# The Influence Of Management Information Systems On Employee Performance With Transformational Leadership Style As A Moderating Variable

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## ABSTRACT

This study is a quantitative study with an explanatory approach, namely an approach that emphasizes the three studies mentioned explicitly above as references and main references. The data used in this article is primary data that researchers distributed to 300 Mitra Bangunan employees spread throughout Indonesia. The data was analyzed using the smart PLS 4.0 analysis tool

## INTRODUCTION

According to The Encyclopedia of Management, "Management Information Systems are planned and organized approaches to supplying executives with intelligence aids that facilitate the managerial process." Another view of management information systems is that they are computer-based systems that make information available to users with similar needs. MIS users typically consist of formal organizational units of an institution or sub-units of a subsidiary institution. The information provided by MIS describes the institution or one of its major systems in terms of what has happened in the past, what is happening now, and what is likely to happen in the future(Marsal and Hidayati 2018) .

MIS will produce this information through the use of two types of software (Shyreen A et al. 2022): 1) Report-writing software that produces periodic reports and special reports. Periodic reports are coded in a programming language and prepared on a specific schedule. Special reports, often called ad hoc reports, are created in response to unanticipated information needs. Today's database management systems have features that can quickly generate reports in response to requests for specific data or information. 2) Mathematical models produce information as a result of a simulation of the organization's operations. Mathematical models that describe the organization's operations can be written in any programming language. However, specialized modeling languages can make the task more effective and efficient.

Robert G. Murdick and Joel E. Ross in their book entitled "Information Systems for Modern Management" (translation) define MIS as a communication process in which input information is recorded, stored, and processed to produce output in the form of decisions about planning, operation and supervision. Josef F. Kelly in his book "Computerized Management Information System" defines MIS as a combination of human resources and computer-based resources that produce a collection of storage, communication and use of data for the purpose of efficient management operations and business planning (Siagian 2014). The Liang Gie in his book, Pokok-Pokok PPBS and MIS, suggests a broader formulation of MIS (Management Information System) as: the entire network of relationships between units and traffic networks, various information in an organization and all processes of collecting, processing, storing, retrieving and distributing that information with various equipment so as to enable members to carry out their duties as well as possible and leaders to make decisions or carry out other leadership tasks appropriately. A similar view was expressed by Robert W. Holmes who stated that a management information system is a system designed to present selected decision-oriented information needed by management to plan, monitor and evaluate organizational activities (Moekijat 2005).

Information and management and management information systems; it can be summarized that the Management Information System is a series of integrated information that can be useful for users (managers) to carry out certain activities and ultimately can be used for the decision-making process. Information systems have several technical capabilities (McLeod 2008). The intended technical capabilities come from computer systems, namely: 1) Batch and single transaction processing, 2) Online processing, 3) Real time, 4) Data communication and message switching, 5) Remote data entry and file updates, 6) Record search and analysis, 7) File search, 8) Decision algorithms and models, 9) Office automation (Isa 2012).

In a public organization, as stated in the Management Information System course module compiled by Drs. Nelman, M.Si and DR. Hj. Hasniati, M.Si (Lecturer of Administrative Science, Hasanuddin University), Management Information Systems have two patterns, namely: 1. Decision support system 2. Database management system for public services (Bahra 2006).

## LITERATURE REVIEW

### Management Information Systems

(Sofyandi 2008), "Management information systems can be defined as a collection of interactions of information systems that are responsible for collecting and processing data to provide useful information for all levels of management in planning and control activities". According to (Wakhid 2021)"The definition of a Management Information System is a series of comprehensive and rationally guided coordinated information subsystems that are able to transform data into information through a series of methods to increase productivity in accordance with the style and nature of managers based on established quality criteria" (Khairul 2021).

(Husein 2011)"Defines Management Information System as a computer-based system that provides information for several users who have similar needs. Information explains the company or one of its main systems about what has happened in the past, what is happening

now and what might happen in the future". Information is data or facts that have been processed in such a way that they change their form into information. In addition, information can reduce uncertainty and has value in decisions because with information we can choose actions with the smallest risk.

**Employee Performance**

According to (Andini and Rosdiana 2023)employee performance is the work results in terms of quality and quantity achieved by an employee in carrying out his duties in accordance with the responsibilities given to him. According to (Suparman and Sugiyanto 2022) explains that performance is the work results or work achievements of a person or group of people in achieving organizational goals. In addition, (Sinambela 2012)has the opinion that employee performance is the ability of employees to carry out a certain expertise in carrying out the tasks given to him.

According to (Rudiyanto Saseta Sitorus 2022), employee performance is what influences how much they contribute to the organization. Performance is very important in a company to achieve its goals. Performance can run well if employees get salaries according to expectations, get training and development, a conducive work environment, get equal treatment, employee placement according to their expertise and get career planning assistance, and there is feedback from the company. Then there are several factors that also influence employee performance Alex Soemadji Nitisemito in (Suparman and Sugiyanto 2022)who classifies several factors that influence employee performance, including intellectual ability, work discipline, job satisfaction, organizational commitment, employee motivation, leadership style, organizational culture, work environment, compensation and management information systems in the company.

**Transformational Leadership Style**

Transformational leadership is a leader who pays attention to the problems faced by his followers and the development needs of each follower by providing encouragement and motivation to achieve his goals (Fortuna 2020). Furthermore, (Faizal Roni 2019)explain that transformational leadership is a leader who has a certain way to influence his subordinates. So, subordinates feel trust, pride, loyalty and respect for their superiors, and they are motivated to do more than expected.

Subordinates of a transformational leader feel trust, admiration, loyalty, and respect for the leader and they are motivated to do more than before. This is fostered by the leader by getting closer to subordinates personally (Robbins 2016). (Robbins 2018)stated that there are four characteristics and at the same time as dimensions of transformational leadership: a. Idealistic Influence (Individualized Influence), leaders set high standards of behavior, morals and ethics, and use the ability to move individuals and groups for shared achievement. b. Inspirational Motivation (Inspirational Motivation), Leaders act as models or role models for followers.

**Figure 1 Model**
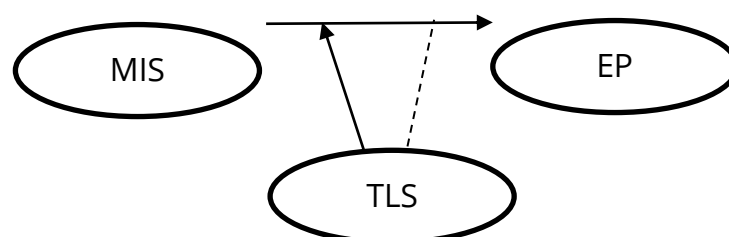


Noted:
MIS: Management Information Systems
EP: Employee Performance
TLS: Transformational Leadership Style

Researchers believe that with a good Management Information System, it will improve Employee Performance. These results are in line with the three previous studies, namely (Syamsiah 2018); (IRFAN 2018) & (Imam Sandika 2019). Unlike the three previous studies with this study, this study adds the Transformational Leadership Style variable as a moderating variable (Kayanti 2016). This study is a quantitative study with an explanatory approach, namely an approach that emphasizes the three studies mentioned explicitly above as references and main references (Aziz 2021). The data used in this article is primary data that researchers distributed to 300 Mitra Bangunan employees spread throughout Indonesia. The data was analyzed using the smart PLS 4.0 analysis tool with the hypothesis below (Santika 2019).

**Hypothesis**
1. H1: The Influence of Management Information Systems on Employee Performance
2. H2: Transformational Leadership Style Can Moderates the Influence of Management Information Systems on Employee Performance

## RESULTS AND DISCUSSION

**Background Analysis**

According to The Encyclopedia of Management, "Management Information Systems are planned and organized approaches to supplying executives with intelligence aids that facilitate the managerial process." Another view of management information systems is that they are computer-based systems that make information available to users with similar needs. MIS users typically consist of formal organizational units of an institution or sub-units of a subsidiary institution. The information provided by MIS describes the institution or one of its major systems in terms of what has happened in the past, what is happening now, and what is likely to happen in the future(Marsal and Hidayati 2018) .

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Based on the above explanation, the researcher believes that Information Systems can facilitate employee work which will ultimately have a positive impact on Employee Performance. There are a number of previous studies (Syamsiah 2018); (IRFAN 2018) & (Imam Sandika 2019)that show that Management Information System variables can affect Employee Performance. In contrast to these studies, this article adds the Transformational Leadership Style variable as a moderating variable.

**Validity Test**

At this stage, it is the first gate for researchers to arrive at the proof of each hypothesis used in this article. The sequence of gates that researchers mean is the validity test gate, reliability test gate, and path coefficient gate (Sarstedt et al. 2014):

**Table 1 Validity Test**

| Variable | Question Item | Loading Factor |
|---|---|---|
| Management Information Systems (X1) | Management Information Systems can make it easier for employees to work | 0.865 |
| | Management information systems can make it easier for employees to achieve their maximum targets in working | 0.871 |
| | Management information systems can make employees work smartly | 0.882 |
| | Management information systems can make employees work in an integrated manner | 0.891 |
| | Management information systems can make employees work in an integrated manner | 0.889 |
| | Management information systems can make it easier for employees to solve problems | 0.895 |

| | | |
|---|---|---|
| Employee Performance (Y) | Employee performance can be influenced by how easy it is for employees to complete their work | 0.881 |
| | Employee performance can be influenced by how optimally employees achieve their targets | 0.894 |
| | Employee performance can be influenced by how hard employees work | 0.898 |
| | Employee performance can be influenced by how quickly employees solve problems | 0.899 |
| | Employee performance can be influenced by how smart employees are in solving problems | 0.895 |
| | Employee performance can be influenced by how good employees are in completing their work | 0.905 |
| Transformational Leadership Style (Z) | Transformative Leadership Style can affect Employee Performance | 0.942 |
| | Transformative Leadership Style can affect Management Information Systems | 0.939 |
| | Transformative Leadership Style can strengthen the influence of Work Information Systems on Employee Performance | 0.951 |
| | Transformative Leadership Style is important in improving Employee Performance | 0.958 |

Valid > 0.70

**Reliability Test**

After the validity test stage, the next stage that can be passed is the reliability test stage. This stage aims to find out whether the data that the researcher obtained previously can be continued to the Path Coefficient stage. Here are the Path Coefficient stages in this article (Ghozali 2016):

**Table 2 Reliability Test**

| Variable | Compositee Reliability | Cronbach Alfa | Noted |
|---|---|---|---|
| Management Information Systems | 0.895 | 0.854 | Reliable |
| Employee Performance | 0.928 | 0.882 | Reliablle |
| Transformational Leadership Style | 0.982 | 0.941 | Reliablle |

Reliable > 0.70

**Path Coefisien**

The last stage that can be passed next is the Path Coefficient stage. This stage is the core stage as well as determining whether each argument construction building that the researcher has put together can be proven or not. The following are the results of the Path Coefficient in this article (Supriyanto 2013):

**Table 3 Path Coefisien**

| Direct Influence | Variable | P-Values | Noted |
|---|---|---|---|
|  | MIS-> EP | 0.007 | Accepted |
| Indirect Influence | TLS* MIS-> EP | 0.000 | Accepted |

Accepted & Significant Level < 0.05

Based on the results of the third table of Path Coefficients above, it can be concluded clearly and completely that the first hypothesis proposed by the researcher in this article can be accepted and proven because the P-Values value leads to positive p and is below the significance level of 0.05, namely 0.007.

This result is because with a good Management Information System, every existing job can be made easier and every target that can be passed is also easy. These results are in line with the three previous studies, namely (Syamsiah 2018); (IRFAN 2018) & (Imam Sandika 2019).

In addition, the second hypothesis in this article can also be proven, this is due to the same reason, namely the P-Values value is below the significance level of 0.05 and leads to positive, namely 0.000. These results are more significant than direct testing. Thus, the first and second hypotheses in this article can be accepted.

**CONCLUSION AND LIMITATION**

Based on the results of the third table of Path Coefficients above, it can be concluded clearly and completely that the first hypothesis proposed by the researcher in this article can be accepted and proven because the P-Values value leads to positive p and is below the significance level of 0.05, namely 0.007.

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