

# The Mediating Role of Knowledge Sharing in Relationship Between IT Application Usage and End-User Focus on Employee Performance

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## Abstract

Employee performance is one of the important things that need to be considered in an effort to advance the company. Good employee performance can be seen from the quality of employee work in accordance with the standards set by the company. This research was conducted at Bank Pembangunan Daerah Jawa Timur (BPD Jatim) in Indonesia with the aim of analyzing the effect of IT application usage on knowledge sharing, the effect of end-user focus on knowledge sharing, the effect of IT application usage on employee performance, the effect of end-user focus on employee performance, and the effect of knowledge sharing on employee performance. The sample in this study were 89 employees of Bank Pembangunan Daerah Jawa Timur. Data analysis used Structural Equation Modeling (SEM) Partial Least Square (PLS). The results showed that IT application usage has a significant effect on knowledge sharing, end-user focus has no significant effect on knowledge sharing, IT application usage has a significant effect on employee performance, end-User Focus has no significant effect on employee performance, knowledge sharing has a significant effect on employee performance.

## Keywords

Knowledge sharing, employee performance, IT application usage, end user focus

## 1. Introduction

The development of technology in the era of globalization is increasing rapidly. Competition between companies is also getting tighter. Companies must be able to keep up with the changes that occur around them, especially in the business world. If the company is not able to adapt to the changes that occur, the company will not be able to compete in the competition between companies. As a result, the company will not survive and the products that are sold will disappear from the market. One way to overcome this, the management must evaluate the things that are in the company, especially in terms of human resources because human resources in the company are the key determinants to be actively involved and gain an advantage over the competition (Gea, 2014).

Employee performance is one of the important things that need to be considered in an effort to advance the company. According to Mangkunegara (2017), performance is the result of work in quality and quantity achieved by an employee in carrying out his duties according to the responsibilities assigned to him (Maharani, 2016). Good employee performance can be seen from the quantity of work achieved by employees that exceeds or is in accordance with the targets set by the company; quality of employee work that is in accordance with the standards set by the company; timeliness of completion of work in accordance with that determined by the company; the number of employee attendance is greater than the number of absences; as well as the ability of employees to cooperate with other employees. One of the ways to improve employee performance is by increasing knowledge sharing (Memah et al., 2017).

Knowledge sharing is defined as a systematic process of sending, distributing, and disseminating multidimensional knowledge and context from a person or organization to other people or organizations in need through various methods and media (Lumbantobing, 2011). According to Andika (2015), knowledge sharing has various benefits, including encouraging the spread of individual learning throughout the organization (Yang, 2007); facilitate competency development (Trivellas et al., 2015); has a positive influence on the performance of organizational members (Javadi et al., 2012; Kuzu & Özilhan, 2014); and innovative work behavior (Akhavan et al., 2015); and organizational innovation capabilities (Lin, 2007). According to Swift and Hwang (2013), there are 3 (three) dimensions of

knowledge sharing, namely voluntarily sharing information, knowledge and skills; communicate with everyone; and receive and get all information easily and freely (Maharani, 2016). With the knowledge sharing behavior within the company, every employee of the company will get new knowledge related to their work, thus making the employee come up with a new idea or innovation for his job which results in increased employee performance. Knowledge sharing can be encouraged by the existence of IT application usage in companies (Kim & Lee, 2006; Oktaviani, 2016).

Huysman and Wulf (2006) define IT application usage as a level where the existence of information technology can increase the speed of searching, accessing and retrieving information, as well as supporting communication and collaboration between employees in an organization (Oktaviani, 2016). According to Lin (2007), the use of information technology in knowledge sharing can facilitate knowledge sharing with applications such as groupware, online databases, intranets, and others (Oktaviani, 2016). Measurement of IT application usage in companies can be measured by looking at the use of electronic storage (such as online databases and data warehousing) to access knowledge; use of knowledge networks (such as groupware, intranets, virtual communities, etc.) to communicate with colleagues; the use of technology that allows employees to share knowledge with others inside the company and outside the company (Kanaan et al., 2013). With this IT application usage, it will facilitate knowledge sharing with knowledge sharing applications so that all employees will get new knowledge related to their work and result in increased employee performance.

In addition to increasing knowledge sharing with IT application usage, company management can also implement end-user focus (Kim & Lee, 2006; Lee, 2018). According to Davis (1989), end-user focus or perceived ease of use of a system is a level where someone believes that using a particular system does not require effort (Oktaviani, 2016). Kim and Lee (2006) argue that end-user focus can be measured by reviewing the information systems and applications used in companies designed to be easy to use and easy to use without doing extra training. With this convenience, it will make employees excited and easier to share the knowledge they have to share with other employees who need this information to complete their work. Thus, employee performance will increase.

PT Bank Pembangunan Daerah Jawa Timur Tbk (“Bank Jatim”) is one of the banks in Indonesia that has a lot of human resources, but the resulting performance is still not optimal. This can be seen from the bank's achievement which is still volatile or does not always increase every year. Even though Bank Jatim already has information systems and technology as well as applications that are actively used during operational activities.

In Kim and Lee's research (2006), IT application usage and end-user focus can encourage knowledge sharing. Meanwhile, knowledge sharing can affect employee performance positively and significantly (Andra & Utami, 2018; Aulia & Syarifuddin, 2017; Javadi et al., 2012). However, the results of research on the same topic are not consistent. There is still research which states that knowledge sharing has no effect on employee performance (Saragih & Harisno, 2015).

## **2. Literature Review and Hypotheses**

### **2.1 Knowledge Sharing**

Lumbantobing (2011) defines knowledge sharing as a systematic process in sending, distributing, and disseminating knowledge and multidimensional contexts from a person or organization to other people or organizations in need through various methods and media. Where this process aims to optimize the use or exploitation of existing knowledge and to encourage the creation of new knowledge as a result of learning and a combination of different knowledge. In another book entitled *Knowledge Management: Concept, Architecture, and Implementation* (2007), Lumbantobing explains that the fundamental difference between physical assets and knowledge assets lies in the process of increasing their value. The value of physical assets will decrease if they are used and tend to increase or have a fixed value if they are not used. Meanwhile, knowledge assets will increase in value if they are shared and used, but on the other hand, their value will decrease if they are not shared and not used. Even if it is not used for a long time, the value of knowledge will be lost.

When new knowledge is acquired, it must be transferred to other parts of the organization that require new knowledge and can be useful in that part. Without this knowledge sharing stage, knowledge will not have much effect on the organization. Thus, the transfer of knowledge in the right time and place is the most important part of storing knowledge in an organization (Javadi et al., 2012). According to Connelly and Kelloway (2003), knowledge sharing is seen as a positive motivating force in organizations. Actually, knowledge sharing is different from sharing information. Knowledge sharing means managing information across organizational levels (such as financial reports),

while knowledge sharing is reciprocal, sharing information can be non-reciprocal and unpredictable (Javadi et al., 2012).

Based on the understanding of knowledge sharing according to the various sources above, it can be concluded that knowledge sharing is the behavior of sharing new knowledge with fellow organizational members or company employees with certain methods.

In practice, knowledge transfer is actually very difficult to encourage employees to use a knowledge management system, both for transferring, contributing to knowledge and for seeking knowledge. In Nawawi (2012) it is stated why people are not happy to share knowledge, the reasons are as follows (Aulia & Syarifuddin, 2017):

- a. Want to share, but don't have time to work on it
- b. No skills in knowledge sharing techniques
- c. Lack of appropriate technology
- d. There is no responsibility and follow-up from senior managers
- e. There is no cost for knowledge sharing

According to Andika (2015) knowledge sharing has several benefits, including:

- a. Encourage the spread of individual learning throughout the organization
- b. Facilitating competency development
- c. Has a positive effect on the performance of organizational members
- d. Has a positive effect on innovative work behavior
- e. Has a positive effect on the innovation capabilities of the organization

According to Swift and Hwang (2013), there are 3 (three) dimensions of knowledge sharing, namely:

- a. Voluntarily share knowledge held with other employees. So that this knowledge will be of useful value so that it can be a provision to increase the results of a work.
- b. Communicate with everyone. This is very influential in the activities of an organization, because good communication will affect the progress and success of an organization.
- c. Receive and get all information easily and freely. When each employee can easily receive the information needed, it will be easier to apply what has been obtained.

## **2.2 IT Application Usage**

According to Warsita (2018) information technology is a means and infrastructure (hardware, software, useware) systems and methods for obtaining, sending, processing, interpreting, storing, organizing, and using data meaningfully. Information Technology is a technology used to process data, including processing, obtaining, compiling, storing, manipulating data in various ways to produce quality information, namely information that is relevant, accurate and timely, it can also be used for personal, business, and governance which is strategic information for decision making. This information technology uses a set of computers to process data, a network system to connect one computer to another as needed, and telecommunications technology is used so that data can be spread and accessed globally (Muzakki et al., 2016). According to Kadir and Triwahyuni (2013) "Information technology is a set of tools that helps you work with information and perform tasks related to information processing". It is explained that information technology is a combination of computer technology and communication technology. Computer technology is a set of equipment used to convert data into information that can be used as material for decision making. While the main use of information technology globally is to help solve problems with high creativity and make people more effective in using it (Muzakki et al., 2016).

According to Huysman and Wulf (2006), IT application usage is defined as the level of information technology can increase the speed of searching, accessing, and retrieving information, as well as supporting communication and collaboration among employees within an organization. The use of information technology in knowledge sharing can facilitate knowledge sharing with applications such as groupware, online databases, intranets, and others (Lin, 2007). In addition, according to Yeh and colleagues (2006), information technology can also provide communication channels for employees to share knowledge (Oktaviani, 2016).

Based on the above understanding, it can be concluded that IT application usage is the use of computer programs that can help users to search, access, retrieve, process, and process data and information as well as support communication and collaboration between employees within an organization.

Kim and Lee (2006) measure IT application usage with 4 (four) dimensions (a) internet, email, and electronic bulletin boards, (b) intranet, (c) electronic databases and data management systems, (d) knowledge management systems, while Kanaan and colleagues (2013) states that the indicators of IT application usage are (a) using electronic storage

(such as online databases) to access knowledge, (b) using knowledge networks (internet, intranet, email or other mailing lists) to communicate with colleagues, (c) using technology that makes it possible to share knowledge in the company, (d) using technology that makes it possible to share knowledge outside the company (Oktaviani, 2016).

Research by Kim and Lee (2006), Lin (2007), Kanaan and colleagues (2013), and Oktaviani (2016) shows almost the same results, namely there is a significant relationship between IT application usage and knowledge sharing. With IT application usage, employees will be helped to find and get data or information more quickly about what is needed in their work. This convenience causes employees to share the knowledge they get with other employees, resulting in knowledge sharing behavior. The higher the IT application usage, the higher the knowledge sharing. Based on this description, the following hypothesis can be drawn:

H1: IT application usage has a significant effect on knowledge sharing

### 2.3 End-User Focus

End-user focus is the perception of the ease of use of a system, which is a level where someone believes that using a particular system does not require effort (Davis, 1989). In addition, designing and delivering the system according to user needs is an important factor in achieving the benefits of the system (King, 1999). Meanwhile, Noor and Salim (2011) state that end-user focus is an easy-to-use system that will encourage users to accept and use the system to support knowledge sharing (Oktaviani, 2016).

Kim and Lee (2006) argue that end-user focus can be measured by reviewing the dimensions of end-user focus below:

- a. Application designed to be easy to use
- b. The application is easy to use without doing extra training

Meanwhile, Lee (2018) states that the end-user focus dimensions are as follows:

- a. Use of the internet, email and company intranet
- b. The infrastructure is designed to be easy to use
- c. IT infrastructure is easy to use without extra training

Research by Kim and Lee (2006), Oktaviani (2016), and Lee (2018) shows almost the same results, namely that there is a significant relationship between end-user focus and knowledge sharing. Ease of accessing a system used in work without the need for hard work and training encourages employees to share knowledge. When an employee does not understand something in his job and asks other employees, the other employee will provide the knowledge they have by easily accessing the existing system. Based on this explanation, a hypothesis can be drawn as follows:

H2: end-user focus has a significant effect on knowledge sharing

### 2.4 Employee Performance

According to Prawirosentono (2012), performance is the result of work that can be achieved by a person or group of people in an organization, in accordance with their respective authorities and responsibilities, in an effort to achieve the goals of the organization concerned legally, not violating the law and in accordance with morals and ethics. Meanwhile, according to Mangkunegara (2017), performance is the result of work in quality and quantity achieved by an employee in carrying out his duties according to the responsibilities given to him.

Performance is the result of a process (Suryadi, 2010) or the level of success of a person or the whole during a certain period in carrying out their duties (Rivai & Basri, 2005) both in quality and quantity (Mangkunegara, 2017). Therefore, according to Hosmani and Shambhushankar (2014), performance is always measured from the aspect of results not the efforts made by individuals, namely how well individuals can meet the demands of their work. It can be concluded that employee performance is the result of employee work as a whole or during a certain period both in quality and quantity based on predetermined and agreed criteria (Sari & Hadijah, 2016).

The definition of performance or performance by Moeheriono (2018) is a description of the level of achievement of the implementation of an activity program or policy in realizing the goals, objectives, vision, and mission of the organization as outlined through the strategic planning of an organization (Chalifa & Nugrohoseno, 2014).

Based on the understanding of employee performance according to the results of the research and literature above, it can be concluded that employee performance is the result of work achieved by employees in accordance with the tasks assigned to the company.

Mathis and Jackson (2011) measure employee performance with the following dimensions of employee performance:

- a. Quantity (Quantity of output). Is the result of hard work from employees who can reach the maximum scale determined by the company. With the results set by the company, the employee's performance is right and correct.

- b. Quality (Quality of output). Is the result of hard work from employees in accordance with the goals set by the company previously. If the results achieved by the employee are high, then the employee's performance is considered good by the company or in accordance with predetermined standards. This means it is a level that shows the work process or the results achieved for a job approaching perfection.
- c. Timeliness (Timeliness of output). Employees can work in accordance with the work time standards set by the company. By working in accordance with predetermined time standards, the employee's performance is good. With timeliness, which is a level that indicates that a job can be completed faster than the specified time, the employee's performance is better.
- d. Presence (Presence at work). Attendance is something that must be maintained by employees. The presence of employees can be a measure of whether employees like their jobs. Employees with more attendance generally perform better than employees with less attendance.
- e. Cooperative Ability (Cooperativeness). With employees who have a high sense of self-respect for their work, employees try to achieve the best results in that job. Therefore, with a high sense of self-respect for their work, it is hoped that employees can improve their performance at work. The ability to work together, which is a level of condition for employees, can create a comfortable atmosphere at work, self-confidence, good communication between colleagues so that performance increases are created.

Moheriono (2018) revealed that in general, performance indicator measures can be grouped into the following 6 (six) categories (Aulia, 2017):

- a. Effective. This indicator measures the suitability of the output produced in achieving something desired. This indicator of effectiveness answers the question are we doing the right things.
- b. Efficient. This indicator measures the level of suitability of the process to produce output at the lowest possible cost. Indicators of effectiveness answer the question of whether we are doing things right.
- c. Quality. This indicator measures the suitability between the quality of the product or service produced with the needs and expectations of consumers..
- d. Initiative, which shows how much the employee's ability to analyze, assess, create and make decisions on solving the problems they face.
- e. Punctuality. This indicator measures whether the work has been completed correctly and on time. For this reason, it is necessary to determine criteria that can measure how long it should take to produce a product. These criteria are usually based on consumer expectations.
- f. Productivity. This indicator measures the level of productivity of an organization. In a more scientific form, this indicator measures the added value generated by a process compared to the value consumed for capital and labor costs.
- g. Safety. This indicator measures the overall health of the organization and the work environment of its employees from a safety aspect.

#### 2.4.1 IT Application Usage and Employee Performance

Research by Muzakki and colleagues (2016) found that the independent variables had a significant influence on employee performance, either simultaneously or partially. The independent variables used are the ease of use of IT and the benefits of using IT. There is also research from Handayani and colleagues (2018) which concludes almost the same thing, namely the perceived usefulness / benefit of information technology variable has a significant influence on the employee performance variable. The use of technology and information applications in an organization or company will support employees to complete their work. Work can be completed quickly because with the use of technology and information applications, employees can find, access, and retrieve existing information more quickly to support completing their work. So that what is produced by employees will be more, both because information is obtained quickly, and it is more timely to complete it. Thus a hypothesis can be drawn as follows:

H3: IT application usage has a significant effect on employee performance

#### 2.4.2 End-User Focus and Employee Performance

Research by Muzakki and colleagues (2016) found that the independent variables had a significant influence on employee performance, either simultaneously or partially. The independent variables used are the ease of use of IT and the benefits of using IT. There is also research from Fitriani (2018) which concludes that the use of technology in improving employee performance is very important and meaningful for the level of employee time efficiency in doing tasks. Companies or organizations with an end-user focus make it easy for employees to use the system effortlessly. So that employees can complete their work better quality, more quantity, on time schedule, attend work more often because what is charged becomes easier to complete, and easier to work together because employees don't have to bother to stress to use the existing system, so it's easy to cooperate with other employees. This makes employee

performance increase. The better the end-user focus, the more employee performance will be. Thus a hypothesis can be drawn as follows:

H4: End-user focus has a significant effect on employee performance

#### 2.4.3 Knowledge Sharing and Employee Performance

Knowledge sharing is one of the main processes in knowledge management aimed at maximizing the use of knowledge through the distribution of knowledge to members in need. Lumbantobing (2011) defines knowledge sharing as a systematic process of sending, distributing and disseminating knowledge and multidimensional contexts from a person or organization to other people or organizations in need through various methods and media.

According to several previous studies, knowledge sharing has an influence on employee performance. Both as a single independent variable (Andra & Utami, 2018; Aulia & Syarifuddin, 2017; Memah et al., 2017), as one of the independent variables (Chalifa & Nugrohoseno, 2014; Kuzu & Özilhan, 2014; Maharani, 2016), as well as as an intervening variable (Javadi et al., 2012). For the effect that occurs, many studies conclude that there is a significant effect, but there are also those who conclude that there is no significant effect of knowledge sharing on employee performance (Saragih & Harisno, 2015).

Hislop in (Lumbantobing, 2011) assumes that humans or organizational members have a desire to share knowledge. The implementation of sharing practices in organizational life is not an easy thing, it takes awareness and commitment of each individual to remain consistent in implementing this knowledge management practice. Knowledge is a resource that is largely inherent in humans, making the effectiveness of knowledge sharing highly dependent on individual decisions to share or not share their knowledge with other organizational members. With the habit of doing knowledge sharing in the organization, it will have an impact on each employee and the organization itself. The ability and work knowledge of employees at work will increase, while the impact on business organizations is an increase in the performance of the organization itself so that it will have a better competitive advantage, because increased company performance is certainly supported by employee performance (Andra and Utami, 2018) So that the following hypothesis can be drawn:

H5: Knowledge sharing has a significant effect on employee performance

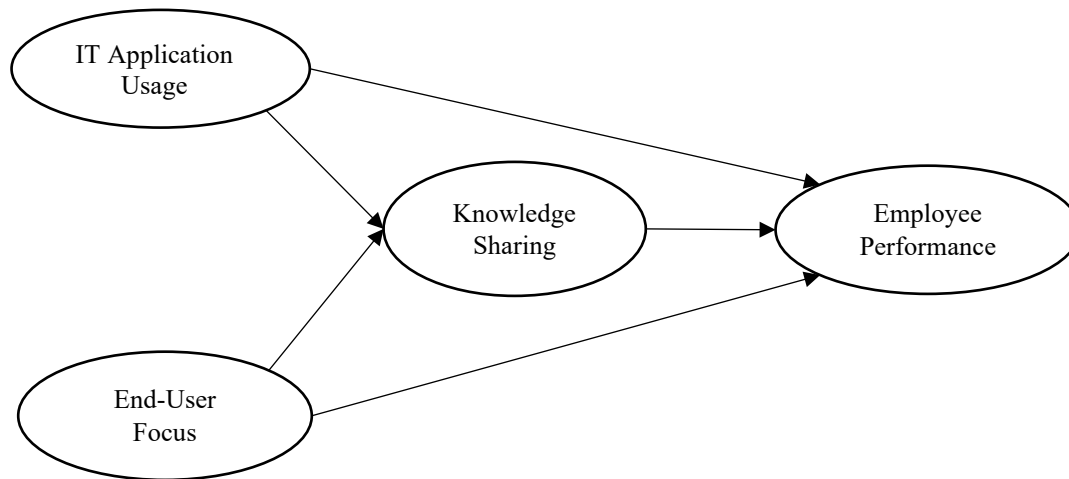


Figure 1. Research Model

### 3. Methods

The population in this study were all headquarters employees of BPD Jatim, Indonesia, totaling 800 employees. To determine the number of research samples used the Slovin formula and from 800 employees as a population, the number of samples of this study were 89 employees. The questionnaire technique is used to obtain data related to the research variables. The questionnaire is managed in the form of a closed statement with 5 (five) alternative answers using a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Data analysis technique used to analyze questionnaires that have been filled out by respondents is using Partial Least Square (PLS).

### 4. Result and Discussion

#### 4.1 Discriminant Validity

Discriminant validity can be seen by looking at the average variant extracted (AVE) value for each indicator, it requires the value to be  $> 0.50$  for a good model (Ghozali, 2014).

Table 1. Average Variant Extracted (AVE)

Variable	AVE
IT Application Usage	0,722
End-User Focus	0,704
Knowledge Sharing	0,613
Employee Performance	0,667

From the table above we can see that AVE value of all research variables  $> 0.50$ . So it can be said that all variables have good discriminant validity.

#### 4.2 Composite Reliability

Composite Reliability is used to test the reliability value of indicators on a variable. Criteria for a good variable or can be declared to meet composite reliability if the composite reliability value is  $> 0.60$  (Ghozali, 2014). The following is the composite reliability value of each variable used in this study.

Table 2. Composite Reliability

Variable	Composite Reliability
IT Application Usage	0,976
End-User Focus	0,960
Knowledge Sharing	0,954
Employee Performance	0,947

From the table above, it is known that the composite reliability value for the variable IT application usage, end-user focus, employee performance and knowledge sharing are  $> 0.60$ . Thus it can be stated that each variable has good composite reliability.

#### 4.3 Cronbach Alpha

The reliability test with the composite reliability above can be strengthened by using the Cronbach alpha value. A variable can be declared reliable or meets Cronbach alpha if it has a Cronbach alpha value  $> 0.70$ . The following is the Cronbach alpha value of each variable:

Table 3. Cronbach Alpha

Variable	Cronbach Alpha
IT Application Usage	0,974
End-User Focus	0,953
Knowledge Sharing	0,947
Employee Performance	0,937

From the table above, it can be seen that all variables have a Cronbach alpha value of each research variable  $> 0.70$ . This means that the level of reliability of all variables is high.

#### 4.4 Path Coefficient

The path coefficient test is used to show how strong the effect or influence of the independent variable is on the dependent variable. Meanwhile, coefficient determination (R-Square) is used to measure how much the endogenous variable is influenced by other variables.

Table 4. Path Coefficient

Variable	Original Sample
IT Application Usage → Knowledge Sharing	0,440
End-User Focus → Kinerja Knowledge Sharing	0,243
Knowledge Sharing → Employee Performance	0,733
IT Application Usage → Employee Performance	0,322
End-User Focus → Employee Performance	0,178

From the table above, it can be known that the biggest path coefficient value is the influence of knowledge sharing on employee performance, which is 0.733.

#### 4.5 Hypothesis Testing

Based on the data processing that has been done, the results of hypothesis testing obtained in this study through the inner model show the correlation of each variable as follows:

Table 5. Hypothesis Testing

Hypothesis	Correlation	T-statistics	P-Values	Result
H1	IT Application Usage toward Knowledge Sharing	3,452	0,001	Accepted
H2	End-User Focus toward Knowledge Sharing	1,912	0,056	Rejected
H3	IT Application Usage toward Employee Performance	3,325	0,001	Accepted
H4	End-User Focus toward Employee Performance	1,854	0,064	Rejected
H5	Knowledge Sharing toward Employee Performance	14,763	0,000	Accepted

Based on the data presented in table 5 above, it can be seen that of the 5 (five) hypotheses proposed in this study, they are as follows:

1. The effect of IT application usage on knowledge sharing has a P value of 0.001 or less than 0.05. From there, it can be said that IT application usage has an effect on knowledge sharing. In calculating the score for the answers to the questionnaire statements, the average score is quite high on the IT application usage. It can be said that employees consider the IT application usage of BPD Jatim to be good enough. In statistical tests, it is known that IT application usage has a positive effect on knowledge sharing. The results of this study are in line with the results of research by Kim and Lee (2006), Lin (2007), Kanaan and colleagues (2013), and Oktaviani (2016) showing almost the same results, namely there is a significant relationship between IT application usage and knowledge sharing. With IT application usage, employees will be helped to find and get data or information more quickly about what is needed in their work. This convenience causes employees to be willing to share their knowledge with other employees, resulting in knowledge sharing behavior. The higher the IT application usage, the higher the knowledge sharing.
2. The effect of end-user focus on knowledge sharing has a P value of 0.054 or greater than 0.05. From this, it can be said that end-user focus has no effect on knowledge sharing. In calculating the score for the answers to the questionnaire statements, the average score was high enough for the end-user focus. It can be said that employees consider the end-user focus applicable at BPD Jatim to be good enough. In statistical tests it is known that end-user focus has no effect on knowledge sharing. Changes in end-user focus, do not encourage changes in knowledge sharing. Based on the theory explaining that the ease of accessing a system used in work without the need for hard effort and training, encourages employees to share knowledge. When an employee does not understand something in his job and asks other employees, then the other employee will provide his / her knowledge with easy access to the existing system. However, this study states that end-user focus has no effect on knowledge sharing. This is due to different perceptions of the ease of accessing a system so that the results of knowledge sharing are different. Ease of accessing a system does not necessarily encourage knowledge sharing. Likewise, on the other hand, there are some employees who have the perception that it is difficult to access a system but because they have a good attitude they are still willing to sharing their knowledge.



3. The effect of IT application usage on employee performance has a P value of 0.001 which is smaller than 0.05. From this, it can be said that IT application usage has an effect on employee performance. In calculating the score for the answers to the questionnaire statements, the average score was high enough for IT application usage. It can be said that the performance of employees at BPD Jatim is quite good. In statistical tests it is known that IT application usage has a positive effect on employee performance. The better IT application usage, the better the employee's performance. Muzakki's research (2016) shows that the independent variables have a significant influence on employee performance both simultaneously and partially. The independent variables used are ease of use of IT and benefit of using IT. There is also research from Handayani (2018) that concludes almost the same thing, it is benefit perception of IT variable has a significant influence on the employee performance variable. The use of information technology applications in an organization or company will support employees to complete their work. Work can be completed quickly because with the use of information technology applications, employees can find, access, and retrieve existing information more quickly to support completing their work. So that what is produced by employees will increase, both because information is obtained quickly, and because the time to complete work is faster.
4. The effect of end-user focus on employee performance has a P value of 0.064 or greater than 0.05. From this, it can be said that end-user focus has no effect on employee performance. In statistical tests it is known that end-user focus has no positive effect on employee performance. Changes that occur in end-user focus are not able to encourage changes in employee performance. The results of this study are not in line with Muzakki's (2016) statement, which shows that the independent variables have a significant influence on employee performance both simultaneously and partially. With an end-user focus, it makes it easy for employees to use the system effortlessly. So that employees can complete their work better quality, more quantity, and on time schedule. The employee attendance rate is also good, because what the company charges is easy to solve. Employees can also more easily cooperate with other employees, because they do not have to bother to use the existing system. All of the things described above make employee performance increase. Thus, the better the end-user focus, the better the employee's performance. However, this study states that end-user focus has no effect on employee performance. This is likely due to different perceptions of the ease of accessing a system so that employee performance results are different. Ease of accessing a system does not necessarily encourage the creation of all high employee performance. Likewise, on the other hand, there are some employees who perceive that it is difficult to access a system but because they have a good attitude and work ethic, they still produce good jobs.
5. The influence of knowledge sharing on employee performance has a P value of 0,000 or less than 0.05. From this, it can be said that knowledge sharing has an effect on employee performance. In calculating the score for the answers to the questionnaire statements, the average score is high enough for knowledge sharing. In statistical tests, it is known that knowledge sharing has a positive effect on employee performance. The better knowledge sharing, the higher employee performance. Lumbantobing (2011) assumes that humans or organizational members have a desire to share knowledge. The practice of sharing in organizational life is not easy, it requires awareness and commitment of each individual to consistently carry out the practice of implementing this knowledge management. Knowledge is a resource that is mostly inherent in humans, making the effectiveness of sharing knowledge highly dependent on the individual's decision to share or not share knowledge with other members of the organization. With the habit of doing knowledge sharing in the organization, it will have an impact on each employee and the organization itself. The ability and work knowledge of employees at work will increase, while the impact on business organizations is an increase in the performance of the organization itself so that it will have a better competitive advantage, because increased company performance is certainly supported by employee performance (Andra & Utami, 2018).

## 5. Conclusion

From the analysis then the results can be concluded as follows: IT application usage has a significant effect on knowledge sharing. Because IT application usage is a variable that affects knowledge sharing, management must further increase IT application usage so that knowledge sharing increases. End-user focus has no significant effect on knowledge sharing. Since end-user focus is a variable that has no effect on knowledge sharing, management must increase end-user focus more so that knowledge sharing is better. IT application usage has a significant effect on employee performance. Because the independent variables of this study, only involve IT application usage and end-user focus, it is advisable for further research to add other variables related to knowledge sharing and employee performance. End-user focus has no significant effect on employee performance. Considering that end-user focus has no effect on employee performance, management must increase end-user focus more in order to improve employee performance. Knowledge sharing has a significant effect on employee performance. Because knowledge sharing has

a significant effect on employee performance, management must further motivate employees to always share knowledge so that employee performance is getting better.

## References

- Akhavan, P. et al. Knowledge-sharing determinants, behaviors, and innovative work behaviors: An integrated theoretical view and empirical examination. *Aslib Journal of Information Management*, 67(5), 2015.
- Andika, A. Meningkatkan knowledge sharing di organisasi: studi literatur terhadap faktor-faktor yang mempengaruhi knowledge sharing. *Penelitian dan aplikasi sistem dan teknik industri (pasti)*, 9(3), 230–237, 2015.
- Andra, R. S., & Uutami, H. N. Pengaruh knowledge sharing terhadap kinerja karyawan (studi pada karyawan pt bank rakyat indonesia kantor cabang malang kawu). *Jurnal administrasi bisnis*, 61(2), 30–37, 2018.
- Aulia, S. A., & syarifuddin, S. Pengaruh knowledge sharing terhadap kinerja karyawan di telkom corporate university center. *E-proceeding of management*, 4(3), 3007–3015, 2017.
- Chalifa, N., & Nugrohoseno, d. Pengaruh berbagi pengetahuan terhadap kinerja karyawan MELALUI KERJA TIM. *BISMA (Bisnis Dan Manajemen)*, 7(1), 1–8, 2014.
- Connelly, C. E., & Kelloway, E. K. Predictors of employees' perceptions of knowledge sharing cultures. *Leadership & Organization Development Journal*, 24(5), 294–301, 2003.
- Davis, F. D. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13(3), 319–340, 1989.
- Fitriani, D. Analisis Pengaruh Penggunaan Teknologi Informasi Terhadap Kinerja Karyawan PT. Asuransi Jiwasraya Pontianak. *Cogito Smart Journal*, 4(1), 160–170, 2018.
- Gea, A. A. SUMBER DAYA MANUSIA DALAM LINGKUNGAN BISNIS GLOBAL KOMPETITIF. *Humaniora*, 5(1), 52–61, 2014.
- Ghozali, I. *Structural Equation Modeling Metode Alternatif Dengan PARTIAL LEAST SQUARES (PLS)* (4th ed.). Badan Penerbit Universitas Diponegoro, 2014.
- Handayani, R., Runtuwene, R. F., & Sambul, S. A. P. Pengaruh Penguasaan Teknologi Informasi Terhadap Kinerja Karyawan Pada PT. Telkom Indonesia Cabang Manado. *Jurnal Administrasi Bisnis*, 6(002), 10–16, 2018.
- Hosmani, A. P., & Shambhushankar, B. R. Study on Impact of Quality of Work Life on Job Performance amongst Employees of Secunderabad Division of South Central Railway. *Research Journal of Management Sciences*, 3(11), 8–11, 2014.
- Huysman, M., & Wulf, V. IT to support knowledge sharing in communities, towards a social capital analysis. *Journal of Information Technology*, 21(1), 40–51, 2006. <https://doi.org/https://doi.org/10.1057%2Fpalgrave.jit.2000053>
- Javadi, M. H. M., et al. Effect of Motivation and Trust on Knowledge Sharing and Effect of Knowledge Sharing on Employee's Performance. *International Journal of Human Resource Studies*, 2(1), 210–221, 2012.
- Kadir, A., & Triwahyuni, T. C. *Pengantar Teknologi Informasi Edisi Revisi*. Penerbit Andi, 2013.
- Kanaan, R., Masa'deh, R., & Gharibeh, A. H. THE IMPACT OF KNOWLEDGE SHARING ENABLERS ON KNOWLEDGE SHARING CAPABILITY: AN EMPIRICAL STUDY ON JORDANIAN TELECOMMUNICATION FIRMS. *European Scientific Journal*, 9(22), 237–258, 2013.
- Kim, S., & Lee, H. The Impact of Organizational Context and Information Technology on Employee Knowledge-Sharing Capabilities. *Public Administration Review*, 66(3), 370–385, 2006.
- King, W. R. INTEGRATING KNOWLEDGE MANAGEMENT INTO IS STRATEGY. *Information Systems Management*, 16(4), 70–72, 1999.
- Kuzu, Ö. H., & Özilhan, D. The Effect of Employee Relationships and Knowledge Sharing on Employees' Performance: An Empirical Research on Service Industry. *Procedia-Social And Behavioral Sciences*, 109(1), 1370–1374, 2014.
- Lee, J. The Effects of Knowledge Sharing on Individual Creativity in Higher Education Institutions: Socio-Technical View. *Administrative Sciences*, 8(2), 21–36, 2018.
- Lin, H. Knowledge sharing and firm innovation capability: an empirical study. *International Journal Of Manpower*, 28(3), 315–332, 2007.
- Lumbantobing, P. *Knowledge Management: Konsep, Arsitektur Dan Implementasi* (No. 2). Graha Ilmu, 2007.
- Lumbantobing, P. *Manajemen Knowledge Sharing Berbasis Komunitas* (No. 1). Knowledge Management Society Indonesia, 2011.
- Maharani, R. H. PENGARUH ETIKA KERJA DAN KNOWLEDGE SHARING TERHADAP KINERJA KARYAWAN PADA BANK RAKYAT INDONESIA (Persero), Tbk Cabang Jombang. *Jurnal Ilmu Manajemen (JIM)*, 4(1), 302–309, 2016.
- Mangkunegara, A. A. A. P. *MANAJEMEN SUMBER DAYA MANUSIA PERUSAHAAN*. Remaja Rosdakarya, 2017.

- Mathis, R. L., & Jackson, J. H. *Manajemen Sumber Daya Manusia Edisi 10* (10th ed.). Salemba Empat, 2011.
- Memah, L., Pio, R. J., & Kaparang, S. G. PENGARUH KNOWLEDGE SHARING TERHADAP KINERJA KARYAWAN KANTOR PERWAKILAN BANK INDONESIA PROVINSI SULAWESI UTARA. *Jurnal Administrasi Bisnis (JAB)*, 5(2), 1–9, 2017.
- Moheriono, M. *Pengukuran Kinerja Berbasis Kompetensi Edisi Revisi*. Raja Grafindo Persada, 2018.
- Muzakki, M. H., Susilo, H., & Yuniarto, S. R. PENGARUH PENGGUNAAN TEKNOLOGI INFORMASI TERHADAP KINERJA KARYAWAN (Studi Pada Karyawan PT. TELKOM Pusat Divisi Regional V Surabaya). *Jurnal Administrasi Bisnis*, 39(2), 169–175, 2016.
- Nawawi, I. *Manajemen Pengetahuan (Knowledge Management)*. Ghalia Indonesia, 2012.
- Noor, N. M., & Salim, J. Factors Influencing Employee Knowledge Sharing Capabilities in Electronic Government Agencies in Malaysia. *International Journal of Computer Science Issues (IJCSI)*, 8(4), 106–114, 2011.
- Oktaviani, D. FAKTOR-FAKTOR YANG MEMPENGARUHI KNOWLEDGE SHARING CAPABILITY: STUDI KASUS GROUP SAP PT ABC [Universitas Indonesia]. In *Karya Akhir*, 2016.
- Prawirosentono, S. *Manajemen Sumberdaya Manusia KEBIJAKAN KINERJA KARYAWAN Kiat Membangun Organisasi Kompetitif Era Perdagangan Bebas Dunia*. Badan Penerbit Fakultas Ekonomi (BPFE), 2012.
- Rivai, V., & Basri, A. F. M. *PERFORMANCE APPRAISAL Sistem yang tepat untuk menilai kinerja karyawan dan meningkatkan daya saing perusahaan*. PT RajaGrafindo Persada, 2005.
- Saragih, S. P. T., & Harisno, H., INFLUENCE OF KNOWLEDGE SHARING AND INFORMATION TECHNOLOGY INNOVATION ON EMPLOYEES PERFORMANCE AT BATAMINDO INDUSTRIAL PARK. *CommIT (Communication and Information Technology) Journal*, 9(2), 45–49, 2015.
- Sari, R. N. I., & Hadijah, H. S. Peningkatan kinerja pegawai melalui kepuasan kerja dan disiplin kerja. *Jurnal Pendidikan Manajemen Perkantoran (JPManper)*, 1(1), 204–214, 2016.
- Suryadi, E., ANALISIS PERANAN LEADERSHIP DAN BUDAYA ORGANISASI TERHADAP KINERJA PEGAWAI. *Manajerial: Jurnal Manajemen Dan Sistem Informasi*, 9(1), 1–9, 2010.
- Swift, P. E., & Hwang, A. The impact of affective and cognitive trust on knowledge sharing and organizational learning. *The Learning Organization*, 20(1), 20–37, 2013.
- Trivellas, P., Akrivouli, Z., Tsifora, E., & Tsoutsas, P. The impact of knowledge sharing culture on job satisfaction in accounting firms. The mediating effect of general competencies. *Procedia Economics And Finance*, 19, 238–247, 2015.
- Warsita, B. *Teknologi Pembelajaran Landasan & Aplikasinya*. Rineka Cipta, 2008.
- Yang, J. The impact of knowledge sharing on organizational learning and effectiveness. *Journal Of Knowledge Management*, 11(2), 83–90, 2007.
- Yeh, Y., Lai, S., & Ho, C. Knowledge management enablers: a case study. *Industrial Management & Data Systems*, 106(6), 793–810, 2006.

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