enables knowledge sharing. In fact, trust affects the employees' willingness to donate their knowledge and cooperate with other organizational members via social networks. Moreover, employees believe that donating and collecting knowledge with their colleagues require strong confidence and trust that their contribution will not be misused against their interests (Kim, 2019). In other words, within a SM environment, if one does trust another member, it does mean that she/he will seek knowledge from her/him. This finding runs to the results of the studies conducted by Chang *et al.*, (2012) and Hau *et al.*, (2013), which found that a high level of trust among

workers has a significant effect on knowledge sharing. Furthermore, greater norms of reciprocity enhance knowledge sharing within the use of SM at work. Previous studies in the higher education context in Saudi Arabia highlight this issue (Hadoussa & Menif, 2019). As demonstrated by Fraj *et al.*, (2016), this study shows that SM create significant economic and relational value for its users when there are strong norms of reciprocity among communities' members. These relational values enhance the feeling of identification and trust (Chang & Chuang, 2011). Nevertheless, the no-causality between social interaction ties and knowledge collection and donation could be explained by the working environment in Saudi Arabia in which gender separation still persists and in which bureaucracy and hierarchy occupy an important place. Also, such results could be explained by the important number of young respondents were recruited at the company and who did not get sufficient time to discover its organizational culture and make contact with other colleagues to enhance social interactions. These findings do not corroborate with many previous studies (Huong & Truong, 2021; Berraies, 2020; Ewing *et al.*, 2019; Allameh, 2018; Chung *et al.*, 2016) which demonstrate that once an employee builds up stronger ties with his/her colleagues using SM at work, more she/he will collect and donate knowledge and so contribute to the knowledge sharing experience within her/his organization. Besides, this study exposes a weak result regarding identification with no implication on knowledge collection. In fact, identification presents just an impact on knowledge donation. This issue could be explained by cultural aspects related to Saudi locals' behavior known by having difficulties in asking for information contrary to donating information. Mainly, these findings are consistent with prior research, which consider norms of reciprocity, identification, and trust as an important social capital dimensions encouraging knowledge sharing at work (Pitafi *et al.*, 2020; Ricciardelli *et al.*, 2020; Lu & Dzikria, 2020; Capiriotti *et al.*, 2020; Song *et al.*, 2019; Kim, 2019; Allameh, 2018; Lefebvre *et al.*, 2016; Chang *et al.*, 2012).

To summarize, this study's findings corroborate partially with many previous studies showing that SM can serve as a good platform for sharing knowledge and acquiring direct and tacit knowledge, which are difficult to obtain in one-to-one communication (Leonardi, 2014). Thus, we note that users with higher connectivity and issue involvement are better at influencing information and knowledge flow, and that social content shared by directors at the organization had greater influence than those by middle managers and individual users. This observation is consistent with previous research findings (Xu *et al.*, 2014).

Theoretical Contributions

This study offers significant literary contributions, especially for academics and practitioners in digital and HR Management and interested in the effects of SM use at work. Guided by the Social Capital Theory, this study proposes a linear research model connecting SM professional use and the forms of knowledge sharing through the dimensions of social capital. Thus, this study extends the previous studies on SM at work by understanding in depth the complex human electronic relationships that impact knowledge sharing practices. In addition, few studies investigated in depth the impacts of each dimension of the Social Capital on knowledge sharing (Song *et al.*, 2019; Cao & Ali, 2018). While some researchers studied the relations between Social Capital and knowledge sharing, they commonly recognize the relational dimension of social capital by only one variable which is "trust". Few empirical studies examined the simultaneous effect of trust, shared vision, norms of reciprocity, identification, and social interactions

on knowledge sharing within SM networks. Nevertheless, the study of the effect of each dimension is crucial for researchers and practitioners to master and engage in practical actions assisting managers with applying specific policies regarding the diffusion and use of SM at work. Since the intensive use of SM at work especially in the MENA Region and in Saudi Arabia, this research contributes to clarify the importance of the different dimensions of Social Capital and the role that they could have in enhancing profitable knowledge sharing practices. Finally, although researchers recognize the importance of distinguishing between two knowledge sharing behaviors: knowledge collecting – consulting other colleagues to get them to share their knowledge – and knowledge donating – communicating one's knowledge to others – (Van den Hooff & De Ridder, 2004), this issue is generally ignored in the literature. Most of the research has conceptualized knowledge sharing as a unidimensional construct (Kim, 2019; Yang, 2010). The findings of this study clearly show the difference in employees' interpretation between the two knowledge sharing behaviors.

Managerial Implications

SM is still an emergent technology at the workplace. Previous studies pay attention to SM use and its impacts on organizations (Cao *et al.*, 2018; Cao *et al.*, 2016). Different studies stressed their effects at work on employee performance. Although some studies consider SM as a source of stress, anxiety (Lee-Won *et al.*, 2015), distraction in academic settings (Chang *et al.*, 2020; Feng *et al.*, 2019) and at work (Marengo *et al.*, 2020; Rozgonjuk *et al.*, 2020; Song *et al.*, 2019; Braojos *et al.*, 2019); other few studies deem SM as a platform for knowledge sharing and communication (Pitafi *et al.*, 2020; Song *et al.*, 2019; Leonardi, 2014; Turban *et al.*, 2011). This study provides a substantial contribution to HR and digital management practices with the proposal of a valid empirical instrument measuring the positive relationship that exists between SM use at work and employees' knowledge sharing practices. This empirical instrument could be used to evaluate any specific SM contribution to knowledge sharing within professional virtual communities. The study findings reveal the significant contribution of SM use to the development of Social Capital among employees, which enhance their practices of work-related knowledge sharing and professional relations. This indicates that SM support different knowledge management activities and practices at the workplace as demonstrated by Moqbel & Nah (2017). Thus, to take advantage of SM networking and promote the exchange of knowledge sharing practices, organizations need to enable their employees to use and optimize the managerial opportunities offered by these tools. This could be enhanced by providing clear policies and ethical rules on their use for work purposes, as well as supporting knowledge-related activities that are coordinated through these tools by strengthening the shared business vision. In addition, HR managers could encourage their employees to participate regularly in professional discussions through SM networks to build especially social interaction ties, to enhance the shared vision, trust, norms of reciprocity, and identification values that will result in more successful knowledge sharing practices. For this purpose, HR managers and directors could introduce specific policies promoting reciprocity, identification between the group and the organization, and for sure the shared vision of the organizational culture. This could be done by implementing a financial and/or motivational reward system for active employer who shares her/his knowledge with the group. Also, this would be an opportunity to make each member's knowledge contribution noticeable, visible, valuable, and will

help her/him assesses social exchange fairness. In addition, such digital practices could enhance the shared vision and social identification within the organizational environment and culture especially for young employees, and propose them a frame that assists and guides them in their professional lives. HR Direction may, therefore, create clear goals and objectives by strengthening discussions and social interactions between network members within the organization, to enhance the knowledge sharing practices and make more successful the professional practice community. As demonstrated in this research, shared vision and trust are crucial for the success of knowledge sharing practices within social networks. Thus, HR managers who aim to enhance knowledge donating and collecting activities through SM, have to encourage and foster activities developing human behaviors of trust between employees such as encouraging regular social interactions and fair discussions allowing employees to better know and understand each other by having at the same time a professional shared vision. This issue could be challenging especially in the Saudi social context because of the fact of gender separation that exists between male and female employees, and which was stressed by many respondents who found some difficulties in sharing (donating and collecting) knowledge at work. The social and cultural context in Saudi Arabia is still conservator and many cultural and social barriers still exist and have pressures on the working environment which could be problematic (Hadoussa et al., 2022). Nevertheless, SM use at work represents a real opportunity for Saudi employees and especially the youth generation to go beyond these social pressures (Hadoussa & Menif, 2019). SM at work in the Saudi context are very diffused and used to facilitate communication between employees. This issue strengthens the shared vision and could be an opportunity to build and develop social interaction ties which may increase the knowledge sharing practices. Furthermore, regarding the local culture and social habits, HR managers can ensure an acceptable level of visibility of the employee's personal information, especially women who share knowledge on SM, such as the employee's name, and her/his professional profile, which may increase also the level of trust among organizational members and thus lead to an honest sharing of knowledge, as well as a sense of social responsibility.

Conclusions, Limitations and Future Research

In the past few years, SM has come close to the people and is taking part in almost all spheres of life (Hadoussa & Menif, 2019; Zaki, 2019). SM has gained wide popularity at the workplace and has especially affected the HR management field (Louati & Hadoussa, 2021; Yen et al., 2020; Nguyen et al., 2020; Rozgonjuk et al., 2020; Pitafi et al., 2020; Song et al., 2019; Braojos et al., 2019). Therefore, these network tools provide interconnected platforms for communication, collaboration, and promotion of the exchange of knowledge (Cao & Ali, 2018). These tools create and enhance knowledge sharing practices and the development of communities of practice in the wave of today's business digital transformation (Zaki, 2019; Jarrahi, 2018). In the healthcare sector, SM allow the essay and rapid dissemination and sharing of information and knowledge to much wider audiences than traditional methods of communication (Hadoussa, 2022; Chan et al., 2020). In the education sector, SM help in creating a useful learning climate for students as they inspire users/learners to participate in online discussions (Chatti & Hadoussa, 2021; Hadoussa, 2020). Nevertheless, the rise of SM has sparked discussions regarding its use in the workplace and especially its impact on HR management and knowledge sharing (Braojos et al., 2019; Song et al., 2019). Many companies are blocking employee access

to these tools in the workplace. Banning the use of those sites could lead companies to lose a huge number of opportunities for business development as improving communication, knowledge sharing, and even employees' performance (Ali-Hassan et al., 2015). The insights obtained by this study are useful for researchers and HR practitioners. The findings of this study stress important issues enriching the scientific debate on the effect of using SM in today's digital workplaces. This study highlights that SM encourage knowledge donating and collecting. The study's findings illustrate that SM enhance knowledge sharing practices within professional communities of practice (Rasheed et al., 2020; Ricciardelli et al., 2020; Dong et al., 2020; Cao & Ali, 2018). Furthermore, this study offers effective and valuable HR policies regarding the use of SM at the workplace within the MENA social context. The study's findings are beneficial to HR managers for establishing a strategic policy to optimize the use of SM at the workplace and gain in terms of knowledge sharing and capitalization which may enhance the creativity and innovation practices within businesses (Nguyen et al., 2020; Lee & Lee, 2020; Lee, 2018). Although this study has found important results and insights regarding SM diffusion and use at the workplace within the wave of digitalization, the findings should be seen in terms of its limitations. For instance, the study is conducted and limited to one company in a specific sector which is telecommunication. In addition, although the sampling method and the use of structural equation modeling provide interesting data, considering the use of additional sources of data, such as interviews and focus groups can cross-validate the results and emphasize the importance of social and cultural aspects dealing with the Saudi and Arab culture. Future research may include various other sectors (health care, education, industrial, etc.) to increase the generalizability of the study's findings. Also, future studies can be carried out in other countries and regions (Europe, North America, etc.) and should assess the effect of cultural differences.

References

- Abrams, L. M., Cross, R., Lesser, E. L., & Levin, D. (2003). Nurturing interpersonal trust in knowledge-sharing networks. *Academy of Management Perspectives*, 17(4), 64–77. <https://doi.org/10.5465/ame.2003.11851845>
- Ahmed, Y. A., Ahmad, M. N., Ahmad, N., & Zakaria, N. A. (2018). Social media for knowledge-sharing: A systematic literature review. *Telematics and Informatics*, 37, 72–112. <https://doi.org/10.1016/j.tele.2018.01.015>
- Aksoy, Y., Ayranci, E., & Gozukara, E. (2016). A Research on the Relationship between Knowledge Sharing and Employee Performance: The Moderating Role of Unethical Behaviors in Organizational Level. *European Scientific Journal, ESJ*, 12(4), 335. <https://doi.org/10.19044/esj.2016.v12n4p335>
- Al-Husseini, S., & Elbeltagi, I. (2018). The role of knowledge sharing in enhancing innovation: a comparative study of public and private higher education institutions in Iraq. *Innovations in Education and Teaching International*, 55(1), 23–33. <https://doi.org/10.1080/14703297.2015.1122544>
- Aliaga, M., & Gunderson, B. (2006). *Interactive Statistics*. Prentice Hall.
- Allameh, S. M. (2018). Antecedents and consequences of intellectual capital. *Journal of Intellectual Capital*, 19(5), 858–874. <https://doi.org/10.1108/jic-05-2017-0068>
- Ashforth, B. E., & Mael, F. A. (1989). Social Identity Theory and the Organization. *Academy of Management Review*, 14(1), 20–39. <https://doi.org/10.5465/amr.1989.4278999>
- Balle, A. R., Oliveira, M., & Curado, C. (2020). Knowledge sharing and absorptive capacity: interdependency and complementarity. *Journal of Knowledge Management*, 24(8), 1943–1964. <https://doi.org/10.1108/jkm-12-2019-0686>

- Barlatier, P., & Mention, A. (2019). How social media can fuel innovation in businesses: a strategic roadmap. *Journal of Business Strategy*, 41(2), 11–18. <https://doi.org/10.1108/jbs-12-2018-0197>
- Berraies, S., Lajili, R., & Chtioui, R. (2020). Social capital, employees' well-being and knowledge sharing: does enterprise social networks use matter? Case of Tunisian knowledge-intensive firms. *Journal of Intellectual Capital*, 21(6), 1153–1183. <https://doi.org/10.1108/jic-01-2020-0012>
- Bhatti, S. H., Vorobyev, D., Zakariya, R., & Christofi, M. (2021). Social capital, knowledge sharing, work meaningfulness and creativity: evidence from the Pakistani pharmaceutical industry. *Journal of Intellectual Capital*, 22(2), 243–259. <https://doi.org/10.1108/jic-02-2020-0065>
- Braojos, J., Benitez, J. F., & Llorens, J. (2019). How do social commerce-IT capabilities influence firm performance? Theory and empirical evidence. *Information & Management*, 56(2), 155–171. <https://doi.org/10.1016/j.im.2018.04.006>
- Burt, R. S. (2009). *Structural Holes: The Social Structure of Competition*. Harvard University Press.
- Byrne, B. M. (2016). *Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming, Third Edition*. Routledge.
- Cao, X., & Ali, A. (2018). Enhancing team creative performance through social media and transactive memory system. *International Journal of Information Management*, 39, 69–79. <https://doi.org/10.1016/j.ijinfomgt.2017.11.009>
- Cao, X., Guo, X., Vogel, D. R., & Zhang, X. (2016). Exploring the influence of social media on employee work performance. *Internet Research*, 26(2), 529–545. <https://doi.org/10.1108/intr-11-2014-0299>
- Capriotti, P., Zeler, I., & Camilleri, M. A. (2021). Corporate Communication Through Social Networks: The Identification of the Key Dimensions for Dialogic Communication. In *Emerald Publishing Limited eBooks* (pp. 33–51). <https://doi.org/10.1108/978-1-80071-264-520211003>
- Carlson, J. E., Carlson, D. S., Zivnuska, S., Harris, R. B., & Harris, K. D. M. (2016). Social Media Use in the Workplace. *Journal of Organizational and End User Computing*, 28(1), 15–31. <https://doi.org/10.4018/joeuc.2016010102>
- Chan, T. M., Dzara, K., Paradise, S., Bhalerao, A., & Maggio, L. A. (2020). Social media in knowledge translation and education for physicians and trainees: a scoping review. *Perspectives on Medical Education*, 9(1), 20–30. <https://doi.org/10.1007/s40037-019-00542-7>
- Chang, C., Huang, H., Chiang, C., Hsu, C., & Chang, C. (2012). Social capital and knowledge sharing: effects on patient safety. *Journal of Advanced Nursing*, 68(8), 1793–1803. <https://doi.org/10.1111/j.1365-2648.2011.05871.x>
- Chang, H. Y., & Chuang, S. S. (2011). Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Information & Management*, 48(1), 9–18. <https://doi.org/10.1016/j.im.2010.11.001>
- Chatti, H., & Hadoussa, S. (2021). Factors Affecting the Adoption of E-Learning Technology by Students during the COVID-19 Quarantine Period: The Application of the UTAUT Model. *Engineering, Technology & Applied Science Research*, 11(2), 6993–7000. <https://doi.org/10.48084/etasr.3985>
- Chen, C., & Hsieh, C. (2015). Knowledge sharing motivation in the public sector: the role of public service motivation. *International Review of Administrative Sciences*, 81(4), 812–832. <https://doi.org/10.1177/0020852314558032>
- Chiu, C., Hsu, M., & Wang, E. W. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, 42(3), 1872–1888. <https://doi.org/10.1016/j.dss.2006.04.001>
- Chung, N., Nam, K., & Koo, C. (2016). Examining information sharing in social networking communities: Applying theories of social capital and attachment. *Telematics and Informatics*, 33(1), 77–91. <https://doi.org/10.1016/j.tele.2015.05.005>
- Churchill, G. A. (1979). A Paradigm for Developing Better Measures of Marketing Constructs. *Journal of Marketing Research*, 16(1), 64. <https://doi.org/10.2307/3150876>
- Costello, A. M., & Osborne, J. A. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation*, 10(1), 1–9. <https://doi.org/10.7275/jyj1-4868>
- De Vaus, D. (2002). *Surveys in Social Research*. Routledge, London.
- Dong, J. K., Saunders, C. J., Wachira, B., Thoma, B., & Chan, T. M. (2020). Social media and the modern scientist: a research primer for low- and middle-income countries. *African Journal of Emergency Medicine*, 10, S120–S124. <https://doi.org/10.1016/j.afjem.2020.04.005>
- Ellison, N. B., Gibbs, J. L., & Weber, M. S. (2015). The Use of Enterprise Social Network Sites for Knowledge Sharing in Distributed Organizations. *American Behavioral Scientist*, 59(1), 103–123. <https://doi.org/10.1177/0002764214540510>
- Ellison, N. B., Vitak, J., Gray, R., & Lampe, C. (2014). Cultivating Social Resources on Social Network Sites: Facebook Relationship Maintenance Behaviors and Their Role in Social Capital Processes. *Journal of Computer-Mediated Communication*, 19(4), 855–870. <https://doi.org/10.1111/jcc4.12078>
- Ewing, M., Men, L. R., & O'Neil, J. (2019). Using Social Media to Engage Employees: Insights from Internal Communication Managers. *International Journal of Strategic Communication*, 13(2), 110–132. <https://doi.org/10.1080/1553118x.2019.1575830>
- Faraj, S., Von Krogh, G., Monteiro, E., & Lakhani, K. R. (2016). Special Section Introduction—Online Community as Space for Knowledge Flows. *Information Systems Research*, 27(4), 668–684. <https://doi.org/10.1287/isre.2016.0682>
- Feng, S., Wong, Y. F., Wong, L. M., & Hossain, L. (2019). The Internet and Facebook Usage on Academic Distraction of College Students. *Computers & Education*, 134, 41–49. <https://doi.org/10.1016/j.compedu.2019.02.005>
- Fornell, C. (1987). *A Second Generation of Multivariate Analysis: Classification of Methods and Implications for Marketing Research*. In: Houston, M. J., Ed., Review of Marketing, American Marketing Association, Chicago, 407–450.
- Ganguly, A., Talukdar, A., & Chatterjee, D. (2019). Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *Journal of Knowledge Management*, 23(6), 1105–1135. <https://doi.org/10.1108/jkm-03-2018-0190>
- Hadoussa, S. (2020). Evaluation of e-learning system on higher education institutions in KSA: a survey at Saudi Electronic University. *International Journal of Technology Enhanced Learning*, 12(2), 180. <https://doi.org/10.1504/ijtel.2020.106285>
- Hadoussa, S. (2022). Transformation numérique de l'administration publique: étude des changements induits à l'échelle individuelle et collective suite à l'usage du Dossier Médical Informatisé (DMI) auprès de la CNAM Tunisie. *Recherches en Sciences de Gestion*, 150, 251–276. <https://doi.org/10.3917/resg.150.0251>
- Hadoussa, S., Amari, A., & Jaoua, F. (2022). Study of determinants of online purchasing behavior: experience of Saudi women regarding luxury beauty products on social media, *Journal of Decision Systems*, <https://doi.org/10.1080/12460125.2022.2104625>
- Hadoussa, S. & Menif, H. (2019). Social Media impact on language learning for specific purpose: a study in English for business administration. *Teaching English With Technology*, 19(1), 56–71. <http://cejsh.icm.edu.pl/cejsh/element/bwmeta1.element.desklight-c416a57b-b0d8-4068-9955-d5f9172f76e6/c/ARTICLE4.pdf>
- Hair, J., Anderson, R., Black, B., & Babin, B. (2016). *Multivariate Data Analysis*. Pearson Higher Ed.
- Hau, Y. S., Kim, B., Lee, H., & Kim, Y. (2013). The effects of individual motivations and social capital on employees' tacit and explicit knowledge sharing intentions. *International Journal of Information Management*, 33(2), 356–366. <https://doi.org/10.1016/j.ijinfomgt.2012.10.009>

- Hoang, T. D., & Truong, C. N. (2021). The Relationship between Social Capital, Knowledge Sharing and Enterprise Performance: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 8(11), 133–143. <https://doi.org/10.13106/jafeb.2021.vol8.no11.0133>
- Jarrahi, M. H. (2018). Social Media, Social Capital, and Knowledge Sharing in Enterprise. *IT Professional*, 20(4), 37–45. <https://doi.org/10.1109/mitp.2017.265105759>
- Kamboj, S., Kumar, V., & Rahman, Z. (2017). Social media usage and firm performance: the mediating role of social capital. *Social Network Analysis and Mining*, 7(1). <https://doi.org/10.1007/s13278-017-0468-8>
- Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 53(1), 59–68. <https://doi.org/10.1016/j.bushor.2009.09.003>
- Kim, S. L. (2019). Enticing high performers to stay and share their knowledge: The importance of trust in leader. *Human Resource Management*, 58(4), 341–351. <https://doi.org/10.1002/hrm.21955>
- Koranteng, F. N., & Wiafe, I. (2019). Factors that Promote Knowledge Sharing on Academic Social Networking Sites: An Empirical Study. *Education and Information Technologies*, 24(2), 1211–1236. <https://doi.org/10.1007/s10639-018-9825-0>
- Louati, H., & Hadoussa, S. (2021). Study of Social media impacts on social capital and employee performance – evidence from Tunisia Telecom. *Journal of Decision Systems*, 30(2–3), 118–149. <https://doi.org/10.1080/12460125.2021.1872142>
- Lavie, D., Haunschild, P. R., & Khanna, P. (2012). Organizational differences, relational mechanisms, and alliance performance. *Strategic Management Journal*, 33(13), 1453–1479. <https://doi.org/10.1002/smj.1987>
- Le, P. T., & Lei, H. (2018). The mediating role of trust in stimulating the relationship between transformational leadership and knowledge sharing processes. *Journal of Knowledge Management*, 22(3), 521–537. <https://doi.org/10.1108/jkm-10-2016-0463>
- Le, P. T., & Lei, H. (2019). Determinants of innovation capability: the roles of transformational leadership, knowledge sharing and perceived organizational support. *Journal of Knowledge Management*, 23(3), 527–547. <https://doi.org/10.1108/jkm-09-2018-0568>
- Lee, J. (2018). The Effects of Knowledge Sharing on Individual Creativity in Higher Education Institutions: Socio-Technical View. *Administrative Sciences*, 8(2), 21. <https://doi.org/10.3390/admsci8020021>
- Lee, S. H., & Lee, S. Y. (2020). Social Media Use and Job Performance in the Workplace: The Effects of Facebook and KakaoTalk Use on Job Performance in South Korea. *Sustainability*, 12(10), 4052. <https://doi.org/10.3390/su12104052>
- Lee-Won, R. J., Herzog, L., & Park, S. S. (2015). Hooked on Facebook: The Role of Social Anxiety and Need for Social Assurance in Problematic Use of Facebook. *Cyberpsychology, Behavior, and Social Networking*, 18(10), 567–574. <https://doi.org/10.1089/cyber.2015.0002>
- Lefebvre, V. M., Sorenson, D., Henchion, M., & Gellynck, X. (2016). Social capital and knowledge sharing performance of learning networks. *International Journal of Information Management*, 36(4), 570–579. <https://doi.org/10.1016/j.ijinfomgt.2015.11.008>
- Leonardi, P. M. (2014). Social Media, Knowledge Sharing, and Innovation: Toward a Theory of Communication Visibility. *Information Systems Research*, 25(4), 796–816. <https://doi.org/10.1287/isre.2014.0536>
- Leonardi, P. M., & Vaast, E. (2017). Social Media and Their Affordances for Organizing: A Review and Agenda for Research. *The Academy of Management Annals*, 11(1), 150–188. <https://doi.org/10.5465/annals.2015.0144>
- Lu, H., & Dzinkria, I. (2020). The role of intellectual capital and social capital on the intention to use MOOC. *Knowledge Management Research & Practice*, 21(1), 29–40. <https://doi.org/10.1080/14778238.2020.1796543>
- Marengo, D., Sindermann, C., Elhai, J. D., & Montag, C. (2020). One Social Media Company to Rule Them All: Associations Between Use of Facebook-Owned Social Media Platforms, Sociodemographic Characteristics, and the Big Five Personality Traits. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.00936>
- Mazurchenko, A., & Maršíková, K. (2019). Digitally-Powered Human Resource Management: Skills and Roles in the Digital Era. *Acta Informatica Pragensia*, 8(2), 72–87. <https://doi.org/10.18267/j.aip.125>
- Misztal, B. A. (1996). Trust in modern societies: the search for the bases of social order. *Choice Reviews Online*, 34(02), 34–1248. <https://doi.org/10.5860/choice.34-1248>
- Moghavvemi, S., Sharabati, M. M. N., Klobas, J., & Sulaiman, A. (2018). Effect of Trust and Perceived Reciprocal Benefit on Students' Knowledge Sharing via Facebook and Academic Performance. *Electronic Journal of Knowledge Management*, 16(1). <https://scholar.ptuk.edu.ps/bitstream/123456789/493/1/Effect%20of%20Trust%20and%20Perceived%20Reciprocal%20Benefit%20on%20Students%27%20Knowledge%20Sharing%20via%20Facebook%20and%20Academic%20Performance.pdf>
- Moghavvemi, S., Sharabati, M. M. N., Paramanathan, T., & Rahin, N. M. (2017). The impact of perceived enjoyment, perceived reciprocal benefits and knowledge power on students' knowledge sharing through Facebook. *The International Journal of Management Education*, 15(1), 1–12. <https://doi.org/10.1016/j.ijme.2016.11.002>
- Moqbel, M., & Nah, F. F. (2017). Enterprise Social Media Use and Impact on Performance: The Role of Workplace Integration and Positive Emotions. *AIS Transactions on Human-computer Interaction*, 261–280. <https://doi.org/10.17705/1thci.00098>
- Nahapiet, J., & Ghoshal, S. (1998). Social Capital, Intellectual Capital, and the Organizational Advantage. *Academy of Management Review*, 23(2), 242–266. <https://doi.org/10.5465/amr.1998.533225>
- Nguyen, T. D., Tran, N. V., Doan, X., & Nguyen, H. T. (2020). The impact of knowledge sharing on innovative work behavior of Vietnam telecommunications enterprises employees. *Management Science Letters*, 53–62. <https://doi.org/10.5267/j.msl.2019.8.016>
- Nisar, T. M., Prabhakar, P., & Strakova, L. (2019). Social media information benefits, knowledge management and smart organizations. *Journal of Business Research*, 94, 264–272. <https://doi.org/10.1016/j.jbusres.2018.05.005>
- Nunnally, J. C. (1978). *Psychometric Theory*. McGraw-Hill Companies.
- Oksa, R., Kaakinen, M., Savela, N., Ellonen, N., & Oksanen, A. (2021). Professional social media usage: Work engagement perspective. *New Media & Society*, 23(8), 2303–2326. <https://doi.org/10.1177/1461444820921938>
- Pai, P., & Tsai, H. (2016). Reciprocity norms and information-sharing behavior in online consumption communities: An empirical investigation of antecedents and moderators. *Information & Management*, 53(1), 38–52. <https://doi.org/10.1016/j.im.2015.08.002>
- Pitafi, A. H., Rasheed, M., Kanwal, S., & Ren, M. (2020). Employee agility and enterprise social media: The Role of IT proficiency and work expertise. *Technology in Society*, 63, 101333. <https://doi.org/10.1016/j.techsoc.2020.101333>
- Polyviou, M., Croxton, K. L., & Knemeyer, A. M. (2019). Resilience of medium-sized firms to supply chain disruptions: the role of internal social capital. *International Journal of Operations & Production Management*, 40(1), 68–91. <https://doi.org/10.1108/ijopm-09-2017-0530>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton University Press.

- Rasheed, M., Malik, M. I., Pitafi, A. H., Iqbal, J., Anser, M. K., & Abbas, M. (2020). Usage of social media, student engagement, and creativity: The role of knowledge sharing behavior and cyber-bullying. *Computers & Education*, 159, 104002. <https://doi.org/10.1016/j.compedu.2020.104002>
- Razak, N. A., Pangil, F., Zin, L. M., Yunus, N. H. M., & Asnawi, N. H. (2016). Theories of Knowledge Sharing Behavior in Business Strategy. *Procedia. Economics and Finance*, 37, 545–553. [https://doi.org/10.1016/s2212-5671\(16\)30163-0](https://doi.org/10.1016/s2212-5671(16)30163-0)
- Ricciardelli, L. A., Nackerud, L., Quinn, A., Sewell, M. A., & Casiano, B. N. (2020). Social media use, attitudes, and knowledge among social work students: Ethical implications for the social work profession. *Social Sciences & Humanities Open*, 2(1), 100,008. <https://doi.org/10.1016/j.ssho.2019.100008>
- Rozgonjuk, D., Sindermann, C., Elhai, J. D., & Montag, C. (2020). Fear of Missing Out (FoMO) and social media's impact on daily-life and productivity at work: Do WhatsApp, Facebook, Instagram, and Snapchat Use Disorders mediate that association? *Addictive Behaviors*, 110, 106,487. <https://doi.org/10.1016/j.addbeh.2020.106487>
- Song, Q., Wang, Y., Chen, Y., Benitez, J. F., & Hu, J. (2019). Impact of the usage of social media in the workplace on team and employee performance. *Information & Management*, 56(8), 103,160. <https://doi.org/10.1016/j.im.2019.04.003>
- Sukamolson, S. (2007). Fundamentals of quantitative research. *Language Institute Chulalongkorn University*, 1–20.
- Sun, Y., Zhou, X., Jeyaraj, A., Shang, R., & Hu, F. (2019). The impact of enterprise social media platforms on knowledge sharing. *Journal of Enterprise Information Management*, 32(2), 233–250. <https://doi.org/10.1108/jeim-10-2018-0232>
- Theiri, S. & Hadoussa, S. (2023). Digitization effects on bank's financial performance: the case of an African country, *Competitiveness Review: An International Business Journal*, <https://doi.org/10.1108/CR-10-2022-0147>
- Tijunaitis, K., Jeske, D., & Shultz, K. S. (2019). Virtuality at work and social media use among dispersed workers. *Employee Relations*, 41(3), 358–373. <https://doi.org/10.1108/er-03-2018-0093>
- Todo, Y., Matous, P., & Inoue, H. (2016). The strength of long ties and the weakness of strong ties: Knowledge diffusion through supply chain networks. *Research Policy*, 45(9), 1890–1906. <https://doi.org/10.1016/j.respol.2016.06.008>
- Tsai, F., & Hsu, I. (2019). The effects of social capital on knowledge heterogeneity. *Management Decision*, 57(5), 1237–1253. <https://doi.org/10.1108/md-12-2016-0909>
- Tsai, W., & Ghoshal, S. (1998). Social Capital and Value Creation: The Role of Intrafirm Networks. *Academy of Management Journal*, 41(4), 464–476. <https://doi.org/10.2307/257085>
- Turban, E., Bolloju, N., & Liang, T. (2011). Enterprise Social Networking: Opportunities, Adoption, and Risk Mitigation. *Journal of Organizational Computing and Electronic Commerce*, 21(3), 202–220. <https://doi.org/10.1080/10919392.2011.590109>
- Van Den Hooff, B., & De Ridder, J. A. (2004). Knowledge sharing in context: the influence of organizational commitment, communication climate and CMC use on knowledge sharing. *Journal of Knowledge Management*, 8(6), 117–130. <https://doi.org/10.1108/13673270410567675>
- Wasko, & Faraj. (2005). Why Should I Share? Examining Social Capital and Knowledge Contribution in Electronic Networks of Practice. *Management Information Systems Quarterly*, 29(1), 35. <https://doi.org/10.2307/25148667>
- Williams, C. (2007). Research Methods. *Journal of Business & Economic Research*, 5, 65–72.
- Williams, J. T. B. (2019). The use of online social networking sites to nurture and cultivate bonding social capital: A systematic review of the literature from 1997 to 2018. *New Media & Society*, 21(11–12), 2710–2729. <https://doi.org/10.1177/1461444819858749>
- Xu, W. W., Sang, Y., Blasiola, S., & Park, H. W. (2014). Predicting Opinion Leaders in Twitter Activism Networks. *American Behavioral Scientist*, 58(10), 1278–1293. <https://doi.org/10.1177/0002764214527091>
- Yen, P., Sousa, K. H., & Bakken, S. (2014). Examining construct and predictive validity of the Health-IT Usability Evaluation Scale: confirmatory factor analysis and structural equation modeling results. *Journal of the American Medical Informatics Association*, 21(e2), e241–e248. <https://doi.org/10.1136/amiajnl-2013-001811>
- Yen, Y., Chen, M., & Su, C. (2020). Social capital affects job performance through social media. *Industrial Management and Data Systems*, 120(5), 903–922. <https://doi.org/10.1108/imds-09-2019-0473>
- Zaki, M. H. (2019). Digital transformation: harnessing digital technologies for the next generation of services. *Journal of Services Marketing*, 33(4), 429–435. <https://doi.org/10.1108/jsm-01-2019-0034>

APPENDIX 1

Questionnaire

Constructs	Items		Adapted from
Work related SM use	SMUW1	I use personal SM to tell others about the work that I do.	Van Zoonen <i>et al.</i> (2016)
	SMUW2	I use personal SM to maintain professional relationships.	
	SMUW3	I publish information about my profession on SM.	
	SMUW4	I stay up to date with co-workers' and professional relations activities using personal SM.	
	SMUW5	I share my organization's accomplishments on my personal SM.	
	SMUW6	I use my personal SM to share work-related information.	
Social interaction ties	SOINTER1	I maintain close social relationships with people through SM.	Chiu <i>et al.</i> (2006)
	SOINTER2	I think that I spend a lot of time interacting with other people through SM.	
	SOINTER3	I personally know some of the people who actively use SM.	
	SOINTER4	I think that I frequently communicate with people through SM.	
Identification	IDENT1	I feel a sense of belonging towards the virtual community created by SM.	Chiu <i>et al.</i> (2006)
	IDENT2	I have the feeling of togetherness or closeness in the virtual community created by SM.	
	IDENT3	I have a strong positive feeling toward the virtual community created by SM.	
	IDENT4	I am proud to be a member of the virtual community created by SM.	
Trust	TRUST1	I assumed that members in the virtual community created by SM would always look out for my interests.	Levin <i>et al.</i> (2004)
	TRUST2	I assumed that members in the virtual community created by SM would go out of their ways to make sure I was not damaged or harmed.	
	TRUST3	I felt like members in the virtual community created by SM cared what happened to me.	
	TRUST4	I believed that members in the virtual community created by SM approached their jobs with professionalism and dedication.	
	TRUST5	Given members in the virtual community created by SM track record, I saw no reason to doubt their competence and preparation	
Norms of reciprocity	NRECIP1	I believe that it is fair and obligatory to help others when I engage in SM activities because I know that other people will help me some day.	Chen and Hung, (2010); Wasko and Faraj (2005)
	NRECIP2	I believe that other people will help me when I need help if I share knowledge with others through SM.	
	NRECIP3	I believe that other people will answer my questions regarding specific information and knowledge in the future if I share knowledge with others through SM.	
	NRECIP4	I think that people who are involved with SM develop reciprocal beliefs.	
Shared vision	SHAV1	Members in the virtual community share the vision of helping others solve their professional problems.	Chiu <i>et al.</i> (2006)
	SHAV2	Members in the virtual community share the same goal of learning from each other.	
	SHAV3	Members in the virtual community share the same value that helping others is pleasant.	
Knowledge donating	KDON1	When I've learned something new, I tell my colleagues in my department about it.	Van Den Hooff <i>et al.</i> (2004)
	KDON2	When they've learned something new, colleagues within my department tell me about it.	
	KDON3	Knowledge sharing with my colleagues within my department is considered a normal thing.	
Knowledge collecting	KCOLL1	I share the information I have with colleagues within my department when they ask me to.	Van Den Hooff <i>et al.</i> (2004)
	KCOLL2	I share my skills with colleagues within my department when they ask me to.	
	KCOLL3	Colleagues within my department tell me what they know, when I ask them about it.	
	KCOLL4	Colleagues within my department tell me what their skills are, when I ask them about it.	