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### EFFECTIVENESS OF MANAGEMENT INFORMATION SYSTEMS AND MOTIVATION ON EMPLOYEE PERFORMANCE AT PT. BANK SULSELBAR, GOWA BRANCH

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#### Abstract

The management information system is the internal planning system of а company which includes internal controls such as the use of resources, documents, technology, and management accounting as one of the business strategies. Currently, information technology is a dominant factor in implementing information systems as a solution for organizations to solve the problems they face. One of the problems faced by organizations is employee efficiency. If, until now, the organization has not implemented a management information system, this is a sign of decreased employee performance. Reducing employee performance creates irregularities and leads to complaints. One of the factors that influence the increase in employee performance is an efficient and effective management information system and work motivation. This study aimed to determine the effect of accuracy, relevance, timeliness, and motivation on employee performance at PT. Bank Sulselbar Gowa Branch. The analytical method used in this research is multiple linear regression analysis, validity test, reliability test, and partial test (t). The research results show that accuracy, relevance, and timeliness significantly affect employee performance at PT. Bank Sulselbar Gowa Branch.

**Keywords** :Management Information System Effectiveness, Motivation, Employee Performance

# A. INTRODUCTION

In the current era of globalization, the business world is transitioning from the age of industrial competition to information competition (Siregar, 2019). The rapid development of the business world requires fast, precise, and accurate information. This rapid development has made competition between companies increasingly tight (Limbong & Irawan, 2019; Suyitno, 2018). This causes data to be very valuable for increasing competitive advantage between companies. Creating the right information

for the company requires a reliable information system within the company (Jannatun et al., 2021).

The role of information technology is to become one of the main facilities for companies to produce quality information. At the same time becomes one of the business strategies for companies, including the banking business. The important role of information technology in all areas of the company has been proven to provide many benefits in supporting quality and optimizing performance (Harhap et al., 2022; Sholeh & Wahyudin, 2021).

In an environment that is constantly changing, every company also needs to have HR that is professional and has high competitiveness so that it will become the center of excellence for the company operating and, at the same time, can play a role as a supporter for the company in keeping up with the demands of developments in science and technology (Hidayati & Putri, 2022; Setiawan et al., 2019).

Therefore, companies must always make efforts so that the workforce involved in the company's operations can work optimally to achieve optimal employee performance (Purba, 2021). Several factors can affect employee performance, one of which is the use of information technology; as expressed by me, the use of information technology is no longer a luxury but a necessity. Efficiency, effectiveness, and performance of organizations or companies, both at the individual, group, and level of organizations or companies as whole, can be improved by using technology which results in increased performance (Kasman, 2021).

Motivation can be viewed change in energy within as a a person. characterized by the appearance of a feeling and preceded by a response to a goal. Motivation is the basic drive that moves someone or the desire to devote all energy because of a plan. As stated by Mangkunegarai (2009), motivation is a condition or power that drives employees self that is directed or directed to achieve organizational goals within the company. Employees positive mental attitude work situations strengthens their work motivation towards to achieve maximum performance. Three elements are the kev to motivation: effort. organizational goals, and needs. So motivation is a response to an action. Motivation arises from within the human self because of encouragement by the presence of an element of purpose. This goal concerns the need issue; there will be no motivation if there is no need.

Therefore, generally, in every company, there is a system that is useful as a support for business operational activities, namely the Management Information System. As is the case with the Information System at the Gowa Branch of Bank Sulselbar, which has implemented the Virtual Banking System (VBS) so far. In implementing the Management Information System, namely the Virtual Banking System, Bank Sulselbar always strives to develop it, hoping that its implementation can be beneficial for supporting employee assignments. Based on this description, the writer is interested in researching "Effectiveness of Management Information Systems and Motivation on Employee Performance at PT. Bank Sulselbar Gowa Branch."

The research aims to determine the effect of accuracy, relevance, timeliness, and information motivation on employee performance at PT. Sulselbar Bank, Gowa Branch.

### **B. LITERATURE REVIEW**

### 1. Definition of Effectiveness

Astutik argues that effectiveness is a condition or condition in which in choosing the goals to be achieved and the means or equipment used, accompanied by the capabilities possessed, are appropriate so that the desired goals can be achieved with satisfactory results (Astutik & Marsono, 2020). According to Susilawati, effectiveness is an effort to do all the work correctly by using all potential resources owned and by operational goals (Susilawati & Subroto, 2021). Jelly states that effectiveness is the ability to choose the right goals or tools to achieve the goals set. From these definitions of effectiveness, it can be concluded that effectiveness is everything done on target and promptly determined by a company (Jeli, 2020).

### 2. Definition of System, Information, and Management

In simple terms, a system can be interpreted as a collection or association of organized elements, components, or variables that interact with each other and are interdependent and integrated (Kurniawan, 2021; Rita & Bahrun, 2021). (Wildatun, 2019) defines a system as an aggregate of parts that interact with each other and operate together to achieve a certain goal in an environment. Next is a system with two approaches: the procedural approach and the component approach. With the procedural approach, a system can be defined as a collection of procedures with a specific purpose. An accounting system is an example of a system defined by this procedural approach. This system is a collection of procedures for cash receipts, payments, sales, purchases, and ledgers (Rahmayuni, 2019). With the component approach, a system can be defined as a collection of interconnected components to form a single entity to achieve certain goals. An example of a system defined by this approach, for example, is a computer system which is defined as a collection of hardware and software. From some of these definitions, a system is a collection of interconnected and integrated components to achieve a goal. In general, the elements that represent a system are input, processing, and output. Most people interpret data and information with the same meaning. However, for scientific studies, these two meanings contain fundamental differences. Data refers to facts in figures, texts, documents, pictures, charts, sounds that represent certain verbal descriptions or codes, and the like. If it has been filtered and processed through a processing system so that it has meaning and value for someone, then the data will change the function of I to become information (Pratiwi, 2019).

Information is data processed into a meaningful form for the recipient and is useful in making current or future decisions (Yunita et al., 2020). Accordingly, information is data that has been processed into a form that has meaning and is useful for humans, where information, in this case, also requires feedback, namely output that is returned to members of the organization who are interested in it. To help evaluate or improve input. From some of these definitions, it can be concluded that information is data that has been arranged in such a way that it has meaning and is useful because it can be communicated to someone who will use it to make a decision (Fajri & Rohman, 2020). Management is a specific process that consists of the following actions: planning, organizing, activating, and controlling, which are carried out to determine and achieve the goals that have been set through the utilization of human resources and other sources. The resources that support the achievement of other goals are what is commonly known as the "six Ms," namely: Men (Humans), Materials (Materials), Machinery (machines), Money (money), and Markets (Market) (Febriansyah, 2018). Management is a process or activity a leader/manager carries out within the organization to achieve common goals. From these two definitions, it can be concluded that planning and management activities are organizing, activating, and controlling, which are carried out to achieve the goals set by utilizing human resources and other resources (L. P. Sari et al., 2022).

# 3. Definition of Management Information Systems

Generally, when discussing Management Information Systems, what is described is a system created to carry out data processing that an organization will utilize. Utilization of data here can mean support for routine tasks, evaluation of organizational achievements, or for decision-making by the organization. SIM is a system that provides organizational managers with data and information relating to implementing organizational tasks. SIM is expected to support the duties of employees, managers, or users of the organization's services and all the main elements within the organization's authority (Febriani, 2022). A *Management Information System* is an integrated human/machine system that provides information to support an organization's operations, management, and decision-making functions (Y. K. Sari et al., 2022).

# 4. Work motivation

In various kinds of literature in the field of management and psychology, experts offer many definitions of motivation. However, in this discussion, the definition of motivation begins with an overview of some of the main characteristics of motivation. There are three main characteristics of motivation, namely: (1) effort, (2) strong will, and (3) direction or purpose (Erpurini, 2019; Y. K. Sari et al., 2022). *Motivation* is a process that explains the intensity, direction, and persistence of an individual to achieve goals. Based on this opinion, it can be concluded that

- 1. Work motivation is an important part of an organization that functions as a tool for achieving goals or goals to be achieved,
- 2. Work motivation contains two main goals within the individual, namely to fulfill personal needs or desires and organizational goals, and
- 3. Work motivation given to someone is only effective when a person has the confidence or belief to progress and succeed in the organization.

Work motivation inspires a person's enthusiasm to work, so they want to work together, work effectively, and integrate with all efforts to achieve satisfaction. The higher the employee's enthusiasm, the more efficient the employee will work.

# 5. Employee Performance

Tikai Pabundu (2006) defines *performance* as the results of job functions/activities of an individual or group within an organization that is influenced by various factors to achieve organizational goals within a certain period.

Wibowoi (2007) Performance is the result of work that has a strong relationship with organizational strategic goals, customer satisfaction, and contributing to the economy. In this way, performance is about doing the work and the results achieved from work. Performance is about what is done and how to do it; according to Prawirosentono (1999), performance is the result of work that can be

achieved by a person or group of people in an organization by the authority and responsibility of each, in order to achieve the goals of the organization concerned illegally, not violating the law, and according to morality and ethics. Still, in the same book, Mineri (1990) states that performance is how a person is expected to function and behave by his assigned tasks.

Furthermore, Cormick & Tiffini (1980) stated that performance is the quantity, quality, and time used in carrying out tasks. *Quantity* is a result that can be calculated to what extent a person can achieve the goals set. Quality is how someone carries out their duties regarding the number of mistakes made, discipline, and accuracy. Working time is about the number of absences made, delays, and length of working period in the year served.

### C. RESEARCH METHODS

This research was conducted at PT. Bank Sulselbar Gowa branch located on Jalan HOS Cokroaminoto No. 2 Sungguminasa, with a research time of less than one month. The type of data consists of qualitative data, namely in words, sentences, and pictures. Data is obtained from information, both orally and in writing, which can support research results in the form of literature and internet sources that are by the research. Furthermore, quantitative data is in the form of numbers obtained from the number of employees and the results of questionnaire answers from each respondent at PT. Bank Sulselbari, Gowa Branch. Data sources are primary data and secondary data. Primary data was obtained directly through interviews with employees as users of the information system and through respondents' answers from filling out the provided questionnaires. Secondary data originates from companies that have been processed and presented in the form of documents and other reports related to the problem to be studied.

The data collection techniques used in this research are field research and library research. Field research (field research) consists of interviews and questionnaires. *Interviews* are data collection techniques that are taken by asking questions and answers directly with parties related to the research object. Questionnaires, namely data collection techniques used by distributing questions to respondents, namely employees of PT. iBank Sulselbari Gowa Branch, to obtain data on the effectiveness of management information systems and motivation on employee performance. With a list of closed questions that use a Likert scale with points 1 to 5. Library research, namely efforts made to obtain data from various literature books and other writings relevant to the research object.

After the data is collected and processed, the next process is to test the hypotheses using the multiple regression analysis method and test the adequacy of research instruments. Multiple regression analysis states that multiple regression analysis is an analysis model to see directly some independent variables on the dependent variable, where employee performance is the independent variable. At the same time, accuracy, relevance, punctuality, and motivation are the independent variables (Fahmi, 2021). Where the regression equation used is as follows:

 $Y = a + b_1X_1 + b_2X2 + b3X3 + b4X4 + e$ Where: Y = Employee Performance

а	= Constant
b <sub>1</sub> ,b2, b3,b4	= Coefficient Variables X <sub>1</sub> , X2, X3,X4
X <sub>1</sub>	= Accuracy
X <sub>2</sub>	= Relevance
X3	= On time
X4	= Motivation
е	= Standard Error

The feasibility test of research instruments consists of validity tests and reliability tests. A *validity test* is a measurement tool used to obtain valid data, where the validity of the item in the question is indicated if the corrected item-total correlation value exceeds 0.30. The reliability test is a test that shows the degree of stability and consistency of the measuring instrument used so that it gives relatively consistent results if the measurement is repeated, which is said to be reliable if the value of Cronbach's Alpha > 0.60 (Putra & Candana, 2020; Wijaya & Priono, 2022).

The writer's hypothesis will be tested using the t-test in this research. A partial t-test was conducted to prove the initial hypothesis about the effectiveness of management information systems and motivation as independent variables on employee work discipline as the dependent variable.

Test Criteria:

 $\begin{array}{l} H0_1: \& = 0 \ (\text{no effect of accuracy on employee performance}) \\ H1_1: \& \neq 0 \ (\text{there is an effect of accuracy on employee performance}) \\ H0_2: \& = 0 \ (\text{no effect of relevance on employee performance}) \\ H1_2: \& \neq 0 \ (\text{there is an effect of relevance on employee performance}) \\ H0_3: \& = 0 \ (\text{no effect of timeliness on employee performance}) \\ H1_3: \& \neq 0 \ (\text{there is an effect of timeliness on employee performance}) \\ H0_4: \& = 0 \ (\text{no effect of motivation on employee performance}) \\ H1_4: \& \neq 0 \ (\text{there is an effect of motivation on employee performance}) \\ \end{array}$ 

# D. RESEARCH RESULT

# 1. Overview of the Research Unit

The banking industry is one of the industries where information technology plays a very important role. It requires an information system that is secure, fast, strong in processing large data, and stable. Besides having to keep abreast of technological developments, banks must be able to synergize with the needs and demands of customers for banking services as part of a business strategy on a broad scale. This is what gives added value to the role of information technology in the banking industry. Information technology in the banking industry plays a very important role. With its strategic function, information technology must align with the business strategy of Banki Sulselbar. Information technology is used to computerize data and business processes and covers all banking activities. The role of information technology at Bank Sulselbar is illustrated by the Virtual banking System, an integrated core banking system application, multibranch and multicurrency BankiSulselbar. VBS covers all areas of core banking, starting from the front office, namely customer information systems, account maintenance through giro, savings, deposited, and loan modules, and payments through retailer modules which are also supported by retail delivery channels (phone banking, ATM, home banking, e-banking)

to the back office.

According to the presenter, Home Banking is one of the delivery channels that supports bank services, especially BPD, which also functions as Regional Treasury and Salary Payment, where the terminal is installed in the customer's office.

The application of the Virtual Banking System (VBS) is that there modules, namely:

- 1. Product Parameters, Interest Rates, Interest Calculation Methods/Methods, Reporting to Bank Indonesia
- 2. Signature Verification (Specimen Signature)
- 3. Customer Information System
- 4. Tellers
- 5. Current Accounts, Savings, and Credit
- 6. Maturity Profile, List of interest reserves
- 7. Deposit/Certificate of Deposit/DOC
- 8. General Ledger
- 9. Delivery Channels

In addition, the Virtual Banking System (VBS) also provides several alternative system architectures, namely:

- 1. Centralized, namely, where data is centralized in one HOST at the Central Office.
- 2. Distributed, where the data is distributed in each branch office.
- 3. Region, namely where there are several data centers that combine several branch offices.

### 2. Characteristics of Respondents

In order to facilitate the process of this research, it is necessary to be supported by determining the characteristics of the respondents who are intended to know the identity or profile of the respondent. As for those used as samples in this research, namely employees of PT. Bank Sulselbar Gowa Branch utilizes a Management Information System (Virtual Banking System) to support its routine tasks with a total of 34 employees, who are classified based on the identity of the respondents according to position, gender, age, education level, and years of service which will be discussed as follows:

a. Classification of Respondents Based on Position

Based on the research results on 34 employee respondents who use management information systems to support their routine tasks at IPT. BankiSulselbar Branch Gowa then obtained respondent data classified by position. The management of respondents based on these positions is presented in Table 1 below:

No	Position	Amount	Percent (%)
1	Staff data entry	5	14.71
2	Account Officer	3	8.82
3	Credit Officer	5	14.71
4	Section Chief	6	17.65
5	HR and Logistics Staff	5	14.71
6	Kasda staff	2	5.88

### Table 1 Data of Respondents by Position

7	Tellers	4	11.76
8	Customer Service	4	11.76
Total		34	100

Table 1 shows that the largest position is Head of Section at 17.65%. Staff in each section, namely data entry staff, credit staff, HR, and Logistics staff, have the same number of 14.71% then the number of Tellers and Customer Service is 11.76%, Accounts Officers were 8.82%, and Kasda staff showed the smallest number, namely 5.88%.

b. Classification of Respondents Based on Gender

Based on the results of research on 34 employee respondents who use management information systems to support their routine tasks at IPT. Banki Sulselbari Gowa Branch, then the respondent data is obtained, which is classified by gender. The management of respondents based on gender is presented in Table 2 belowTable 2. Data of Respondents by Gender

No	Gender	Amount	Percent (%)
1	Man	21	61.76
2	Woman	13	38.24
Tota	al	34	100

From the identity characteristics of the respondents according to gender, it appears that the respondents in this study were more dominant in the male sex, namely 21 people or 61.76%. In comparison, women were 13 people, or 38.24%. c. Classification of Respondents Based on Age

Based on the research results on 34 employee respondents using the Management Information System at PT. Bank Sulselbar Gowa Branch then obtained respondent data classified by age. The management of respondents based on age is presented in Table 3 below:

No	Age (Years)	Amount	Percent (%)
1	20-30	14	41.18
2	31-40	10	29.41
3	41-50	8	23.53
4	>50	2	5.88
	Total	34	100

Table 3 Data of Respondents by Age

Table 3 shows that the largest number of respondents were aged 20-30 years, namely 14 people or 41.18%, 30-40 years old ten people or 29.41%, and 41-50 years old eight people or 23.53%, and the smallest was aged > 50 years two people or equal to 5.88%.

d. Classification of Respondents Based on Level of Education

The level of education shows the knowledge and thinking possessed by a respondent. Therefore, in this research, the educational level of the respondents was grouped into D3, S1, S2, and S3. For more details, see the following table:

0	Level of education	Amount	Percent (%)
1	Diploma	3	8.82
2	S1	26	76.47
3	S2	5	14.71
4	S3	0	0
Total		34	100

Table 4. Data of Respondents by Education Level

Table 4 shows that the most recent formal education is I S1, and the lowest is at Diploma and Masters education levels. The largest distribution of respondents was at the Bachelor's level of education, as much as 76.47%, and the smallest was a diploma, as much as 8.82%, while the Master's degree was as much as 14.71%, so it can be said that most of the education levels of employees at PT. bank Sulselbar Gowa Branch are having a bachelor degree (S1)

e. Classification of Respondents Based on Working Period

Tenure of work can reflect the experience of employees in the company so that for more details, the characteristics of the respondents based on their years of service can be presented, which can be seen in the following table:

No	Level of education	Amount	Percent (%)
1	1-5	15	44.12
2	6-10	8	23.53
3	11-15	3	8.82
4	16-20	2	5.88
5	21-25	6	17.65
6	26-30	0	0
7	>30	0	0
Tota	al	34	100

Table 5 Respondents Data Based on Years of Service

Table 5 shows that according to the length of service, most respondents are between 1-5 years, namely 15 people or 44.12%. The longer the working period of employees, the higher the work experience they have in handling each job that has been occupied.

f. Analysis of Research Variable Description regarding the effectiveness

Management Information System on Employee Performance Management Information System Effectiveness needs to be known and measured because it is a supporting factor for improving employee performance. The effectiveness of management information systems is determined by how far a system can produce output that meets the needs of employees. If the effectiveness of the management information system is good, it can influence employee activities in carrying out routine tasks so that employee performance can be more optimal.

Several conditions must be known in measuring the effectiveness of management information systems, namely in terms of accuracy, relevance, and timeliness.

### a. Respondents' Perceptions of Accuracy Dimensions

Information accuracy is a requirement that must be considered in measuring the effectiveness of management information systems that can affect employee performance, namely including Accuracy, Consistency, Clarity, and Reliability of the information produced. For more details, respondents' perceptions regarding the dimensions of accuracy will be presented, which can be seen in Table 6 below:

Statement	Alternative Respondent Answers				S
	SS	S	KS	TS	STS
	%	%	%	%	%
The Virtual Banking System (VBS) provides	4	19	11	0	0
precise information (clean from errors and	(11.76)	(55.88)	(32.35)		
mistakes) so that you rarely make mistakes					
in completing your tasks.					
VBS provides consistent information and	4	23	7	0	0
does not contain contradictions in its	(11.76)	(67.65)	(20.59)		
presentation.					
VBS presents information that clear	4	22	7	1	0
and easy understood by employee.	(11.76)	(64.71)	(20.59)	(2.94)	
VBS always provides reliable (reliable)	5	28	1	0	0
information.	(14.71)	(82.35)	(2.94)		

	Table 6 Responde	ents' Perceptions	s of Accuracy Dimensions
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Based on the respondent's perception of the accuracy dimension, with the statement that the Virtual Banking System (VBS) provides the right information (clean from errors and mistakes) so that you rarely make mistakes in completing your assignments, then the answer that most respondents agree is 19 people (55.88%), I then the statement both VBS provides consistent information and does not contain contradictions in its presentation, the answer is that the majority of respondents agree yes, namely as many as 23 people (67.65%), the third statement whether VBS presents information that is clear and easy to understand by employees, the answer dominated by the most respondents is agreed, namely 22 people (64.71%), while the fourth statement is that VBS always provides information that can be trusted (reliable), most of the respondents answered yes, namely 28 people (82.35%).

b. Respondents' perceptions of the Relevance dimension

The Relevance Dimension is a requirement in measuring the effectiveness of management information systems where in an organizational context, the information needed is truly relevant to the organization's problem, mission, and goals. The relevance dimension relates to suitability and usefulness. For more details, the respondents' perceptions regarding the dimensions of irrelevance will be presented, which can be seen in the following table:

Table 7	Respondents	Perceptions	regarding	Relevance	Dimensions
			-00		

Statement	Alter	native Re	spondent	Answe	ers
	SS	S	KS	TS	STS
	%	%	%	%	%

The Virtual Banking System (VBS) provides information according to the needs of employees and in accordance with your field of work.		19 (55.88)	3 (8.82)	0	0
VBS generates that information clearly reflects which meaning contained from supporting data.		19 (55.88)	4 (11.76)	0	0
VBS presents clear information and can really support employees in making decisions according to the problems at hand.		28 (82.35)	1 (2.94)	0	0
VBS can present information in an internal form which forms allows information in that form enable utilization by employees.	4 (11.76)	24 (70.59)	6 (17.65)	0	0

Based on respondents perceptions of the dimensions of relevance to the first statement that the Virtual Banking System (VBS) provides information that is by the needs of employees and by your field of work, the average respondent answered yes as many as 19 people (55.88%), the second statement regarding VBSI produces information that reflects the meaning contained in the supporting data, the answer to the majority of respondents was that they agreed, namely 19 people (55.88%), the third statement regarding iVBS presented clear information and could support employees in making decisions according to the problem at hand, the answers of respondents were dominated by answers that agreed, namely as many as 28 people (82.35%), while the fourth statement regarding VBS can present information in forms that allow employees to use it, dominated by the majority of respondents who answered yes, i.e., 24 people (70.59%).

# c. Respondents' perceptions of the dimensions of timeliness

The timeliness dimension measures the effectiveness of a management information system in which the information needed can be made available on time. The timeliness dimension is related to availability, speed, and accessibility. For more details, respondents' responses regarding the timeliness dimension will be presented, which can be seen in the following table:

	Alte	ernative R	esponden	t Answe	rs
Statement	SS	S	KS	TS	STS
	%	%	%	%	%
The Virtual Banking System (VBS) provides	3	18	11	12	0
information that can be obtained/accessed	(8.82)	(52.94)	(32.35)	(5.88)	
by employees who wish to utilize it.					
The Virtual Banking System (VBS) always	6	20	8	0	0
provides information quickly in providing	(17.65)	(58.82)	(23.53)		
services to customers, including handling					
customer complaints.					

Table 8 Respondents Perceptions regarding Dimensions Punctuality

The Virtual Banking System (VBS) provides	10	21	1	2	0
information that can expedite the routine	(29.41)	(61.77)	(2.94)	(5.88)	
tasks of employees.					
VBS provides up to date information if at	6	20	8	0	0
any time needed by employees in handling	(17.65)	(58.82)	(23.53)		
complaints by customers.					

Based on the respondent's perception of the timeliness dimension with the first statement that the Virtual Banking System (VBS) provides information that can be obtained/accessed by employees who want to use it, the average respondent answered yes as many as 18 people (52.94%), the second statement regarding whether VBS always provides information quickly in perform services to customers, most respondents answered yes as many as 20 people (58.82%), then the third statement that VBS provides information that can facilitate the routine tasks of employees, the most respondents answer agrees that is as many as 21 people (61.77%). The fourth statement is that VBS presents information that is up to date if at any time it is needed by employees in handling customer complaints; the answer that most respondents agree with is that as many as 20 people (58.82%). d. Respondents' Perceptions of Motivation

	Table 9 Respondents Perceptions of Motivation						
ſ		Alter	native Re	spondent	Answe	ers	
	Statement	SS	S	KS	TS	STS	
		%	%	%	%	%	
	I am motivated to work at	10	20	4	0	0	
	Bank Sulselbar to develop	(29.41)	(58.82)	(11.76)			
	work skills and achieve						
	the achievements that are						
	expected by myself and by						
	Bank Sulselbar.						
	I want to get recognition	8	16	10	0	0	
	and appreciation from the	(23.53)	(47.06)	(29.41)			
	leadership for my service						
	at Bank Sulselbar.						
	I really like my work	9	20	5	0	0	
	because it suits the setting	(26.47)	(58.82)	(14.71)			
	background of my						
	education and expertise.						
	I always carry out	17	12	5	0	0	
	tasks seriously because I	(50.00)	(35.29)	(14.71)			
	feel responsible for my						
	duties						

Based on the respondents' perceptions regarding motivation with the first statement, I am encouraged to work at Banki Sulselbar to develop work skills and

achieve the achievements expected by myself as well as by Banki Sulselbar, so the average number of respondents answered yes as many as 20 people (58.82%). Then to the second statement that I want to get recognition and appreciation from the leadership for my dedication to iBank Sulselbar, the average respondent answered yes, namely 16 people (47.06%). The third statement is that I like my job because of my educational background and expertise, so the average respondent answered that there were 20 people (58.82%). Moreover, in the fourth statement that I always carry out my duties seriously because I feel responsible for my assignments, the average respondent answered yes, namely 12 people (35.29%).

### e. Respondents' responses regarding employee performance

Performance results from work by employees in completing their duties and responsibilities. Employee performance has a strong relationship with organizational strategic goals and consumer satisfaction. The more optimal employee performance, the better the company's performance. For more details, respondents' responses will be presented regarding the performance of employees at PT. Bank Sulselbar Gowa branch is shown in the following table:

Statement	Alternative Respondent Answers			ers	
	SS	S	KS	TS	STS
	%	%	%	%	%
Subordinates have fulfilled the	9	20	5	0	0
achievement of work targets set by Bank	(26.47)	(58.82)	(14.71)		
Sulselbar in quality and quantity					
Subordinates have willingness to help	11	17	6	0	0
colleagues that work need help in	(32.35)	(50.00)	(17.65)		
finishing his job.					
Subordinates prepare reports according to	9	17	8	0	0
the terms of the time determined by their	(26.47)	(50.00)	(23.53)		
superiors.					
Subordinates are able to carry out a work	6	21	7	0	0
function on their own initiative and are	(17.65)	(61.76)	(20.59)		
responsible for each of their actions to					
complete their work.					

Table 10 Perceptions Respondent regarding Performance Employee

Based on respondents' perceptions of employee performance with the first statement, Subordinates have fulfilled the achievement of work targets set by Bank Sulselbar in quality and quantity; the average respondent answered yes to as many as 20 people (58.82%), the second statement that subordinates have the willingness to help co-workers who need assistance in completing their work. Most respondents agree that as many as 17 people (50.00%), the third statement is that subordinates prepare reports according to the terms of the time determined by their superiors. The average respondent answers agree that as many as 17 people (50.00%), while the fourth statement is that subordinates can carry out a job function on their initiative and are responsible for every action to complete the work, the dominance of the respondent's answer is agreed as many as 21 people (61.76%).

f. Test the Research Instruments

The instrument test was carried out on the indicators of each variable so that the level of validity and reliability of the indicators as a measuring tool for the variable could be identified. The instrument test consists of a validity test and a reliability test. 1. Validity Test

A validity test is used to test the accuracy of a research instrument in measuring what you want to measure. So that in determining whether an item is appropriate or not, if the corrected item-total correlation limit is overcome by 0.30, an instrument is said to be invalid if it can measure what is desired and can reveal the variable data studied correctly. About the description above, the results of processed validity data on the effectiveness of the management information system variable can be presented by using the corrected item-total correlation analysis model through the following table:

Variable	Variable	Correlation	standard	Ket.
	Code			
	X <sub>1·1</sub>	0.753		
accuracy	X <sub>2.2</sub>	0.468	0.30	Valid
	X <sub>3.3</sub>	0.722		
	X4.4	0.341		
	X <sub>2·1</sub>	0.815		
Relevance	X <sub>2.2</sub>	0.709	0.30	Valid
	X <sub>2·3</sub>	0.346		
	X <sub>2.4</sub>	0.421		
	X <sub>3·1</sub>	0.745		
Punctuality	X <sub>3.2</sub>	0.889	0.30	Valid
	X <sub>3.3</sub>	0.779		
	X <sub>3.4</sub>	0.889		

Table 11 Validity Test Results for the Effectiveness of Management Information Systems

Based on the results of the validity test on the effectiveness of the management information system, it can be seen that for the variables Accuracy, Relevance, and Timeliness, it appears that all statement items are valid; this is because they have a corrected item-total correlation value above 0.30.

Then the results of the validity test on work motivation will be presented, which can be seen in the following table:

Variable	Variable	Correlation standard Ke			
Variable	Code	Gorrelation	Standard	Ret.	
	Coue				
	X <sub>1</sub>	0.817			
Motivation	X2	0.766	0.30	Valid	
	X3	0.622			
	X4	0.616			

Table 12 Test Results Validity of Motivation

Based on the table regarding the results of the validity test on motivation, it was found that all statement items in the motivational variable were invalid because they had a corrected item-total correlation value resolved at 0.30.

Then the results of the validity test on work discipline will be presented, which can be seen in the following table:

Variable	Code	Correlation	standard	Ket.
	Variable			
	Y <sub>1</sub>	0.607		
Employee	Y <sub>2</sub>	0.673	0.30	Valid
performance	Y <sub>3</sub>	0.636		
	Y <sub>4</sub>	0.629		

Table 13 Results Validity test on Performance Employee

Based on the table regarding the results of the validation test on employee performance, the result is that all items in the statement in the work discipline variable are invalid because they have a corrected item-total correlation value overcome 0.30.

# 2. Reliability Test

The reliability test was used to determine the consistency of the measuring instrument and whether the measuring instrument used was reliable and consistent if the measurement was repeated. Meanwhile, according to Iman Ghozali, a research instrument can be reliable if Cronbach's unlucky value is overcome by 0.60.

About the description above, the results of testing the reliability of the effectiveness of the management information system and employee performance can be presented, which can be seen in the following table:

	Cronbach's	Cronbach's	Ket.
Variable	alpha	Standard	
		alpha	
accuracy	0.677	0.60	Reliable
Relevance	0.682	0.60	Reliable
Punctuality	0837	0.60	Reliable
Employee	0.609	0.60	Reliable
Performance			
Motivation	0.609	0.60	Reliable

Table 14 Results Reliability Test on Effectiveness Information Systems Management, Motivation and Performance Employee

Based on Table 14, it can be said that for all the statement items, both for the accuracy variable  $(X_1)$ , relevance (X2), timeliness (X3), motivation (X4) and for the employee performance variable (Y), it appears that all statement items are reliable, this is because they have a Cronbach's alpha value overcome of 0.60.

Analysis of the Influence of Management Information System Effectiveness and Motivation on Employee Performance

In order to see how far the effectiveness of the management information system, which consists of accuracy, relevance, and timeliness variables about improving employee performance, can be carried out, the results of regression data processing can be carried out, which can be seen in the following table:

Table 15 Recapitulation Results of Data Processing Regression regarding
Management Information System Effectiveness and Motivation towards Employee
performance

	Unstandardized		Standardized			
	Coe	fficient	Coefficient	Q	Sig	
Model	В	Error	Betas			
		Standard				
1. (Constant)	0.200	2,394		0.083	0.934	
accuracy	0.729	0.188	0.581	3,871	0.001	
Relevance	0.487	0.159	0.066	3,063	0.000	
On time	0.285	0.110	0.273	2,591	0.002	
Motivation	0.437	0.136	0.033	3,189	0.001	
R = 0.842 Fcount =	R = 0.842 Fcount = 24.416					
$R^2 = 0.709$						

From the regression results obtained, the regression equation is obtained as follows:  $Y = 0.200+ 0.729 X_1 + 0.487 X2 + 0.285 + 0.473 X3$ 

The regression equation has the following meaning:

- a) a = 0.200 is mark constant, that is means the magnitude of employee performance if accuracy, relevance and timeliness are considered constant.
- b)  $b_1 = 0.729$  ones means that the amount of influence accuracy against performance employee.
- c)  $b_2 = 0.487$  ys means that magnitude relevance effect on performance employee.
- d) b3 = 285 which means that magnitude accuracy effect time against performance employee.
- e) b4 = 0.437 which means that magnitude motivation against performance employee.

Furthermore, from the correlation results, the value of R = 0.842 is obtained, which means that the effectiveness of management information systems has a very strong relationship to employee performance. At the same time, the coefficient of determination (Rsquare) is 0.709 or 70.9%, which indicates that statistically, the variation in changes in employee performance is influenced by the effectiveness of the management information system represented by the three variables X which is 70.9%, and the remaining 29.1% is influenced by other factors not examined in this study.

### **Hypothesis test**

Furthermore, the hypothesis in this study was tested by conducting a t-test (Significant Test) by comparing the t count and t table of research variables which can be described as follows:

1) Accuracy Variable

 $HO_1$  = Accuracy no effect on performance employee.

Ha<sub>1</sub> = Accuracy effect on performance employee.

Taking decision based on:

- If t count < t table, then impact accuracy on performance employee.
- If t count > t table, then impact accuracy on performance employee.

And

- If probability x > 0.05, then No significant
- If Probability < 0.05, then significant

Value coefficient t count accuracy variable  $(X_1)$  of 3,871 > t table ie 2.0369 and a significance value of 0.001, which means t arithmetic t table so that Hat is accepted and significant, then the accuracy variable has a significant effect on the Employee Performance variable (Y), so that the proposed hypothesis is proven true.

2) Relevance Variable

 $HO_2$  = Relevance has no effect on employee performance.

Ha<sub>2</sub> = Relevance affects employee performance.

Decision making based on:

- If t count <t table, then relevance affects employee performance.

- If t count > t table, then relevance affects employee performance.

And

- If the probability x > 0.05, then it is not significant

- If the probability x < 0.05, then it is significant.

The coefficient of t value for the relevance variable  $(X_2)$  is 3.063 > t table, namely 2.0369 and a significance value of 0.000, which means t count > t table so that Ha2 is

accepted and significant, then the relevance variable has a significant effect on the Employee Performance variable (Y), so that the hypothesis that submitted proven true.

3) Variable Timeliness

H03 = Relevance has no effect on employee performance.

Ha3 = Relevance affects employee performance.

Decision making based on:

- If t count <t table, then timeliness affects employee performance.
- If t arithmetic > t table, then timeliness affects employee performance.
- And
- If the probability x > 0.05, then it is not significant.
- If the probability x < 0.05, then it is significant.

The coefficient value of t count the timeliness variable (X3) is 2.591 > t table which is 2.0369 and a significance value of 0.002 which means t count > t table so that Ha3 is accepted and significant, then the timeliness variable has a significant effect on the Employee Performance variable (Y), so the hypothesis put forward is proven true.

# DISCUSSION

Analysis of the Effectiveness of the Management Information System on employee performance at PT. Banki Sulselbar Gowa Branch, as seen in Table 15, shows a coefficient of determination  $(R^2) = 0.709$ . This means that the Effectiveness of the management information system, which includes the variables of accuracy  $(X_1)$ , relevance  $(X_2)$ , timeliness (X3), and motivation (X4), can explain 70.9% of the variation in changes in employee performance at PT. Bank Sulselbar Gowa Branch, the remaining 29.1% is explained by other variables not included in the regression equation. Then the relationship between accuracy, relevance, and timeliness of information with employee performance at PT. Bank Sulselbar Gowa Branch indicates a very strong relationship, as indicated by the correlation coefficient R = 0.842.

Furthermore, from the results of the data analysis that has been carried out regarding the effect of the Effectiveness of the management information system, which includes the variables Accuracy  $(X_1)$ , Relevance (X2), Timeliness (X3), and motivation (X4) on employee performance (Y) at iPT. BankiSulselbar Branch Gowa. Obtained the following results:

1. Effect of Accuracy Variable (X<sub>1</sub>) on Employee Performance (Y)

The results of the regression test between information accuracy and employee performance show that the accuracy variable positively influences employee performance by 0.729, so if the management information system is good in terms of information accuracy, it will improve employee performance. As shown in Table 15, the magnitude of change in employee performance influenced by the information accuracy variable is the largest increase among the other two variables affecting employee performance. This shows that the accuracy of the information generated by a management information system is important in improving employee performance. The more accurate the information, the smaller the level of errors and mistakes that employees can make in completing their work so that the performance they show will also improve because this has been proven from research results which show a positive and significant effect of the Accuracy variable  $(X_1)$  on Employee Performance (Y).

2. Effect of Relevance (X<sub>2</sub>) on Employee Performance (Y)

The regression test results shown in Table 15 show the influence of information relevance on employee performance at PT. Bank Sulselbar Branch of Gowa has a coefficient value of 0.487. This means that if the management information system is good regarding information relevance, it will improve employee performance. This is in line with the theory that in an organizational context, relevance is a condition where the information needed is truly relevant to each employee's field of work and the problems, mission, and goals of the organization so that the information generated by the management information system can be used by employees both to support their work fields and in making and making the right decisions to produce more optimal employee performance.

3. The Effect of Timeliness (X3) on Employee Performance (Y)

This study's results show a positive influence of the timeliness of the information on employee performance at PT. Bank Sulselbar Gowa Branch. This is indicated by a coefficient value of 0.285, which can be interpreted that if the management information system is good in terms of timeliness of information, it will improve employee performance. In addition, the value of t count 2.591 > t table 2.0369 with a significant level of 0.002 indicates a significant influence between timeliness and employee performance. In theory, it also supports the research results obtained that timeliness is related to the availability of information when needed. The ease of information to be accessed by employees so if the information needed is available on time and easily accessed, it will accelerate the completion of tasks and work of employees, increasing employee performance. The better, especially in the quantity of work, that will increase.

4. Effect of Motivation (X3) on Employee Performance (Y)

The regression test results shown in Table 15 show the influence of motivation on employee performance at PT. Bank Sulselbar Gowa Branch has a coefficient value of 0.437. This means that if the management information system is motivated, it will improve employee performance. Considers that motivation is a factor that determines employee performance at Bank Sulselbar.

#### CONCLUSION

Based on the discussion regarding the effectiveness of management information systems on employee performance at PT. Banki Sulselbari Gowaima Branch, it can be drawn that accuracy significantly affects employee performance. Relevance has a significant effect on employee performance. Punctuality has a significant effect on employee performance. Participate Motivation has a significant effect on employee performance.

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