

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

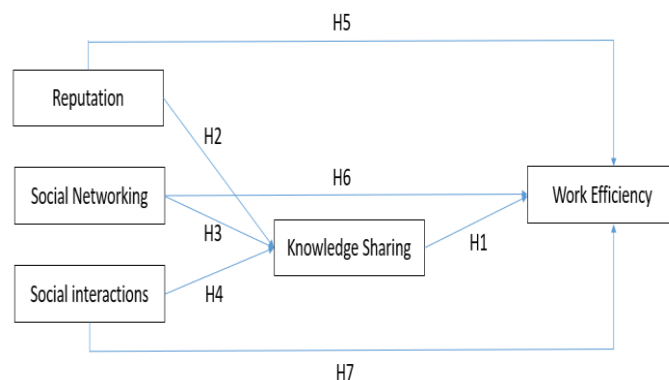
"social networking," and this identifies the structural position of persons within a network (Wasko & Faraj, 2005). There are several elements contained in social networking including interpersonal trust, mutual obligations, and harmony (Davison et al., 2018). Individuals have a deep-seated craving for 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
Work Efficiency (WE)	Perception of individual performance on work-related tasks in quantity and quality level (Janssen & Van Yperen 2004)
Knowledge Sharing (KS)	The extent to which a person engages in knowledge sharing activities in chat groups for work purposes (Bock et al. 2005).
Reputation (R)	Perceived of the importance of the image or status of individuals within an organization (Wasko & Faraj 2005).
Social Networking (SN)	Perceived importance of social relations with others in an organization (Chiu et al. 2006).
Social Interaction (SI)	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 KS2: I share work progress and official documents with colleagues KS3: I share my experience or knowledge from work with other coworkers	Choi et al. (2010)
2	Work Efficiency - VARIABLE 2	WE1: The knowledge sharing helps me save time or effort spending on my tasks 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	Janssen and Van Yperen (2004)
3	Reputation - VARIABLE 3	R1: It is important to earn respect from others by participating in knowledge sharing 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	Kankanhalli et al. (2005) and Wasko and Faraj (2005)
4	Social Networking - VARIABLE 4	SN1: It is important to maintain close social relationships with co-workers by knowledge sharing 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	Chiu et.al (2006)
5	Social Interaction - VARIABLE 5	SI1: Knowledge sharing are an excellent means for social interaction. 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	Picciano (2002)

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	0.817				
Reputation	0.593	0.796			
Social Interactions	0.571	0.643	0.823		
Social Networking	0.590	0.638	0.747	0.868	
Work Efficiency	0.684	0.564	0.527	0.595	0.836

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 R² 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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References

- Abdellaoui, A., Chen, H.Y., Willemsen, G., Ehli, E.A., Davies, G.E., Verweij, K.J.H., Nivard, M.G., de Geus, E.J.C., Boomsma, D.I., & Cacioppo, J.T. (2019). Associations between loneliness and personality are mostly driven by a genetic association with Neuroticism. *Journal of Personality*, (pp. 386-397).
- Alderei, H.M., Sufian, A., Mansor, N., Husseini, S.A. (2022). Enhancing intellectual capital for employee creativity through knowledge sharing: A review. *Journal of Positive School Psychology*.
- Arikunto, S. (2013). *Research procedures: A practical approach*. Rineka Cipta.
- Azwar, S. (2010). *Research methods*. Student Library.
- Bartol, K. M., & Srivastava, A. (2002). Encouraging Knowledge Sharing: The Role of Organizational Reward Systems. *Journal of Leadership & Organizational Studies*.
- Burt, R. S. (2009). *Structural holes: The social structure of competition*. Harvard University Press.
- Bock, G.W., Zmud, R.W., Kim, Y.G., & Lee, J.N. (2005). Behavioral intention formation in knowledge sharing: Examining the roles of extrinsic motivators, social-psychological factors, and organizational climate. *MIS Quarterly*, (pp. 87-111).
- Brown, J. S., and Duguid, P. (2001). "Knowledge and Organization: A Social-Practice Perspective." *Organization Science* (12:2), pp. 198-213.
- Chantaplaboon, N. (2020). Aged governmental officers' motivation: What influence work efficiency? *Management Science Letters*.
- Chiu, C.M., Hsu, M.H., & Wang, E. T. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, (pp. 1872-1888).

- Choi, S.Y., Lee, H., & Yoo, Y. (2010). The impact of information technology and transactive memory systems on knowledge sharing, application, and team performance: A field study. *MIS Quarterly*, (pp. 855-870).
- Chen, C.M., Lee, C.L., Chi, H.J., Yeh, T.J. & Huang, K.P. (2021). The correlations among social interaction, knowledge sharing and innovation capability case on medical technology industry. *Revista de Cercetare si Interventie Sociala Volumul 72/2021*.
- Crick, J. (2014). Effective team communication. *In Practice*, 36, (pp.96–98).
- Cooke, N.J., Gorman, J.C., Myers, C.W. & Duran, J.L. (2013). Interactive team cognition. *Cogn. Sci.*, 37, (pp.255-285).
- Cooper, D.R., & Schindler, P.S. (2014). *Business research method*. McGraw-Hill.
- Davison, R. M., Ou, C. X., and Martinsons, M. G. 2018. "Interpersonal Knowledge Exchange in China: The Impact of Guanxi and Social Media," *Information & Management*.
- Djaali. (2008). *Likert Scale*. Main Library.
- Florenthal, B. (2015). "Applying Uses and Gratifications Theory to Students' LinkedIn Usage," *Young Consumers* (16:1), pp. 17-35.
- Gan, C., & Li, H. (2018). Understanding the effects of gratifications on the continuance intention to use WeChat in China: A perspective on uses and gratifications. *Computers in Human Behavior*.
- Ghozali, I. (2016). *Analysis Multivariate Application with IBM SPSS Program*. Semarang: University of Diponegoro.
- Gie, The Liang. (2000). *Modern Office Administration*. Yogyakarta. Liberty.
- Geladi, Paul & Kowalski, Bruce R. (1986). Partial Least Square Regression: A Tutorial. *Elsevier Science Publishers B. V. Amsterdam*.
- Hamari, J., Sjoklint, M., & Ukkonen, A. (2015). The Sharing Economy: Why People Participate in Collaborative Consumption. *Journal Of The Association For Information Science And Technology*.
- Haider, S.A., Tehseen, S., Poulouva, P., & Akbar, A. (2022). The Impact of Responsible Leadership on Knowledge Sharing Behavior Through The Mediating Role of Person –Organization Fit and Moderating Role of Higher Educational Institute Culture. *Journal of Innovation & Knowledge*.
- Hansen, M. T., Nohria, N., and Tierney, T. (1999). "What's Your Strategy for Managing Knowledge." *The Knowledge Management Yearbook 2000–2001* (77:2), pp. 106-116
- Hau, Y. S., Kim, B., Lee, H., & Kim, Y.-G. (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.
- Helm, S., Lier-Gobbers, K., & Storck, C. (2011). *Reputation Management*. Springer.
- Hele, A.P., & Maela, N.F.S. (2018). The Improvement of Services in Luwu Public Hospital based on Organisational Communication Strategic. *Journal of Profesional Communication*.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in Variance-based Structural Equation Modeling. *Journal of the Academy of Marketing Science*.
- Huber, G. P. (2001). "Transfer of Knowledge in Knowledge Management Systems: Unexplored Issues and Suggested Studies," *European Journal of Information Systems*.
- Huang, Q., Davison, R. M., and Gu, J. (2011). "The Impact of Trust, Guanxi Orientation and Face on the Intention of Chinese Employees and Managers

- to Engage in Peer-to-Peer Tacit and Explicit Knowledge Sharing," *Information Systems Journal*.
- Hussein, A.T.T., Singh, S., Sohal, A.S., & Farouk, S. (2016). Knowledge Sharing Enablers, Processes and Firm Innovation Capability. *Journal of Workplace Learning*.
- Hollenbeck, J. R., & Jamieson, B. B. (2015). Human capital, social capital, and social network analysis: Implications for strategic human resource management. *The Academy of Management Perspectives*.
- Hollingshead, A. B., Fulk, J., and Monge, P. (2002). "Fostering Intranet Knowledge Sharing: An Integration of Transactive Memory and Public Goods Approaches," in *Distributed Work*, P. Hinds, S. Kiesler, J. Walther and M. Mortensen (eds.). Cambridge, MA: MIT Press, pp. 335-355.
- Janssen, O., and Van Yperen, N. W. (2004). "Employees' Goal Orientations, the Quality of Leader-Member Exchange, and the Outcomes of Job Performance and Job Satisfaction." *Academy of Management Journal*.
- Jin, J., Li, Y., Zhong, X., and Zhai, L. (2015). "Why Users Contribute Knowledge to Online Communities: An Empirical Study of an Online Social Q&a Community," *Information & Management* (52:7), pp. 840- 849
- Jones, C., Hesterly, W. S., and Borgatti, S. P. (1997). "A General Theory of Network Governance: Exchange Conditions and Social Mechanisms," *Academy of Management Review*.
- Jöreskog, K. G., and Wold, H. O. (1982). *Systems under Indirect Observation: Causality, Structure, Prediction*. Amsterdam: North Holland.
- Kankanhalli, A., Tan, B. C., and Wei, K.-K. (2005). "Contributing Knowledge to Electronic Knowledge Repositories: An Empirical Investigation. *MIS Quarterly*.
- Katzell, R. A., & Thompson, D. E. (1990). "Work Motivation: Theory and Practice," *American Psychologist* (45:2), pp. 144-153.
- Kerlinger. (2006). *Principles of Behavior Research*. Third Edition. Yogyakarta: Gadjah Mada University Press.
- Kim, J. (2018). Emotional Labor in the Care Field and Empathy-enhancing Education by Reading Literature: A Brief Review. *Iranian Journal of Public Health*.
- Krasnova, H., Veltri, N. F., Eling, N., and Buxmann, P. (2017). "Why Men and Women Continue to Use Social Networking Sites: The Role of Gender Differences," *Journal of Strategic Information Systems* (26:4), pp. 261-284.
- Landon, S., & Smith, C., (1997). "The Use of Quality and Reputation Indicators by Consumers: The Case of Bordeaux Wine". *MPRA Paper 9283*. University Library of Munich, Germany.
- Lawrence, N.W., (2003). *Social Research Methods: Qualitative and Quantitative Approaches*. Boston: Allyn and Bacon.
- Leonardi, P. M., & Meyer, S. R. (2015). Social Media as Social Lubricant: How Ambient Awareness Eases Knowledge Transfer. *American Behavioral Scientist* (59:1), pp. 10-34.
- Martoyo, S. (2000). *Human Resource Management*. Yogyakarta: PT BPFPE.
- Mardiasmo (2009). *Public Sector Accounting*. Yogyakarta: Andi Yogyakarta.
- Mubarak, F., & Noor, A. (2018). Effect of authentic leadership on employee creativity in project-based organizations with the mediating roles of work engagement and psychological empowerment. *Cogent Business & Management*.
- Mulyadi (2007). *Accounting System, Fourth Edition*. Jakarta: Salemba Empat.
- Nguyen, T.M., Nham, T.P., Froese, F.J., & Malik, A. (2019). Motivation and Knowledge Sharing: A Meta-Analysis of Main and Moderating Effects. *Journal of Knowledge Management*.

- Nham, T.P., Nguyen, T.M., Tran, N.H., & Nguyen, H.A. (2020). Knowledge Sharing and Innovation Capability At Both Individual and Organizational Levels: An Empirical Study From Vietnam's Telecommunication Companies. *Management & Marketing. Challenges for the Knowledge Society*.
- Obstfeld, D. (2005). Social networks, the tertius iungens orientation, and involvement in innovation. *Administrative Science Quarterly*, (50:1), (pp. 100-130).
- Olatokun, W. & Nwafor, C.I. (2012) The Effect of Extrinsic and Intrinsic Motivation on Knowledge Sharing Intentions of Civil Servants in Eboni State, Nigeria. *Information Development*, 28, 216-234.
- Picciano, A. (2002). Beyond student perceptions: issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks*.
- Pramono, B. K., & Susanty, A. I. (2015). *the Influence of personal factors, organizational factors, and technological factors in the use of CIM toward employee's knowledge sharing in pt. jalan tol lingkar luar jakarta*.
- Ramzan, S., & Khan, I. M. (2010). Dimension reduction and remedy of multicollinearity using latent variabel regression methods. *World Applied Science Journal*, 8(4), (pp.404-410).
- Rasmussen, L. (2018). Parasocial interaction in the digital age: An examination of relationship building and the effectiveness of YouTube celebrities. *The Journal of Social Media in Society*.
- Rode, H. 2016. "To Share or Not to Share: The Effects of Extrinsic and Intrinsic Motivations on KnowledgeSharing in Enterprise Social Media Platforms," *Journal of Information Technology* (31:2), pp. 152-165.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* (55:1), (pp. 68-78).
- Roberts, P.W., & Dowling, G.R., (2002). Corporate Reputation and Sustained Superior Financial Performance. *Strategic Management Journal*.
- Sedarmayanti. (2001). *Human Resources and Work Productivity*. Mandar Maju, Jakarta.
- Sekaran, U. & Bougie, R. (2016) *Research methods for business: A skill-building approach* (7th Edition). Wiley & Sons.
- Sevilla, C.G., Ochave, J.A., Punsalan, T.G., Regala B.P., & Uriarte G.G., (2007). *Research Methods*. Rex Printing Company.
- Sickles, R.C., & Zelenyuk, V. (2019). *Measurement of Productivity and Efficiency*. Cambridge University Press
- Siemsen, E., Balasubramanian, S., & Roth, A. V. (2007). Incentives that induce task-related effort, helping, and knowledge sharing in workgroups. *Management Science*, (53:10), (pp. 1533-1550).
- Sugiyono. (2006). *Quantitative, qualitative, and R&D research methods*. Alfabeta.
- Susilo. (2011). *Human Resource Management*. Yogyakarta: BPFE.
- Soekartawi. (2001). *Agricultural analysis*. Rajawali Persada.
- Stuebs, M., and Sun, L. (2010). "Business Reputation and Labor Efficiency, Productivity, and Cost," *Journal of Business Ethics*.
- Taylor, L.K., & Glen, C. (2019). From empathy to action: Can enhancing host- society children's empathy promote positive attitudes and prosocial behaviour toward refugees?. *Journal of Community & Applied Social Psychology*.
- Thorn, B. K., and Connolly, T. (1987). "Discretionary Data Bases: A Theory and Some Experimental Findings,"

- Communication Research* (14:5), pp. 512-528.
- Toubia, O., & Stephen, A. T. (2013). Intrinsic vs. image-related utility in social media: Why do people contribute content to twitter? *Marketing Science* (32:3), (pp. 368-392).
- Triana, A., Utami, H. N., & Ruhana, I. (2016). The influence of organizational communication on sharing knowledge and employee performance (study on employees of gajah mada graha malang hotel). *Journal of Business Administration* 35(2), (pp.86-93).
- Von Hippel, E., & Von Krogh, G. (2003). Open source software and the "private-collective" innovation model: Issues for organization science. *Organization Science*, (14:2), (pp. 209-223).
- Vyas, P.G. and Pandey, S. (2021), "The effect of social networking sites use on employees' knowledge sharing", *European Journal of Training and Development*, Vol. 45 No. 2/3, pp. 218-240.
- Wang, L., & Long, L. (2018). Idiosyncratic deals and taking charge: The roles of psychological empowerment and organizational tenure. *Social Behavior and Personality: An International Journal*.
- Wang, J., Yuan, Z., He, Z., Zhou, F., & Zehou Wu. (2021). *Critical factor affecting team work efficiency in bim-based collaborative design: An empirical study in china*.
- Wasko, M. M., & Faraj, S. (2005). Why should i share? examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly* (29:1), (pp. 35-57).
- Wijaya, D.A.P. (2016). Social Interaction Relationship with Work Productivity of Civil State Service of Transportation, Communication And Informatics Pamekasan. Psychology Faculty of Muhammadiyah Malang University.
- Wojcik, M., Jeziorska-Biel, P., & Czapiewski, K. (2019). Between words: A generational discussion about farming knowledge sources. *Journal of Rural Studies*, 67, (pp. 130-141).
- Yan, Z., Wang, T., Chen, Y., & Zhang, H. (2016). Knowledge Sharing in Online Health Communities: A Social Exchange Theory Perspective. *Information and Management*.
- Yang, X., Ye, J., & Wang, X. (2019). How does social media improve work efficiency? insights from the theory of communication visibility. *ICIS*.
- Yuan, J., Yi, W., Miao, M., & Zhang, L. (2018). Evaluating the Impacts of Health, Social Network and Capital on Craft Efficiency and Productivity: A Case Study of Construction Workers in China. *International Journal of Environment Research and Public Health*.
- Yulianto, H. S., (2022). Definition of Efficiency, Types, Terms, and Purpose. <https://www.bola.com/ragam/read/4976658/pengertian-efisiensi-jenis-syarat-dan-tujuannya>
- Zakariya, R., & Bashir, S. (2020). Can Knowledge Hiding Promote Creativity Among IT Professionals. *Journal of Information and Knowledge Management Systems*.
- Zhu, H., Dow, S. P., Kraut, R. E., & Kittur, A. (2014). Reviewing versus doing: Learning and performance in crowd assessment. in proceedings of the 17th ACM conference on computer supported cooperative work & social computing. *Baltimore, MD*, (pp. 1445-1455).