

The Effect of Knowledge Sharing, Absorption Capacity on Employee Performance with Innovation Capability as Intervening Variables (Case Study on Employees of the Central Java Agricultural Technology Research Center)

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Abstract

This study aims to analyze how much influence the variable knowledge sharing, absorption capacity has on employee performance through innovation capability as an intervening variable. This study uses the Structural Equation Model (SEM) analysis method. The findings of this study indicate that the variable knowledge sharing has a positive effect on employee performance, absorption capacity has a positive effect on employee performance, knowledge sharing has a negative effect on innovation capability, and absorption capacity has a positive effect on employee performance and innovation. Capability has a positive effect on employee performance. The managerial implications in this study indicate that absorption capacity has a positive effect on employee performance and innovation capability has a positive effect on employee performance. The managerial implications in this study indicate that absorption capacity has a positive effect on employee performance and innovation capability has a positive effect on employee performance. The managerial implications in this study indicate that there needs to be optimization in applying the priority of the quality of work results to existing employees. The quality of the work describes the results expected by the government to be applied to local farmers in Central Java. With good yield quality in innovation of superior seeds and fertilizers, it will increase the production power of farmers in Central Java.

Keywords

Knowledge sharing; absorption capacity; innovation capability; employee performance



I. Introduction

In the process to advance the company or organization, it is necessary to have Human Resources who have good performance and can be developed by the company. Employee performance is needed in the process of achieving targets in a job, then employees will be measured their performance to find out how far the performance they can produce. (Robbins, 2012). Employee performance or employee performance can be interpreted as the results obtained after doing a job assessed in terms of the quality and quantity that have been achieved by employees so that in the process to complete and carry out the tasks and responsibilities that have been entrusted by the company to employees (Mangkunegara, 2011).

The existence of performance optimization activities requires the development of knowledge. Knowledge sharing is a bridge between employees and the company towards a better direction. The activity of sharing knowledge in the end together provides benefits to human life through the learning that has been given by senior employees to their juniors. (Zhi Yang, 2018). In that sense, knowledge sharing is a process that runs systematically in the activity of sending, distributing, and disseminating knowledge from a person or organization to people using various media. (Paul, 2007)

Financial statements are basically a source of information for investors as one of the basic considerations in making capital market investment decisions and also as a means of management responsibility for the resources entrusted to them (Prayoga and Afrizal 2021) . Financial performance is a measuring instrument to know the process of implementing the company's financial resources. It sees how much management of the company succeeds, and provides benefits to the community. Sharia banking is contained in the Law of the Republic of Indonesia No.21 of 2008 article 5, in which the Financial Services Authority is assigned to supervise and supervise banks. (Ihsan, R. et al. 2021)

Knowledge Sharing make employees act actively interact with each other in order to grow new ideas for the betterment of the organization or company. Sharing knowledge is very good if it is given support in the form of potential absorption capacity. Cohen (1991) defines the notion of absorptive capacity as the absorption capacity of employees to assess new knowledge from the outside, and apply it to a common goal that can result in profitability and positive feedback. This mechanism will later underlie the assessment and assimilation of new knowledge in the form of learning. (Moxi Song, 2020).

Absorption capacity is a set of routines for employees needed to identify and utilize knowledge (Shauliang Zao, 2019). Absorption capacity can enable employees to increase their enthusiasm for understanding new things that they have never encountered so that with good absorption, it will increase opportunities for employees to quickly understand the knowledge and skills that must be applied in their work. (Onyiewu, 2015).

Absorbing ability possessed, makes employees have the potential to develop new things that have never existed before. Carla (2015) defines and explains that innovation capability can be interpreted as a pattern of characteristics that is seen as a personality in employees in order to measure the existence of a sense of individual or employee willingness to change by using new and innovative ways. According to Minna (2016) Innovation capability is the power of an innovative sense to reinvent the way of thinking in employee behavior that focuses on developing new ideas that have not existed before. The idea can be poured through the behavior of the work output that has been produced by employees in an effort to produce something new.

Employees who have the capability to develop their ideas systematically will be able to improve their performance. This is explained in the research conducted Primitive (2020) explains the positive and significant influence of the innovation capability variable on employee performance. This is in line with a study conducted by Moxi Song (2020) which reveals that innovation capability has a positive and significant effect on employee performance. Sabeen (2020) also revealed that increasing innovation capability has a role in improving employee performance and the ability to foster innovation in individuals will produce something new in the form of enthusiasm for using new ways of working for employees.

The object of research is a civil servant at the office of the Center for the Study of Agricultural Technology, which is located at Jalan Soekarno – Hatta KM. 26 Bergas District, Semarang Regency. Based on laws and regulations, the Center for the Study of Agricultural Technology is an agency under the ministry of finance in charge of discovering new

technologies and their development in agriculture and animal husbandry. In producing new and quality seeds, the Agricultural Technology Research Center conducts in-depth research studies on the content and potential for seed development so that the seeds that will be distributed to local farmers are super good seeds and are able to increase the production of agricultural products.

II. Review of Literature

2.1. Theoretical Framework and Hypotheses Formulation

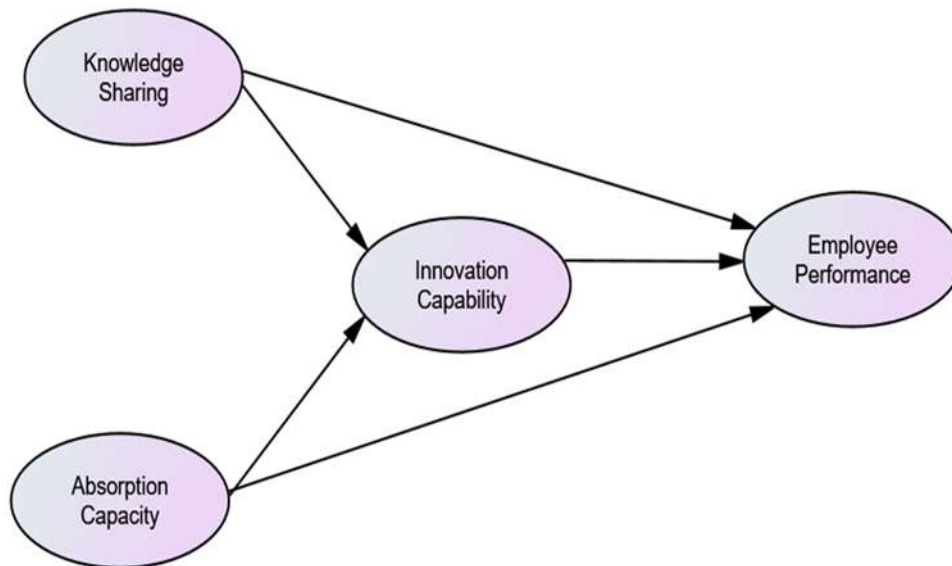


Figure 1. Framework for Thinking

Source: (Carla, 2015), (Moxi Song, 2020), (Shauliang Zao, 2019), (Yao, 2020), (Lee, 2015), (Kang, 2017), (Shu Hsien, 2016)

2.2. Effect of Knowledge Sharing on Employee Performance

In a knowledge development activity Knowledge sharing can make a bridge for the organization with a journey of the point of development of an organization for the purpose of the company's sustainability towards a better direction by sharing knowledge and in the end being able to work together. (Chuang, 2017). So that it will improve employee performance after gaining knowledge because the knowledge sharing that has occurred can provide space and a forum for employees to add and update knowledge that they have never gotten in their work, so that the ability in performance increases. (Ranjan, 2020). Performance of employees in doing a job requires a knowledge. Because with the presence of a good understanding of knowledge, employees who will carry out their work will grow self-confidence because they clearly understand the work to be done. (Chuang, 2017). In the development of the company, good performance is needed from its employees because it is needed to complete the targets set by the company (Lee, 2015). Knowledge Sharing is demonstrated by holding regular discussions so as to be able to provide new knowledge that has never been obtained by previous employees. With the knowledge sharing process, employees will be required to think in order to contribute ideas for product development in the company (Chang Feng, 2020). With the knowledge sharing process, it will foster good performance in employees because they already understand how they work and what the obstacles are (Carla, 2015). The following is a research hypothesis based on the exposure of the previous arguments:

H1: Knowledge Sharing has a positive and significant effect on Employee Performance

2.3. Effect of Absorption Capacity on Employee Performance

Employees are the main resource in the movement of the company, therefore the absorption capacity of employees is related to the process of forming innovation capabilities, skill accumulation, and knowledge transfer. (Shauliang Zao, 2019). With this, employees will show a good level of absorption capacity so as to improve employee performance (Lee, 2015). With a good absorption capacity, it will support the ability of employees in their work. In working they will feel light and carefree because they have good absorption ability to understand regulations and work procedures (Schweisfurth, 2018). The company will be much more developed and advanced with optimal employee performance and carried out in accordance with the regulations and targets set by the company (Ranjan, 2020). Employees who have good Absorption Capacity always devote their energy, contribution and thoughts for the betterment of the company. The idea that they developed at the start of the knowledge sharing discussion process will be very useful for researching a new product (Zahra, 2003). The company will show a good level of absorption capacity so as to improve employee performance (Azadehdel, 2014). Therefore, it can be interpreted that good absorption will increase employee performance because: Employees who have good performance always devote their energy, contributions and thoughts for the betterment of the company (Shu Hsien, 2016). The following is a research hypothesis based on the exposure of the previous arguments:

H2: Absorption Capacity has a positive and significant effect on Employee Performance

2.4. The Effect of Knowledge Sharing on Innovation Capability

Innovation capability is the power of innovative sense to reinvent the form of employee behavior that focuses on developing new concepts and ideas. This development can later be actualized through the behavior and results of new forms of discovery (Ussawanitchakit, 2017). This new discovery will later be used as a product and thought development with the aim of advancing the organization together (Minna, 2016). Knowledge Sharing can provide encouragement for employees to find an invention for the betterment of the organization so that it can encourage increased innovation capability in employees (Sabeen, 2020). Knowledge Sharing is shown by holding regular discussions so as to be able to provide new knowledge that has never been obtained by previous employees (Kang, 2017). With the knowledge sharing process, employees will be required to think in order to contribute ideas for product development in the company (Chuang, 2017). With the knowledge sharing process, it will foster innovation from management so that employees are encouraged to explore their abilities to the maximum so that they are able to bring out the innovations that exist in themselves. (Carla, 2015). Employees who have good innovation capability will always devote their energy, contribution and thoughts for the betterment of the company. The idea that they developed at the start of the knowledge sharing discussion process will be very useful for researching a new product (Kang, 2017). This ability can be seen from the way they have used in their work as a form of renewing power that does not yet exist to develop something new with additional modifications to apply advanced technology in business development that cannot be done by competitors. (Kim, 2018). The following is a research hypothesis based on the exposure of the previous arguments:

H3: Knowledge Sharing has a positive and significant effect on Innovation Capability

2.5. Effect of Absorption Capacity on Innovation Capability

In the continuation of the Absorption Capacity process, employees will form a series of activities to show how they can innovate and find new ideas (Carla, 2015). Employees will demonstrate a good level of absorption capacity so as to increase innovation capability. Therefore it can be interpreted that good absorption will increase innovation capability, this is in line with research Onyiewu (2015) and Shu Hsien (2016) which reveals that absorption capacity has a positive and significant effect on growing innovation capability in employees. Employees are the main resource in the movement of the company, therefore absorption capacity or absorption capacity for employees is an important asset in increasing innovation capability. (Chang Feng, 2020). Because when employees understand the content of the learning being taught, it will support innovation thinking to grow (Primitiva, 2020). Absorption capacity must be able to be optimized because this is a capital for employees to understand the material and lessons taught by the company (Schweisfurth, 2018). The company will demonstrate a good level of absorption capacity so as to increase innovation capability. Therefore, it can be interpreted that good absorption will increase innovation capability because: Employees who have good innovation capability will always devote their energy, contribution and thoughts for the progress of the company (Shu Hsien, 2016). The idea that they developed at the start of the knowledge sharing discussion process will be very useful for researching a new product (Zhi Yang , 2018). This ability can be seen from the way they have used it at work (Minna, 2016). Innovation Capability will appear when employees show good absorption ability, they always pay attention and organize thoughts and contribute to the progress of the company. (Zahra, 2003). The company will develop when balanced with advances in science and technology in the company's sustainability (Kang, 2017). The following is a research hypothesis based on the exposure of the previous arguments:

H4: Absorption Capacity has a positive and significant effect on Innovation Capability

2.6. The Influence of Innovation Capability on Employee Performance

In the development of a company, innovation capability is the ability created in the minds of employees to develop and modify a concept that did not exist before by using a different new technology system so that it cannot be imitated and carried out by other organizations. (Yao, 2020). Meanwhile, according to Carla (2015) innovation capability can be explained as an effort that appears and can foster individual willingness to change, so that the capability focuses on developing rare ideas. (Chang Feng, 2020). With a good innovation capability, it will support the ability of employees in their work (Lee, 2015). In their work, they will feel light and carefree because the innovation ideas they create are recognized and considered by the company (Chang Feng, 2020). The company will be much more developed and advanced with optimal employee performance and carried out with pleasure without being burdened (Ranjan, 2020). With the existence of good innovation capability capital, employees who have the capability to develop their ideas systematically will be able to improve their performance. Good to finish the job (Kang, 2017). This can improve employee performance because employees have new ideas and breakthroughs that can later be used for progress in company performance (Primitiva, 2020). The following is a research hypothesis based on the exposure of the previous arguments:

H5: Innovation Capability has a positive and significant effect on Employee Performance

III. Research Method

This study uses explanatory research with quantitative methods. Explanatory research is research that aims to test hypotheses, whether to strengthen or reject the hypothesis seen from the research results. Explanatory research is research with the aim of knowing whether there is a relationship and influence between the independent variables on the dependent variable, if there is a relationship and influence then how close is the relationship and influence (Ghozali, 2012). In this study, the population was determined, namely permanent employees of civil servants at the Office of the Center for the Study of Agricultural Technology, the population at the Office of the Center for the Study of Agricultural Technology, as many as 85 respondents were civil servants at the Center for the Study of Agricultural Technology in Central Java, which consisted of 15 technicians,

The sampling technique in this study is a purposive sampling technique, meaning that not all samples can be used in research. Purposive sampling technique is a sampling technique with certain criteria in research. The criteria are all employees who are in the Center for the Study of Agricultural Technology with the status of a special functional civil servant who has worked for more than 1 year as a condition for selecting the sample. In taking the sample in this study, the author uses the saturated sample formula, which is sampling if all the population is used as a sample and is also known as a census.

IV. Result and Discussion

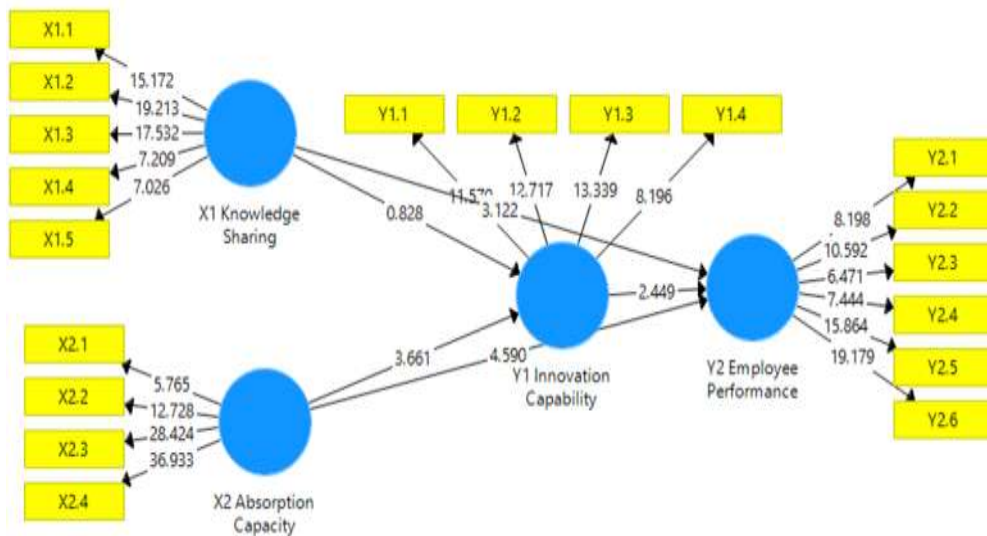


Figure 1. Structural Model Testing

Table 1. Hypothesis Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values (Sig.)
KS - EP	0.306	0.315	0.098	3,122	0.002
AC – EP	0.515	0.516	0.112	4,590	0.000
KS – IC	0.119	0.136	0.143	0.828	0.408
AC – IC	0.477	0.477	0.130	3,661	0.000
IC – EP	0.165	0.156	0.067	2,449	0.015

Source: Processed primary data, 2021

4.1. Hypothesis Test Results 1

Hypothesis 1 of this study is the higher knowledge sharing will encourage employees of the Central Java Agricultural Technology Research Center to be able to share their knowledge which has an impact on increasing employee performance. Knowledge sharing has a significant effect on employee performance with a path coefficient (O) of 0.306 with a t-statistic value of 3.122 with a significance level of 0.002 which is smaller than 0.05. This positive coefficient indicates that the higher the knowledge sharing owned by the employees of the Central Java Agricultural Technology Research Center, the higher the existing employee performance. The positive value of the parameter coefficient means that employees who have high knowledge sharing will encourage to share their knowledge in order to improve the performance of other employees.

4.2. Hypothesis Test Results 2

Hypothesis 2 of this research is the higher absorption capacity will encourage employees of the Central Java Agricultural Technology Research Center to be able to have knowledge absorption capacity which has an impact on increasing employee performance. Absorption Capacity has a significant effect on employee performance with a path coefficient (O) of 0.515 with a t-statistic value of 4.590 with a significance level of 0.000 which is smaller than 0.05. This positive coefficient indicates that the higher the absorption capacity of the employees of the Central Java Agricultural Technology Research Center, the higher the existing employee performance. The positive value of the parameter coefficient means that employees who have high absorption capacity will encourage them to absorb their knowledge in order to improve employee performance.

4.3. Hypothesis Test Results 3

Hypothesis 3 of this study is that higher knowledge sharing does not encourage employees of the Central Java Agricultural Technology Research Center to share knowledge and does not have an impact on increasing innovation capability. Knowledge sharing has no significant effect on innovation capability with a path coefficient (O) of 0.119 with a t-statistic value of 0.828 with a significance level of 0.408 which is greater than 0.05. This negative coefficient indicates that the higher the knowledge sharing owned by the Central Java Agricultural Technology Research Center employees, the higher the innovation capability. Therefore, the third hypothesis which states that there is an influence between knowledge sharing on innovation capability not proven.

4.4. Hypothesis Test Results 4

Hypothesis 4 of this research is the higher absorption capacity will encourage employees of the Central Java Agricultural Technology Research Center to be able to have the power of innovation in themselves to increase innovation capability. Absorption Capacity has a significant effect on innovation capability with a path coefficient (O) of 0.477 with a t-statistic value of 3.661 with a significance level of 0.000 which is smaller than 0.05. This positive coefficient indicates that the higher the absorption capacity of the Central Java Agricultural Technology Study Center employees, the higher the existing innovation capability will be. The positive value of the parameter coefficient means that employees who have high absorption capacity will encourage them to develop innovations in themselves in order to improve employee performance.

4.5. Hypothesis Test Results 5

Hypothesis 5 from this research is that higher innovation capability will encourage Central Java Agricultural Technology Research Center employees to be able to have innovation power at work, which will have an impact on increasing employee performance. Innovation Capability has a significant effect on employee performance with a path coefficient (O) of 0.165 with a t-statistic value of 2.449 with a significance level of 0.015 which is smaller than 0.05. This positive coefficient indicates that the higher the innovation capability of the Central Java Agricultural Technology Research Center, the higher the existing employee performance. The positive value of the parameter coefficient means that employees who have high innovation capability will encourage their innovation to grow in order to improve employee performance.

Table 2. Intervening Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values (Sig.)	Description
KS – IC – EP	0.020	0.020	0.024	0.813	0.416	Not Mediating
AC – IC – EP	0.079	0.076	0.042	1,880	0.061	Not Mediating

Source: Processed primary data, 2021

1. The indirect effect on the variable knowledge sharing on employee performance through innovation capability has a path coefficient (O) of 0.020 with a t-statistic of 0.813 and a significance of 0.416 which is more than $\alpha = 0.05$. This means that innovation capability does not mediate the effect of knowledge sharing on employee performance. In a study conducted by Minna (2016) in testing moderation in companies engaged in digital telecommunications, it was explained that Innovation Capability cannot mediate Knowledge Sharing on Employee Performance because in sharing knowledge employees always directly practice the results of new knowledge that has been obtained, so as to innovate. they must seek permission from the head of the department or his superiors first.
2. The indirect effect on the absorption capacity variable on employee performance through innovation capability has a path coefficient (O) of 0.079 with a t-statistic of 0.813 and a significance of 0.061 which is more than $\alpha = 0.05$. This means that innovation capability does not mediate the effect of knowledge sharing on employee performance. In a study conducted by Salih (2015) in testing moderation in companies engaged in the fast food distribution sector, it was explained that Innovation Capability cannot mediate Absorption Capacity on Employee Performance because in sharing knowledge employees always absorb knowledge to practice it into finished goods, the goods have been made according to the standard provisions in force, so in order to innovate they must first seek permission from the head of their department or superiors to get corrections and approval. This is what makes Innovation Capability unable to mediate Absorption Capacity on Employee Performance

V. Conclusion

1. Knowledge sharing positive and significant effect on Employee Performance on employees of the Central Java Agricultural Technology Study Center.
2. Absorption Capacity positive and significant effect on Employee Performance on employees of the Central Java Agricultural Technology Study Center.
3. Knowledge sharing positive and insignificant effect on Innovation Capability for employees of the Central Java Agricultural Technology Study Center.
4. Absorption Capacity has a significant positive effect on Innovation Capability for employees of the Central Java Agricultural Technology Study Center.
5. Innovation Capability positive and significant effect on Employee Performance on employees of the Central Java Agricultural Technology Study Center.
6. From the test results of the Specific Indirect Effect analysis to prove the effect of mediating or intervening the Innovation Capability variable, it was proven not to be able to become an intervening variable between Knowledge Sharing and Employee Performance.
7. From the test results of the Specific Indirect Effect analysis to prove the effect of mediating or intervening the Innovation Capability variable, it is proven not to be able to become an intervening variable between Absorption Capacity and Employee Performance.

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