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# Research Article

# The Role of Knowledge Management on Employee Performance

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Abstract: The purpose of this study is to investigate how organizational learning and information technology affect worker efficiency, using knowledge management as a mediating variable. The respondents in this study were all employees of Klaten Regional Drinking Water Company. This research was carried out using the census method in sampling. 69 employees made up the sample, which was determined by the method of sample collecting. Questionnaires were given to chosen samples in order to collect data. The questionnaire uses a Likert scale for measurements. The Partial Least Square (PLS) variant serves as the foundation for the Structural Equation Model (SEM) used in the examination approach, which is performed using the SmartPLS 3.2.9 application. To observe the impact of mediating variables as well as the relationship between independent and dependent variables. The research findings indicate that knowledge management, organizational learning, and information technology have a favorable and significant impact on employee performance, based on hypothesis testing utilizing the bootstrapping approach. Furthermore, knowledge management has the ability to moderate the impact of organizational learning and information technology on worker efficiency.

Keywords: Information technology, Organizational learning, Employee performance, Knowledge management.

# I. INTRODUCTION

As the current era develops, it can be marked by the rapid development of information technology because humans increasingly cannot be separated from technology. This rapidly developing information technology produces various types of products to support people's needs. Various types of information technology products can simplify the data reporting process. Therefore, work will be more efficient. The use of information technology can also influence the success, quantity and quality of employee performance in an organization [1].

This developing information technology has had an impact on company activities, which are mainly related to business transactions. A business challenge that will be faced now by companies is rapid change, competitive uncertainty, markets and regulations. Companies must be able to handle this by applying information technology to provide services to consumers; apart from that, companies must continue to learn. There is a constant need for management knowledge in creating innovation, so management knowledge is required to continue to develop itself in order to improve company performance, both in the period short or longer time <sup>[2]</sup>. The choice of technology used. Information on a company's performance is the basic need for the company itself to survive in increasingly tight economic competition. Many companies invest in information technology because it is the best step in increasing economic productivity, company profits, and also the operational quality of the company itself <sup>[2]</sup>.

Apart from information technology, as time goes by, every organization is also required to learn and continue to develop. Organizations that do not have the will to learn will be left behind by other competitors. Thus, now, many organizations are forced to implement effective learning processes in the hope of improving the performance of their employees; this term is often referred to as organizational learning. Organizational learning, which aims to improve behavior through better understanding and knowledge of thinking, can also provide opportunities for every individual in an organization to understand themselves so that they can improve their ability to think, and this can lead to increased performance of the organization [3].

There is a positive impact on learning activities in an organization [4]. According to Watkins and Marsick<sup>[5]</sup>, organizational learning activities can improve an employee's abilities. Srimulatsih<sup>[3]</sup> said that organizational learning is seen as a continuous learning cycle of entities in organizations. The learning process is carried out to follow dynamic changes in the business world [3].



In order for the relationship between technology and performance to have a positive impact, data technology must be used appropriately and must be compatible with the tasks being supported [1]. Knowledge management is an important resource for organizations; as a result, knowledge management becomes important for organizational success [6]. This shows that knowledge management is important to be implemented in organizations or companies so that companies can have a sustainable competitive advantage because the implementation of knowledge management can provide benefits in the areas of service and operations and can also increase personal competence, as well as product development innovation.

Basically, knowledge management can be implemented as a strategy with little dependence on current technological sophistication. Despite this, the success of current knowledge development cannot be denied that it is greatly influenced by facilities or infrastructure that suit the needs of an organization, technological dynamics and environmental demands. Through knowledge management, company superiors not only share knowledge and experience but also create something that can be a "contamination center", where someone influences other people to have ideas and creativity [7].

## II. LITERATURE REVIEW

In a company, information technology performance requires support from the workforce, business resources, and technology that work effectively together. Research evidence shows that information technology performance can be positively influenced by information technology, which is supported by human resources, business resources and technological resources. Information technology can support a competent workforce with the aim of providing convenience for companies in managing data more efficiently. Proper use of information technology can significantly influence employee performance in an organization. [8]

# H1: Information technology has a positive effect on employee performance.

The capacity of an organization to sustain or enhance performance via experience is known as organizational learning. This activity entails gaining knowledge through which interactions, abilities, and insights are developed or created. Apart from that, there is a process of sharing knowledge through spreading to others what has been obtained by several people. Moreover, the use of knowledge by integrating learning so that it is unified and widely available can be generalized to new situations. [9] Referring to the theoretical study put forward by Djamaludin [10], which states that organizational culture and learning are able to adapt to changes in the company's environment if the company is late in changing, then it is very likely that the company will decline in its performance.

# H2: Organizational learning has a positive effect on employee performance

Technology is one aspect of knowledge management that involves information technology components. [11] Information technology is a main component in knowledge management, with knowledge management focusing more on the approaches used in business practices rather than the technology or products used. However, the success of any knowledge management system is highly dependent on information technology. With information technology, knowledge management can create a corporate framework within which knowledge can be developed. According to research conducted by Meidiyanto [12], it was found that expertise in technology, information and communication has a significant impact on knowledge management. Knowledge acquisition and information technology are significantly correlated. Thus, it can be concluded that the influence of information technology on knowledge management is positive. Research conducted by Kosasih and Budiani [13] showed that there was a relationship between individual knowledge of work procedures. The results of this study show that good knowledge helps a good understanding of work procedures. The aforementioned description leads to the formulation of the following hypothesis.

# H3: Information technology has a positive effect on knowledge management

The learning process that occurs within an organization is called organizational learning. This process intends to improve action through better understanding and better thinking knowledge. Organizational learning provides opportunities for each member of the organization to know and understand themselves. That way, each individual can improve their thinking abilities, which will ultimately have a positive impact on organizational performance<sup>[14]</sup>. The organizational learning process is provided to those who have an interest in the organization in order to help the organization grow in facing rapid environmental changes. This aims to continue to fulfill the desired interests and goals of the organization. Finally, the individual achievements of team members also influence the overall performance of the organization. In Watkins and Marsick's research in 2003, they concluded that with learning, employee abilities can be improved, and in the end, the organization will experience positive improvements. Organizational learning is an active process of creating and combining knowledge to develop resources that play a role in achieving better performance. [4]

# H4: Organizational learning has a positive effect on knowledge management

Performance is a very important aspect of an organization and is also an indicator of company progress.<sup>[15]</sup> According to Falah & Prasetya<sup>[16]</sup>, a company's progress depends on the contribution of employees in fulfilling their duties and work.

Employee performance can be seen from the work productivity they produce. Knowledge management has a big influence on improving employee performance in a company. One of the factors related to efforts to improve human resource performance is related to knowledge management, where several previous studies show that knowledge management is able to influence employee performance. The knowledge possessed by employees can influence their capacity. When knowledge increases, individual capacity also increases indirectly so that their achievements will also be affected. Knowledge management is the management of activities aimed at creating and placing knowledge, managing the flow of knowledge, and ensuring the effective and efficient use of knowledge in the long term for the benefit of the organization. [17]

# H5: Knowledge management has a positive effect on employee performance.

Data was obtained by conducting interviews and filling out questionnaires. The data collection technique through interviews is a method of collecting information using verbal questions. In this research, an interview was conducted with one of the HRD staff, to obtain information that would be used as a problem formulation in the research. The data analysis method, namely descriptive statistics, is statistics used to analyze data by describing or illustrating the data that has been collected with the intention of making conclusions that apply to the general public or generalizations. [18] Research conducted on populations will clearly use descriptive statistics in their analysis. The method used in this study to process data is through the Structural Equation Modeling (SEM) approach.

## III. RESULTS AND DISCUSSION

The path coefficient test was carried out to test the correlation of information technology, organizational learning, and knowledge management on employee performance, as well as the correlation of information technology and organizational learning on knowledge management. First, the test results show that there is a significant positive influence of information technology on employee performance (p=0.005). Second, there is a significant positive effect of organizational learning on employee performance (p=0.001). Third, there is a significant positive effect of knowledge management on employee performance (p=0.018). Fourth, the research results show that there is a significant positive influence of information technology on knowledge management (p=0.025). Fifth, the test results show that there is a significant positive influence of organizational learning on knowledge management (p=0.003).

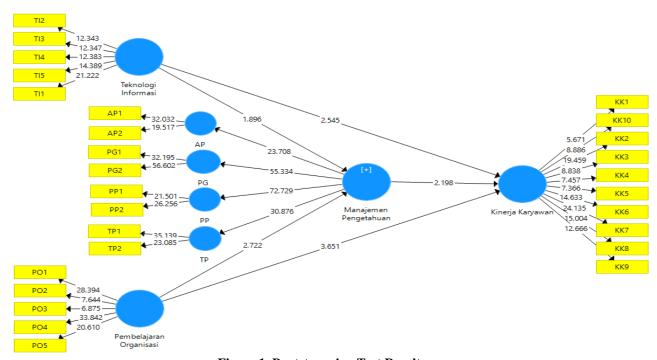


Figure 1. Bootstrapping Test Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Knowledge Management -> Knowledge Acquisition	0.863	0.863	0.037	23.626	0
Knowledge Management -> Employee Performance	0.22	0.214	0.105	2.102	0.018
Knowledge Management -> Knowledge Creation	0.923	0.923	0.017	53.766	0
Knowledge Management -> Knowledge storage and retrieval	0.95	0.949	0.014	70.214	0
Knowledge Management -> Knowledge Utilization Transfer	0.894	0.895	0.028	31.994	0
Organizational Learning -> Employee Performance	0.365	0.37	0.11	3.307	0.001
Organizational Learning -> Knowledge Management	0.393	0.407	0.142	2.767	0.003
Information Technology -> Employee Performance	0.287	0.294	0.111	2.593	0.005
Information Technology -> Knowledge Management	0.308	0.289	0.157	1.961	0.025

### **Table 1. Path Coefficient**

Source: Processed data (2023)

Based on the results of indirect tests, the effect of organizational learning on employee performance is mediated by knowledge management at 0.084 and is significant at P Values = 0.036. Likewise, the influence of information technology on employee performance is mediated by knowledge management at 0.068 and is significant at P Values = 0.096.

**Table 2. Indirect Effect** 

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Organizational Learning -> Knowledge Management ->					
Employee Performance	0.087	0.084	0.048	1.806	0.036
Information Technology -> Knowledge Management ->					
Employee Performance	0.068	0.065	0.052	1.305	0.096

Source: Processed data (2023)

The purpose of this study is to ascertain how organizational learning and information technology affect worker efficiency through knowledge management, as well as the correlation of information technology and organizational learning on knowledge management. This research proves that information technology has a significant positive effect on the employee's performance. Thus, it can be understood that the better use of information can facilitate employee performance so that it can increase. The results of this research support research conducted by Tanriverdi [19], who obtained evidence that there is a positive influence between the linkage of information technology on employee performance, or it can be interpreted that the higher the level of linkage to information technology, the higher the employee's performance. Companies that always adapt to developments in information technology and manage knowledge will improve employee performance in both the short and long term.

This research shows that organizational learning has a significant positive effect on the employee's performance. Thus, it can be understood that with better implementation of the organizational, employee performance will increase. The results of this research support research conducted by Rose et al. [4], which concluded that organizational learning has a significant effect on employee performance, where increasing organizational learning activities increases knowledge increases, abilities and skills, thereby increasing work performance.

Based on the test results, information technology has a significant positive effect on knowledge management. The link between information technology and knowledge management has a positive relationship, so the higher the level of information technology linkage, the higher the level of improvement in knowledge management. The development of information technology will have an impact on management, which continues to follow its progress so that it can produce innovation in services and products. This research has similar views to research conducted by Dewett & Jones [20], as well as research

conducted by Tanriverdi<sup>[19]</sup>.

This research shows that organizational learning has a significant positive effect on knowledge management. If the company continues to strive to learn, good knowledge management will be created so that it can improve the company's performance. This research is in line with the findings of Jain and Moreno [21] and Shu [22].

Based on the results of this research, it show that knowledge management has a significant positive effect on employee performance. There is a positive influence between knowledge management on employee performance or it can be interpreted that the higher the knowledge management ability, the higher the employee performance will be. So, to support and face competitive uncertainty and regulatory uncertainty, management must be able to manage knowledge that is always developing rapidly. This research is in line with Sahibzada et al. [23].

The research is limited by the fact that during the data collection phase, data gathered from respondents via questionnaires may not accurately reflect the views of the participants. This is due to a variety of factors, including variations in respondents' ideas, presumptions, and comprehension, in addition to the honesty of the data offered in the survey.

### IV. CONCLUSION

Information technology, organizational learning and knowledge management have a positive impact and are significant to employee performance. Apart from that, information technology and organizational learning also influence knowledge management. Knowledge management is also capable of mediation the relationship between information technology and organizational learning on employee performance. Using knowledge management as the mediating variable, this study was successful in demonstrating the impact of organizational learning and information technology on worker performance. Therefore, it would be better for other researchers in future research to use other employee performance factors besides information technology and learning organizations.

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