Factors That Influence Employees' Intention to Use Enterprise Social Media as Knowledge Sharing Media

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***Abstract*—Along with the widespread use of Enterprise Social Media (ESM) by various large companies in Indonesia, this research is conducted to discover what the factors that drive employees' intention to use ESM as knowledge sharing media are, and what factor is the most dominant in driving employees' intention. This research is a quantitative research which uses Innovation Diffusion Technology (IDT) and Extended Technology Acceptance Model (TAM) as the research model. Data collection in this research is conducted by the survey method. The questionnaires are distributed to 374 respondents. Based on the data collected, data processing and hypothesis testing are carried out using Partial Least Square Structural Equation Modelling (PLS-SEM). The result of this study indicates that relative advantage, compatibility, and perceived ease of use have a significant influence on perceived usefulness and perceived enjoyment. Meanwhile, perceived usefulness and perceived enjoyment have a significant influence on employees' intention to use ESM. Furthermore, it is also found that the most dominant factor among those two variables is perceived enjoyment.**

***Index Terms*—Intention to Use, Enterprise Social Media, Knowledge Sharing Media**

I. Introduction

THE application of knowledge management and the practice of knowledge sharing are commonly carried out by many organizations these days. The advantage of knowledge sharing is in forming business strategies and increasing innovation and the positive effect in financial and operational performance [1–6]. Thus, the stakeholder decides to implement knowledge sharing within their organizations [7].

However, creating an effective knowledge sharing process in an organization is not easy [8, 9]. Many organizations eventually fail to implement knowledge sharing within their organizations. Both the technology and the social environment play an essential role in supporting the knowledge sharing process [10]. According to Ref. [11], there are several failure factors of knowledge sharing. First, it is the lack of employees' time to share knowledge. Second, it can be a lack of social networks, so it is difficult for employees to find the right person who has the knowledge. Third, it is a different location and time zones. Last, it is the technology that is difficult to operate.

On the other side, the presence of social media is very closely with people's daily lives. From the result of a survey conducted by Social Media Today, on average, people spent two hours each day surfing in social media [12]. Other than being easy to use, it is very popular because it can meet the personal and social needs of people [13]. Therefore, it is not surprising that the growth of social media users continues growing [14]. There are some of the benefits of social media. For example, it can be building social interaction, exchanging information, maintaining communication with relatives, building social relationships with new people [15, 16] and making social media favored by various groups, including the organization.

Since 2010, the organizations have begun to use social media as a tool for internal communication and knowledge sharing. It is called Enterprise Social Media (ESM) [17]. Many organizations receive the presence of this ESM very well. For example, the Workplace was released by Facebook in 2016. Since its launch, Facebook has claimed that more than 1000 companies use Workplace during the closed beta period [18, 19]. Currently, there are 30000 organizations joining [20].

Nevertheless, not all ESM applications are success-

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ful. Some experts argue that the lack of participation from employees makes the application of ESM in organizations effective [7, 21]. Reference [22] argued that the main factor for the success of a system lied in the involvement of users in using the system itself. This statement was also confirmed by Ref. [23]. They said that the acceptance of users to use technological innovation was a successful form of that technology.

Moreover, the research on the acceptance of ESM as knowledge sharing media is still rarely found, especially in Indonesia. Therefore, this research is conducted to analyze the acceptance of ESM as knowledge sharing media among Indonesian employees.

A. Knowledge Sharing in Organizations

Knowledge is a combination of experience, values, contextual information, and insight producing a framework for evaluating and combining new experiences and information [24]. Some studies by Refs. [25–27] argue that the beginning of knowledge originating from human thought is very contextual and dynamically created. It is formed from social interactions between individuals in the organization. According to Ref. [28], the knowledge is not only in documents or repositories, but it is also deeply embedded through the action.

Furthermore, knowledge is divided into two types: explicit and tacit [29]. Explicit knowledge is often easier to explain, codify, and store. Meanwhile, tacit knowledge refers to things that people knew and applied in action. However, it is difficult to spread to others and translate into written forms [29, 30]. According to Ref. [31], tacit knowledge can only be developed or disseminated through socialization and experience and involved through practical practice.

As one of the most valuables assets in organizations [30, 31], knowledge is often seen as an important role in the success of an organization. It can improve performance, create innovations, and provide competitive advantages for companies [24, 32, 33]. Therefore, it is not surprising as now many companies are implementing knowledge management and utilizing IT to facilitate all their employees to absorb and share knowledge easily [34, 35].

The development of knowledge in organizations is very fast and continuing. So, it encourages organizations to use IT as support for knowledge management [36]. Technology that can facilitate communication, collaboration, and content management, especially for knowledge capture, sharing, and dissemination are needed to support knowledge management in organizations [31]. As one of the most important activities in knowledge management [31], knowledge sharing is a tool that facilitates employees to exchange knowledge, contribute to the knowledge, create innovation, and provide competitive advantages for companies [6]. Along with the development of knowledge sharing media, the process of sharing knowledge is mapped into three generations. In the first generation, it is said that the process of sharing knowledge in organizations is done traditionally [24, 34]. All existing knowledge in the organization is documented in books or database repositories [37]. Then, it is codified to be easy to search [24]. This approach is considered inefficient and ineffective. Besides, much time is wasted in the documentation. The process of sharing knowledge does not have social interaction in it, so this approach is considered inefficient and ineffective [11].

According to Ref. [34], in the second generation, the process of sharing knowledge is a form that focuses more on the social component. In this approach, direct or face-to-face communication is applied. By implementing mentoring and coaching between seniors and juniors, it is expected to build good cooperation. Face-to-face meetings can also be done formally (training) or informal meetings such as brainstorming, joint lunch, or face-to-face meetings. However, in practice, it turns out that this approach still has limitations. This approach is unable to support the effective process of knowledge sharing. It becomes difficult for multinational companies to implement this approach. The widespread of employees in different locations and time zones becomes one of the inhibiting factors for this approach [11].

In the third generation, the process of sharing knowledge is done using social media. Along with the rapid growth of social media and the hope of building a character that is more bottom-up and has social interaction, social media is used to support the process of sharing knowledge in organizations. By involving social media location and time barriers of multinational organizations can be overcome [34].

In recent years, many researchers have researched the use of social media as knowledge sharing, or more commonly referred to as ESM. Among these studies, ESM has many advantages over the use of repositories [38]. Some other researchers also reveal that the use of ESM contributes positively to business performance [39, 40]. This is what triggers organizations to choose ESM as knowledge sharing media [39, 41]. The statements of several previous researchers also confirm this. They agree that in managing knowledge and sharing it, social interaction and technology support are the keys to successful knowledge sharing [10, 31, 42].

B. Enterprise Social Media

According to Ref. [43], ESM is a web-based platform. It allows the employees to: (1) communicate

messages with specific colleagues or broadcast the information to all employees within the organization; (2) find colleagues who can be a interlocutor; (3) post, edit, and sort the text or files; (4) and see all the messages, connections, conversations, or files that are posted or edited by anyone in the organization at anytime.

Based on the understanding of Ref. [41], ESM is not like general social media (Facebook, Twitter, and others). ESM is an integrated platform allowing users to post something related to their work. For example, it can be information about the progress report, organization goals, policies, procedures, and others. ESM can also be used to share expertise among the employees and gain access to learning from others [41]. It can be concluded that ESM is an integrated system that combines communication, collaboration, and document storage in a platform with limited usage [42]. It is summarized that the benefits of ESM can improve the organization's resources [41]. First, it enables the resources to collaborate between different business functions and accesses the company's knowledge or expertise stored. Second, it provides media for unlimited social interaction and communication between resources throughout the company. Third. It improves socialization among new employees. Fourth, it helps the new employees to adapt and adjust themselves.

C. The Use of Enterprise Social Media as Knowledge Sharing Media

Today's knowledge management has several challenges. Those are managing the content effectively, facilitating collaboration between individuals, connecting individuals, finding an expert, and helping the organization to learn to make decisions based on data, information, and knowledge. The knowledge must be complete, valid, and interpreted well [31]. These difficulties facing by the organization are the triggers why the researchers keep looking for the right media to share knowledge [29]. Among the various existing solutions for knowledge sharing [24, 34, 44], ESM attracts the attention of many researchers [23, 32, 41, 45].

ESM is a platform that allows employees to ask questions any time and anywhere and to anyone in the organization [7, 43]. The ease of the interaction is very helpful for multinational organizations in bringing their employees closer to each other in various locations [46]. The geographical and time zone problems facing by the organization, especially multinational organizations, can be solved. In addition, ESM can also store and distribute the knowledge to all employees within the organization in real-time [39]. This will certainly make it easier for employees to find an answer [45]. ESM also allows employees to extend their connection with all employees, including the experts in the organization [42, 46]. By building social interaction with all employees in the organization, employees will be easier and faster in finding experts who have specialities in the employees' problem [29].

Based on the advantages of ESM as knowledge sharing media mentioned previously, it is no wonder many organizations have implemented ESM since 2010 [17]. However, according to Ref. [47], although ESM has many advantages and is a suitable media for sharing knowledge, not all ESM implementations are successful. It depends on the user's intention to use. The results of previous studies support that one of the keys regarding the success of an information system lies in the user's intention to use it [22, 23].

II. Research Hypothesis

A. Relative Advantage

Many previous studies prove that relative advantage has a positive influence on perceived usefulness [23, 48, 49]. When the users find that the benefits of using a new system are relatively higher than the existing system, they will also find that the usefulness of the new system is higher than the existing one [50]. Moreover, the relative advantage has a positive influence on perceived enjoyment [51].

Several researchers have explained the relative advantage of ESM as knowledge sharing media. According to Ref. [38], ESM has many additional advantages compared to knowledge sharing repositories. ESM is more efficient, cheaper, more personal, and more cloud-based. So, it can be used wherever and whenever. Then, it encourages companies to prefer ESM than conventional knowledge sharing media. Effective knowledge sharing is a challenge for many organizations by considering that it is not easy to store knowledge in an accessible form, especially tacit knowledge. However, this difficulty can be facilitated by ESM. ESM can easily facilitate employees to store explicit and tacit knowledge. By providing a tagging feature, searching feature, and identification make it easier for someone to search the experts, and tacit knowledge easier to be found [29].

- H1= Relative advantage of ESM as knowledge sharing has a significant effect on perceived usefulness.
- H2= Relative advantage of ESM as knowledge sharing has a significant effect on perceived enjoyment.

B. Compatibility

According to Ref. [51], if innovation is suitable and has the same values or even better than its predeces-

sor, the users will surely find the usefulness of the innovation. Moreover, the compatibility of innovation also has a positive influence on perceived enjoyment. Reference [52] has proven it in their research about Convergence Adoption Model (CAM) in smart car services. The compatibility significantly has a positive influence on perceived usefulness and perceived enjoyment.

In the context of ESM, it has the potential to support knowledge sharing within the company [39]. With the similarity of features possessed by ESM as a media for sharing knowledge [53], it makes ESM widely used by organizations as knowledge sharing media [17]. Many previous studies also support that social media can be used as a media for knowledge sharing [24, 39, 41, 46].

- H3= Compatibility of ESM as knowledge sharing has a significant effect on perceived usefulness.
- H4= Compatibility of ESM as knowledge sharing has a significant effect on perceived enjoyment.

C. Perceived Ease of Use

The perceived ease of use in Technology Acceptance Model (TAM) is one of the variables having a positive effect on the intention to use a new system. Not only that, the perceived ease of use affects perceived usefulness [54]. Moreover, the convenience of users in using a system will make users more comfortable and satisfied. For example, the perceived ease of use of haptic enabling technology products has a positive influence on perceived usefulness and enjoyment [51].

The similarity of ESM with external social media (Facebook, Twitter, Google+, and others) [43] makes ESM easy to be used by many people. It is by considering the use of social media that is already commonly used by the public [12]. The perceived ease of use of ESM has a positive influence on perceived usefulness and perceived enjoyment [55]. Therefore, the researchers suspect that the similarity of ESM with other social media influences perceived usefulness and perceived enjoyment.

- H5= Perceived ease of use of ESM as knowledge sharing has a significant effect on perceived usefulness.
- H6= Perceived ease of use of ESM as knowledge sharing has a significant effect on perceived enjoyment.

D. Intention to Use

One of the keys to successful knowledge sharing in organizations is the active participation of all members of the organization [7]. In motivational theory, there are factors driving the users' intention to participate in using IT, namely extrinsic and intrinsic factors [55]. The extrinsic motivation factor is a motivation to achieve results because there is encouragement from the outside, such as to get material rewards or avoid punishment. Meanwhile, the intrinsic motivation factor is a motivation to achieve results that arise from within an individual, such as to satisfy themselves [55].

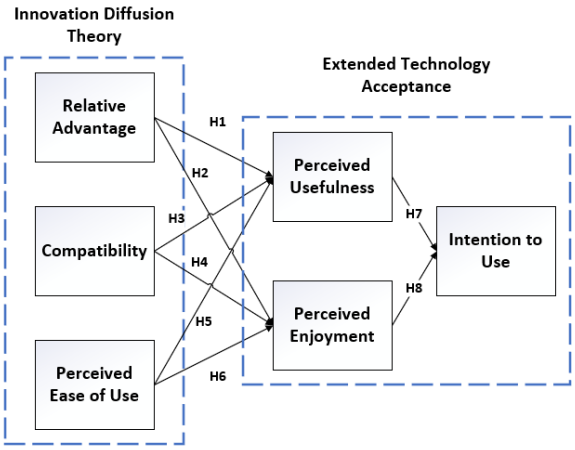

Fig. 1. Research model.

According to Ref. [55], extrinsic (perceived usefulness) and intrinsic factors (perceived enjoyment) affect one's intention to participate in using a new system in the workplace. ESM can enhance conversations in knowledge sharing [56] and reduce barriers to knowledge sharing within organizations [29, 46], so it has a positive influence on employee knowledge performance.

- H7= Perceived usefulness of ESM as knowledge sharing has a significant effect on the intention to use.
- H8= Perceived enjoyment of ESM as knowledge sharing has a significant effect on the intention to use.

Figure 1 illustrates the hypotheses and the proposed research model based on the description.

III. Research Method

A. Research Variables and Indicators

Based on the research model and hypotheses, the latent variables used in this research are relative advantages, compatibility, perceived ease of use, perceived usefulness, perceived enjoyment, and intention to use. Furthermore, to measure these latent variables, the manifest variable or indicator of each latent variable should be determined. Table I shows the manifest variables which are used to represent each latent variable.

TABLE I
THE VARIABLES AND INDICATORS.

Variables	Indicators
Relative Advantage	General usefulness Time-saving Benefits Advantage Value
Compatibility	Appropriate for learning style Compatible with my lifestyle Compatible with my current situation Compatible with the way I use
Perceived Ease of Use	Clear and easy to understand interface design Easy to use system Easy to operate the new system Easy to be skillful in the system
Perceived Usefulness	Make the job easier Enhance effectiveness Increase productivity Improve performance Find it useful
Perceived Enjoyment	More interesting Fun to use it Happy to use it Enjoy those aspects of my job that requires to use the system Enjoyable
Intention to Use	Plan to use it often Make use it more often Suggest to another person Continue to use Intent to use

TABLE II
AVE FOR EACH VARIABLE.

Variable	AVE	Result
Relative Advantage	0.713	Valid
Compatibility	0.742	Valid
Perceived Ease of Use	0.720	Valid
Perceived Usefulness	0.753	Valid
Perceived Enjoyment	0.743	Valid
Intention to Use	0.777	Valid

TABLE III
THE RELIABILITY TEST.

Variable	C.R	Cronbach's Alpha	Result
Relative Advantage	0.927	0.902	Reliable
Compatibility	0.934	0.912	Reliable
Perceived Ease of Use	0.926	0.901	Reliable
Perceived Usefulness	0.944	0.926	Reliable
Perceived Enjoyment	0.942	0.923	Reliable
Intention to Use	0.948	0.931	Reliable

B. Data Sampling

The population used in this research is all active employees who have used ESM (Yammer, Slack, and Workplace by Facebook). The recorded number is 4349. To determine the number of samples representing the population, the researchers use Slovin formula with a confidence level of 95% as follows $n = N/(1 + Ne^2)$, where N is the population size and e is the precision.

From the calculation, the number of samples to be used in this research is 366.31. It is rounded up to 367 respondents. Sampling is carried out using probability sampling techniques (random sampling).

C. Data Collecting

Data collection in this research is conducted by the survey method. The measurement instrument is a questionnaire. The distribution of questionnaires is done online with the help of Google Forms. Questionnaire measurements are carried out using a 1-5 Likert scale. The questionnaire can be seen in Table A1 in the Appendix.

IV. RESULTS AND DISCUSSION

In a survey conducted online for four months, 374 respondents complete the questionnaire in full. This number exceeds the expected number of samples. It is equal to 366 respondents with a confidence level of 95%. From all data collected, 112 respondents (30%) are very interested in technology. About 128 respondents (34%) mention that they are interested in technology, and 108 respondents (29%) answer neutral. Next, 23 respondents (6%) are not interested in technology, and the remaining 3 respondents (1%) are not very interested in technology.

Moreover, 190 respondents (51%) argue that the process of sharing knowledge within the company is very important. About 153 respondents (41%) mention that the process of sharing knowledge in the company is important. Then, 28 respondents (7%) answer neutral, and 3 respondents (1%) argues that the process of sharing knowledge within the company is very insignificant.

A. Convergent Validity

Based on the results of calculations carried out in SmartPLS 3, loading factors for each indicator can be seen in Table II. The variables can be declared valid if the loading factor value of each indicator is above 0.7, and the AVE value of the variable is above 0.5 [57]. It can be concluded that all indicators used in the research are valid or feasible to use.

B. Composite Reliability

Based on the results of calculations using SmartPLS 3, the composite reliability value, and Cronbach's alpha of all variables used in this research can be seen in Table III. From the data shown in Table III, the composite reliability values of all variables used in this research are above 0.7. Then, Cronbach's alpha

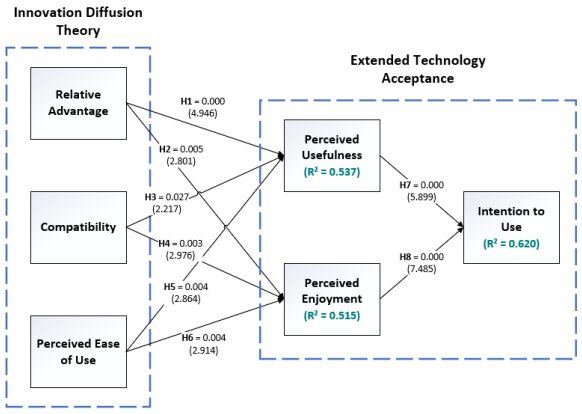

Fig. 2. The structure model with adjusted R^2.

values of all variables are above 0.7. In accordance with the criteria mentioned by Refs. [57, 58], the variables can be said to be reliable if they have a composite reliability value or Cronbach's alpha above 0.7. Thus, the variables used in the research are reliable or trustworthy.

C. Structure Model

Structure model testing can be done by looking at the value of the coefficient of determination (R2) and path coefficient [58]. The value of R and path coefficient obtained in this research can be seen in Fig. 2. The value of R2 obtained for the perceived usefulness variable is 0.541. This shows that the relative advantage, compatibility, and perceived ease of use variables can explain the perceived usefulness variable of 54.1%. Meanwhile, the remaining percentage (45.9%) is explained by other variables that are not included in this research model.

The value of R2 for perceived enjoyment variables is 0.518. This shows that the relative advantage, compatibility, and perceived ease of use variables can explain perceived enjoyment by 51.8%. The remaining percentage (48.2%) is explained by other variables that are not included in this research model. Next, the value of R2 for the intention to use is 0.622. It shows that variables perceived usefulness and perceived enjoyment can explain the intention to use about 62.2%. Meanwhile, 37.8% is explained by other variables that are not included in this research model.

D. Path Coefficient

Based on the results of the p-value and t-statistics of each hypothesis tested in Table IV, it can be concluded that all proposed hypotheses are acceptable. Using the Partial Least Square - Structural Equation Modeling (PLS-SEM) and SmartPLS 3, each hypothesis proposed is explained.

From the results of the data analysis, the relative advantage, compatibility, and perceived ease of use influence the perceived usefulness variables. This result is supported by previous researchers who also find that the relative advantage, compatibility, and perceived ease of use variables influence perceived usefulness [48, 50–52, 55]. According to Ref. [51], a person's perception of the perceived usefulness of a system will increase when a system has advantages over the previous system (relative advantage, compatibility, and perceived ease of use). That statement is similar to what Ref. [50] finds that there is an influence employee intention to use the E-learning system.

In addition, this research also finds that the relative advantage is the most dominant factor among other variables in influencing perceived usefulness. The t-statistic value of the relative advantage variable has a large number (4,946) compared to the compatibility variable (2,217) and perceived ease of use (2,864). Similarly, Ref. [50] found that the relative advantage had the greatest influence on perceived usefulness.

Based on the results of data analysis, the relative advantage, compatibility, and perceived ease of use influence perceived enjoyment variables. This is consistent with the by Refs. [51, 55]. References [51, 55] found that the relative advantage, compatibility, and perceived ease of use variables influenced perceived enjoyment variables. Next, Ref. [51] added that they found compatibility as the most dominant factor in influencing a person's enjoyment of the new system. This previous result is in line with the result of this research. Based on the results that have been processed, the compatibility (2.976) has the most dominant influence on perceived enjoyment compared to the relative advantage (2.801) and perceived ease of use (2.914).

The results of data analysis show that the perceived usefulness and perceived enjoyment influence the intention to use. This is consistent with the results of a research conducted by Ref. [55] regarding the role of intrinsic and extrinsic factors in the acceptance of users using social media in the workspace. In the case of social media as a hedonic IS, perceived usefulness and perceived enjoyment play a role in shaping employee intention to use a system. The more a system has enjoyment or playfulness aspects and is supported by maximum usefulness, the more there is an increase in employee acceptance in using the system [55]. Moreover, in the research on the acceptance of haptic enabling technology, perceived usefulness and perceived enjoyment influence one's intention to use a system [51].

In this research, it is also found that the perceived

TABLE IV
PATH COEFFICIENT OF SMARTPLS 3.

Hypotheses	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (IO/ST-DEV)	P-Values	Description
Relative advantage → Perceived usefulness	0.384	0.384	0.078	4.946	0.000	Supported
Relative advantage → Perceived enjoyment	0.236	0.234	0.084	2.801	0.005	Supported
Compatibility → Perceived usefulness	0.173	0.172	0.078	2.217	0.027	Supported
Compatibility → Perceived enjoyment	0.251	0.250	0.084	2.976	0.003	Supported
Perceived ease of use → Perceived usefulness	0.226	0.228	0.079	2.864	0.004	Supported
Perceived ease of use → Perceived enjoyment	0.282	0.287	0.097	2.914	0.004	Supported
Perceived usefulness → Intention to use	0.386	0.386	0.065	5.899	0.000	Supported
Perceived enjoyment → Intention to use	0.441	0.442	0.059	7.485	0.000	Supported

Note: Supported with P-Values $\leq$ 0.05, T-Statistics $\leq$ 1.96

enjoyment is the most dominant factor in influencing the intention to use compared to the perceived usefulness. This can be seen from the magnitude of the t-statistic value that is owned by perceived enjoyment, which is 7.485. The value of t-statistic from perceived usefulness is 5.899. This is in line with the result of Ref. [42]. ESM, as a hedonic technology, brings enjoyment, pleasure, and excitement to users when they share knowledge. Compared to perceived usefulness, perceived enjoyment is the most dominant factor in directing employees' intention to share knowledge [7, 42].

V. CONCLUSION

Based on the results of data processing and analysis, perceived usefulness and perceived enjoyment are the factors that influence employee intention to use ESM as a media for sharing knowledge. Meanwhile, the factors that influence perceived usefulness and perceived enjoyment variables are relative advantages, compatibility, and perceived ease of use. Moreover, the factors that dominate the most influence of employees' intention to use ESM as knowledge sharing media are perceived enjoyment. For future research, the researchers may look at the detail of the features widely and frequently used in ESM. They can evaluate to what extent social media may serve the purpose.

REFERENCES

[1] J. B. Arthur and C. L. Huntley, "Ramping up the organizational learning curve: Assessing the impact of deliberate learning on organizational performance under gainsharing," *Academy of Management Journal*, vol. 48, no. 6, pp. 1159–1170, 2005.

[2] S. Eltayeb and G. Kadoda, "The impact of knowledge management practices on business strategies and organizational performance," in *2017 Sudan Conference on Computer Science and Information Technology (SCCSIT)*. Elnuhood, Sudan: IEEE, Nov. 17–19, 2017, pp. 1–7.

[3] L. A. Ho, "What affects organizational performance? the linking of learning and knowledge management," *Industrial Management & Data Systems*, vol. 108, no. 9, pp. 1234–1254, 2008.

[4] I. C. Hsu, "Knowledge sharing practices as a facilitating factor for improving organizational performance through human capital: A preliminary test," *Expert Systems with Applications*, vol. 35, no. 3, pp. 1316–1326, 2008.

[5] C. C. Law and E. W. Ngai, "An empirical study of the effects of knowledge sharing and learning behaviors on firm performance," *Expert Systems with Applications*, vol. 34, no. 4, pp. 2342–2349, 2008.

[6] Z. Wang and N. Wang, "Knowledge sharing, innovation and firm performance," *Expert Systems with Applications*, vol. 39, no. 10, pp. 8899–8908, 2012.

[7] A. Ardichvili, V. Page, and T. Wentling, "Motivation and barriers to participation in virtual knowledge-sharing communities of practice," *Journal of Knowledge Management*, vol. 7, no. 1, pp. 64–77, 2003.

[8] P. Akhavan and A. Pezeshkan, "Knowledge management critical failure factors: A multi-case study," *VINE: The Journal of Information and Knowledge Management Systems*, vol. 44, no. 1, pp. 22–41, 2014.

[9] R. McDermott and C. O'dell, "Overcoming cultural barriers to sharing knowledge," *Journal of Knowledge Management*, vol. 5, no. 1, pp. 76–85, 2001.

[10] A. Cabrera and E. F. Cabrera, "Knowledge-sharing dilemmas," *Organization Studies*, vol. 23, no. 5, pp. 687–710, 2002.

[11] A. Riege, "Three-dozen knowledge-sharing barriers managers must consider," *Journal of Knowl-*

edge Management, vol. 9, no. 3, pp. 18–35, 2005.

[12] E. Asano. (2017) How much time do people spend on social media? [infographic]. [Online]. Available: https://bit.ly/2MZ7keV

[13] I. A. Zolkepli and Y. Kamarulzaman, "Social media adoption: The role of media needs and innovation characteristics," *Computers in Human Behavior*, vol. 43, pp. 189–209, 2015.

[14] J. Clement. (2019) Number of social network users worldwide from 2010 to 2021 (in billions). [Online]. Available: https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users

[15] S. A. Raza, W. Qazi, and A. Umer, "Facebook is a source of social capital building among university students: Evidence from a developing country," *Journal of Educational Computing Research*, vol. 55, no. 3, pp. 295–322, 2017.

[16] C. Steinfield, N. B. Ellison, and C. Lampe, "Social capital, self-esteem, and use of online social network sites: A longitudinal analysis," *Journal of Applied Developmental Psychology*, vol. 29, no. 6, pp. 434–445, 2008.

[17] B. Wehner, C. Ritter, and S. Leist, "Enterprise social networks: A literature review and research agenda," *Computer Networks*, vol. 114, pp. 125–142, 2017.

[18] Facebook Newsroom. (2016) Introducing workplace by Facebook. [Online]. Available: https://newsroom.fb.com/news/2016/10/introducing-workplace-by-facebook/

[19] O. Yusuf. (2016) Facebook resmikan Workplace, jejaring sosial untuk perusahaan. [Online]. Available: https://tekno.kompas.com/read/2016/10/11/07260517/facebook.resmikan.workplace.jejaring.sosial.untuk.perusahaan

[20] K. Chaykowski. (2017) Facebook's 'Workplace' spreads to 30,000 businesses, nonprofits. [Online]. Available: https://bit.ly/36riGjM

[21] E. Gonzalez, D. Leidner, C. Riemenschneider, and H. Koch, "The impact of internal social media usage on organizational socialization and commitment," in *Thirty Fourth International Conference on Information Systems*, Milano, Italy, Dec. 15–18, 2013, pp. 1–18.

[22] C. M. Jackson, S. Chow, and R. A. Leitch, "Toward an understanding of the behavioral intention to use an information system," *Decision Sciences*, vol. 28, no. 2, pp. 357–389, 1997.

[23] R. Rauniar, G. Rawski, J. Yang, and B. Johnson, "Technology Acceptance Model (TAM) and social media usage: An empirical study on facebook," *Journal of Enterprise Information Management*, vol. 27, no. 1, pp. 6–30, 2014.

[24] Z. Gaál, L. Szabó, N. Obermayer-Kovács, and A. Csepregi, "Exploring the role of social media in knowledge sharing," *Electronic Journal of Knowledge Management*, vol. 13, no. 3, pp. 185–197, 2015.

[25] J. S. Brown and P. Duguid, *The social life of information: Updated, with a new preface*. Boston, Massachusetts: Harvard Business Review Press, 2017.

[26] I. Nonaka, "A dynamic theory of organizational knowledge creation," *Organization Science*, vol. 5, no. 1, pp. 14–37, 1994.

[27] L. Razmerita, K. Kirchner, and T. Nabeth, "Social media in organizations: Leveraging personal and collective knowledge processes," *Journal of Organizational Computing and Electronic Commerce*, vol. 24, no. 1, pp. 74–93, 2014.

[28] A. Ismail Al-Alawi, N. Yousif Al-Marzooqi, and Y. Fraidoon Mohammed, "Organizational culture and knowledge sharing: Critical success factors," *Journal of Knowledge Management*, vol. 11, no. 2, pp. 22–42, 2007.

[29] M. S. Weber and W. Shi, *Enterprise social media*. John Wiley & Sons, Inc., 2017, pp. 1–9.

[30] R. Grover and T. M. Froese, "Knowledge management in construction using a sociobim platform: A case study of ayo smart home project," *Procedia Engineering*, vol. 145, pp. 1283–1290, 2016.

[31] K. Dalkir, *Knowledge management in theory and practice*. Routledge, 2013.

[32] C. Archer-Brown and J. Kietzmann, "Strategic knowledge management and enterprise social media," *Journal of Knowledge Management*, vol. 22, no. 6, pp. 1288–1309, 2018.

[33] W. C. Barley, J. W. Treem, and T. Kuhn, "Valuing multiple trajectories of knowledge: A critical review and agenda for knowledge management research," *Academy of Management Annals*, vol. 12, no. 1, pp. 278–317, 2018.

[34] B. Bellefroid, "The new way of knowledge sharing, a thesis research about the effects of NWOW on knowledge sharing." Master's thesis, Utrecht University, 2013.

[35] P. M. Leonardi, "The social media revolution: Sharing and learning in the age of leaky knowledge," *Information and Organization*, vol. 27, no. 1, pp. 47–59, 2017.

[36] I. Becerra-Fernandez and R. Sabherwal, *Knowledge management: Systems and processes*. New York: Routledge, 2015.

[37] C. M. Chiu, M. H. Hsu, and E. T. Wang, "Under-

standing knowledge sharing in virtual communities: An integration of social capital and social cognitive theories," *Decision Support Systems*, vol. 42, no. 3, pp. 1872–1888, 2006.

[38] G. Von Krogh, "How does social software change knowledge management? Toward a strategic research agenda," *The Journal of Strategic Information Systems*, vol. 21, no. 2, pp. 154–164, 2012.

[39] N. B. Ellison, J. L. Gibbs, and M. S. Weber, "The use of enterprise social network sites for knowledge sharing in distributed organizations: The role of organizational affordances," *American Behavioral Scientist*, vol. 59, no. 1, pp. 103–123, 2015.

[40] T. Mettler and R. Winter, "Are business users social? A design experiment exploring information sharing in enterprise social systems," *Journal of Information Technology*, vol. 31, no. 2, pp. 101–114, 2016.

[41] M. Moqbel and F. F.-H. Nah, "Enterprise social media use and impact on performance: The role of workplace integration and positive emotions," *AIS Transactions on Human-Computer Interaction*, vol. 9, no. 4, pp. 261–280, 2017.

[42] M. G. Aboelmaged, "Knowledge sharing through Enterprise Social Network (ESN) systems: Motivational drivers and their impact on employees' productivity," *Journal of Knowledge Management*, vol. 22, no. 2, pp. 362–383, 2018.

[43] P. M. Leonardi, M. Huysman, and C. Steinfield, "Enterprise social media: Definition, history, and prospects for the study of social technologies in organizations," *Journal of Computer-Mediated Communication*, vol. 19, no. 1, pp. 1–19, 2013.

[44] T. J. T. E and C. Chihui, "Perceived innovativeness, perceived convenience and TAM: Effects on mobile knowledge management," in *2009 Third International Conference on Multimedia and Ubiquitous Engineering*. Qingdao, China: IEEE, June 4–6, 2009, pp. 413–420.

[45] G. C. Kane, "Enterprise social media: Current capabilities and future possibilities." *MIS Quarterly Executive*, vol. 14, no. 1, pp. 1–16, 2015.

[46] P. M. Leonardi, "Social media, knowledge sharing, and innovation: Toward a theory of communication visibility," *Information Systems Research*, vol. 25, no. 4, pp. 796–816, 2014.

[47] M. Kugler, S. Smolnik, and P. Raeth, "Why don't you use it? Assessing the determinants of enterprise social software usage: A conceptual model integrating innovation diffusion and social capital theories," in *Thirty Third International Conference on Information Systems*, Orlando, Florida, USA, Dec. 16–19, 2012, pp. 1–14.

[48] T. Ramayah and M. C. Lo, "Impact of shared beliefs on "perceived usefulness" and "ease of use" in the implementation of an enterprise resource planning system," *Management Research News*, vol. 30, no. 6, pp. 420–431, 2007.

[49] S. L. Shivers-Blackwell and A. C. Charles, "Ready, set, go: Examining student readiness to use ERP technology," *Journal of Management Development*, vol. 25, no. 8, pp. 795–805, 2006.

[50] Y. H. Lee, Y. C. Hsieh, and C. N. Hsu, "Adding innovation diffusion theory to the technology acceptance model: Supporting employees' intentions to use e-learning systems," *Journal of Educational Technology & Society*, vol. 14, no. 4, pp. 124–137, 2011.

[51] J. Oh and S. J. Yoon, "Validation of Haptic Enabling Technology Acceptance Model (HE-TAM): Integration of IDT and TAM," *Telematics and Informatics*, vol. 31, no. 4, pp. 585–596, 2014.

[52] S.-B. Yoon and E. Cho, "Convergence Adoption Model (CAM) in the context of a smart car service," *Computers in Human Behavior*, vol. 60, pp. 500–507, 2016.

[53] S. A. M. Shah, I. Khan, and S. Amjad, "The role of social media in developing an effective knowledge management process in professional service firms," *Mediterranean Journal of Social Sciences*, vol. 4, no. 14, pp. 775–782, 2013.

[54] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS Quarterly*, pp. 319–340, 1989.

[55] S. F. Wamba, M. Bhattacharya, L. Trinchera, and E. W. Ngai, "Role of intrinsic and extrinsic factors in user social media acceptance within workspace: Assessing unobserved heterogeneity," *International Journal of Information Management*, vol. 37, no. 2, pp. 1–13, 2017.

[56] A. Majchrzak, S. Faraj, G. C. Kane, and B. Azad, "The contradictory influence of social media affordances on online communal knowledge sharing," *Journal of Computer-Mediated Communication*, vol. 19, no. 1, pp. 38–55, 2013.

[57] J. F. Hair Jr, M. Sarstedt, L. Hopkins, and V. G. Kuppelwieser, "Partial Least Squares Structural Equation Modeling (PLS-SEM) an emerging tool in business research," *European Business Review*, vol. 26, no. 2, pp. 106–121, 2014.

[58] M. Sarstedt, C. M. Ringle, D. Smith, R. Reams, and J. F. Hair Jr, "Partial Least Squares Structural Equation Modeling (PLS-SEM): A useful tool for family business researchers," *Journal of Family*

Business Strategy, vol. 5, no. 1, pp. 105–115, 2014.

[59] G. C. Moore and I. Benbasat, "Development of an instrument to measure the perceptions of adopting an information technology innovation," *Information Systems Research*, vol. 2, no. 3, pp. 192–222, 1991.

[60] S. Amaro and P. Duarte, "An integrative model of consumers' intentions to purchase travel online," *Tourism Management*, vol. 46, pp. 64–79, 2015.

[61] S. C. Chang and F. C. Tung, "An empirical investigation of students' behavioural intentions to use the online learning course websites," *British Journal of Educational Technology*, vol. 39, no. 1, pp. 71–83, 2008.

[62] X. Wang, K. F. Yuen, Y. D. Wong, and C. C. Teo, "An innovation diffusion perspective of e-consumers' initial adoption of self-collection service via automated parcel station," *The International Journal of Logistics Management*, vol. 29, no. 1, pp. 237–260, 2018.

[63] W. W. Chin and A. Gopal, "Adoption intention in GSS: Relative importance of beliefs," *ACM SIGMIS Database: The DATABASE for Advances in Information Systems*, vol. 26, no. 2-3, pp. 42–64, 1995.

[64] I. F. Liu, M. C. Chen, Y. S. Sun, D. Wible, and C. H. Kuo, "Extending the TAM model to explore the factors that affect intention to use an online learning community," *Computers & Education*, vol. 54, no. 2, pp. 600–610, 2010.

[65] C. L. Hsu and J. C. C. Lin, "Acceptance of blog usage: The roles of technology acceptance, social influence and knowledge sharing motivation," *Information & Management*, vol. 45, no. 1, pp. 65–74, 2008.

[66] T. Teo and J. Noyes, "An assessment of the influence of perceived enjoyment and attitude on the intention to use technology among pre-service teachers: A Structural Equation Modeling approach," *Computers & Education*, vol. 57, no. 2, pp. 1645–1653, 2011.

[67] R. Buettner, "Analyzing the problem of employee internal social network site avoidance: Are users resistant due to their privacy concerns?" in *2015 48th Hawaii International Conference on System Sciences*. Kauai, HI, USA: IEEE, Jan. 5–8, 2015, pp. 1819–1828.

APPENDIX

The Appendix can be seen on page 89.

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TABLE A1
THE QUESTIONNAIRES IN THE RESEARCH

Relative Advantage - [59, 60]	
RA1	I often use ESM to obtain/ share information and knowledge.
RA2	Using ESM makes sharing knowledge/ information within the company easier and faster compared to other knowledge management systems.
RA3	Using ESM to share knowledge will make my interaction in learning with co-workers clear and understandable.
RA4	Using ESM makes it easier to find the right person who knows my problem than other knowledge management systems.
RA5	Using ESM is the best way to share knowledge/find information than other knowledge management systems.
Compatibility - [61–63]	
CO1	Using ESM is compatible with my learning style.
CO2	Using ESM is compatible with my style in finding information.
CO3	Using ESM is completely compatible with my lifestyle.
CO4	Using ESM will be compatible with my current situation.
CO5	Overall, ESM is compatible with the way I use to share knowledge.
Perceived Ease of Use - [63–65]	
PEOU1	I find that the user interface in ESM is clear and easy to understand.
PEOU2	I can find information related to my problem easily by using ESM.
PEOU3	It is easy for me to remember how to find information by using ESM.
PEOU4	It will be easy for me to become skillful at using ESM.
PEOU5	Overall, I find ESM is easy to use.
Perceived Usefulness [54, 64–67]	
PU1	ESM is a helpful tool in terms of getting the answer for an uncertain and difficult task when I do not know who can help me or whom I should ask.
PU2	Using ESM will enhance my effectiveness in sharing knowledge/finding information.
PU3	Using ESM enhances my effectiveness in knowledge sharing.
PU4	Using ESM to share knowledge will add value to my performance.
PU5	Overall, I find that ESM is useful in sharing knowledge.
Perceived Enjoyment	
PE1	Sharing knowledge is more interesting and enjoyable with ESM.
PE2	Using ESM to share knowledge is fun.
PE3	I feel happy using ESM to share knowledge.
PE4	I enjoy those aspects of my job that require me to share knowledge with ESM.
PE5	Overall, I find ESM as knowledge sharing media is an enjoyable tool.
Intention to Use	
IU1	I plan to use ESM to share my knowledge often.
IU2	I intend to gain information more often from ESM.
IU3	I will suggest using ESM to others, especially to new employees.
IU4	I continue sharing/ will share information/ knowledge through ESM.
IU5	Overall, I intend to use ESM as knowledge sharing media.