

## The Mediating Role of Knowledge Sharing on The Relationship between Social Networking, Reputation, Social Interaction and Work Efficiency in PT. Taspem (Persero)

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### Abstract

This study examines the mediating effect of knowledge sharing on work efficiency, which influenced by social networking, reputation, and social interactions. A survey questionnaire conducted among 320 respondents. The result of hypothesis testing was conducted by Smart PLS 3.0. The result shows that social networking and reputation were directly and significantly related to work efficiency. Meanwhile, social interactions were not directly significant related to work efficiency. The knowledge sharing was found to be directly and significantly related to work efficiency. Knowledge sharing mediates the relationship between social networking, reputation, social interactions, and work efficiency. The results of this study could foster organizations to be able to support the knowledge sharing process among employees in a conducive manner to improve work efficiency. Organizations can also encourage the effectiveness of knowledge sharing by giving awards to employees who have participated as contributors. This is intended to reduce the tendency to be reluctant to share knowledge among employees. Further research can be explored more deeply factor that influence work efficiency such as communication, time management, and work culture.

### Keywords

Knowledge Sharing; Reputation; Social Interaction; Social Networking; Work Efficiency

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### Introduction

An organization certainly has a desired purpose. The achievement of the goals that have been set is strongly influenced by efficiency. Soekartawi (2010) looks at the efficiency of two things, namely in terms of time where a job is called more efficient if the work results are based on the desired size benchmark to get something good and maximum, and in terms of performance, namely the results of work in quality and quantity achieved by an employee in

carrying out his duties in accordance with the responsibilities given. While work efficiency is the ratio of output to time invested in an event (Sickles & Zelenyuk, 2019). One of the things that affect efficiency is knowledge. In the workplace, knowledge exchange is necessary for enhancing employee performance (Hansen et al. 1999) and innovation (Obstfeld 2005). Employee's job performance is influenced by knowledge exchange, open communication, and visible work

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improvement in addition to individual talent (Davison et al. 2018; Leonardi 2015). The exchange and transfer of knowledge between members of the organization can be active or passive behavior. Such passive behavior is driven by the design of organizational systems. Nevertheless, interaction between organizational members ranks first among the precursors to personal knowledge sharing. Social interaction is type of informal interaction. The behavior of members of the organization can be changed by the existence of relationships with other members. The content of exchange on social interactions may be emotional, such as social support, or essential, such as information and knowledge (Chen et al., 2021).

Another factor that is said to affect the efficiency of each worker is motivation (Chantaplaboon, 2020). In other words, if a worker is motivated, they tend to work more efficient and productive. Motivation is the reason why individual actions occur (Ryan & Deci, 2000). From the point of view of an individual's level of effort and perseverance, motivation can increase a person's willingness to use effort and persevere to reach a goal (Lee et al., 2005). Martoyo (2000) defines work motivation is something that gives rise to encouragement or morale or encourages morale. The theory of work motivation has been utilized extensively to explain employee behavior (Siemsen et al., 2007). Previous research shows that social rewards can motivate employee organizational behavior (Katzell and Thompson, 1990; Siemsen et al., 2007). In this study, there are two distinct social rewards, namely the need for reputation (Wasko & Faraj 2005) and the goal to preserve and grow social networking (Florenthal, 2015; Krasnova et al., 2017). Those are significant job motivations in the setting of information sharing. Reputation and social networking are expected to encourage employees to share their knowledge and therefore affect work efficiency (Yang et al., 2019).

Gan and Li (2018) determine that knowledge sharing is not just a communication process but also a communicative ability, as well as the specific knowledge shared in the team, through both formal and informal interactions, sharing work-related experiences, professions, and backgrounds with other employees within the same department or between departments. Employees may be reluctant to share expertise in the real world of competitive workplaces because they worry about losing their distinctive value. (Brown & Duguid, 2001) and being replaced (Huber 2001). Employees are therefore more likely to save their knowledge internally and carefully use the content provided by others. (Hollingshead et al. 2002). Other research suggests that knowledge may lose its unique value when it helps everyone but themselves (Thorn & Connolly, 1987).

Prior research has demonstrated that rewards can encourage workers (Katzell & Thompson, 1990) to share information and boost productivity (Siemsen et al. 2007), for example work efficiency. Rewards are considered essential to encourage employees to participate in knowledge sharing (Bartol & Srivastava, 2002; Hau et al., 2013).

Wasko and Faraj (2005) argue that contributors may receive anything in exchange for sharing their knowledge, such as social rewards like respect, recognition, and prestige. People who frequently engage in pro-social behavior and actively aid others typically receive social rewards. (von Hippel & von Krogh, 2003). This argument demonstrates that staff members are more inclined to actively share knowledge when they receive social rewards for doing so.

However, rewards are not always effective (Olatokun & Nwafor, 2012), or may negatively affect knowledge sharing (Bock & Kim, 2002). With this gap, it is necessary to study the relationship between rewards and knowledge sharing.

Meanwhile, team members with stronger ties to other team members have more relational capital to acquire more knowledge. To maintain more relational capital, an individual will expend more resources, such as engaging with others or disseminating essential messages, resources, or expertise to others. People with more relational capital are more eager to share their knowledge with others in this situation (Chen et al., 2021)

Based on the previous research, we will examine the influence of social rewards as well as social interactions on work efficiency, with knowledge sharing mediation variables. The research will examine the mediating role of knowledge sharing on the relationship between social networking, reputation, social interaction, and work efficiency.

## Literature Review

### *Work Efficiency*

According to Mulyadi (2007), efficiency is often associated with the performance of an organization because efficiency reflects the comparison between output (output) and input (input). Efficiency is the ability to carry out tasks properly without wasting time, effort, or money. Efficiency is a word that is often found in work (Yulianto, 2022). Another understanding according to Mardiasmo (2009) efficiency is the result of a comparison between output and input, the higher the ratio of output to input, the higher the level of efficiency achieved. While the understanding of efficiency according to Susilo (2011) is a condition or circumstance, where the completion of a work is carried out correctly and with full ability possessed.

Work efficiency according to Sedarmayanti (2001) is the implementation of certain ways without reducing the goal is the easiest way to do it, the cheapest cost, the shortest time, the lightest the load, the shortest distance. Another understanding of The Liang Gie (2000) states that work efficiency is a basic principle of the best

comparison between a business and the results achieved by that work. From some of the descriptions above, it can be concluded that what is meant by work efficiency is a process of activities carried out to achieve a certain goal with the optimal results possible and with the smallest possible sacrifice.

### *Knowledge Sharing*

Pramono and Susanty (2015) define knowledge sharing as a collaborative activity carried out to improve knowledge and skills to achieve individual and organizational goals. Knowledge sharing is a social interaction that involves knowledge, experience, and skills between employees to improve their competencies (Pramono & Susanty, 2015). According to Triana et al. (2016) knowledge sharing is a systematic process in the delivery of messages between individuals and organizations through diverse media. Meanwhile, Hussein et al., (2016) define Knowledge sharing as a process of exchanging information about employees' skills and experiences to solve problems and develop new ideas, ultimately increasing competitive value. It's critical to comprehend the basic mechanisms that drive employee knowledge sharing on social media platforms as well as the causes of such activity. (Jin et al., 2015). That knowledge sticks in such a way that it is internalized in the individual and is considered an employee's personal asset (Bock et al., 2005).

Knowledge sharing is defined as a process by which explicit or implicit knowledge can flow between individuals or be utilized by groups, departments, or organizations (Alderei et al., 2022). Knowledge sharing is also described as a process by which knowledge is transferred and disseminated to individuals, groups, or organizations (Zakariya & Bashir, 2020). On the other hand, knowledge sharing is the impact of employees exerting their horizontal influence on one another (Haider et al., 2021).

### **Reputation**

Reputation refers to expectations to improve personal image and status in one's profession among colleagues (J. Hamari et al. 2015). According to Helm et al., (2011), reputation is a perception that describes the overall behavior of an organization and its relationship with stakeholders that is formed over time. Reputation is the most important thing the company maintains in stabilizing the company's current condition (Hele & Maela, 2018; Yanuar, 2017).

Interpersonal interactions can lead to reputation, which is the reputation of an employee (Huang et al. 2011). A good reputation is an important intangible asset for employees to have in their workplace (Jones et al., 1997; Wasko & Faraj, 2005). Gaining the approval, trust, dignity, and respect of coworkers and superiors helps employees establish their reputations (Wasko & Faraj 2005). In a survey of reputable businesses, Stuebs and Sun (2010) found that a strong reputation can increase productivity and work efficiency. Therefore, a positive reputation can motivate staff members to contribute to the team by sharing what they find useful, as doing so will increase the visibility of their positions and talents and urge others to recognize their contributions.

### **Social Networking**

The depth and breadth of social connections inside an organization are referred to as

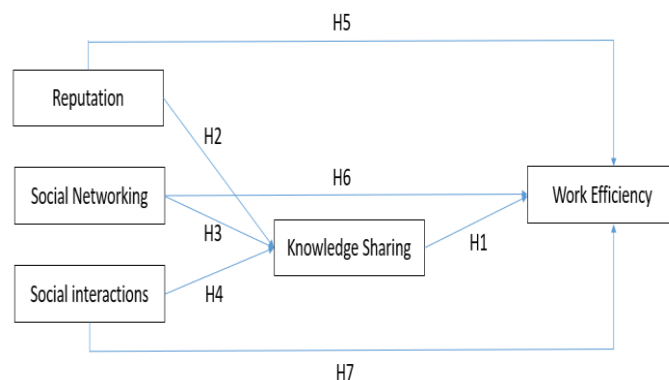
"social networking," and this identifies the structural position of persons within a network (Wasko & Faraj, 2005). There are several elements contained in social networking including interpersonal trust, mutual obligations, and harmony (Davison et al., 2018). Individuals have a deep-seated craving for social networking (Ryan & Deci, 2000). Employees who like having a larger social network have more social media sharing intentions (Toubia & Stephen, 2013). Additionally, larger social networks can encourage knowledge sharing on social media and expand the audience for the message or information being addressed.

### **Social Interaction**

According to Wang and Long (2018), social interaction is the interplay of people and identity processes within organizations and groups to produce work experiences like cohesion and leadership style. New employees in a company will pick up job skills and form bonds with other employees. According to Taylor and Glen (2019), social interactions are defined as social behavior that occurs when people connect with one another in a direct or indirect way to communicate, relate, and get along. Relationships and communication can be based on interaction, and interpersonal interactions can both deepen and weaken social bonds.

## **Research Model and Hypotheses**

### **Theoretical Framework**



### **Knowledge Sharing and Work Efficiency**

People who contribute knowledge may become more responsible and interested in a particular task domain because of helping others (Zhu et al. 2014). Participants in knowledge sharing must be able to seek for, comprehend, and share knowledge (Leonardi & Meyer, 2015). As a result, high-performing personnel will continue to enhance their metaknowledge and skills, sometimes known as "learning how to learn" (Zhu et al. 2014). Employees may occasionally be able to boost their output and efficiency at work thanks to this skill.

Research by Nguyen et al., (2019); Nham et al., (2020) shows that knowledge sharing is very influential in reducing production costs, generating solutions, and increasing productivity which has an impact on a company's competitive advantage. Based on those arguments, this study proposes the first hypothesis, namely:

*H1: Knowledge sharing is positively related to work efficiency.*

### **Reputation and Knowledge Sharing**

Reputation, whether positive or negative, can be defined as the initial opinions and judgments of each person who comes as feedback for a particular task that an individual is trying or continuing to accomplish (Yan et al. 2016). Sometimes the intentions and reputation of knowledge sharing participants are reduced when the content shared is unreliable, does not have a significant impact, or when participants do not receive rewards from shared content. However, a person's reputation can improve by giving extraordinary recognition to the individual or improving learning performance (Safa & Von Solms, 2016). This idea is supported by the study Yan et al. (2016), which emphasizes that the reputation of online health care professionals will increase along with sharing individual knowledge of behavior and learning performance. Thus, the next hypothesis proposed in this study:

*H2: Reputation is positively related to knowledge sharing.*

### **Social Networking and Knowledge Sharing**

Employees can anticipate growing or extending their own social networking in addition to reputation. Previous studies have demonstrated that individual behavior can be predicted by social networking (i.e., knowledge sharing) (Burt, 2009). Vyas, P.G. and Pandey, S. (2021), stated the results of their research that the use of social networking, bridging social capital and job satisfaction has a positive effect on knowledge sharing.

People typically like engaging in fantastic social networking and feeling like they have influence over other people in their network (Toubia & Stephen, 2013). The more social networking there is, the more messages network members can receive. This will encourage people to share more to develop and broaden their social networking. According to Siemsen et al., (2007); Wasko and Faraj (2005) staff members who are heavily involved in social networking are more likely to have a feeling of teamwork and compliance with the team's objectives. Based on the description above, the next hypothesis that can be taken is:

*H3: Social networking is positively related to knowledge sharing.*

### **Social Interaction and Knowledge Sharing**

Rasmussen (2018) considers that trust between the two parties will affect cooperation both inside and outside the company, which includes knowledge sharing. As trust between the two parties grows, so will the transmission of knowledge and experience. According to Mubarak and Noor (2018), dedication plays a role in knowledge exchange between people and organizations. A person who engages in greater social interaction is more likely to trust that the management of the

organization and their coworkers will affect their readiness to share knowledge.

The knowledge sharing process is divided into contributions and collections of knowledge (Abdellaoui et al., 2019). A person who engages in more social contacts will have greater confidence in their coworkers. High social contacts have been shown to have a favorable impact on knowledge sharing. Wojcik, Jeziorska-Biel, and Czapiewski (2019), discovered a good correlation between interaction and knowledge contribution. Thus, the next hypothesis can be proposed, namely:

*H4: Social interaction is positively related to knowledge sharing.*

#### **Reputation and Work Efficiency**

In the study of the connection between reputation and performance, Landon and Smith (1997) found that there is generally a positive correlation between reputation and a number of performance-related variables. Reputation can result in cost savings and is linked to cost effectiveness (Stuebs & Sun, 2009). According to additional studies, a positive reputation is a business asset that can help recruit and retain exceptional individuals. Additionally, these workers will put in more effort for businesses with a better reputation (Roberts & Dowling, 2002). Based on this, the next proposed hypothesis is:

*H5: Reputation positively related to work efficiency*

#### **Social Networking and Work Efficiency**

Social networks represent the social capital of individuals, which is the collective value of all social networks. This value arises because networking allows completing important missions and improving work efficiency and productivity (Hollenbeck & Jamieson, 2015). Therefore, a perfect social network can positively affect the efficiency and productivity of work. The results of the Yuan et al. (2018) study stated that strong social support from social capital and networks has a positive influence on the

efficiency and productivity of construction work. Based on this, the hypotheses that can be proposed are:

*H6: Social networking is positively related to work efficiency.*

#### **Social Interaction and Work Efficiency**

Problem solving and information sharing are based on member interaction and communication (Crick, J., 2014). While the study's findings by Cooke et al. (2013) indicated that productive and efficient team interaction tactics and procedures could boost output. The study of Wijaya (2016) shows that there is a positive relationship between social interaction with work productivity. Thus, the next hypothesis can be proposed, namely:

*H7: Social interaction is positively related to work efficiency.*

#### **Methodology**

##### **Research Design**

This research is quantitative research, which uses an approach that emphasizes analysis on numerical data processed by statistical methods (Azwar, 2010), which aims to explain correlations between variables through the formulation of hypotheses. Variables in this study consist of independent variables, namely reputation, social networking and social interaction, dependent variables, namely work efficiency, and mediation variables, namely knowledge sharing. To find out the relationship between these variables, research is conducted through surveys with research units in the form of individuals. As stated by Lawrence (2003) that survey research is quantitative research.

Research is minimal interference, where researchers do not interact or change the respondent's condition during data collection, and capture actual environmental conditions (field condition, non-contrived study setting) at that time (Cooper & Schindler, 2014). Data collection is carried out cross-sectional,

where data is collected at a certain period in answering research questions during the observation period (Sekaran & Bougie, 2016).

### **Sampling Method & Sample Size**

The target population in this study is employees of PT Taspen (Persero), both head office and branch offices. Arikunto (2013) argues that to obtain better research results, a good sample is needed, which really reflects the population. Meanwhile, according to Sugiyono (2008), the sample represents a representation of the population's size and makeup. So, it can be concluded that the sample is a part of the population that is considered to represent the population because it has the same characteristics or characteristics. Random sampling, specifically simple random sampling, was the sample method employed in this investigation. According to Kerlinger (2006), simple random sampling is a technique for selecting individuals in a population or universe in a certain way so that each person has an equal probability of being chosen or elected.

Sampling frames are used at headquarters and branch offices for the positions of managing staff and officials. While the method used to determine the number of samples is using the formula Slovin (Sevilla et.al, 2007), taking into consideration the 1,946 study populations that are known for definite and the 5% margin of error, the lowest number of samples is as few as 318 respondents.

### **Method of Data Collection and the Technique of Data Collection**

Data sources and information in this study were collected from primary sources through surveys to respondents. Questionnaire is created using Google Form and sent to all research samples through the company's internal application, with a filling time of 7 days. The questionnaire was created using a Likert scale of the

number 1 which indicates strongly disagree and the number 5 strongly agrees. The Likert scale is used to assess a person's or a group of people's attitudes, views, and perceptions of social issues (Djaali, 2008). For questionnaire items, knowledge sharing adopted from Choi et al. (2010), work efficiency from Janssen and Van Yperen (2004), reputation from Kankanhalli et al. (2005) also Wasko and Faraj (2005). While the questionnaire item for social networking adopted from Chiu et al. (2006), and social interaction variables adopts from Picciano (2002) research.

### **Data Analysis**

Data processing techniques using Smart PLS. In order to assess survey data and test put forth hypotheses and models, partial least squares (PLS) are utilized (Jöreskog & Wold, 1982). Due to its greater robustness or immunity, PLS is an excellent substitute for main component regressions and multiple regression analysis methods. Robust indicates that when new samples are gathered from the entire population, the model parameters will not change significantly (Geladi & Kowalski, 1986). PLS is a prediction method that can handle a large number of independent variables, even when there is multicollinearity between these variables (Ramzan & Khan, 2010). Analysis on PLS is carried out with three stages, namely outer model analysis, inner model, and hypothesis testing (Hussein, 2015). Utilizing the convergent validity, discriminant validity, and unidimensionality of the outer model analysis for validity and reliability testing. Three metrics, alpha Cronbach's (CA), Composite Reliability (CR), and Average Variance Extracted are used to evaluate convergent validity (AVE).

### **Measurement of Research Variable**

To clarify the parameters of each variable present in this study, it can be seen in the table below:

**Table 1. Construct Definition**

Construct	Definition
<b>Work Efficiency (WE)</b>	Perception of individual performance on work-related tasks in quantity and quality level (Janssen & Van Yperen 2004)
<b>Knowledge Sharing (KS)</b>	The extent to which a person engages in knowledge sharing activities in chat groups for work purposes (Bock et al. 2005).
<b>Reputation (R)</b>	Perceived of the importance of the image or status of individuals within an organization (Wasko & Faraj 2005).
<b>Social Networking (SN)</b>	Perceived importance of social relations with others in an organization (Chiu et al. 2006).
<b>Social Interaction (SI)</b>	Perceived importance of communication/interaction with others (Kim, 2018).

**Table 2. Operationalization of Variables**

No	Construct	Item Code & Wording	References
1	Knowledge Sharing - VARIABLE 1	KS1: I give suggestions and ideas to members who have work-related problems	Choi et al. (2010)
		KS2: I share work progress and official documents with colleagues	
		KS3: I share my experience or knowledge from work with other coworkers	
2	Work Efficiency - VARIABLE 2	WE1: The knowledge sharing helps me save time or effort spending on my tasks	Janssen and Van Yperen (2004)
		WE2: Updating information/knowledge provided by co-workers helps me avoid job replication.	
		WE3: I complete my tasks quickly through the help of information/knowledge from coworkers	
3	Reputation - VARIABLE 3	R1: It is important to earn respect from others by participating in knowledge sharing	Kankanhalli et al. (2005) and Wasko and Faraj (2005)
		R2: I value my status in knowledge sharing for work	
		R3: it is important to improve reputation by knowledge sharing for work	
		R4: Members who participate in knowledge sharing for work want to have more prestige than those who do not	
4	Social Networking - VARIABLE 4	SN1: It is important to maintain close social relationships with co-workers by knowledge sharing	Chiu et.al (2006)
		SN2: It is important to bond with co-workers via knowledge sharing	
		SN3: It is important to contact co-workers via knowledge sharing	
		SN4: I value the personal contact with co-workers via knowledge sharing	
5	Social Interaction - VARIABLE 5	SI1: Knowledge sharing are an excellent means for social interaction.	Picciano (2002)
		SI2: The amount of interactions with the knowledge sharing material provider is appropriate	
		SI3: The quality of interaction with the material provider in knowledge sharing is appropriate	
		SI4: I felt comfortable interacting with other students in the knowledge sharing	
		SI5: The amount of interaction with others in the knowledge sharing was appropriate	
		SI6: The quality of interaction with others in the knowledge sharing was appropriate	



## Results

The respondents collected were 327 people. After we verified, there were 7 respondents who had data outliers, so that the

respondents who could be used for this study amounted to 320 people, with the following profile.

**Table 3. Respondent Demographics**

Demographic Variables		Count	%
Work Unit	Head Office	120	36.7
	Branch Office	200	61.2
Gender	Male	188	57.5
	Female	132	40.4
Age	<= 30 years	152	46.5
	31 to 40 years	97	29.7
	41 to 50 years	12	3.7
	> 50 years	59	18.0
Position	Staff	185	56.6
	Official	135	41.3
Education	High School	37	11.3
	Diploma	45	13.8
	Bachelor	210	64.2
	Magister	28	8.6

The demographic of respondents showed that the percentage of branch offices was higher than the head office, with 200 branch office respondents (61.2%) and 120 head office respondents (36.7%). As for the gender demographic, the percentage of men who participated in the survey was higher than that of women, with 188 male respondents (57.5%) and 132 female respondents (40.4%). Most respondents aged 30 years and under with a total of 152 people (46.5%), followed by 97 respondents (29.7%) aged 31-40 years, then 59 respondents (18.0%) with the age of over 50 years and 12 respondents with an age range of 41-50 years (3.7%). Based on the position, most of the respondents were executive staff with 185 respondents (56.6%), while the remaining 135 respondents (41.3%) were officials. From the educational demographic, respondents with the last undergraduate education background made up the majority in this

study with a total of 210 respondents (64.2%), followed by 45 respondents (13.8%) with diploma education, then 37 respondents (11.3%) with high school education / equivalent and 28 respondents (8.6%) with a Magister education background.

### Validity and Realibility

To establish convergent validity according to Henseler & Sarstedt (2015), here are the things that must be met, namely the loading factor for each indicator must be significant with a value greater than 0.60; the average extracted variance (AVE) for each loading factor should be greater than 0.50; the minimum value of Cronbach Alpha is 0.7; and the composite reliability for each loading factor must be greater than 0.60. Table 4 shows that all items of each variable meet convergent validity and reliability.

**Table 4. Convergent Validity and Reliability**

Variable	Item	Outer Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Knowledge Sharing	KS1	0.839	0.750	0.858	0.668
	KS2	0.772			
	KS3	0.838			
Reputation	R2	0.810	0.711	0.839	0.634
	R3	0.821			
	R4	0.757			
Social Interactions	SI1	0.767	0.906	0.926	0.677
	SI2	0.810			
	SI3	0.819			
	SI4	0.811			
	SI5	0.858			
	SI6	0.869			
Social Networking	SN1	0.867	0.890	0.924	0.753
	SN2	0.885			
	SN3	0.901			
	SN4	0.816			
Work Efficiency	WE1	0.826	0.783	0.874	0.698
	WE2	0.860			
	WE3	0.820			

The validity of the discriminant is assessed using the Fornell-Larcker criteria and the cross-loading test. The Fornell-Larcker criterion postulates that the construction of the AVE should be higher than all its square correlations (Henseler, 2015). Table 5 shows that the model has proven discriminant validity. The Knowledge Sharing variable AVE (0.817) is higher than squared correlations (0.549, 0.571, 0.590, and 0.684). Variable Reputation AVE

(0.796) is higher than squared correlations (0.593, 0.643, 0.638 and 0.564). The Variable Social Interaction AVE (0.823) is higher than squared correlations (0.571, 0.643, 0.747 and 0.527). The Social Networking variable AVE (0.868) is higher than squared correlations (0.590, 0.638, 0.747 and 0.595). Finally, the Work Efficiency AVE variable (0.836) is higher than squared correlations (0.684, 0.564, 0.527 and 0.595).

**Table 5. Discriminant Validity Fornell-Larcker Criterion**

	Knowledge Sharing	Reputation	Social Interaction	Social Networking	Work Efficiency
Knowledge Sharing	<b>0.817</b>				
Reputation	0.593	<b>0.796</b>			
Social Interactions	0.571	0.643	<b>0.823</b>		
Social Networking	0.590	0.638	0.747	<b>0.868</b>	
Work Efficiency	0.684	0.564	0.527	0.595	<b>0.836</b>

Next is the determination coefficient test. The determination coefficient test is performed to find out how much endogenous variables are simultaneously able to explain exogenous variables. The higher the R-Square value means that the better the prediction model of the proposed

research model. The coefficient of determination test ( $R^2$ ) is performed to determine and predict how much or important the contribution of influence exerted by independent variables together to dependent variables. The coefficient of determination is between 0 and 1. If the value is close to 1, it means that the

independent variable provides almost all the information needed to predict the dependent variable. However, if the value of R-Square is getting smaller, it means that the ability of independent variables to explain dependent variables is quite limited (Ghozali, 2016).

According to Chin (1998), the *R-Square* value is categorized as strong if it is more than 0.67, moderate if it is more than 0.33

but lower than 0.67, and weak if it is more than 0.19 but lower than 0.33.

Table 6 also shows that the determination coefficient (R-Square) value in the endogenous variable Work Efficiency is 0.535, indicating that all independent variables simultaneously have an influence of 53.5% on Work Efficiency (dependent variables). The remaining 46.5% was influenced by other variables not tested in the study.

**Table 6. Results of R<sup>2</sup> of Endogenous Variables**

Latent Constructs	R-Square Value	Evaluation Criteria by Chin( 1998)
Knowledge Sharing	0.439	Moderate
Work Efficiency	0.535	Moderate

### Hypothesis Testing

We use nonparametric bootstrapping techniques to perform hypothesis testing. Table 7 presents the results of the direct effects hypothesized in this study. The results of the PLS-SEM bootstrap output confirm that there is a significant positive relationship between Knowledge Sharing and Work Efficiency Using ( $\beta = 0.464$ ,  $t = 8,941$ ,  $p < 0.05$ ), and between Reputation and Knowledge Sharing ( $\beta = 0.316$ ,  $t = 4,423$ ,  $p < 0.05$ ). This result leads us to accept the H1 and H2 hypotheses. There is also a significant positive relationship between Social Networking and Knowledge Sharing

( $\beta = 0.256$ ,  $t = 3,140$ ,  $p < 0.05$ ), and between Social Interaction and Knowledge Sharing ( $\beta = 0.177$ ,  $t = 2,677$ ,  $p < 0.05$ ). This result leads us to accept H3 and H4. Then, there is also a significant positive relationship between Reputation and Work Efficiency ( $\beta = 0.142$ ,  $t = 1,799$ ,  $p < 0.036$ ), and between Social Networking and Work Efficiency ( $\beta = 0.235$ ,  $t = 3,569$ ,  $p > 0.05$ ). These results also lead us to accept H5 and H6. While between Social Interaction and Work Efficiency ( $\beta = -0.005$ ,  $t = 0.083$ ,  $p < 0.05$ ) There are negative and insignificant relationships. Thus, the result leads us to reject H7.

**Table 7. Summary of the Direct Effect**

Hypothesis	Relationship	Path Coefficient	Standard Deviation	T-Statistic	P Values	Results
H1	KS -> WE	0.464	0.052	8.941	0.000	Supported
H2	R -> KS	0.316	0.071	4.423	0.000	Supported
H3	SN -> KS	0.256	0.081	3.140	0.001	Supported
H4	SI -> KS	0.177	0.066	2.677	0.004	Supported
H5	R -> WE	0.142	0.079	1.799	0.036	Supported
H6	SN -> WE	0.235	0.066	3.569	0.000	Supported
H7	SI -> WE	-0.005	0.066	0.083	0.467	Not Supported

Table 8 presents the results of indirect influences (mediation) contained in this research model. Knowledge Sharing mediates the relationship between Reputation and Work Efficiency ( $\beta = 0.147$ ,  $t = 3,762$ ,  $p < 0$ ). Knowledge Sharing

mediates the relationship between Social Interaction and Work Efficiency ( $\beta = 0.082$ ,  $t = 2.702$ ,  $p < 0$ ). Knowledge Sharing mediates the relationship between Social Networking and Work Efficiency ( $\beta = 0.119$ ,  $t = 2,890$ ,  $p < 0.05$ ).

**Table 8. Summary of the In-Direct Effect**

Relationship	Path Coefficient	Standard Deviation	T-Statistic	P Values	Results
R -> KS -> WE	0.147	0.039	3.762	0.000	Mediating
SI -> KS -> WE	0.082	0.030	2.702	0.004	Mediating
SN -> KS -> WE	0.119	0.041	2.890	0.002	Mediating

## Discussion and Conclusion

Based on the results it can be concluded that Knowledge Sharing has a direct effect on Work Efficiency. Knowledge sharing that is provided to employees will have a positive impact on Work Efficiency. This is in line with March (1991) which states that knowledge sharing is not only beneficial for knowledge seekers, but also for contributors. Helping others solve problems can stimulate knowledge contributors to be more responsible and explore a single task domain (Zhu et al. 2014). Reputation directly effects to Knowledge Sharing. The good reputation given to contributors will have a positive impact on Knowledge Sharing. The findings are supported by a study by Yan et al. (2016), which emphasizes that the reputation of online health care professionals will increase along with sharing individual knowledge of behavior and learning performance.

Social networking has a direct impact on knowledge sharing. Knowledge Sharing will benefit from the increased use of social networks. This is in line with the findings of Toubia and Stephen (2013) which show that greater social networking allows a wider range of messages to network members. Individuals tend to enjoy having

great social networking and the feeling of influencing members in their network.

Social Interaction directly affects Knowledge Sharing. The existence of social interaction will have a positive impact on Knowledge Sharing. This is similar with Rasmussen (2018) who considers that the transmission of information and experience will continue to increase with the growth of trust relations between the two parties, and trust will affect cooperation within and outside the organization, the cooperation contains knowledge sharing.

Reputation directly affects to Work Efficiency. A good reputation will have a positive impact on Work Efficiency. Roberts and Dowling (2002) also mentioned that a good reputation is a corporate asset that can attract talented people and skilled employees. In addition, these employees will work harder for companies with a higher reputation.

Social Networking directly affects Work Efficiency. The existence of social networks will have a positive impact on Work Efficiency. Social networks represent the social capital of individuals, which is the collective value of all social networks. This value arises because networking allows completing important missions and

improving work efficiency and productivity (Hollenbeck & Jamieson, 2015). Therefore, a perfect social network can positively affect the efficiency and productivity of work.

Social Interaction has a negative and insignificant effect on Work Efficiency. So that social interaction will not have an impact on Work Efficiency. The findings contradict research by Cooke et al. (2013) which showed that effective team interaction strategies and processes can increase productivity and efficiency.

Meanwhile, Knowledge Sharing mediates the indirect relationship between Social Networking, Reputation Social Interaction and Work Efficiency. Thus, the Knowledge Sharing provided will have a positive impact on the relationship between Social Interaction and Work Efficiency.

The most notable finding is that knowledge sharing is a predictor of employee work efficiency. As a result, precise knowledge can boost work efficiency. Our findings confirm that individuals' expectations of social rewards (reputation and social networking) have a significant impact on their knowledge-sharing behavior and work efficiency. Another important finding is related to social interactions that have no direct effect on employee work efficiency. If it is associated with the majority number of respondents who are millennials and Z generation, this finding is quite relevant where the social interaction of that age group is indeed reduced by the presence of gadgets.

### **Implications**

The results obtained from the hypothesis prove that Knowledge Sharing, Reputation and Social Networking affects Work Efficiency, both directly and indirectly. While Social Interactions has an indirect influence through mediation from Knowledge Sharing. The organizational

implication of this research is as an input for companies to be able to support the knowledge sharing process among employees conductively to increasing work efficiency. Companies can also encourage the effectiveness of knowledge sharing by rewarding employees who have participated as contributors. This is intended to reduce the tendency to be reluctant to share knowledge between employees. This study adds to the organization's knowledge management literature, which shows that employee social rewards have a significant influence on knowledge sharing behavior (Rode, 2016).

### **Limitation and Future Research**

This research only covers one company, namely PT Taspen (Persero) and the results of the study cannot be generalized with other companies, because the difference in employees between one company and another cannot affect respondents' answers.

Although the sample in this study consisted of employees of the head office and branch offices, there are still some areas that have not been represented. Therefore, the researchers suggest increasing the number of respondents and covering the entire by using proportionate stratified random sampling to produce more accurate data.

The finding that social interaction has no effect on work efficiency differs from previous research that found a significant effect of social interaction on work efficiency. So that further research into the effect of social interaction on work can be conducted.

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