THE EFFECT OF MANAGEMENT INFORMATION SYSTEMS (MIS), WORK ENVIRONMENT, AND MOTIVATION ON EMPLOYEE PERFORMANCE

(Evidence at PT Citra Bathara Bersaudara, South Tangerang)

THESIS

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A THESIS

Submitted in a partial fulfillment of the requirements for the degree of Master of Business Administration

CERTIFICATE OF APPROVAL

Name & student ID   :   **Ivan Noviandrie Falisha (19231015)**

Topic   :   The Effect Of Management Information Systems, Work Environment, and Motivation On Employee Performance. (Evidence at PT Citra Bathara Bersaudara, South Tangerang).

We hereby declare that this Thesis is from the student's work, has been read and presented to Sekolah Tinggi Manajemen IPMI Board of Examiners, and has been accepted as part of the requirements needed to obtain a Master of Business Administration and is satisfactory.
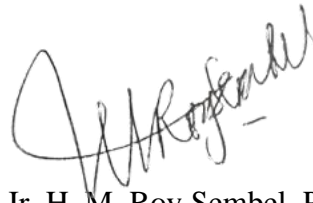
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NON-PLAGIARISM DECLARATION FORM

This Thesis is a presentation of our original research work, Wherever contributions of others are involved, every effort is made to indicate this clearly, with due references to the literature, and acknowledgment of collaboration in research and discussion.

Also, this work is being submitted in partial fulfillment of the requirement of the Master Business of Administration degree and has not previously been accepted in substance for any degree and is not being concurrently in candidature for any degree Some of the material in this thesis has been published in a peer-reviewed academic journal. This thesis remained a copyrighted work of the author, any error of information contained within is the responsibility of the author.

Jakarta, 23 September 2022

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First of all, I would like to express gratitude to God, for His blessing that helped us finish this Thesis report with the title "The Effect Of Management Information System (MIS), Work Environment and Motivation on Employee Performance". (Evidence at PT Citra Bathara Bersaudara, South Tangerang)", as a requirement to complete the Master of Business Administration at IPMI International Business School.

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ABSTRACT

Strict protocol procedures have been adopted worldwide, to deal with the coronavirus (Covid-19) pandemic, PT. Citra Bathara Saudara is a company that is included in the essential sector. Must continue to operate as usual following government regulations, which will undoubtedly have a significant impact on the company's operational activity, especially employee performance. This study aims to determine the effect of information systems management, work environment, and motivation on employee performance at PT. Citra Bathara Bersaudara in South Tangerang. This research uses a quantitative approach and uses primary data through dissemination questionnaires to 59 respondents, employees of PT. Image of the Bathara Bathara in South Tangerang. The sampling technique used is *simple random sampling*. The data is processed through the SPSS version 25.0 program with analytical techniques parametric statistics, namely multiple linear regression analysis. The results of the partial t-test prove that partially the management information system (MIS) significant effect on employee performance with a value of significance of $0.001 < 0.05$, the work environment variable is not affecting on employee performance with a value of $0.749 > 0.05$, while motivation has a significant effect on employee performance which is indicated by the acquisition of a significant value of $0.000 < 0.05$. The F test results prove that the management information system (MIS), work environment, and motivation simultaneously have a significant effect on the performance of employees of PT. Citra Bathara Bersaudara with a value significance of $0.000 < 0.05$. The large contribution of the influence of information systems management (MIS), work environment, and motivation on work performance employees with Adjusted coefficient of determination Adjusted-R of 0.884 or 88.4% while the remaining 11.6% is affected by other factors which were not investigated in this study.

Keywords: *Management Information System (MIS), Information Systems, Work Environment, Motivation, Employee Performance, Performance.*

CHAPT ER 1

INTRODUCTION

1.1   Background

In 2020, the world has been affected by the disease caused by the Corona virus, and this pandemic is affecting many people and industries. Coronavirus is an infectious disease that affects the lungs and causes death (Organization, 2021). Many countries around the world have implemented a "lockdown".
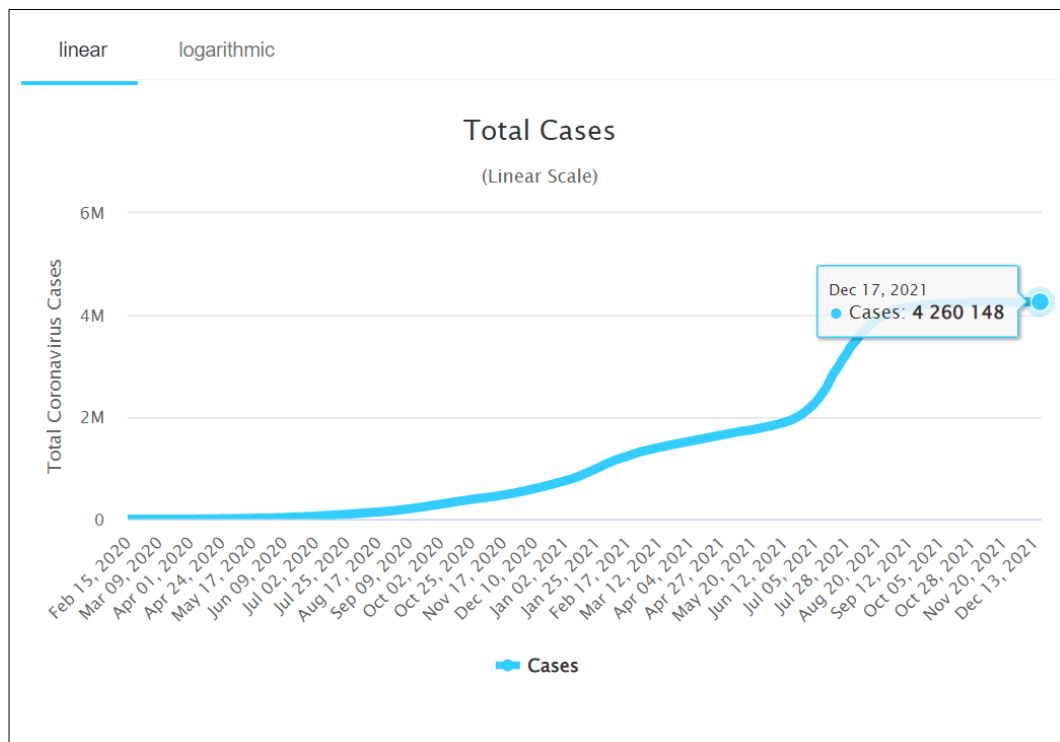
Figure 1.1 World Daily New Cases

Sources: Worldmeter, 2021

Meanwhile, Indonesia is one of the countries that is still fighting Covid-19 with a variety of policies that combine countermeasures without compromising the economy. As of December 17, 2021, data from the Indonesian government's Committee for Handling Covid-19 and National Economic Recovery (KPCPEN)

show the number of daily cases of positive cases has surpassed 4.2 million, with over 143 thousand of them getting killed and 4.1 million recovered.

One of the sectors most affected by the Covid-19 pandemic is the economic sector because social vulnerabilities make the position of economic resilience experience shocks. Many sectors experienced a decrease in income so the impact was a lot of reduction in employees and even stopped operating to be able to survive and get out of the crisis (Putranto Hari Widodo, 2021).

During the pandemic, PT. Citra Bathara Saudara, a company that is included in FMCG (Fast Moving Consumer Good) in the logistics sector and is a staple food ingredient, is included in the essential sector. By the Ministry of Health of the Republic of Indonesia's circular letter HK.01.07/MENKES/413/2020, companies in the essential sector will continue to operate as usual. The existence of WFH (Work From Home) and WFO (Work From Office) regulations, will undoubtedly have a significant impact on the company's operational activities and employee performance.
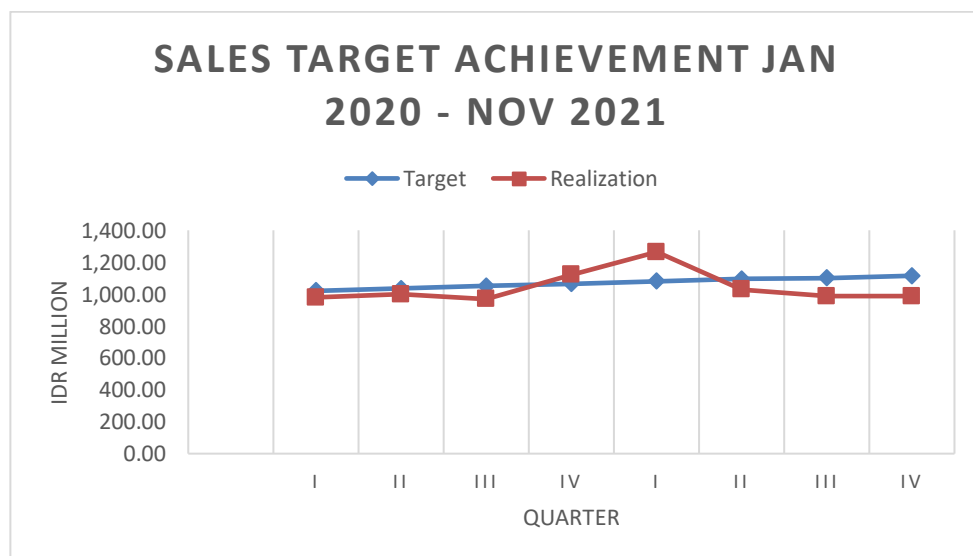
Figure 1.2 Sales Target Achievement Jan 2020- Nov 2021

Source: Data Process, 2021

Figure 1.2 above shows trend data in the form of a graph of company achievement of sales targets PT. Citra Bathara Bersaudara is based on realized employee performance. This is indicating that employee performance is decreasing, and in turn, affecting employee productivity.

One of the factors affecting the level of success of an organization is the productivity of its employees. Employee performance is the actions an employee takes when performing the work offered by the company. Several factors are believed to affect employee performance, including management information systems, work environment, and motivation.

Information systems today cannot be separated from the use of information technology, especially computers, as the use of technology in information systems can improve the quality and quantity of information produced. Information is a resource that plays an increasingly important role in the lives and livelihoods of individuals, and the assimilation of information is important to individuals and various groups of society, as well as businesses, public institutions, political groups, and governments. Bureaucratic and non-profit organizations., including religious groups (Hertiwie, 2014).

According to Gordon, B. Davis (Jogiyanto, 2005), a management information system is a system that performs the function of providing all information that affects all operations of an organization. Management information system availability is required to improve the performance of employees in already highly complex organizations. This will define development policies and strategies, and the availability of operational data and information (Kumorotomo and Margono, 2010)

In terms of improving employee performance, factors such as the work environment, in addition to a supportive Management Information System, play an important role. As the company, the organization must provide a comfortable and conducive work environment that encourages employees to work productively. Providing a comfortable work environment will able to provide satisfaction to employees for the work done and leave a lasting impression on employees, resulting in good performance.

Unhealthy working conditions can cause employees to be easily stressed, dissatisfied with their jobs, and arrive late, and vice versa. Employees who work in a healthy environment are more likely to be enthusiastic about their jobs, be less prone to illness, and be able to concentrate for long periods, allowing them to complete their tasks more quickly. corresponding to the target The work environment itself has two dimensions: physical (room coloring, lighting, cleanliness, spatial planning, etc.) and non-physical (employee welfare, work atmosphere, relations between employees, etc.). Organizations must be able to provide these two dimensions in good condition so that employees can continue to work productively and collaborate with leaders to achieve.

The work environment, according to (Farizki and Wahyuati, 2017), is the entire toolkit, the surrounding environment, the work method in which a person works, and the work regulations for individuals and groups. According to Sumantri (2016), the work environment, particularly the attitudes, values, norms, and feelings commonly held by workers or employees regarding their company and the work environment, can describe the psychological climate, culture, or personality of the company.

Employee motivation, in addition to the Management Information System and the work environment, can have an impact on employee performance. The term motivation (motivation) or motive (motive) is widely used in the world of work, where high performance is expected. Because people who are highly motivated at work will go above and beyond to ensure that their work is as successful as possible.

According to Paputungan (2013), motivation is formed by an employee's attitude toward work situations. Motivation is also a condition that drives employees to achieve organizational goals. As a result, there is no motivation if there is no sense of need, satisfaction, or balance.

According to Danim (2004), motivation consists of two essential components. The first is the goal to be achieved. Second, the strategies required by individuals or groups to achieve these goals. They are essential for productive organizational people based on these two elements. That is, an employee must be able to generate achievement motives that exist within the employee and that he can arouse.

Motivation is capable of encouraging individuals' desire to carry out particular activities to achieve a goal, such as employees at PT. Citra Bathara Bersaudara. Motivating PT. Citra Bathara Bersaudara employees can be beneficial in providing opportunities for employees to work well and receive what is expected by PT. Citra Bathara Bersaudara.

Based on the above, this study intends to conduct additional research on the subject, which will be included in a thesis entitled "The Effect of Management Information Systems, Work Environment, and Motivation on Employee Performance at PT. Citra Bathara Bersaudara.

1.2   Problem Identification

As explained above, it can be seen that employee performance indicators based on sales realization targets have decreased from the first quarter to the third quarter of 2021. According to Sutiyadi (2017), a positive management information system impacts the performance of employees. In other words, the better the management information system is used, the better the employee's performance. Another research by Wiranda (2015), said that the work environment affects employee performance. On the other hand, Y Badrianto (2019), According to the research results, motivation affects employee performance. Therefore this study to investigating the effect of management information systems, work environment, and motivation on employee performance (Evidence on the employee at PT Citra Bathara Bersaudara in South Tangerang). Moreover, this research will highlight these points from the human resource aspect.

1.3   Research Question

Looking at the previous background explains about management information systems, work environment, and motivation on employee performance at PT Citra Bathara Bersaudara, it can be formulated into four questions as follows::

1. Does the management information system affect employee performance at PT Citra Bathara Bersaudara, South Tangerang?

2. Does the work environment affect employee performance at PT Citra Bathara Bersaudara, South Tangerang?

3. Does motivation affect employee performance at PT Citra Bathara Bersaudara, South Tangerang?

4. Does the management information system, work environment, and motivation simultaneously affect employee performance at PT Citra Bathara Bersaudara, South Tangerang?

1.4 Research Objectives

Based on the proposed problem statement in this research, it can be concluded that the objectives of the research are as follows:

1. To analyze the management information system effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.

2. To analyze the work environment's effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.

3. To analyze motivation's effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.

4. To analyze management information systems, work environment, and motivation simultaneously affect employee performance at PT Citra Bathara Bersaudara, South Tangerang.

1.5 Research Benefit

1.5.1 Theoretical benefits

The results of this study can be used as a reference for other studies and analyses in increasing knowledge in the field of human resource management, especially regarding the effect of management information systems, work environment, and motivation on the performance of employees of PT Citra Bathara Bersaudara.

1.5.2 Practical benefits

This research is expected to provide a direct contribution to improving the Company's Performance of PT Citra Bathara Bersaudara and, more broadly. In addition, this research is expected to be a guide for companies to consider the application of management information systems, work environment, and motivation as variables that can significantly improve employee performance in the company.

1.6 Research Scope

This research is about to evaluate the correlation between employee performance the title of this research includes Management Information systems, Work Environment, and Motivation at PT Citra Bathara Bersaudara specifically. The respondents who were taken in this research are employees of PT Citra Bathara Bersaudara.

1.7 Structure of Thesis

This thesis consists of six chapters that provided a systematic process to help readers understand the content of this research. Each chapter provides details on:

Chapter I Introduction

This section outlines the prerequisites for an investigation and consists of several parts, such as Introduction, Problem Identification, research

objectives, research questions, the scope of research, and the purpose of research.

Chapter II Literature Review

This section focused on the theoretical review to guide the investigation. It also shows the definition, frame, illustration of this topic, and the result of previous studies. The literature review is a collection of journals, books, and other sources of information that can support research.

Chapter III Methodology

This section explains the methods for completing the investigation. Its interest is in the research process, analyzing the data, Hypothesis, as well as the analysis indicators used in the study.

Chapter IV Data Analysis

This section describes the details of the data analysis. This part shows the process of data by established procedures, then the result of the data processors, and provides an analysis of the results.

Chapter V Conclusion and recommendations

This section is the final chapter, summarising the entire analysis from the beginning to the end, evidence in the hypothesis in the previous section, and also presenting, the conclusions and recommendations.

References

This chapter consists of a list of references used in this thesis.

CHAPTER 2
LITERATURE REVIEW

2.1. Management Information Systems

A management information system (MIS) is a system that consists of an organized set of parts/components that work together or interact to generate data for use in company management. (Hertiwie, 2014).

McLeod and Schell (2009) in their book titled Management Information System (MIS), define a management information system as "a computer-based system that provides information to users with similar needs." MIS users are typically superior to formal organizational entities-companies or sub-units below them. The MIS data describes the company or one of its main systems in terms of what has happened in the past, what is happening now, and what is likely to happen in the future.

Information systems, according to Jogiyanto (2003), include six components: input, model, output, technology, database, and control. To make a single unit, all six components are necessary. If one or more of these components is missing, the information system will be unable to execute its role, namely data processing, and will not be able to achieve its goal, which is to provide relevant, timely, and accurate data.

George M. Scots quoted in the book Principles of Management Information Systems (2001) suggests that management information systems must have the following criteria: 1) Overall. 2) Coordinated. 3) Have an information sub-system. 4) Integrated rationally. 5) Transforming data into information in various ways. 6) Increase productivity. 7) Following the nature and style of the manager. 8) Using the established quality criteria.

According to Fahmi (2010), "Management Information System (MIS) is a management tool used to support company management in properly and systematically receiving, processing, and managing the company to support the creation of company performance."

Laudon (2012) defines an information system as a collection of interconnected components that collect (or obtain), process, store, and distribute information to support decision-making and control in an organization. In addition to facilitating decision-making, coordination, and monitoring processes, information systems can assist managers and employees in analyzing problems, describing complex issues, and developing new products.

According to Gordon B. Davis (in Revina, 2018) in his book Basic Framework for Management Information Systems Part I, the basic model of information systems can be presented in Figure 2.1:

Information System Basic Model

Data → Processing → Information

Information System Basic Model

Data → Processing → Information

Storage
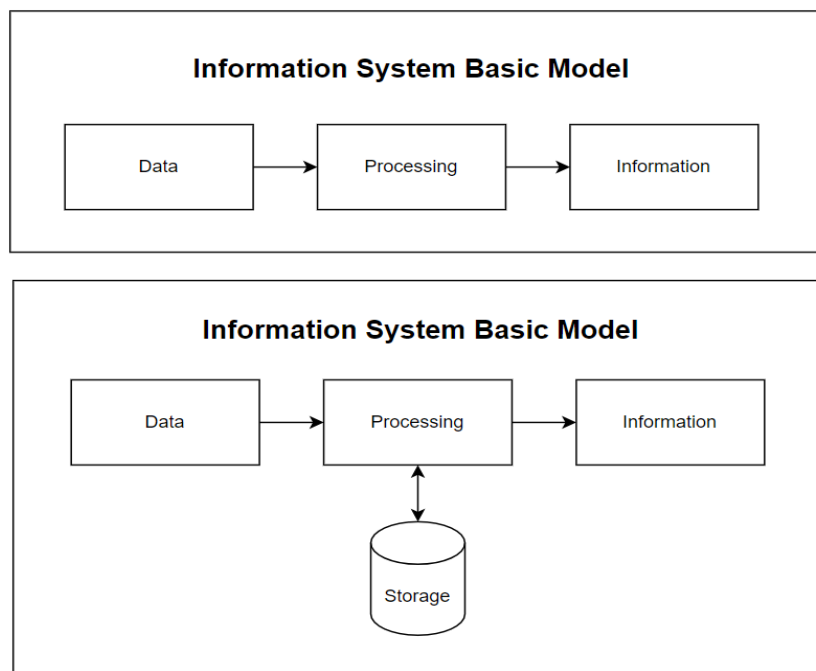
Figure 2.1 Information System Basic Model

Source: Revina, 2018

The information system, as shown in Figure 2.1, receives input data and instructions, processes the data according to the instructions, and then outputs the results. The input, processing, and output system model is appropriate for the simplest information processing system in which all inputs come at the same time. However, this is a rare occurrence. Data that has been collected and processed in a previous period is frequently required by the information processing function. As a result, the information system model now includes data file storage. Processing operations are accessible for both collected and stored as well as data that has already been collected and stored. Storage capacity after converting to information involves not only converting data to information but also storing data for future use.

A company will not be separated from the various kinds of problems that exist within the organization, and in a company changes often arise, so these changes are often an obstacle for managers, and as a result, these changes cause problems. Therefore we need a management information system to support managers in overcoming problems. Information systems not only process data into information but also channel information to support the decision-making process.

2.2. Work Environment

The work environment refers to all of the circumstances that surround an employee and are linked to the development of psychological changes in that employee, Nitisemito (2000). The work environment itself consists of two, namely the physical and non-physical work environment.

The physical work environment according to Sedarmayanti (2009) is all physical conditions around the workplace that can affect employees either directly

or indirectly. The physical work environment itself can be divided into two categories. The first category is an environment that is in direct contact with employees and near employees (such as tables, chairs, and so on). The second category is the intermediate environment or the general environment can also be called the work environment that affects the human condition, for example, temperature, humidity, air circulation, lighting, noise, mechanical vibration, unpleasant odors, colors, and so on.

The non-physical work environment is all conditions that occur related to work relationships, both relationships with superiors and relationships with co-workers, or relationships with subordinates. Sedarmayanti (2009). The non-physical work environment is no less important than the physical work environment. Employee morale is strongly affected by the state of the non-physical work environment, for example, relationships with fellow employees and with their leaders. If the relationship of an employee with other employees and with the leadership goes very well, it will be able to make employees feel more comfortable in their work environment.

A positive work environment is required in an organization, according to Robbins in Djuremi (2016). Employees are concerned about their work environment for their comfort as well as to make it easier to do a better job. Temperature, light, and other environmental elements should not be set to extremes (too hot or too dark). Furthermore, most employees like to work in facilities that are clean and somewhat modern, as well as with adequate tools and equipment.

The work environment, according to Soetjipto in Ronal (2019), is defined as "all things or aspects that can affect directly or indirectly an organization or firm

and have a positive or negative impact on employee performance and job satisfaction." A pleasant work environment is critical for enhancing employee performance, and a good work environment is defined as one in which employees may make a significant contribution to the company's success, either directly or indirectly.

2.3.   Motivation

According to Robbins (in Atqiya, 2017) Motivation is a process through which people are willing to put in a lot of effort to achieve organizational goals, but only if that effort can meet an individual need. "A psychological push to someone who controls the direction of a person's conduct in the organization, the degree of effort (*level of effort*), and the level of tenacity or resilience in the face of an obstacle or issue (*level of persistence*)". Motivation, according to Rivai and Sagala (2011), is a set of attitudes and beliefs that motivate people to accomplish specific tasks based on their personal goals.

Nawawi (2011) said, "Motivation is a condition that encourages or causes someone to do an act/activity that takes place consciously". This understanding also implies that all motivational theories begin with the underlying principle that humans only engage in activities that they find enjoyable. This does not rule out the possibility that a person may do something he does not want to do while under intense stress.

According to Robbins (2007), Fredrik Herzberg's Highienis theory contends that intrinsic factors are related to job satisfaction and motivation. Believing that each individual's contribution to his or her work determines success or failure.

Motivation is a method of satisfying an employee's needs, which means that when certain factors meet that person's needs, that person will exert his or her best efforts to achieve organizational goals. In this theory, motivation is divided into two factors: motivators, also known as intrinsic motivation, and hygiene factors, also known as extrinsic motivation. These factors are separated into two dimensions, each of which affects a different aspect of job satisfaction. Hygiene factors reduce dissatisfaction but do not cause it.

2.4. Employee Performance

Performance is the outcome of a person's or a group of people's work over a specific period that reflects a specific job, a job in such an organization's business objectives Bernardin and Russell (Pratama 2002). According to As'ad (2004), performance is the outcome of a person based on the size applicable to the job at hand. Because the two have a close relationship, improved individual performance (individual performance) is likely to improve corporate performance (corporate performance).

According to Mangkuprawira and Hubeis (2007), performance is the result of a specific work process carried out in a planned manner at the time and place specified by the employee and the organization. Meanwhile, according to Rivai (2005), performance is a real behavior that everyone demonstrates as work performance produced by employees based on their role in the company. By the company's organizational standards, performance measures can be seen in terms of a certain quantity and quality.

According to Mangkunegara (2007), employee performance evaluation is "a procedure used by leaders to determine if an employee is executing his work in line with his tasks and obligations." Based on the several definitions above, performance is the result of a person's or a group of people's work in an organization or company in terms of quality and quantity over a specific period that reflects how well the person or group fulfills the requirements of a job to achieve organizational or company goals.

2.5. Previous Research

A lot of previous research is focused on Management Information systems (MIS), Work Environment (WE), Motivation (MO), and Employee Performance (EP). Some previous research related to this study is presented in table 2.1 below.

Table 2.1 Lists of Previous Studies

Source: Data Process, 2022

Author	Year	Title of Research	Variable of Interest	Respondent	Research Location
Ibrahim Bali Pamungkas	2017	Pengaruh Sistem Informasi Manajemen, Kompetensi, Motivasi Terhadap Kinerja Karyawan Pada PT. Circleka Indonesia Utama (Wilayah Jakarta).	Management Information System, Competence, Motivation, Employee Performance.	155	Jakarta Capital City Government, Indonesia.
Rizal Ahmad	2019	Analisis Kualitas Sistem Informasi Manajemen Terhadap Kinerja Karyawan PDAM Tirta Wampu Stabat.	Management Information System, Employee Performance.	50	North Sumatra, Indonesia.
Yuan Badrianto & Muhamad Ekhsan	2019	The Effect Of Work Environment And Motivation On Employee Performance of PT. Hasta Multi Sejahtera Cikarang.	Work Environment, Motivation, Employee Performance.	60	West Java, Indonesia.
Fahry Akbar Wiranda and Wahyu Hidayat	2015	Pengaruh Sistem Informasi Manajemen Dan Lingkungan Kerja Terhadap Kinerja Karyawan PT. PLN (Persero) Distribusi Jakarta Raya Dan Tangerang Bidang Sumber Daya Manusia Dan Keuangan.	Management Information System, Work Environment, Employee Performance.	72	Banten, Indonesia.

Hani Fitria Rahmani	2019	Pengaruh Penerapan Sistem Informasi Manajemen (SIM) Terhadap Kinerja Karyawan	Management Information System, Employee Performance.	60	West Java, Indonesia.
Aditya W. Demus, Paulus Kindangen and Maria V. J. Tielung	2015	The Impact Of Work Environment On Employee Performance (Case Study at PT. Bank Artha Graha International Tbk, Manado Branch Calaca).	Interpersonal Relationship, Supervision, Training and Development, Employee Welfare, Work Environment, and Employee Performance.	30	North Sulawesi, Indonesia.
Yessy Yovina Vanesa, Rahim Matondang, Isfenti Sadalia and Muhamad Toyib Daulay	2019	The Effect Of Organizational Culture, Work Environment And Work Motivation On Employee Discipline In PT Jasa Marga (Persero) TBK, Medan Branch, North Sumatra, Indonesia.	Organizational Culture, Work Environment, Work Motivation, Employee Discipline.	67	North Sumatra, Indonesia.
Wala Erpurini	2019	Pengaruh Sistem Informasi Manajemen Kepegawaian (Simpeg) Dan Lingkungan Kerja Terhadap Kinerja Karyawan Pada Instalasi Narkotika, Psikotropika Dan Zat Adiktif (Napza) Rumah Sakit Jiwa Provinsi Jawa Barat.	Management Information System, Work Environment, Employee Performance.	45	West Java, Indonesia.
Diapari Sosagaon Putra Pane	2019	Pengaruh Budaya Organisasi, Kepemimpinan, Lingkungan Kerja Dan Motivasi Sebagai Variabel Intervening Terhadap Kinerja Dosen Politeknik Di Kota Bekasi.	Organizational Culture, Leadership, Work Environment, Motivation, Employee Performance.	99	West Java, Indonesia.

2.6. The effect of management information Systems on employee performance

In particular, this study explored management information systems (MIS) in firms and their effect on employee performance by Rahmani (2019). Wiranda (2015) In his study stated that the management information system (MIS) has a significant effect on employee performance, which means that if the MIS is good, the employee performance will be good as well.

MIS provides managers with the information required to manage organizations efficiently and effectively. These systems are distinct from other information systems in that they are designed to be used to analyze and facilitate strategic and operational activities in the organization O'Brien (Shah, M., 2014).

Liyas, J. N., & Widyanti, F. N. (2020) also supported a significantly positive relationship between management information systems (MIS) and employee performance. Based on the above explanation, the management information system (MIS) has a significant effect on employee performance, The hypothesis in this research is listed as follows:

H$_1$: Management information has a positive effect on employee performance

2.7. The effect of work environment on employee performance

Y Badrianto (2019) stated that the work environment does not affect employee performance. But, Bushiri, (2014) that studies revealed that the organization's working environment had an impact on employee performance. The result of that study found that the organization needs to improve its physical working environment so that to effect employees stay in the office, work comfortably and perform their job.

According to Otley, the performance of organizations is dependent upon the performance of employees (job performance) and other factors such as the environment of the organization. The distinction between organizational and job performance is evident; an organization that is performing well is successfully attaining its objectives, in other words: one that is effectively implementing an appropriate strategy (Otley, 1999), and job performance is the single result of an employee's work (Hunter, 1986).

Based on the above explanation, the work environment affects employee performance. The hypothesis in this research is listed as follows:

H$_2$: Work environment has a positive effect on employee performance

2.8. The effect of motivation on employee performance

Kuswati, (2020) stated Motivation has a positive effect on performance. The results give meaning that the role of motivation becomes a supporting factor in an organization both government and private especially in improving performance. Empirical findings indicate that the direct effect of motivation on performance has an effect. This is based on the relationship between performance and motivation.

According to Latham and Ernest (2006), motivation was at the beginning of the 1900s thought only to be monetary. However, it was discovered during the 20th century that to motivate employees, there are more factors than just money. In their view, employee satisfaction with their job is an important indicator of good job performance and happy employees are productive. To them, motivation is a psychological factor and is affected by the workers" mental attitude and health. Therefore, to be motivated, a person needs to have certain basic needs fulfilled. If these needs are lacking, a person's self-esteem and self-actualization cannot develop. This could result in a lack of interest in progress and development, both professionally and personally. There are several theories of human needs, which are the foundation of motivation.

Based on the expertise and the researcher's explanation above, that motivation has a significant effect on employee performance. The hypothesis in this research is listed as follows:

H_3:   Motivation has a positive effect on employee performance

2.9.   Theoretical Framework

Based on the previous theory and variable framework, the theoretical framework of this research is described as follows:
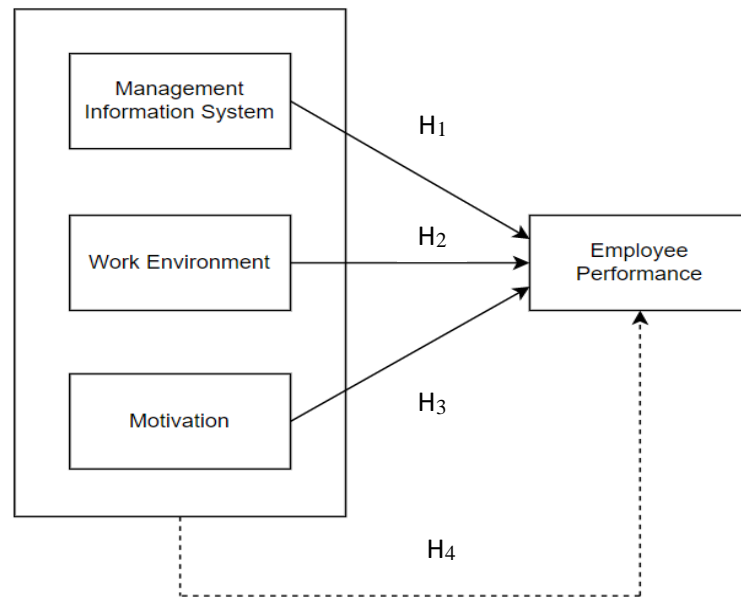
Figure 2.2 Theoretical Framework

Sources: Data Process, 2022

H_1: Management Information System (MIS) has a positive effect on Employee Performance.

H_2: Work Environment has a positive effect on Employee Performance.

H_3: Motivation has a positive effect on Employee Performance.

H_4: Management Information systems (MIS), Work Environment, and Motivation simultaneously have a positive effect on Employee Performance.

CHAPTER 3

RESEARCH METHODOLOGY

3.1   Introduction

The research design used the research onion approach. The philosophy of research is positivism, with data collected from a representative sample in PT Citra Bathara Bersaudara using a deductive approach. This study examined the hypothesis by using the concepts and theories of previous studies. This study employs the quantitative research method to examine the effect of the variables chosen and to logically analyze the causal effects caused by these variables. The survey questionnaire was created with Google Forms. The information was gathered using a questionnaire distributed via an online survey to PT Citra Bathara Bersaudara employees in December 2021.

3.2   Research Design

Creswell (2014) "Research design" is defined as "the specific procedure involved in the research process: data collecting, data analysis, and report writing". Quantitative research emerged around 1250 A.D. and was driven by investigators with the need to quantify data. Since then quantitative research has dominated western culture as the research method to create meaning and new knowledge. What constitutes a quantitative research method involves a numeric or statistical approach to research design (Williams C, 2007). Leedy and Ormrod (2001) alleged that quantitative research is specific in its surveying and experimentation, as it builds upon existing theories. The methodology of quantitative research maintains the assumption of an empiricist paradigm (Creswell, 2003).

In this research, the onion research method was used. The study philosophy is positivism, and data is collected using a deductive approach from a representative sample of PT Citra Bathara Bersaudara. In this study, the hypothetical deductive technique is used to solve a problem in a step-by-step, logistical, structured, and rigorous manner. Using concepts and theories from previous research, this study tested the variable hypothesis.

The *quantitative research* approach is utilized in this study to assess the effect of selected factors and to rationally analyze the causal effects induced by these variables. The goal of causal research is to figure out which factors are the cause (independent variables) and which variables are the effect (dependent variables) of a phenomenon, as well as to figure out what the substance of the causal variables' effect is and what consequence to expect. The data for this study came from a questionnaire from a previous study.

The data for this study came from a questionnaire from a prior study. The google form was used to create the survey questions. The questionnaire will be distributed to PT Citra Bathara Bersaudara employees via an online survey in December 2021. The questionnaire will be delivered via the WhatsApp app, Telegram app, and email.
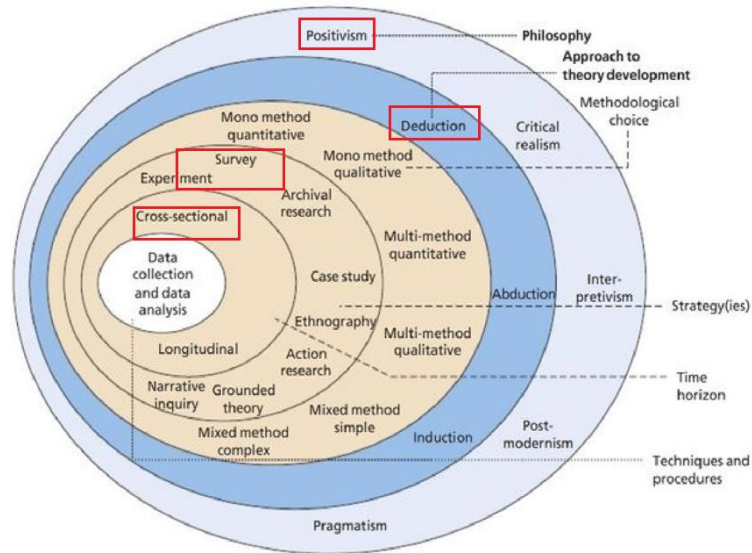
Figure 3.1 Saunders Research Onion

Sources: Saunders et al, 2007

According to Malhotra (2010), the Sampling technique consists of six stages as follows:

1) Define Target Population

2) Determine the sampling frame

3) Select the sample techniques

4) Determine the sample size

5) Execute the sampling proses

6) Validate the sample.

3.3   Population and Sample

The population is the whole object of research (Arikunto, 2013). Meanwhile, According to Sugiyono (2015) defines population as "objects/subjects that have specified amounts and qualities that are utilized to be examined and then made conclusions." The sample is chosen as part of a population that has characteristics, or each part of the population is chosen based on its level of

presentation (Silalahi, 2009). According to Sugiyono (2015) "The sample is part of the total" and characteristics possessed by the population. In this study, the population was taken based on the total number of employees at PT. Citra Bathara Bersaudara.

The total population is categorized above involving 163 employees in PT Citra Bathara Bersaudara. According to Cohen (1992), the sample size recommendation based on the number of arrows pointing at a construct with R square 0.25 is a minimum of 59 respondents, because this study has 3 (three) numbers of arrows pointing to the construct Employee Performance (EP), as per the research framework.

Table 3.1 Sample size recommendation Cohen

Sources: Cohen J.A power primer, 1992

Exhibit 1.7	Sample Size Recommendation a in PLS-SEM for a Statistical Power of 80%											
	Significance Level											
	1%				5%				10%			
Maximum Number of Arrows Pointing at a Construct	Minimum R²				Minimum R²				Minimum R²			
	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75	0.10	0.25	0.50	0.75
2	158	75	47	38	110	52	33	26	88	41	26	21
3	176	84	53	42	124	59	38	30	100	48	30	25
4	191	91	58	46	137	65	42	33	111	53	34	27
5	205	98	62	50	147	70	45	36	120	58	37	30
6	217	103	66	53	157	75	48	39	128	62	40	32
7	228	109	69	56	166	80	51	41	136	66	42	35
8	238	114	73	59	174	84	54	44	143	69	45	37
9	247	119	76	62	181	88	57	46	150	73	47	39
10	256	123	79	64	189	91	59	48	156	76	49	41

Source: Cohen, J.A power primer. *Psychological Bulletin*, 112, 155–519.

Because the employees are located in areas other than south Tangerang, such as Subang, West Java, the number of samples from Cohen (1992) with a target sample of 59 (Fifty-Nine) involving a population of 163 was chosen. As a result, the population for this study was drawn from all levels of employees at PT Citra Bathara Bersaudara.

3.4 Sampling Technique

The sampling approach is divided into two categories: probability sampling and non-probability sampling, each with its subcategory (Malhotra, 2010). Sampling techniques classification can be seen in figure 3.4 below.
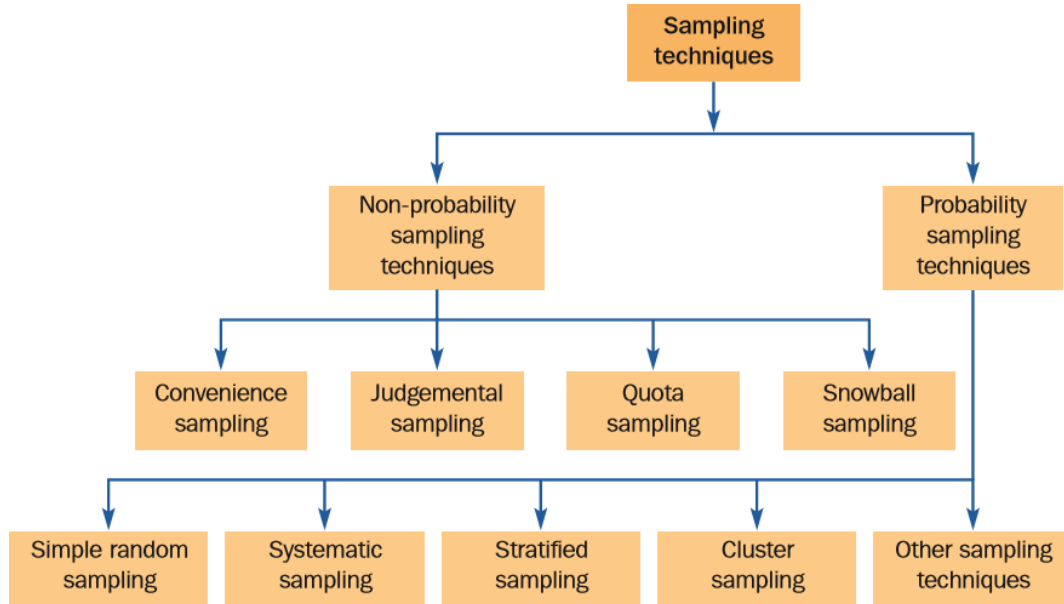
Figure 3.2 Sampling Technique Classification

Sources: Malhotra N, 2010

PT. Citra Bathara Bersaudara Sampling frame is a representation of elements of the targeted population. the sampling frame aims to get an appropriate target population, then select the sampling techniques. In this study, *simple random sampling* was used. This sampling method is normally used where there is little known about the population of participants. The total population in this research is 163 employees including Supervisor staff and Coordinator, Manager and senior management, and Staff.

3.5   Source Data

In this research, quantitative research will be used to acquire data. Quantitative research is described as a study that heavily on statistical methods to provide an overview of an event or symptom. Creswell (2002) defines quantitative research as the process of gathering, analyzing, interpreting, and writing the findings of a study. The data source used in this research consists of the following:

1. Primary Data Source

   Silalahi (2009) stated that the primary data source is the data obtained from first-hand information. The primary data source in this research is quantitative research. In this research, the data was obtained from the questionnaire distributed to the employee of PT Citra Bathara Bersaudara

2. Secondary data sources come from indirect sources. This information was gathered from a variety of publications, the internet, literature, and academic journals utilized as reference theories. Secondary data sources are data gathered from or originating from third parties or other sources available before the performance of this research (Silalahi, 2009).

A questionnaire is a research instrument consisting of a series of questions to gather information from respondents. Questionnaires can be thought of as a kind of written interview. A questionnaire is defined as a structured technique for data collection that consists of a series of questions to be answered by the respondent (Malhotra, 2010). In this study, a data survey was collected through the questionnaire method and distributed to employees of PT Citra Bathara Bersaudara.

The online questionnaire was chosen since it is more cost-effective and efficient. The questionnaire was prepared with Google Forms and released over social media platforms such as Telegram, Whatsapp, and email. In December 2021, an online questionnaire will be distributed to all respondents.

3.6 Variables and the Definition of Operational Variables

This study uses 4 (four) variables. Management Information System (MIS), Work Environment (WE), and Motivation (MV) as the independent variable, and Employee Performance (EP) is the Dependent Variable. Employee Performance (EP) as a dependent variable is the primary interest of this research. According to Sugiyono (2018), "the dependent variable is a variable that is affected or becomes a result as a result of the independent variable." The independent variable, on the other hand, is a variable that affects or causes the change or emergence of the dependent variable. The operational variable in this study is the table below:

Table 3.2 Operational Variable

Source: Data Process, 2022

Variables	Item	Measurement Items	Score
Management Information System (MIS) (Adopted from Davis in Eva (2016))	MIS1	The information generated from the management information system is useful for me	5-Likert Scale
	MIS2	The information generated from the management information system helps me in my work	
	MIS3	The employee database data collection operating system helps me in processing the existing information	
	MIS4	The debriefing of managers and heads of sections for the implementation of the existing management information system is good	
	MIS5	There is a complete and easy-to-understand personnel management information system application	
	MIS6	The implementation of organizational and management policies is well organized	
	MIS7	Organizational and management policies support the implementation of a better management information system	
	MIS8	Decision-making is based on a management information system	
	MIS9	No errors in payroll information generated from SIM (Management Information System)	

	MIS10	The information generated by the system has a positive value for managers and department heads	
	MIS11	Implementation of a management information system is beneficial for managers and heads of departments	
Work Environment (WE) (Adopted from Hanaysha in Pidha (2019))	WE1	I am OK with the area (place) provided for me to do the task.	5-Likert Scale
	WE2	My workplace is clean	
	WE3	There is sufficient distance between me and my closest companion	
	WE4	Quiet work environment	
	WE5	Overall, my work environment is pleasant and visually appealing	
Motivation (MV) (Adopted from Anwar Prabu Mangkunegara (2009) in Bayu Fadillah, et all (2013))	MV1	My high level of work motivation gives me a strong desire to perform at my best.	5-Likert Scale
	MV2	My enthusiasm for work has an impact on corporate goals	
	MV3	My dedication to my job stems from my positive mental health.	
	MV4	The working spirit that I have creates fun which encourages me to work harder	
	MV5	My work ethic has encouraged me to be more consistent in achieving company goals	
	MV6	I do work on my initiative without any encouragement from others or of my own free will	
	MV7	My motivation to work is to form creativity by finding new relationships	
	MV8	I enjoy my job at this company since I can learn things I never knew before.	
	MV9	My desire for work makes me feel responsible for the tasks I accomplish.	
	MV10	I'm driven to do work on time because of my job at this company.	
Employee Performance (EP) (Adopted from Bernadin and in Sabdo (2016))	EP1	To grow the company, I am prepared to assist colleagues who need support with their job.	5-Likert Scale
	EP2	I'm willing to collaborate to finish the task at hand.	
	EP3	I'm willing to work without being given orders from my supervisors.	
	EP4	I set aside time to do jobs efficiently.	
	EP5	I followed the given time to work.	
	EP6	I work persistently.	
	EP7	I work diligently and precisely.	
	EP8	I work with an adequate skill base.	
	EP9	I communicate with a fellow worker	

The variable measurement uses an ordinal scale. The scale used in this research is the Likert scale. According to Malhotra and Dash (2010), the Likert scale is a measurement scale with 5 response categories ranging from "1= strongly disagree" to "5 = strongly agree". Respondents are required to choose one of five options as per the level of agreement or disagreement related to the objective statement. The score of each response in this study is as follows:

- Strongly agree is equal to 5 points

- Agree is equal to 4 points

- Neutral is equal to 3 points

- Disagree is equal to 2 points

- Strongly Disagree is equal to 1 point

3.7 Data Analysis Technique

The gathered information from the questionnaire distribution will be analyzed for validity and reliability. In this research, SPSS version 25 software on a computer was used. Multiple linear regression is used to see how two or more independent factors (explanatory variables) affect one dependent variable. The dependent variable and each of its predictors are assumed to have a straight line/linear relationship in this model (Janie, 2012).

3.8 Descriptive Analysis

Descriptive analysis purposes are to get a comprehensive view of research variables to include the problem and understand the characteristic of respondents. Descriptive analysis is needed to provide systematic consideration of aspects that contribute to certain situations and can support further research (Sekaran & Bougie, 2016). The data source comes from a questionnaire answered by respondents. The questionnaire is divided into two parts, namely the opening part and the main part. The opening part is related to the basic information of the respondents (gender,

position level, education, etc.), and the main part is related to the indicators of each variable.

3.9 Validity Test

Validity is a metric used to determine how well an instrument is valid. If an instrument can reveal data from appropriately investigated variables, it is considered to be valid. The instrument's high and low validity indicate how closely the data obtained matches the description of the intended validity (Arikunto, 2013).

According to (Widoyoko, 2013) The construct validity of an instrument relates to how well it measures the concept of a theory that was used to construct it. The definition or concept that is measured from the theory used. The definition or concept that is measured from the theory used. Therefore, there must be a discussion on the theory of the variables to be measured which will be the basis for determining the construct of an instrument. Based on the theory about these variables, conceptual definitions and operational definitions are then formulated and then determined indicators to be measured. These indicators are then translated into instrument items, both in the form of questions and statements.

To determine the validity of the item, the *product moment Pearson* correlation formula is used. The IBM SPSS program was used to perform the validity test in this study. The *product moment Pearson* formula is used, which is:

$$r_{xy} = \frac{N \sum XY - (\sum X)(\sum Y)}{\sqrt{[N \sum X^2 - (\sum X)^2][N \sum Y^2 - (\sum Y)^2]}}$$

Explanation:

r = Pearson r correlation coefficient

N = Total sample

The correlation number is between -1 and +1. The correlation becomes closer to 1 as it gets closer to being perfect. The relationship's direction is shown by the negative and positive values. According to (Sugiyono, 2018) the guidelines for providing the interpretation of the correlation coefficient are as follows:

Table 3.3 Correlation Coefficient Interpretation Guidelines

Source: Sugiyono, 2012

Value	Description
0.00 - 0.19	A very weak correlation
0.20 - 0.39	A weak correlation
0.40 - 0.69	A moderate correlation
0.70 - 0.89	A strong correlation
0.90 - 1.0	A very strong correlation

3.10 Reliability Test

According to Widoyoko (2013) "Instruments can be said" reliable (reliable) if it gives steady or steady results (consistent) when tested many times. In this test, *Cronbach's alpha* coefficient (α) with the features of the IBM SPSS program is used for this kind of interval measurement to assess how reliable each instrument is. If the *Cronbach alpha* value is larger than a preset limit of 0.6 or the estimated correlation value is greater than the value in the table, the instrument is deemed to be dependable and may be used for research, which is expressed as follows:

$$a = \frac{k}{k-1}\left(1 - \frac{\sum s_i}{s_t}\right)$$

Explanation:

α = Reliability coefficient

k = Number of question items tested

∑ Si = Total score variance for each item

∑ St = Varians total

3.11 Classical Assumption Test

3.11.1 Normality Test

The normality test is used to find out if the sample of data distribution comes from normal population distribution and to know if the data has equal skewness. The test will be used by Kolmogorov-Smirnov to assess numerical tests for normality. According to the (Ghozali, 2011) criteria normality, testing in this Research is the P-value > 0.05; afterward, the data is normally distributed if the P-value < 0.05. To analyze the normality test, P-P Plots will use graphs. If the data are distributed normally, the points data will be located close to the diagonal line, if the data points are away from the diagonal line, it means the data is not normally distributed.

3.11.2 Multicollinearity Test

This test aims to test whether there is a high or perfect correlation between the independent variables in the regression model. If there is perfect multicollinearity between variables, then the regression coefficient of the independent variable cannot be determined and the *standard error* value becomes infinity. The regression coefficient of the independent variable can be determined

if the multicollinearity between the independent variables is strong, but a high *standard error* value implies that the regression coefficient value cannot be estimated properly (Jani, 2012).

According to Ghozali (in Dinda, 2018) this test aims to test whether the regression model finds a correlation between independent variables. This regression model should not occur in the correlation between the independent variables. If these variables are correlated with each other, then these variables are not *orthogonal* (the correlation between independent variables is zero). The values of the Variable Tolerance and Variance Inflation Factor (VIF). can be used to determine whether or not multicollinearity occurs.

- If the Tolerance value < 0.10 then there is multicollinearity
- If the value of VIF > then there is multicollinearity

3.11.3 Heteroscedasticity Test

The next classical assumption in the regression model is homoscedasticity or having the same variance. The graphical approach and the statistical method are two methods for detecting the presence or absence of heteroscedasticity. The graph technique is commonly used by analyzing the graph plot between the dependent variable's predicted value and its residual. The Glejser test, White test, Spearman's Rank Correlation test, Goldfeld Quandt test, and Breusch-Pagan-Godfrey test are examples of statistical methods (Jani, 2012). But what will be discussed in this study is only the graph method and the Glejser test.

By regressing the independent variables on the residual absolute value, the Glejser test is performed (Gujarati, 2004). The difference between the observed

relationship is known as the residual, while the value is known as the absolute. There is no problem with heteroscedasticity if the significance between the independent variable and the absolute residue is more than 0.05.

- Sig. > 0.05: no heteroscedasticity occurs
- Sig. <0.05: has heteroscedasticity

3.12 Multiple Regression Model

Multiple linear regression is an equation model that explains the relationship of one dependent variable/response (Y) with two or more independent variables/predictors (X_1, X_2,… X_n). The purpose of the multiple linear regression test is to predict the value of the dependent variable/response (Y) if the values of the independent variable/predictor (X_1, X_2,… X_n) are known. Besides that, it is also to be able to find out how the direction of the relationship between the dependent variable and the independent variables (Yuliara, 2016). The multiple linear regression equation is mathematically expressed by:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + ... + b_nX_n$$

Explanation:

a = Constant

b_1 , b_2 , b_3 , ... , b_n = Regression Coefficient Value

X_1 , X_2 , X_3 , ... , X_n = Independent Variable

3.13 Determination Coefficient

The coefficient of determination (R^2) is used to determine the independent variable's capability to explain the dependent variable. According to (Widarjono,

2000), the Coefficient of Determination Test (R-Squared) is a test to explain the magnitude of the proportion of variation of the dependent variable explained by the independent variable. In addition, the coefficient of determination test can also be used to measure how well the regression line we have is. If the value of the coefficient of determination (R-squared) in an estimate is close to one (1), it can be said that the dependent variable is well explained by the independent variable. And conversely, if the coefficient of determination (R-Squared) is away from the number one (1) or close to zero (0), then the less good the variable independent explains the dependent variable.

$$\text{R-}squared = r^2 \text{ x}$$

Explanation:

R-*squared* = Coefficient of Determination

r^2 = Quadratic from Correlation Coefficient

3.14 Hypothesis Test

To test the hypothesis by using a statistical value for alpha 5% and a two-tailed hypothesis, the t-statistic value used is 1.96. So, the criteria for acceptance/rejection of the hypothesis is Ha is accepted when the t-statistic > 1.96 and H_0 is rejected. According to Ghozali (2014), To reject or accept the hypothesis using probability, Ha is accepted if the value of $p < 0.05$.

For this Research, analyze the data using multiple regression analysis models. Multiple regression is used when the independent variable is more than one (L. Nathans, L. et al, 2012). This Research used multiple regression to the analyzed effect of the marketing mix and consumer characteristics on consumers' purchase

intention of local sneakers brands. According to (Sugiyono, 2012) the formula for multiple regression:

$$y = \alpha + \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon$$

Explanation:

α = Constant

y = Employee Performance

β_1 = Coefficient Management Information System (MIS)

β_2 = Coefficient for Work Environment

β_3 = Coefficient for Motivation

x_1 = Management Information System (MIS)

x_2 = Work Environment

x_3 = Motivation

ϵ = Standart Error

3.15 Research Framework

The research framework is to implement the steps taken during the study. Following the research framework in this study:
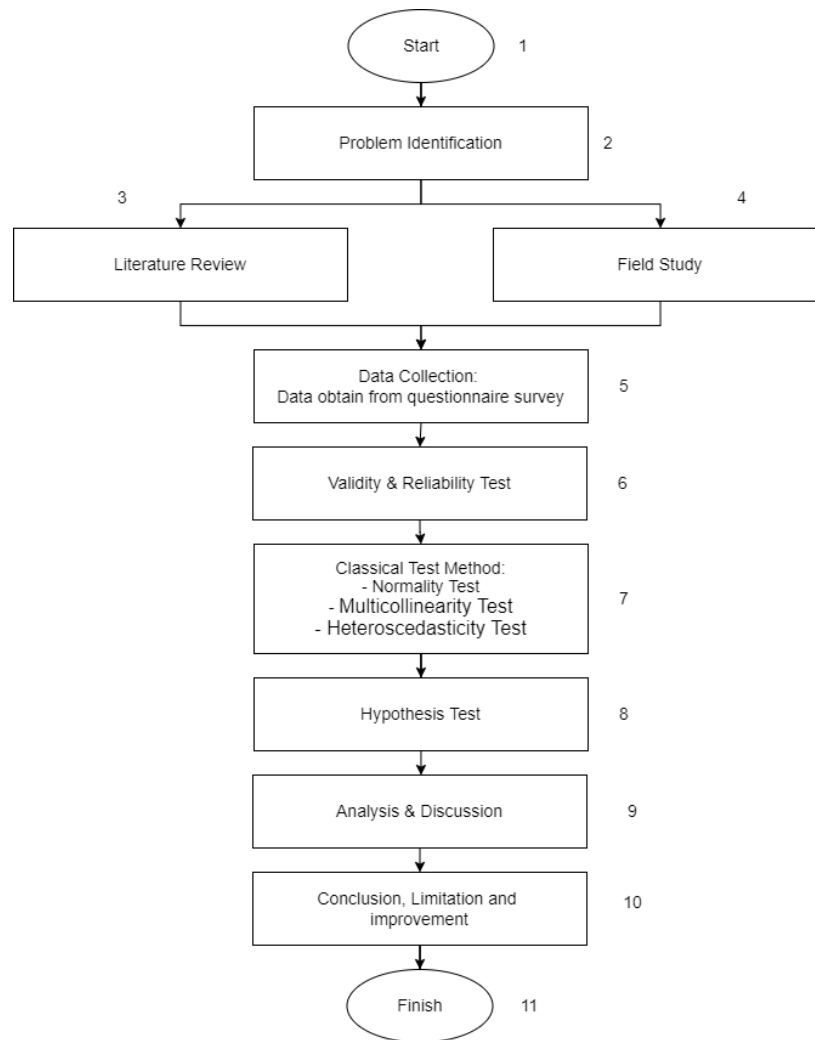
Explanation:

1. Start the beginning of the research where ideas and materials of this research are being prepared.

2. Identifying the current problems related to the subject of research.

3. Literature Review finding previous studies, research, scientific journals, and other literature materials that are related to the problem identification that are suited for the research, while illustriously forming a theoretical framework and hypothesis of the research problem.

4. Field studies discover the fact, problems, or data that are relevant to research problems that will be studied and analyzed in the next stage of the research

5. Data collection will be conducted by using the survey in Google Forms online will be distributed to the Indonesian public and converting the data that has been collected into data that can be analyzed using SPSS Software version 25.0 to find the result.

6. A validity & Reliability test will be conducted to ensure the feasibility of the question in the survey and that the answers of the respondent are both valid and reliable to use to form a conclusion and test the hypothesis.

7. The classical assumption test is a statistical test used to determine the relationship between variables, including the normality test, multicollinearity test, and heteroscedasticity test

8. A hypothesis test is a step where the significant level effects that are caused by independent variables towards dependent variables are true

9. Analysis and discussion where the data that is obtained from previous stages show the information that is necessary to draw out conclusions.

10. Conclusion, limitation, and suggestion are where the conclusion of the research will be presented and explain how the research is limited from various aspects while also giving suggestions that are both practical and theoretical for future research to use.

11. Finish the final stage in which the research is completed by giving the research result.

CHAPTER 4

ANALYSIS, AND DISCUSSION

4.1 Data Collection

The data collection is being conducted from the beginning of January 2022 to September 2022. The data collected offline is going to PT. Citra Bathara Bersaudara headquarter, and online platform, known as Google form. The respondents of this research are 59 respondents. The sample size recommendation in this study is based on the table and the number of arrows pointing at a construct with R square 0.25 a minimum of 59 respondents because this study has 3 (three) numbers of arrows pointing to the construct Employee Performance (EP). Cohen (1992).

4.2 Descriptive Analysis

Based on the SPSS and Google form, The graph shows answers to some questions regarding 59 people. There are 35 personal questions for the respondent to identify their Gender, Age, and Education regarding the descriptive of the respondents of this Research will explain in this chapter.

4.2.1 Respondent's Gender
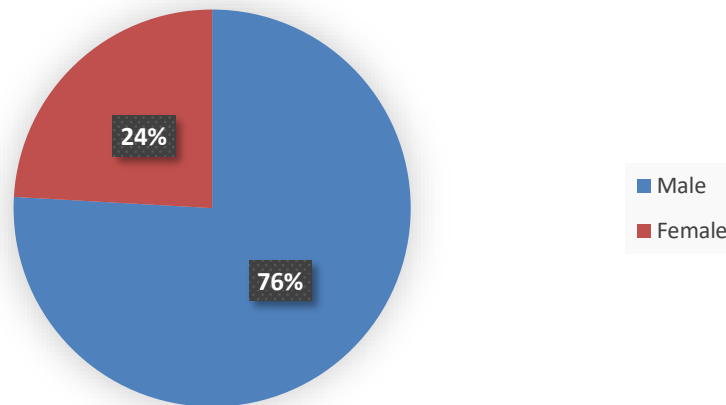
Figure 4.1 Gender of respondents

Based on the chart above, the result is based on gender respondents. Men answered the questionnaire with a total of 75,9% out of 59 respondents. On the other side Women, respondents are 24,1% out of 59 total respondents.

4.2.2 Respondent's Age
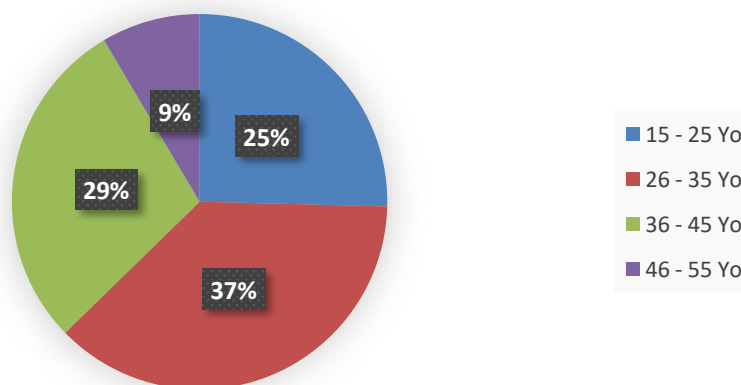
Figure 4.2 Age of respondents

Based on the chart above, the respondents who filled were mostly from age 26 - 35 years old with a frequency of 37,3% out of 59 respondents. Moreover, followed by the second larger percentage is the respondent group 36 - 45 years old

with a frequency of 28.8% out of 59 respondents. Next, the percentage is the respondent group 15 - 25 years old with a frequency of 25.4% out of 59 respondents. The last group of respondents is 46 -55 years old, with a total percentage of 8,5% out of 59 respondents.

4.2.3 Respondent's Education Background
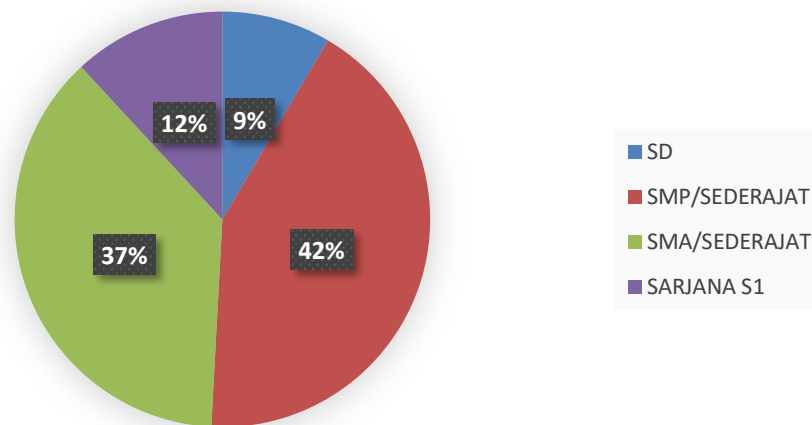
Figure 4.3 Education of respondents

In terms of education, This chart represents the results of respondents mostly junior high school education with a frequency of 42,4% out of 59 respondents and followed by senior high school education with a total of 37,3% out of 59 respondents and followed by bachelor's degree background with 11,9% out of 59 respondents lastly, followed by elementary education with 8.5% out of 59 respondents.

4.3   Validity and Reliability Test

A validity test determines whether or not a questionnaire is valid. A questionnaire is considered to be valid if the questions on it may reveal anything

that the questionnaire measures. The SPSS Version 25 software is used to do this

calculation. The following criteria are used in this validity test:

a) If the value of $r_{count} > r_{table}$ = valid

b) If the value of $r_{count} < r_{table}$ = invalid

How to find the value of r_{table} with **N=59** at 5% significance in the statistical

r_{table} value distribution. The r_{table} value is then retrieved by **0.2521.**

Table 4.1 Validity Test Results for Management Information Systems.

Source: Data Process, 2022

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.735	0.2521	0.001	Valid
2	0.702	0.2521	0.001	Valid
3	0.667	0.2521	0.001	Valid
4	0.674	0.2521	0.001	Valid
5	0.644	0.2521	0.001	Valid
6	0.698	0.2521	0.001	Valid
7	0.645	0.2521	0.001	Valid
8	0.710	0.2521	0.001	Valid
9	0.685	0.2521	0.001	Valid
10	0.757	0.2521	0.001	Valid
11	0.729	0.2521	0.001	Valid

So according to table 4.1 above, all statement items are considered valid for

measuring the Management Information System (X_1) variable. The basis is that all

statement items have r_{count} larger than 0.2521 and a Significantion value $< 0,05$.

Table 4.2 Validity Test Results for Work Environment.

Source: Data Process, 2022

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.709	0.2521	0.001	Valid
2	0.622	0.2521	0.001	Valid
3	0.472	0.2521	0.001	Valid
4	0.500	0.2521	0.001	Valid
5	0.565	0.2521	0.001	Valid

So according to table 4.2 above, all statement items are considered valid for measuring the Work Environment (X_2) variable. The basis is that all statement items have r_{count} larger than 0.2521 a Significantion value $< 0,05$.

Table 4.3 Validity Test Results for Motivation.

Source: Data Process, 2022

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.630	0.2521	0.001	Valid
2	0.797	0.2521	0.001	Valid
3	0.770	0.2521	0.001	Valid
4	0.863	0.2521	0.001	Valid
5	0.829	0.2521	0.001	Valid
6	0.714	0.2521	0.001	Valid
7	0.725	0.2521	0.001	Valid

	0.808	0.2521	0.001	Valid
8	0.808	0.2521	0.001	Valid
9	0.789	0.2521	0.001	Valid
10	0.789	0.2521	0.001	Valid

So according to table 4.3 above, all statement items are considered valid for measuring the Mot (X_3) variable. The basis is that all statement items have r$_{count}$ larger than 0.2521 a Significantion value < 0,05.

Table 4.4 Validity Test Results for Employee Performance.

Source: Data Process, 2022

Question Number	r$_{count}$	r$_{table}$	Sig.	Criteria
1	0.803	0.2521	0.001	Valid
2	0.844	0.2521	0.001	Valid
3	0.705	0.2521	0.001	Valid
4	0.867	0.2521	0.001	Valid
5	0.811	0.2521	0.001	Valid
6	0.841	0.2521	0.001	Valid
7	0.806	0.2521	0.001	Valid
8	0.859	0.2521	0.001	Valid
9	0.776	0.2521	0.001	Valid

So according to table 4.4 above, all statement items are considered valid for measuring the Employee Performance (Y) variable. The basis is that all statement items have r$_{count}$ larger than 0.2521 a Significantion value < 0,05.

Table 4.5 Reliability Test.

Source: Data Process, 2022

Reliability Statistics	
Cronbach's Alpha	N of Items
0.978	35

The reliability test is used to measure the consistency of Likert Scale questions, from table 4.5 above. According to (Hussein Umar, 2003) the reliability test shall be performed using Cronbach Alpha, an instrument said to be reliable when the grade of Cronbach Alpha is exceeded 0.60. The output from the data process shows that the grade of Cronbach Alpha is 0.978. means that the questionnaires of this Research are reliable.

4.1 Classical Assumption Test

4.4.1 Normality Test

A normality test is conducted, and the independent variables are normally distributed or not. The normality test criteria are when P-Value is above 0.05. Then the data usually means distributed in the model. The table below shows the result of the normality test from sample data, the P-Value or Kolmogorov Smirnov.

Table 4.6 Normality Test Numerical.

Source: Data Process, 2022

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		59
Normal Parameters,b	Mean	-0.0048459
	Std. Deviation	0.24404133
Most Extreme Differences	Absolute	0.066
	Positive	0.066
	Negative	-0.043
Test Statistic		0.066
Asymp. Sig. (2-tailed)		.200c,d
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Based on the table representing the result for the normality test, the P-value (Sig.) is 0.200 above 0.05, or the data is normally distributed.

The P-Plot tests in figure 4.4 below represent the normality test as graphically from the output of a standard P-Plot test. As can be seen, data points are close to the diagonal line, which, according to the statistics statement, it can be indicated as normally distributed data.

.

Figure 4.4 Normality Test

Sources: Data Process, 2022

4.4.2 Multicollinearity Test

For multicollinearity tests, this method is used to find out the correlational relationship among the independent variables. According to (Ghozali, 2013), the values used to be indicated are the Variable Inflation Factor (VIF) or the presence of multicollinearity from the tolerance value. This test can be measured if the tolerance value is> 0.10% and the VIF value < 10, it can be indicated there is no multicollinearity between independent variables in the regression.

Table 4.7 Multicollinearity Test.

Source: Data Process, 2022

Coefficients								
		Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model		B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	0.017	0.203		0.082	0.935		
	TOTAL_MIS	0.395	0.132	0.363	3.006	0.004	0.130	7.699
	TOTAL_WE	-0.020	0.129	-0.018	-0.152	0.880	0.135	7.393
	TOTAL_MV	0.615	0.096	0.622	6.432	0.000	0.203	4.933
a. Dependent Variable: TOTAL_EP								

The table above shows the result of the multicollinearity test for this Research. Accordance to Ghozali (2018)., The tolerance value is above 0.10 percent, and the Variable Inflation Factor (VIF) is less than 10. The means value in the table above does not indicate multicollinearity between independent variables in the regression method.

4.4.3 Heteroscedasticity Test

For Heteroscedasticity test is used to know the residuals difference between one to another sight. Through this heteroscedasticity method, the result of scatter plot graphs. In Chapter 3, that heteroscedasticity should not happen in a good regression model. If the dots on the scatterplot scattered above or below the 0 (Zero)

along the Y-axis not forming any pattern, can be said that no heteroscedasticity or homoscedasticity. The scatterplot below shows that the dispersed is above and below the 0 (Zero) among Y-axis. The residuals do not form any pattern to increase residual value on the scatter plot.
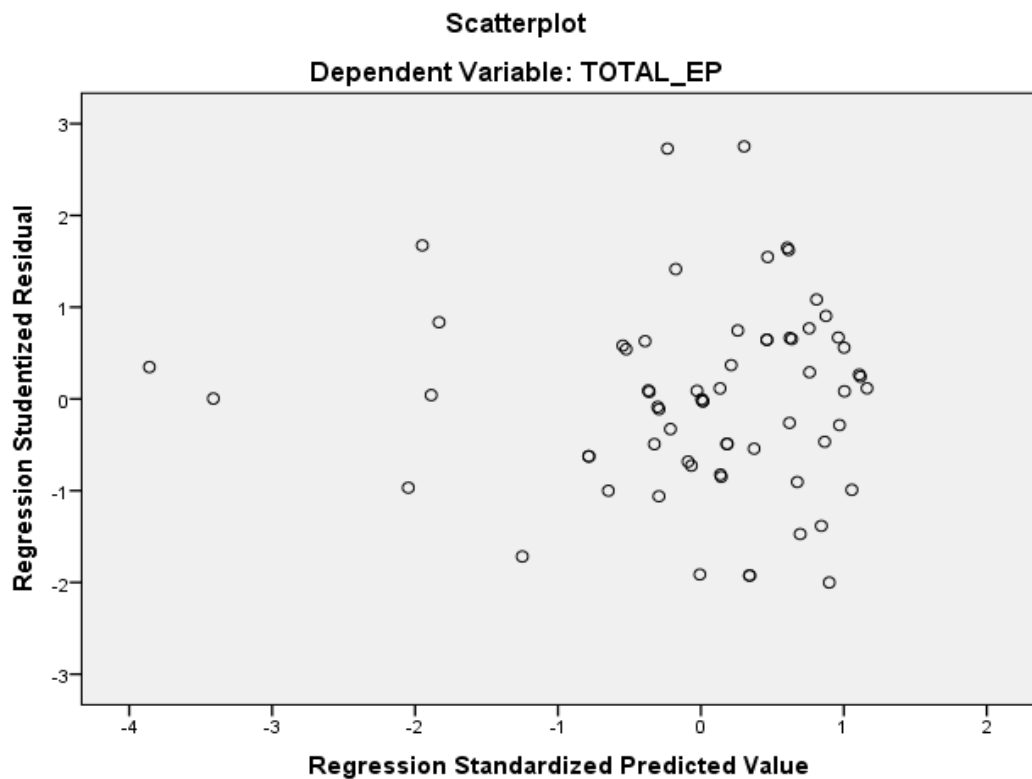
Figure 4.5 Heteroscedasticity Test Result.

Sources: Data Process, 2022

The next test is the Glejser test, in table 4.8 below it can be seen that the significance value of the residue is more than 0.05. Therefore, in the Glejser test, it can be ascertained that there is no heteroscedasticity.

Table 4.8 Glejser Test Result.

Source: Data Process, 2022

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0.191	0.122		1.572	0.122
	TOTAL_MIS	-0.123	0.066	-0.539	-1.864	0.068
	TOTAL_WE	-0.071	0.038	-0.348	-1.869	0.067
	TOTAL_MV	-0.189	0.060	-0.905	-1.134	0.053
a. Dependent Variable: ABS_RES						

4.5 Hypotheses Test

4.5.1 Anova Model Feasibility Test (F-Test)

Table 4.9 ANOVA model feasibility test

Source: Data Process, 2022

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.056	3	9.019	155.439	.000[b]
	Residual	3.539	61	0.058		
	Total	30.595	64			
a. Dependent Variable: TOTAL_EP						
b. Predictors: (Constant), TOTAL_MV, TOTAL_WE, TOTAL_MIS						

The F-Test is to represent independent variables in the model that gave a simultaneous effect on the dependent variables. The criteria for F-Test is (Sig.) if the value of (Sig.) below 0.05 means the independent variables are simultaneously significant to the dependent variables. The table above the score is .000, which means Management Information Systems (MIS), Work Environment, and Motivation simultaneously affect Employee Performance.

4.5.2 Partial T-Test

Table 4.10 Partial T-Test Results

Source: Data Process, 2022

Coefficients[a]						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.044	0.215		0.203	0.840
	TOTAL_MIS	0.397	0.117	0.365	3.389	0.001
	TOTAL_WE	-0.022	0.067	-0.022	-0.321	0.749
	TOTAL_MV	0.608	0.107	0.615	5.707	0.000
a. Dependent Variable: TOTAL_EP						

The partial T-Test is used to denote the effect of independent variables when explaining the variety of dependent variables. If P-Value (sig.) is below 0.05 means, the hypothesis is accepted, and if P-Value (Sig.) is above 0.05 means the hypothesis is rejected. Based on the table above, one hypothesis was rejected. Hypothesis number two (Work Environment) was rejected because of the value of (Sig.) (0.749). So the rest of the hypotheses can be concluded Management Information Systems (MIS), and Motivation do significantly affect Employee Performance. In table 4.10 above, there are two accepted hypotheses for Employee Performance, which are Hypotheses 1 (Management Information Systems) is accepted because the value of 0.000 and is significant at P-Value < 0.05. Hypothesis 3 (Motivation) with a value of 0.000. according to the table above, the results of this test can conclude that Management Information Systems and Motivation have a significant effect on Employee Performance. The parallel based on the unstandardized coefficient of the multiple regression is as follows:

$$Y = 0.044 + 0.397 \ X_1 + (-0.022) \ X_2 + 0.608 \ X_3 + e$$

4.6　Coefficient Determination

The value of the R-square is from the table of the model summary below. It can be seen the R. Square from this model is 0.884 or 88.4% of this result. It indicates Employee Performance can be from Management Information Systems (MIS), Work Environment, and Motivation. Since the coefficient interval score is (0.884) the means are considered strong (Sugiyono, 2013). The rest score, which is 11.6% of Employee Performance for other reasons, is not included in this study.

Table 4.11 Coefficient Interval Results

Source: Data Process, 2022

Model Summary					
Model	R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin-Watson
1	.940ᵃ	0.884	0.878	0.25050	1.745
a. Predictors: (Constant), TOTAL_MV, TOTAL_WE, TOTAL_MIS					
b. Dependent Variable: TOTAL_EP					

4.7 Analysis and Discussion

4.7.1 The Effect of Management Information Systems on Employee Performance

The results of data analysis statistically prove that the variable management information system (X_1) has a significant effect on employee performance partially shown by a significant value acquisition of $0.001 < 0.05$. This means that H_1 is accepted, this shows that "Management Information Systems have" influence on employee performance at PT. Citra Bathara Bersaudara proved to be true." The results of this study are the results of previous studies, namely The Effect of Management Information Systems and Work Environment on Employee Performance at PT. PLN (PERSERO) Distribution of Greater Jakarta and Tangerang in the Field of Human Resources and Finance, (Wiranda, (2015)). Based

on the partial test, the management information system has a significant effect on employee performance.

4.7.2 The Effect of Work Environment on Employee Performance

The results of data analysis statistically prove that the work environment variable (X_2) does not have a significant effect on employee performance partially as indicated by the acquisition of a significant value of $0.749 > 0.05$. This means that H_2 is rejected, this shows that "The Work Environment does not affect employee Performance of PT. Citra Bathara Bersaudara proved to be true." The results of this study are to the results of previous studies, namely the analysis of the influence of the quality of Management Information Systems and the Work Environment on Employee Performance of Bumiputera 1912 Life Insurance Branch Pandanaran Semarang written by (Alvin Reynaldo, 2015). By the results of the study "There is no significant effect of the Work Environment on Employee Performance".

4.7.3 The Effect of Motivation on Employee Performance

The results of data analysis statistically prove that the motivation variable (X_3) has a significant effect on employee performance partially, which is indicated by the acquisition of a significant value of $0.000 < 0.05$. This means H_3 is accepted, this shows "Motivation influences Employee Performance of PT. Citra Bathara Bersaudara proved to be true." The results of this study are to the results of previous studies, namely "The Influence of Management Information Systems, Competence, and Motivation on Employee Performance (Evidence At PT. Circleka Indonesia Utama Jakarta Area)" which was studied by (Ibrahim, 2018).

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1   Conclusion

The objectives of this study are to analyze the effect of Management Information Systems, Work Environment, and Motivation on Employee Performance at PT. Citra Bathara Bersaudara.

Based on the results of the overall research that has been done to determine "The Effect of Management Information Systems, Work Environment, and Motivation on Employee Performance PT. Citra Bathara Bersaudara", it can be concluded as follows:

1) The first Hypothesis stated that the management information system variable (X_1) on employee performance is partially based on a significance test value of 0.001 <0.05. Thus, the management information system variable has a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

2) The second Hypothesis stated that the work environment (X_2) on employee performance is partially based on a significance test value of 0.749 <0.05. Thus, the work environment variable does not affect the employee performance variable of PT. Citra Bathara Bersaudara.

3) The third Hypothesis stated that the motivation variable (X_3) on employee performance is partially based on a significance test value of 0.000 <0.05. Thus, the motivation variable has a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

4) The fourth Hypothesis stated that the management information systems, work environment, and motivation variable on employee performance are simultaneously based on a significance test value of 0.000 <0.05. Thus, the management information systems, work environment, and motivation variables have a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

5.2 Research Implication

5.2.1 Academic/Theoretical Implications

The results of this study provide empirical evidence that management information systems (MIS), work environment, and motivation on employee performance at PT. Citra Bathara Bersaudara, This shows that management information systems and motivation have affected employee performance at PT. Citra Bathara Bersaudara. However, it is different from the work environment variable that does not affect employee performance in this research. This study should be beneficial for future researchers to design their investigation on similar studies. In addition, the result of this research can be used as a reference for other analyses or studies on the effect of management information systems in the digitalization era.

5.2.2 Practical/Managerial Implications

Results based on statistical tests partially management information system factors affect employee performance, In this study suggests that the company improves the quality of Management Information Systems, especially in HRM

(Human Resources Management). Because motivation has a positive and significant effect on employee performance, every boss must be able to build awareness of his employees to have high work motivation because it can be a way to improve employee performance. The need for achievement will make employees enthusiastic and excel at work. For the results of statistical tests partially the work environment factors on performance have no effect, suggesting that the company maintains the existing working environment conditions. Researchers that are interested in studying employee performance should be able to expand on the limitations of this study's findings and explore other factors that are not included in the study.

5.3   Limitation

This study has several limitations, so it must be considered by future researchers. Limitations of this research are: First, this study only focuses on three variables, namely management information systems, work environment, and motivation. Second, this study limited the participants to 59 samples, in South Tangerang only. Third, This study was conducted during the COVID-19 pandemic situation, which may affect the results of this study. The result might be different if it is in a normal situation. Because of that, the result may vary if no such kind of threshold.

5.4   Recommendations

There are several recommendations for PT Citra Bathara Bersaudara are:

First, this study only focuses on three variables, which are management

information systems (MIS), work environment, and Motivation at PT. Citra Bathara Bersaudara. And also based on the results of statistical tests there is the effect of other variables of 11.6% of the employee performance, To get more accurate and diverse data, future researchers can add several variables such as leadership, compensation, work culture, work discipline, and many more.

Second, this study only uses 59 samples. To produce higher-quality research, it is recommended to carry out a similar test with a larger number of samples, so that better answers are obtained from respondents.

Third, From the results of this study indicate that all variables, namely management information systems, work environment, and motivation together (simultaneously) have a significant and positive effect on the performance of employees of PT. Citra Bathara Bersaudara, it is hoped that these indicators will be maintained and further improved by the company so that performance increases and has an impact on company performance results.

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QUESTIONNAIRES

THESIS TITLE: "THE EFFECT OF MANAGEMENT INFORMATION SYSTEM (MIS), WORK ENVIRONMENT AND MOTIVATION ON EMPLOYEE PERFORMANCE AT PT CITRA BATHARA BERSAUDARA"

JUDUL THESIS:"PENGARUH SISTEM INFORMASI MANAJEMEN, LINGKUNGAN KERJA DAN MOTIVASI TERHADAP KINERJA KARYAWAN PT. CITRA BATHARA BERSAUDARA"

Hello, my name is Ivan Noviandrie Falisha, and I am an MBA student at IPMI International Business School in Jakarta. I am currently conducting a study on " The Effect Of Management Information Systems, Work Environment, and Motivation On Employee Performance. (Evidence at PT Citra Bathara Bersaudara, South Tangerang)". The purpose of this study is to evaluate the effect of management information systems (MIS), work environment, and motivation on employee performance in PT. Citra Bathara Bersaudara. Your contribution after fulfilling the questionnaire in this study is very much appreciated; the responses given will only be used for academic research purposes. Thanks.

Ivan Noviandrie Falisha

SECTION A: Personal Information
Please check [/] your response in the appropriate space below / Cross mark [/] know your reply in the appropriate space provided below:

1. Gender
   a. Male   [   ]
   b. Female   [   ]

2. Age
   a. 15 - 25 year old   [   ]
   b. 26 - 35 year old   [   ]
   c. 36 - 45 year old
   d. 46 - 55 year old   [   ]

3. Education
   a. Elementary School   [   ]
   b. Junior High School   [   ]
   c. Senior High School   [   ]
   d. Bachelor Degree   [   ]

SECTION B:

Based on your opinion, please indicate the extent to which you agree or disagree with the following statement using the 5-point Likert scale. Please mark only one point for each item.

1	2	3	4	5
Sangat Tidak Setuju	**Tidak Setuju**	**Netral**	**Setuju**	**Sangat Setuju**

Indicate your level of agreement with the following statements

No	Question	Assessment Interval				
		1	**2**	**3**	**4**	**5**
Management Information Systems / Sistem Informasi Manajemen						
1	Informasi yang dihasilkan dari system informasi manajemen bermanfaat bagi saya					
2	Informasi yang dihasilkan dari sistem informasi manajemen membantu saya dalam bekerja					
3	Sistem pengoperasian pendataan database karyawan membantu saya dalam mengolah informasi yang ada					
4	Pembekalan manajer dan kepala bagian untuk penerapan sistem informasi manajemen yang ada sudah baik					
5	Terdapat aplikasi sistem informasi manajemen kepegawaian yang lengkap dan mudah dipahami					
6	Penerapan kebijakan organisasi dan manajemen sudah tertata dengan baik					
7	Kebijakan organisasi dan manajemen mendukung dalam penerapan sistem informasi manajemen yang lebih baik					
8	Pengambilan keputusan didasarkan pada sistem infomasi manajemen					
9	Tidak ada kesalahan pada informasi penggajian yang dihasilkan dari SIM (Sistem Informasi Manajemen)					

10	Informasi yang dihasilkan sistem mempunyai nilai positif bagi manajer dan kepala bagian					
11	Penerapan sistem informasi manajemen menguntungkan bagi manajer dan kepala Bagian					
Work Environment / Lingkungan Kerja						
1	Saya puas dengan ruang (tempat) yang dialokasikan bagi saya untuk melaksanakan pekerjaan					
2	Tempat kerja saya bersih					
3	Terdapat jarak yang memadai antara saya dan rekan terdekat saya					
4	Lingkungan kerja yang tenang					
5	Secara keseluruhan, lingkungan kerja saya menyenangkan dan tampak menarik secara visual					
Motivation / Motivasi						
1	Motivasi kerja yang tinggi membuat saya memiliki dorongan yang kuat untuk mencapai kinerja yang maksimal					
2	Motivasi kerja yang saya miliki berpengaruh terhadap tujuan dari suatu perusahaan					
3	Semangat kerja yang saya miliki berasal dari keadaan psikologis yang baik					
4	Semangat kerja yang saya miliki menimbulkan kesenangan yang mendorong saya untuk bekerja lebih giat					
5	Semangat kerja yang saya miliki mendapat mendorong saya untuk lebih konsekuen dalam mencapai tujuan perusahaan					
6	Saya melakukan pekerjaan sesuai inisiatif saya sendiri tanpa ada dorongan dari orang lain atau atas kehendak sendiri					
7	Motivasi saya bekerja adalah untuk membentuk kreatifitas dengan					

	menemukan hubungan sesuatu yang baru					
8	Saya senang bekerja di perusahaan ini karena dapat menemukan sesuatu yang belum dikenal sebelumnya					
9	Motivasi kerja yang saya miliki membuat saya merasa memiliki tanggung jawab terhadap pekerjaan yang saya lakukan					
10	Motivasi saya dalam bekerja di perusahaan ini membuat saya mampu menyelesaikan tugas secara tepat waktu					
Employee Performance / Kinerja Karyawan						
1	Saya bersedia membantu rekan kerja yang membutuhkan bantuan dalam menyelesaikan pekerjaan demi memajukan perusahaan					
2	Saya bersedia bekerja sama untuk menyelesaikan tugas yang ada					
3	Saya bersedia melakukan pekerjaan tanpa diperintah oleh atasan					
4	Saya menyediakan waktu untuk menyelesaikan tugas-tugas tepat waktu					
5	Saya bekerja sesuai dengan waktu yang ditentukan					
6	Saya bekerja secara tuntas					
7	Saya bekerja dengan penuh ketelitian dan keakuratan					
8	Saya bekerja dengan dasar keterampilan yang memadai					
9	Saya melakukan komunikasi dengan sesama rekan kerja					

STATEMENT LETTER

The undersigned is

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Hereby declare that   :

1. This manuscript has not been published or is in the process of submission to other journals
2. A scientific paper is free of plagiarism

If it is found in the future that there is plagiarism or other abuses in the submitted paper, I am willing to accept the sanctions following the provision of the legislation

Jakarta, 23 September 2022

Ivan Noviandrie Falisha

PAPER APPROVAL FORM

Topic   :   **The Effect Of Management Information Systems, Work Environment, and Motivation On Employee Performance. (Evidence at PT Citra Bathara Bersaudara, South Tangerang).**

Author   :   **Ivan Noviandrie Falisha**

This paper has been revised in accordance with the reviewer(s) recommendation and this paper I approve to publish in any reputable journal.

Jakarta, 23 September 2022
Supervisor by:

Ir. Yulita F. Susanti, M.Sc., Ph.D.

THE EFFECT OF MANAGEMENT INFORMATION SYSTEMS (MIS), WORK ENVIRONMENT, AND MOTIVATION ON EMPLOYEE PERFORMANCE

(Evidence at PT Citra Bathara Bersaudara, South Tangerang)

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ABSTRACT

Strict protocol procedures have been adopted worldwide, to deal with the coronavirus (Covid-19) pandemic, PT. Citra Bathara Saudara is a company that is included in the essential sector. Must continue to operate as usual following government regulations, which will undoubtedly have a significant impact on the company's operational activity, especially employee performance. This study aims to determine the effect of information systems management, work environment, and motivation on employee performance at PT. Citra Bathara Bersaudara in South Tangerang. This research uses a quantitative approach and uses primary data through dissemination questionnaires to 59 respondents, employees of PT. Image of the Bathara Bathara in South Tangerang. The sampling technique used is simple random sampling. The data is processed through the SPSS version 25.0 program with analytical techniques parametric statistics, namely multiple linear regression analysis. The results of the partial t-test prove that partially the management information system (MIS) significant effect on employee performance with a value of significance of $0.001 < 0.05$, the work environment variable is not affecting on employee performance with a value of $0.749 > 0.05$, while motivation has a significant effect on employee performance which is indicated by the acquisition of a significant value of $0.000 < 0.05$. The F test results prove that the management information system (MIS), work environment, and motivation simultaneously have a significant effect on the performance of employees of PT. Citra Bathara Bersaudara with a value significance of $0.000 < 0.05$. The large contribution of the influence of information systems management (MIS), work environment, and motivation on work performance employees with Adjusted coefficient of determination Adjusted-R of 0.884 or 88.4% while the remaining 11.6% is affected by other factors which were not investigated in this study.

Keywords: Management Information System (MIS), Information Systems, Work Environment, Motivation, Employee Performance, Performance.

1. INTRODUCTION

1.1 Background

In 2020, the world has been affected by the disease caused by the Corona virus, and this pandemic is affecting many people and industries. Coronavirus is an infectious disease that affects the lungs and causes death (Organization, 2021).

Many countries around the world have implemented a "lockdown". Meanwhile, Indonesia is one of the countries that is still fighting Covid-19 with a variety of policies that combine countermeasures without compromising the economy. As of December 17, 2021, data from the Indonesian government's Committee for Handling Covid-19 and National Economic Recovery (KPCPEN) show the number of daily cases of positive cases has surpassed 4.2 million, with over 143 thousand of them getting killed and 4.1 million recovered. During the pandemic, PT. Citra Bathara Saudara, a company that is included in FMCG (Fast Moving Consumer Good) in the logistics sector and is a staple food ingredient, is included in the essential sector. By the Ministry of Health of the Republic of Indonesia's circular letter HK.01.07/MENKES/413/2020, companies in the essential sector will continue to operate as usual. The existence of WFH (Work From Home) and WFO (Work From Office) regulations, will undoubtedly have a significant impact on the company's operational activities and employee performance. Based on survey data at the company, the achievement of the sales target of PT. Citra Bathara Bersaudara is based on the realization of employee performance. The survey results prove that employee performance is decreasing which in turn affects employee productivity. One of the factors affecting the level of success of an organization is the productivity of its employees. Employee performance is the actions an employee takes when performing the work offered by the company. Several factors are believed to affect employee performance, including management information systems, work environment, and motivation. According to Gordon, B. Davis (Jogiyanto, 2005), a management information system is a system that performs the function of providing all information that affects all operations of an organization. Management information system availability is required to improve the performance of employees in already highly complex organizations. This will define development policies and strategies, and the availability of operational data and information (Kumorotomo and Margono, 2010). In terms of improving employee performance, factors such as the work environment, in addition to a supportive Management Information System, play an important role. As the company, the organization must provide a comfortable and conducive work environment that encourages employees to work productively. Providing a

comfortable work environment will able to provide satisfaction to employees for the work done and leave a lasting impression on employees, resulting in good performance. Employee motivation, in addition to the Management Information System and the work environment, can have an impact on employee performance. The term motivation (motivation) or motive (motive) is widely used in the world of work, where high performance is expected. Because people who are highly motivated at work will go above and beyond to ensure that their work is as successful as possible. According to Paputungan (2013), motivation is formed by an employee's attitude toward work situations. Motivation is also a condition that drives employees to achieve organizational goals. As a result, there is no motivation if there is no sense of need, satisfaction, or balance. Based on the above, this study intends to conduct additional research on the effect of management information systems, work environment, and motivation on employee performance at PT. Citra Bathara Bersaudara.

1.2   Problem Statement

According to Sutiyadi (2017), a positive management information system impacts the performance of employees. In other words, the better the management information system is used, the better the employee's performance. Another research by Wiranda (2015), said that the work environment affects employee performance. On the other hand, Y Badrianto (2019), According to the research results, motivation affects employee performance. Therefore this study to investigating the effect of management information systems, work environment, and motivation on employee performance (Evidence on the employee at PT Citra Bathara Bersaudara in South Tangerang). Moreover, this research will highlight these points from the human resource aspect.

1.3   Research Objectives

Based on the proposed problem statement in this research, it can be concluded that the objectives of the research are as follows:

1. To analyze the management information system effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.
2. To analyze the work environment's effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.
3. To analyze motivation's effect on employee performance at PT Citra Bathara Bersaudara, South Tangerang.

4. To analyze management information systems, work environment, and motivation simultaneously affect employee performance at PT Citra Bathara Bersaudara, South Tangerang.

2. LITERATURE REVIEW

2.1 Management Information Systems

A management information system (MIS) is a system that consists of an organized set of parts/components that work together or interact to generate data for use in company management. (Hertiwie, 2014). McLeod and Schell (2009) in their book titled Management Information System (MIS), define a management information system as "a computer-based system that provides information to users with similar needs." MIS users are typically superior to formal organizational entities-companies or sub-units below them. The MIS data describes the company or one of its main systems in terms of what has happened in the past, what is happening now, and what is likely to happen in the future. According to Fahmi (2010), "Management Information System (MIS) is a management tool used to support company management in properly and systematically receiving, processing, and managing the company to support the creation of company performance."

2.2 Work Environment

The work environment refers to all of the circumstances that surround an employee and are linked to the development of psychological changes in that employee, Nitisemito (2000). The work environment itself consists of two, namely the physical and non-physical work environment. A positive work environment is required in an organization, according to Robbins in Djuremi (2016). Employees are concerned about their work environment for their comfort as well as to make it easier to do a better job. Temperature, light, and other environmental elements should not be set to extremes (too hot or too dark). Furthermore, most employees like to work in facilities that are clean and somewhat modern, as well as with adequate tools and equipment. The work environment, according to Soetjipto in Ronal (2019), is defined as "all things or aspects that can affect directly or indirectly an organization or firm and have a positive or negative impact on employee performance and job satisfaction." A pleasant work environment is critical for enhancing employee performance, and a good work environment is defined as one

in which employees may make a significant contribution to the company's success, either directly or indirectly.

2.3 Motivation

Based on According to Robbins (in Atqiya, 2017) Motivation is a process through which people are willing to put in a lot of effort to achieve organizational goals, but only if that effort can meet an individual need. "A psychological push to someone who controls the direction of a person's conduct in the organization, the degree of effort (level of effort), and the level of tenacity or resilience in the face of an obstacle or issue (level of persistence)". Motivation, according to Rivai and Sagala (2011), is a set of attitudes and beliefs that motivate people to accomplish specific tasks based on their personal goals.

2.4 Employee Performance

According to Mangkuprawira and Hubeis (2007), performance is the result of a specific work process carried out in a planned manner at the time and place specified by the employee and the organization. Meanwhile, according to Rivai (2005), performance is a real behavior that everyone demonstrates as work performance produced by employees based on their role in the company. By the company's organizational standards, performance measures can be seen in terms of a certain quantity and quality. According to Mangkunegara (2007), employee performance evaluation is "a procedure used by leaders to determine if an employee is executing his work in line with his tasks and obligations." Based on the several definitions above, performance is the result of a person's or a group of people's work in an organization or company in terms of quality and quantity over a specific period that reflects how well the person or group fulfills the requirements of a job to achieve organizational or company goals.

## 2.5 The Development of Research Hypothesis

Based on the aim of the research, the hypotheses in this research are listed as follows:

- H1: Management Information System (MIS) has a positive effect on Employee Performance.

- H2: Work Environment has a positive effect on Employee Performance.

- H3: Motivation has a positive effect on Employee Performance.

- H4: Management Information systems (MIS), Work Environment, and Motivation simultaneously have a positive effect on Employee Performance.

Based on the elaboration above, we can illustrate the Theoretical structure of this research as follows:

Figure 2.1 Theoretical Structure
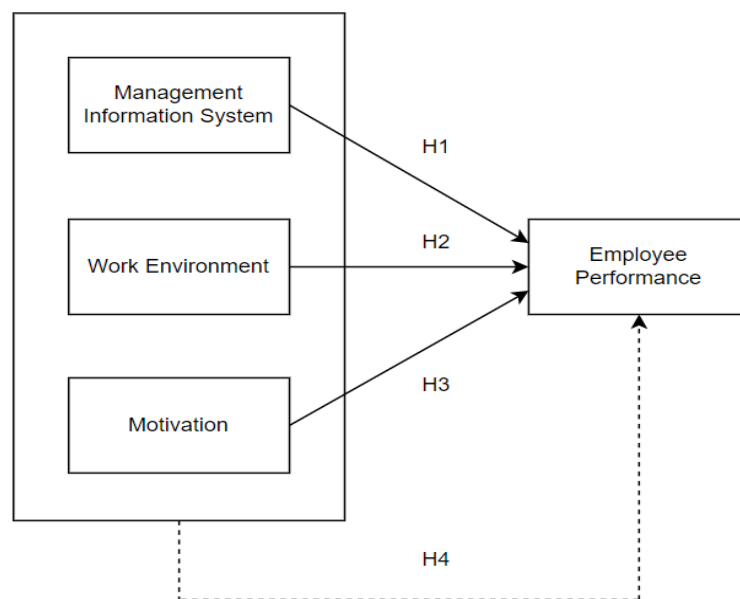
3.   RESEARCH METHODOLOGY

3.1   Research Method

Primary data in this study were collected by distributing online questionnaires using Google forms which were then distributed through social media such as digital messaging applications such as WhatsApp, Telegram, and Line in these study data collection techniques used questionnaires as research instruments.

The questionnaire method the researcher used consisted of a series of statements with choices and answers that are already available so that they are easily analyzed for statistical data processing, questionnaires distributed were addressed

to respondents from the sampling population. The total population is categorized above involving 163 employees in PT Citra Bathara Bersaudara. According to Cohen (1992), the sample size recommendation based on the number of arrows pointing at a construct with R square 0.25 is a minimum of 59 respondents with sampling techniques using random sampling techniques, because this study has 3 (three) numbers of arrows pointing to the construct Employee Performance (EP), as per the research framework. Questions used in the questionnaire are closed-ended question type of questions consisting of the scale used is Likert scale, which is a measurement scale in the form of intervals commonly used to measure a person's attitudes, opinions, or perceptions about society.

The questions used in the questionnaire are closed-ended question type of questions consisting of:

a. Likert scale question; Likert scale question is a type of question in which the answer to the question is in the form of a Likert scale. In this study, researchers used a scale range of 1-5 with each meaningful scale as follows:

- 1 for the answer "Strongly Disagree"
- 2 for "Disagree" answers
- 3 for "Neutral" answers
- 4 for "Agree" answers
- 5 for "Strongly Agree" answers

b. Short answer question; This type of question is used on one question to asks the respondent's personal information (age, gender, and education).

The data analysis method used is correlation, simple and multiple linear regression with SPSS 25.0 program.

3.2   Data Analysis Method

In Sujarweni's (2014) study, the formulation of the problem may be addressed by using data analysis, which is the work of already-available data that has been statistically analyzed. Quantitative analysis is used by the author, specifically:

a) **Validity Test**

Validity is a metric used to determine how well an instrument is valid. If an instrument can reveal data from appropriately investigated variables, it is considered to be valid. The instrument's high and low validity indicate how closely the data obtained matches the description of the intended validity (Arikunto, 2013).

b) **Reliability Test**

According to Widoyoko (2013) "Instruments can be said" reliable (reliable) if it gives steady or steady results (consistent) when tested many times. In this test, Cronbach's alpha coefficient (α) with the features of the IBM SPSS program is used for this kind of interval measurement to assess how reliable each instrument is.

c) **Classical Assumption Test**

- **Normality Test**

  The normality test is used to find out if the sample of data distribution comes from normal population distribution and to know if the data has equal skewness. The test will be used by Kolmogorov-Smirnov to assess numerical tests for normality. According to the (Ghozali, 2011) criteria normality, testing in this Research is the P-value > 0.05; afterward, the data is normally distributed if the P-value < 0.05. To analyze the normality test, P-P Plots will use graphs. If the data are distributed normally, the points data will be located close to the diagonal line, if the data points are away from the diagonal line, it means the data is not normally distributed.

- **Multicollinearity Test**

  According to Ghozali (in Dinda, 2018) this test aims to test whether the regression model finds a correlation between independent variables. This regression model should not occur in the correlation between the independent variables. If these variables are correlated with each other, then these variables are not orthogonal (the correlation between independent variables is zero). The values of the Variable Tolerance and Variance Inflation Factor (VIF).

can be used to determine whether or not multicollinearity occurs.

- If the Tolerance value < 0.10 then there is multicollinearity
- If the value of VIF > then there is multicollinearity

- **Heteroscedasticity Test**

    The next classical assumption in the regression model is homoscedasticity or having the same variance. The graphical approach and the statistical method are two methods for detecting the presence or absence of heteroscedasticity. The graph technique is commonly used by analyzing the graph plot between the dependent variable's predicted value and its residual. The Glejser test, White test, Spearman's Rank Correlation test, Goldfeld Quandt test, and Breusch-Pagan-Godfrey test are examples of statistical methods (Jani, 2012). But what will be discussed in this study is only the graph method and the Glejser test.

    By regressing the independent variables on the residual absolute value, the Glejser test is performed (Gujarati, 2004). The difference between the observed relationship is known as the residual, while the value is known as the absolute. There is no problem with heteroscedasticity if the significance between the independent variable and the absolute residue is more than 0.05.

    - Sig. > 0.05: no heteroscedasticity occurs
    - Sig. <0.05: has heteroscedasticity

d) **Multiple Regression Model**

Multiple linear regression is an equation model that explains the relationship of one dependent variable/response (Y) with two or more independent variables/predictors (X1, X2,… Xn). The purpose of the multiple linear regression test is to predict the value of the dependent variable/response (Y) if the values of the independent variable/predictor (X1, X2,… Xn) are known. Besides that, it is also to be able to find out how the direction of the relationship between the dependent variable and the independent variables (Yuliara, 2016). The multiple linear regression equation is mathematically expressed by:

$$Y = a + b1X1 + b2X2 + b3X3 + \ldots + bnXn$$

e) **Determination Coefficient**

The coefficient of determination (R^2) is used to determine the independent variable's capability to explain the dependent variable. According to (Widarjono, 2000), the Coefficient of Determination Test (R-Squared) is a test to explain the magnitude of the proportion of variation of the dependent variable explained by the independent variable.

3.3   Hypothesis Test

To test the hypothesis by using a statistical value for alpha 5% and a two-tailed hypothesis, the t-statistic value used is 1.96. So, the criteria for acceptance/rejection of the hypothesis is Ha is accepted when the t-statistic > 1.96 and Ho is rejected. According to Ghozali (2014), To reject or accept the hypothesis using probability, Ha is accepted if the value of $p < 0.05$.

3.4   Research Framework

Figure 3.1 Research Framework
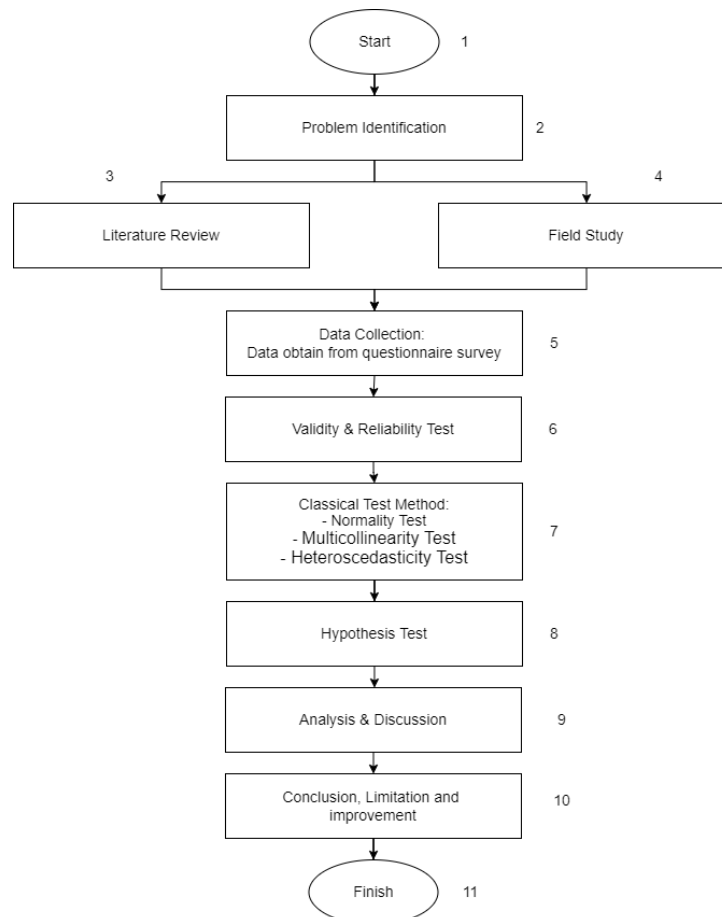
4. RESULT AND DISCUSSION

4.1 Result of Questionnaire

Table 4.1 Questionnaire Respondents' Profile

Profile	N	Percentage
Gender:		
Male	45	75.9%
Female	14	24.1%
Age:		
15 – 25 Year Old	15	25.4%
26 – 35 Year Old	22	37.3%
36 – 45 Year Old	17	28.8%
46 – 55 Year Old	5	8.5%
Education:		
Elementary School	5	8.5%
Junior High School	25	42.4%
Senior High School	22	37.3%
Bachelor Degree	7	11.9%

From Table 4.1, it can be identified that the majority of the respondents are male; and it takes up to 75%, while the rest, 24% are female. On the other hand, the majority age of the respondents is 26 – 35 years old which percentage is 37.3%. The lowest percentage of the respondents is 8.5% which the age is 46 – 55 years old. For education, 75% of the respondents identified were in junior high school, and the lowest percentage is 8.5% for the respondents who were in elementary school.

4.2 Validity and Reliability Test

A validity test determines whether or not a questionnaire is valid. A questionnaire is considered to be valid if the questions on it may reveal anything that the questionnaire measures. The SPSS Version 25 software is used to do this calculation. The following criteria are used in this validity test:

a) If the value of rcount > rtable = valid

b) If the value of rcount < rtable = invalid

How to find the value of rtable with N=59 at 5% significance in the statistical rtable value distribution. The rtable value is then retrieved by 0.2521.

Table 4.2 Validity Test Results for Management Information Systems.

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.735	0.2521	0.001	Valid
2	0.702	0.2521	0.001	Valid
3	0.667	0.2521	0.001	Valid
4	0.674	0.2521	0.001	Valid
5	0.644	0.2521	0.001	Valid
6	0.698	0.2521	0.001	Valid
7	0.645	0.2521	0.001	Valid
8	0.710	0.2521	0.001	Valid
9	0.685	0.2521	0.001	Valid
10	0.757	0.2521	0.001	Valid
11	0.729	0.2521	0.001	Valid

So according to table 4.2 above, all statement items are considered valid for measuring the Management Information System (X_1) variable. The basis is that all statement items have r_{count} larger than 0.2521 and a Significantion value $< 0,05$.

Table 4.3 Validity Test Results for Work Environment.

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.709	0.2521	0.001	Valid
2	0.622	0.2521	0.001	Valid
3	0.472	0.2521	0.001	Valid
4	0.500	0.2521	0.001	Valid
5	0.565	0.2521	0.001	Valid

According to table 4.3 above, all statement items are considered valid for measuring the Work Environment (X_2) variable. The basis is that all statement items have r_{count} larger than 0.2521 a Significantion value $< 0,05$.

Table 4.4 Validity Test Results for Motivation.

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.630	0.2521	0.001	Valid
2	0.797	0.2521	0.001	Valid
3	0.770	0.2521	0.001	Valid
4	0.863	0.2521	0.001	Valid
5	0.829	0.2521	0.001	Valid
6	0.714	0.2521	0.001	Valid
7	0.725	0.2521	0.001	Valid
8	0.808	0.2521	0.001	Valid
9	0.789	0.2521	0.001	Valid
10	0.789	0.2521	0.001	Valid

According to table 4.4 above, all statement items are considered valid for measuring the Mot (X_3) variable. The basis is that all statement items have r_{count} larger than 0.2521 a Significantion value $< 0,05$.

Table 4.5 Validity Test Results for Employee Performance.

Question Number	r_{count}	r_{table}	Sig.	Criteria
1	0.803	0.2521	0.001	Valid
2	0.844	0.2521	0.001	Valid
3	0.705	0.2521	0.001	Valid
4	0.867	0.2521	0.001	Valid
5	0.811	0.2521	0.001	Valid

6	0.841	0.2521	0.001	Valid
7	0.806	0.2521	0.001	Valid
8	0.859	0.2521	0.001	Valid
9	0.776	0.2521	0.001	Valid

According to table 4.5 above, all statement items are considered valid for measuring the Employee Performance (Y) variable. The basis is that all statement items have r$_{count}$ larger than 0.2521 a Significantion value < 0,05.

Table 4.6 Reliability Test.

Reliability Statistics	
Cronbach's Alpha	N of Items
0.978	35

The reliability test is used to measure the consistency of Likert Scale questions, from table 4.5 above. According to (Hussein Umar, 2003) the reliability test shall be performed using Cronbach Alpha, an instrument said to be reliable when the grade of Cronbach Alpha is exceeded 0.60. The output from the data process shows that the grade of Cronbach Alpha is 0.978. means that the questionnaires of this Research are reliable.

4.3 Classical Assumption Test

4.3.1 Normality Test Test

A normality test is conducted, and the independent variables are normally distributed or not. The normality test criteria are when P-Value is above 0.05. Then the data usually means distributed in the model. The table below shows the result of the normality test from sample data, the P-Value or Kolmogorov Smirnov.

Table 4.7 Normality Test Numerical.

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		59
	Mean	-0.0048459

Normal Parameters[a],[b]	Std. Deviation	0.24404133
Most Extreme Differences	Absolute	0.066
	Positive	0.066
	Negative	-0.043
Test Statistic		0.066
Asymp. Sig. (2-tailed)		.200[c],[d]
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Based on the table representing the result for the normality test, the P-value (Sig.) is 0.200 above 0.05, or the data is normally distributed. The P-Plot tests in figure 4.4 below represent the normality test as graphically from the output of a standard P-Plot test. As can be seen, data points are close to the diagonal line, which, according to the statistics statement, it can be indicated as normally distributed data.

Figure 4.1 Normality Test.
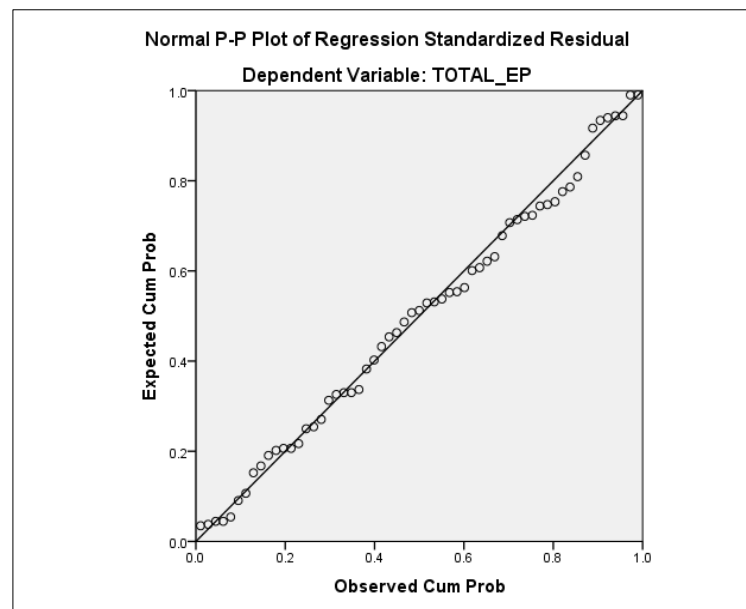
4.3.2 Multicollinearity Test

For multicollinearity tests, this method is used to find out the correlational relationship among the independent variables. According to (Ghozali, 2013), the values used to be indicated are the Variable Inflation Factor (VIF) or the presence of multicollinearity from the tolerance value. This test can be measured if the tolerance value is> 0.10% and the VIF value < 10, it can be indicated there is no multicollinearity between independent variables in the regression.

Table 4.8 Multicollinearity Test.

| Coefficients							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
1 (Constant)	0.017	0.203		0.082	0.935		
TOTAL_MIS	0.395	0.132	0.363	3.006	0.004	0.130	7.699
TOTAL_WE	-0.020	0.129	-0.018	-0.152	0.880	0.135	7.393
TOTAL_MV	0.615	0.096	0.622	6.432	0.000	0.203	4.933
a. Dependent Variable: TOTAL_EP							

The table above shows the result of the multicollinearity test for this Research. Accordance to Ghozali (2018)., The tolerance value is above 0.10 percent, and the Variable Inflation Factor (VIF) is less than 10. The means value in the table above does not indicate multicollinearity between independent variables in the regression method.

4.3.3 Heteroscedasticity Test

For Heteroscedasticity test is used to know the residuals difference between one to another sight. Through this heteroscedasticity method, the result of scatter plot graphs. In Chapter 3, that heteroscedasticity should not happen in a good regression model. If the dots on the scatterplot scattered above or below the 0 (Zero) along the Y-axis not forming any pattern, can be said that no heteroscedasticity or homoscedasticity. The scatterplot below shows that the dispersed is above and below the 0 (Zero) among Y-axis. The residuals do not form any pattern to increase residual value on the scatter plot.

Figure 4.2 Heteroscedasticity Test Results.
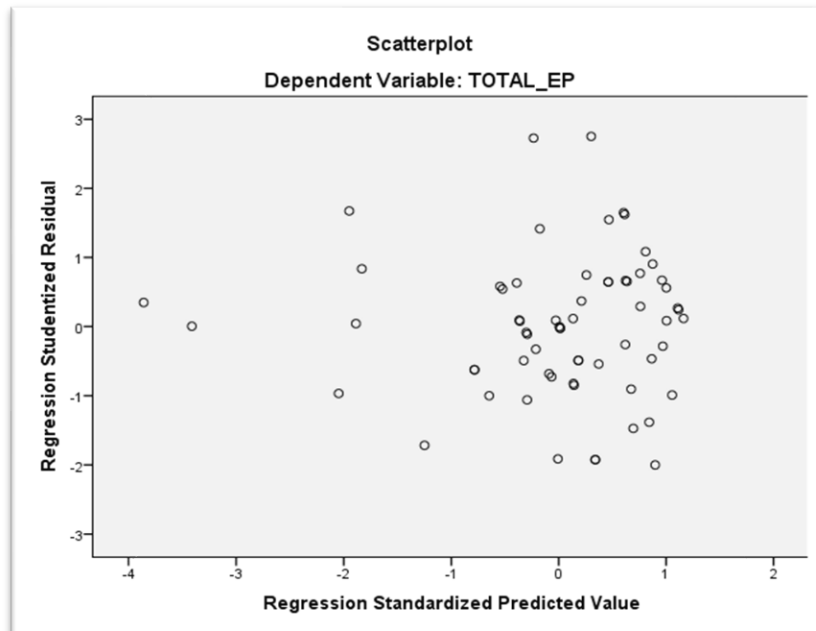
The next test is the Glejser test, in table 4.9 below it can be seen that the significance value of the residue is more than 0.05. Therefore, in the Glejser test, it can be ascertained that there is no heteroscedasticity.

Table 4.9 Glejser Test Result.

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.191	0.122		1.572	0.122
	TOTAL_MIS	-0.123	0.066	-0.539	-1.864	0.068
	TOTAL_WE	-0.071	0.038	-0.348	-1.869	0.067
	TOTAL_MV	-0.189	0.060	-0.905	-1.134	0.053
a. Dependent Variable: ABS_RES						

Coefficients[a]

4.4 Hypotheses Test

4.4.1 Anova Model Feasibility Test (F-Test)

Table 4.10 ANOVA model feasibility test.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.056	3	9.019	155.439	.000[b]
	Residual	3.539	61	0.058		
	Total	30.595	64			
a. Dependent Variable: TOTAL_EP						
b. Predictors: (Constant), TOTAL_MV, TOTAL_WE, TOTAL_MIS						

The F-Test is to represent independent variables in the model that gave a simultaneous effect on the dependent variables. The criteria for F-Test is (Sig.) if the value of (Sig.) below 0.05 means the independent variables are simultaneously significant to the dependent variables. The table above the score is .000, which means Management Information Systems (MIS), Work Environment, and Motivation simultaneously affect Employee Performance.

4.4.2 Partial T-Test

Table 4.11 Partial T-Test Results.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	0.044	0.215		0.203	0.840
	TOTAL_MIS	0.397	0.117	0.365	3.389	0.001
	TOTAL_WE	-0.022	0.067	-0.022	-0.321	0.749
	TOTAL_MV	0.608	0.107	0.615	5.707	0.000
a. Dependent Variable: TOTAL_EP						

The partial T-Test is used to denote the effect of independent variables when explaining the variety of dependent variables. If P-Value (sig.) is below 0.05 means, the hypothesis is accepted, and if P-Value (Sig.) is above 0.05 means the hypothesis is rejected. Based on the table above, one hypothesis was rejected. Hypothesis number two (Work Environment) was rejected because of the value of (Sig.) (0.749). So the rest of the hypotheses can be concluded Management Information Systems (MIS), and Motivation do significantly affect Employee Performance. In table 4.10 above, there are two accepted hypotheses for Employee Performance, which are Hypotheses 1 (Management Information Systems) is accepted because the value of 0.000 and is significant at P-Value < 0.05. Hypothesis 3 (Motivation) with a value of 0.000. according to the table above, the results of this test can conclude that Management Information Systems and Motivation have a significant effect on Employee Performance. The parallel based on the unstandardized coefficient of the multiple regression is as follows:

$$Y = 0.044 + 0.397 \ X_1 + (-0.022) \ X_2 + 0.608 \ X_3 + e$$

4.5 Coefficient Determination

The value of the R-square is from the table of the model summary below. It can be seen the R. Square from this model is 0.884 or 88.4% of this result. It indicates Employee Performance can be from Management Information Systems (MIS), Work Environment, and Motivation. Since the coefficient interval score is (0.884) the means are considered strong (Sugiyono, 2013). The rest score, which is 11.6% of Employee Performance for other reasons, is not included in this study.

Table 4.12 Coefficient Interval Results.

Model Summary					
Model	R	R Square	Adjusted R Square	Std.Error of the Estimate	Durbin-Watson
1	.940ᵃ	0.884	0.878	0.25050	1.745
a. Predictors: (Constant), TOTAL_MV, TOTAL_WE, TOTAL_MIS					
b. Dependent Variable: TOTAL_EP					

4.6   Analysis and Discussion

4.6.1 The Effect of Management Information Systems on Employee Performance

The results of data analysis statistically prove that the variable management information system (X_1) has a significant effect on employee performance partially shown by a significant value acquisition of $0.001 < 0.05$. This means that H_1 is accepted, this shows that "Management Information Systems have" does affect employee performance at PT. Citra Bathara Bersaudara proved to be true."

4.6.2 The Effect of Work Environment on Employee Performance

The results of data analysis statistically prove that the work environment variable (X_2) does not have a significant effect on employee performance partially as indicated by the acquisition of a significant value of $0.749 > 0.05$. This means that H_2 is rejected, this shows that "The Work Environment does not affect employee Performance of PT. Citra Bathara Bersaudara."

4.6.3 The Effect of Motivation on Employee Performance

The results of data analysis statistically prove that the motivation variable (X_3) has a significant effect on employee performance partially, which is indicated by the acquisition of a significant value of $0.000 < 0.05$. This means H_3 is accepted, this shows "Motivation influences Employee Performance of PT. Citra Bathara Bersaudara proved to be true."

5.   CONCLUSION AND RECOMMENDATION

5.1   CONCLUSION

The objectives of this study are to analyze the effect of Management Information Systems, Work Environment, and Motivation on Employee Performance at PT. Citra Bathara Bersaudara.

Based on the results of the overall research that has been done to determine "The Effect of Management Information Systems, Work Environment, and Motivation on Employee Performance PT. Citra Bathara Bersaudara", it can be concluded as follows:

1. The first Hypothesis stated that the management information system variable (X_1) on employee performance is partially based on a significance test value of $0.001 < 0.05$. Thus, the management information system

variable has a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

2. The second Hypothesis stated that the work environment (X2) on employee performance is partially based on a significance test value of 0.749 <0.05. Thus, the work environment variable does not affect the employee performance variable of PT. Citra Bathara Bersaudara.

3. The third Hypothesis stated that the motivation variable (X3) on employee performance is partially based on a significance test value of 0.000 <0.05. Thus, the motivation variable has a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

4. The fourth Hypothesis stated that the management information systems, work environment, and motivation variable on employee performance are simultaneously based on a significance test value of 0.000 <0.05. Thus, the management information systems, work environment, and motivation variables have a significant effect on the employee performance variable of PT. Citra Bathara Bersaudara.

5.2   Academic/Theoretical Implication

The results of this study provide empirical evidence that management information systems (MIS), work environment, and motivation on employee performance at PT. Citra Bathara Bersaudara, This shows that management information systems and motivation have affected employee performance at PT. Citra Bathara Bersaudara. However, it is different from the work environment variable that does not affect employee performance in this research. This study should be beneficial for future researchers to design their investigation on similar studies. In addition, the result of this research can be used as a reference for other analyses or studies on the effect of management information systems in the digitalization era.

5.3   Practical/Managerial Implication

Results based on statistical tests partially management information system factors affect employee performance, In this study suggests that the company improves the quality of Management Information Systems, especially in HRM (Human Resources Management). Because motivation has a positive and

significant effect on employee performance, every boss must be able to build awareness of his employees to have high work motivation because it can be a way to improve employee performance. The need for achievement will make employees enthusiastic and excel at work. For the results of statistical tests partially the work environment factors on performance have no effect, suggesting that the company maintains the existing working environment conditions. Researchers that are interested in studying employee performance should be able to expand on the limitations of this study's findings and explore other factors that are not included in the study.

5.4   Recommendation

There are several recommendations for PT Citra Bathara Bersaudara are:

1. First, this study only focuses on three variables, which are management information systems (MIS), work environment, and Motivation at PT. Citra Bathara Bersaudara. And also based on the results of statistical tests there is the effect of other variables of 11.6% of the employee performance, to get more accurate and diverse data, future researchers can add several variables such as leadership, compensation, work culture, work discipline, and many more.

2. Second, this study only uses 59 samples. To produce higher-quality research, it is recommended to carry out a similar test with a larger number of samples, so that better answers are obtained from respondents.

3. Third, From the results of this study indicate that all variables, namely management information systems, work environment, and motivation together (simultaneously) have a significant and positive effect on the performance of employees of PT. Citra Bathara Bersaudara, it is hoped that these indicators will be maintained and further improved by the company so that performance increases and has an impact on company performance results.

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