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The Effectiveness of Enterprise Resource Planning on the Performance Quality of Food Company Employees in West Java

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Abstract

Implementing Enterprise Resources Planning (ERP) in the company is part of the company's internal business strengthening strategy to increase strong competitiveness and manage the company professionally. However, implementing ERP systems in some cases is considered a failure because the company does not achieve the goals set. This study aims to determine whether the implementation of the system in the company has a positive effect on employee performance. The models used to evaluate the impact of ERP system implementation are work quantity, work quality, work knowledge, collaborative creativity, dependability, initiative, and personal quality. The method used in this research is a descriptive, analytic and evaluative qualitative method by analyzing the impact of ERP system implementation on user performance components in food companies in West Java. The results obtained are that ERP implementation positively affects work quantity, work quality, knowledge, collaboration, creativity, dependence, initiative, and personal quality.

Keywords

Enterprise resource planning, Performance Quality, Employees Performance, Food Company, West Java

1. Introduction

In the era of a very competitive and rapidly changing global economy, companies are required to use information technology to support their business processes. Information and communication technology management requires a strategic vision that unifies information

technology and business processes. Information and communication technology strategies refer to specific investments in different systems, such as Enterprise Resource Planning (ERP) systems. Corporate Resource Planning is an information system structure that can integrate marketing functions, production functions, logistics functions, finance/finance functions, resource functions, production functions, and other functions (Gupta & Kohli, 2006; Su & Yang, 2010). ERP has been developed as an integration tool that aims to integrate all enterprise applications into a central data storage so that it can be easily accessed by all departments (sections) that need it, including integrating the company's relationships with suppliers (Özkarababak et al., 2014).

Enterprise Resource Planning (ERP) is a way to manage company resources using information technology (Marsudi & Pambudi, 2021). ERP is equipped with hardware and software to coordinate and integrate information data in each area of the business process to produce quick and precise decision-making. It provides quick analysis, financial, on-time sales, production, and inventory reports (Shehab et al., 2004). Enterprise Resource Planning (ERP) is an integrated information system technology used by world-class companies in improving company performance (Fauzi, 2021). Data integration in ERP technology is carried out using a single data entry system. This functioning department enters data, so other functions can use this data within the company.

The business world will always develop along with the development of technology and competition. In recent years, ERP systems have become popular among large companies worldwide, including Indonesia. In addition to these large companies, medium and small companies have also begun to adopt ERP systems. ERP systems reflect innovative business strategies because they can increase the efficiency and effectiveness of the company. The efficiency and effectiveness of this ERP system will change the role of accounting management by providing easy and fast, and precise access to operational data needed for decision-making and corporate management control. Business success can be achieved by implementing an enterprise resource planning system that can assist in finance, inspection, and Supply Chain Management (SCM). In its application, supply chain management plays an important role in improving company performance (Jamaludin, 2021). Supply chain management aims to minimize costs and maximize service levels, meet consumer needs and generate profits, and win the market competition. It can optimize the overall value realized to meet consumer wants and demands and minimize overall costs such as ordering, storage, and transportation costs (Jamaludin, 2022).

This ERP technology is the ideal answer for any company that has grown rapidly and has many advantages that can help the company's performance. However, the effectiveness of ERP implementation differs from one company to another, so some mistakes that the company unwittingly makes will reduce the effectiveness of ERP, which ultimately causes losses to the company.

The loss experienced by the company, in this case, is the company's operations which are directly disrupted, so that it also interferes with the performance of employees in companies that use ERP. The performance of employees who use the ERP system will affect the company's overall performance. Therefore, based on the purpose of implementing ERP, the performance of employees who use ERP should be more productive and quality with the

effectiveness of the existing ERP in the company. It is interesting to study how the ERP implementation that the company has implemented on the performance of employees who use ERP is seen from the user side as an employee in the company compared to before implementing ERP implementation or before using ERP.

The purpose of this study is to determine whether the implementation of ERP system implementation in the company has an effect on the performance of employees who implement ERP in the company, and to produce a recommendation in the form of an evaluation of the implementation of ERP implementation in the company in order to have a positive effect on employee performance. As a result, implementing ERP should positively affect employee performance, in this case, workers who use ERP in the company. In this case, the factors used to assess the performance of employees who use ERP are quality of work, quantity of work, work knowledge, creativity, dependability, initiative, and personal qualities (Andrianto, 2019).

2. Literature Review

2.1 The Concept of Enterprise Resource Planning (ERP)

According to Hasan (2018) and Bernroider & Hampel (2005), Enterprise Resource Planning System is a core software program used by companies to integrate and coordinate information in every area of the business process. ERP programs help organizations manage companies with a broad scope of business processes, use an integrated basis, and are used as an effective management reporting tool to support decision making. A business process is a set of activities that start from certain inputs to produce certain outputs, such as a report or prediction that has added value for customers. ERP software drives the operating efficiency of business processes by integrating interrelated tasks such as sales, accounting, and human resource management within a company.

Enterprise Resource Planning (ERP) is a system consisting of several software packages that make seamless integrations over the entire flow of information within the company's organization, such as human resources, finance, accounting, and consumer information (Shehab et al., 2004). According to AboAbdo et al. (2019), an ERP system is a system that integrates all aspects of organizational activities into one accounting information system. For example, when the sales department enters an order, this transaction will automatically enter the database system and flow to all parts of the company, after which the purchasing and production department can directly place purchase orders and direct production to accommodate the supplies needed for sales. In the accounting department, these transactions will be recorded automatically. According to (Gupta & Kohli, 2006), Enterprise Resource Planning is a business application that unifies all data in an organization's business processes and is related to all functional areas. By integrating functional areas related to the organization's business processes, ERP solutions can create an enterprise database, one application integration and one common graphical user in one enterprise to manage information and transactions in the enterprise. An organization implements ERP to increase visibility in business processes and plays an important role within the company in a dynamic environment.

According to (AlBar et al., 2014), Enterprise Resource Planning is a software program with well-integrated applications and is widely used in business organizations. These integrated

applications are usually classified by operational function. Functions related to accounting include general ledger, accounts receivable, accounts payable, fixed assets, cash management, and accounting modules. In comparison, the financial function includes portfolio analysis modules, risk analysis, credit analysis, asset management, leasing, and others. Then the ERP application for the human resources function includes modules on recruitment, payroll, personnel management, employee development, and compensation management. At the same time, the marketing field includes customer relationship management, order entry, order processing, and so on. Then for ERP in logistics, it is usually in the form of production planning, material management, and factory management.

2.2 Implementasi Enterprise Resource Planning (ERP)

Gorla et al. (2010) proposed a model of information system success that reflects a systematic combination of individual actions. Information system success consists of system quality, information quality, usability, user satisfaction, individual influence, and organizational influence. The ERP implementation process consists of several stages: Project Preparation, Business Blueprint, Implementation, Final Preparation, and Go Live and Support.

The important thing that must be understood before implementing is understanding the difference between the business processes within the company and the configuration of the ERP system, which must be adjusted to run properly. Implementing ERP certainly requires careful consideration to make an investment decision. It is because, in ERP implementation, the company will face various challenges in the execution of ERP implementation to achieve post-implementation success. ERP implementation requires careful preparation because of the high costs incurred for ERP implementation. Then an ERP implementation error will result in no small loss, so it will cause a failure in ERP implementation. Good business processes will increase the efficiency and effectiveness of the company. The readiness of the employee's ability is also needed with the change in the new system. A good ERP design will not help if it is not executed properly.

Alhazami (2021) said that each assigned part in the ERP system implementation process, such as project managers and consultants, is very concerned about whether the implementation process will be completed on time and within the budgeted cost. People who adopt ERP systems hope to increase their business's output and achieve company goals.

2.3 The Role of ERP in the Company

Enterprise Resource Planning plays many important roles in the company. It is because the ERP system integrates every department of the company. ERP integrates sales and distribution (SD), Material Management (MM), Production Planning (PP), Financial Accounting (FI), Controlling (CO) processes, and Human Capital Management (HCM) (Introduction to ERP). And the various functions are: 1) Sales and Distribution: this module supports sales functions ranging from pre-sales processes such as inquiries, recording sales order processes, shipping goods, to billing and receiving payments from customers; 2) Material Management: supports the procurement function starting from ordering raw materials, selecting vendors, to ordering and paying to vendors; 3) Production and Planning: this module supports the production control process from planning and scheduling production to completion of the production process; 4) Financial Accounting: this module supports the company's financial activities, including

accounting processes such as recording transactions, calculating, and reporting financial statements; 5) Controlling: this module supports the company's internal control activities by certifying materials and controlling other quality, and; 4) Human Capital Management: supports human resource management using organizational management and employee administration.

3. Method

Based on the object's context, this research is field research which is an evaluative study. This study uses a qualitative approach. Qualitative research to answer problems related to whether or not the impact of ERP implementation on user performance. Research locations in Jakarta and Bekasi. Then the source of data for this research is primary data. Primary data are field data obtained from interviews, surveys, and direct observations of data sources. The data collection technique used is by using interviews, namely by conducting open and in-depth interviews with informants (Head of Production and Operations Management, Head of Sales and Distribution, and Head of Finance/Accounting) and ERP system users who have experience before using ERP and after using ERP. This research was conducted at PT. Kunafe Bandung which uses an ERP system.

4. Results

4.1 User Performance Analysis before and after ERP System implementation

The main purpose of implementing ERP is to improve and strengthen the effectiveness of existing resources within the company; the resources discussed in this study are human resources that use the ERP system. One of the success criteria for implementing ERP is the increased operational performance of the company, where the company's performance is supported or supported by the performance of its employees.

Based on the description above, a comparison can be made regarding the eight criteria of related performance appraisals before and after the implementation of ERP by the company eight performance appraisal criteria: quantity of work (completed in a certain period), quality of work (by standards that have been determined), job knowledge (knowledge about work and the things that are responsibilities), creativeness (creativity to create solutions to problems that arise at work), cooperation (the ability to work together with others), dependability (awareness of the completion of a job that must be done), initiative (awareness and willingness to expand responsibilities in work), personal qualities (the quality of a worker which includes personality, leadership, attitude in daily life and integrity).

Then for the Job knowledge component (knowledge about work and what things they are responsible for), all informants, namely three informants who provided data and information, stated that prior to the ERP system knowing their responsibilities and knowledge about their work, some informants had to conform to the Human Resource Department (HRD) or the HR department to find out their work and what the informants are responsible for. Some informants must read the company's operational standards in detail if there is a dispute regarding the authority and responsibility for a job. So that conflicts often occur because not all workers know their responsibilities and knowledge about the work they are supposed to do. In the ERP system, everything related to the work that must be done and carried out by each user has been

standardized in modules and menus tailored to each user's functions and positions. In addition, how to implement and measure the completion of work is also contained in the module of each user of the ERP system according to the function and position of the user.

Associated with the Creativity component (creativity to create solutions to problems that arise at work), one of the advantages of the ERP system is processing data into information more quickly, precisely, and efficiently, in addition to analyzing a problem using data and information from ERP is much faster. All informants gave testimonials and statements that before the ERP system implementation, the analysis process using data and information to solve a problem took a long time because converting data into information if done manually took a long time. Hence, it affects the resolution of a problem or decision-making process. After the implementation of the ERP system, the informants stated that it was helpful to resolve a problem or decision making so that solutions and decisions became more creative; creative here is defined as solutions and decisions that are outside of normative decisions and solutions where creative decisions and solutions can be run efficiently and effectively.

In the cooperation component (the ability to cooperate with others), based on testimonies and statements from informants, some of the informants stated that with the ERP system, their work system became more individual because all their work became standardized. Some of the other informants stated that they could improve internal and division cooperation because communication can be carried out efficiently and effectively in the ERP system. After analyzing the informants who stated that they worked to be more individualistic, it turned out that they did not take advantage of the communication features or facilities that were embedded or existed in the ERP system. One of the functions to streamline communication between functions and units, as well as interpersonal within a company that uses ERP, is a communication function that can be in the form of chat, short messages, and discussion forums related to the completion of work.

For the dependability component (awareness of the completion of work that must be done), all informants gave testimony and statements before implementing the ERP system. Their dependence on work completion was still very dependent on other units and functions because the data and information needed for completing their work were manually processed manually by other functions within the company. After the use and implementation of the ERP system, all informants stated that the increased processing of data into information and the increase in data flow between functions or units had a positive impact on informants by increasing the level of completion of the work of informants on the data they needed to complete their work.

For the initiative component (awareness and willingness to expand responsibilities at work), some informants stated that before using the ERP system, they felt they had more initiative than after using the ERP system because the problems encountered made some of the informants have the initiative in solving them. After using the ERP system or after the ERP system was implemented, they stated that they lacked initiative because all their work was already in the ERP system used. In contrast, some of the informants stated that with the implementation of an ERP system or the use of an ERP system, they could complete their work faster and carry out other work initiatives that were still related to their functions and responsibilities. Before using the ERP system, they felt they were unable to take the initiative because they were busy completing their work.

Then for the personal qualities component (the quality of a worker which includes personality, leadership, attitude in daily life, and integrity), all informants stated that with the implementation of the ERP system, all users became more disciplined and followed the rules set by the company, namely standard operating procedures. The standard operating procedure is in the use of the ERP system. In addition, the ERP system user informants stated that compared to before using the ERP system, and they stated that they could maintain their integrity because all work done was monitored through the ERP system.

4.2 Evaluation of the impact of ERP system implementation on user performance

Based on the discussion above, it can be analyzed in general that the implementation of ERP has a positive effect on employee performance. For the components of creativeness (creativity to create solutions to problems that arise at work), ERP implementation positively affects informants because the ERP system provides more complete and faster information. This information is useful for informants in terms of completing work and making decisions based on information that is of better quality compared to using a manual process, where the information provided is more limited and requires a process that is not fast and efficient. Then for the Cooperation component (the ability to cooperate with others), the ERP implementation was concluded by some informants to have a positive effect because they can interact using the ERP system, and the ERP features implemented in the company have supported communication between functions and units within the company through the ERP system. While some of the informants stated that the ERP system had a negative effect on cooperation because all their work was managed in the ERP system and eliminated relationships with other functions and units. The results of further observations and interviews show that the informant has not utilized the existing communication features in the ERP system (Ahn & Ahn, 2020; Christiansen et al., 2022). In this case, the socialization of all ERP system functions is very important because users can maximize all functions related to their field of work.

Then the dependability component (awareness of the completion of work that must be done), the implementation of the ERP system has a positive effect on ERP system users due to the increased level of work completed as an effect of improving business processes in terms of process speed and process accuracy so that ERP system users get the data and information needed to complete a job faster. The next component, namely initiative (awareness and willingness to expand responsibilities at work), the implementation of the ERP system has two effects on informants, namely, some say they have more initiative, and some say they don't have the initiative. Informants who stated that they had more initiative because they had a faster work completion time so they could take the initiative to do the next job, then informants who stated they had no initiative because all work had been included in the ERP system module they were using, so they felt no need to take the initiative to do what they did other (Clayson & Miller, 2017; Clayson et al., 2021). From the analysis results, this is not a problem if all the work that the user should do has been accommodated in the ERP system.

The last component is personal qualities (the quality of a worker, which includes personality, leadership, attitude in daily life, and integrity). After implementing the ERP system, all users stated that they had a positive impact on the personal quality of users in terms

of discipline, work coordination in one unit or division, then integrity, and also important informants get more value because they have experience using ERP systems.

5. Conclusion

Based on the results of the discussion regarding the effects of implementing ERP system implementation on employee performance from the ERP system, it can be concluded that, in general, the ERP system has a positive effect on employee performance. Based on data and information, the implementation of ERP implementation has a positive effect on the performance components: quantity of work (amount of work completed in a certain period), quality of work (by predetermined standards), job knowledge (knowledge about work and other matters -what things are his responsibility), creativeness (creativity to create solutions to problems that arise in work), dependability (awareness of a job completion that must be done), personal qualities (the qualities of a worker which includes personality, leadership, attitude in everyday life and integrity). The components above are positively affected by the use of the ERP system in the company.

The initiative component (awareness and willingness to expand responsibilities in work) and the cooperation component (the ability to work together with others), two components where some of the informants were positively affected due to the implementation and use of the ERP system, and some of the informants did not get the same positive effect even reduced due to the implementation and use of ERP systems. For the Initiative component (awareness and willingness to expand responsibilities at work), the informants who stated that they did not get a positive impact due to the use and implementation of ERP can be concluded not to be a problem as long as all their work is accommodated in the ERP system implemented, and the informants have completed all responsibilities responsible for their work, because the informants considered they lacked initiative. After all, all their work was in the ERP system that was implemented. For the Cooperation component (the ability to cooperate with other people), the informants who stated that they did not get a positive impact due to the use and implementation of ERP can be concluded that there is a lack of socialization of all the features and functions of the ERP system developed at the company so that the communication features are not known by the company some informants and became the basis that they were unable to communicate and coordinate with other functions and units using the ERP system..

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