The Analysis of Implementation of Enterprise Resource Planning in the Warehouse Division of Trading and Service Companies, Indonesia

Bethriza Hanum[1], Jakfat Haekal[2] & Dian Eko Adi Prasetio[3]

[1-2]Industrial Engineering Department, Faculty of Engineering, University of Mercu Buana

[3]Industrial Engineering Department, Faculty of Engineering, University of Islam As-Syafiíyah

Indonesia

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ABSTRACT

Enterprise Resource Planning (ERP) is an information system that is used to integrate all information in every business process in a company by using a shared database. Proper integration of each division can improve good communication, regular workflow, and company success. This study aims to analyze the implementation of ERP in a trading and service company. Before implementing ERP, each division, namely the warehouse division and the finance division, used a separate application. As a result, there is a difference in inventory calculation between warehouse records and finance.

The study was conducted by distributing questionnaires to employees who deal directly with the ERP system in the company under study. The results of the questionnaire show that the relationship of user training and data analysis has an influence on the success of ERP implementation. After the ERP system is implemented, there are no more data miscut incidents due to work processes, spare part administration, checking of the purchase status and spare part expenditure processes in the warehouse division to be more accountable because all users use the same database for all divisions, namely the warehouse, finance, and commercial divisions. The control system of every activity in and out of goods and also better monitored, especially the spare parts that are warranty because the warehouse division has received enough information from each use of spare parts.

Key Words: Enterprise Resource Planning (*ERP), Warehouse, Performance.*

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1. INTRODUCTION

The rapid development of industry and technology has brought the world into the era of the industrial revolution 4.0, an era where automation technology can be connected with cyber technology. By connecting these two fields, industry 4.0 can improve the organization's operational performance, productivity, and growth and give birth to a variety of innovations (Fauzan, 2018). The main objective of Industry 4.0 is to enable the stability of the distribution of goods and needs by collecting data on the needs of the community in real-time by sending the data to producers so that that producer can produce the right amount according to the number of needs. Economically, this can maintain the stability of the price of goods in the market. From the business side, it can expand the market. Product tracking and transparency will increasingly lead to new services. This is possible because of mechanisms in the industrial era 4.0 integrated producers with supply lines without geographical boundaries (Winata, 2019). Various kinds of transformation and adoption of technology in the industrial world have presented the Enterprise Resource Planning system or better known as the ERP system. ERP is an information system for both manufacturing and service companies whose role is to integrate all functions and departments within the company into a system that can meet all company needs (Rahman, 2018). With the various benefits and uses provided by ERP systems in the industrial era 4.0, various companies in many sectors have developed and adopted these systems in their companies.

Since the 1990s, Enterprise Resource Planning System (ERP System) has been widely used by companies around the world to replace information systems that have been developed previously (Parr, Shanks, & Darke, 1999). ERP applications are packages that integrate essential business functions into one information system through an integrated database sharing (Lee & Lee, 2000).The implementation of this ERP system has been carried out in one of the trade and service companies that the author has examined. The company is a market leader in creating innovative solutions for sorting systems globally—the trusted partner for central banks, financial institutions, banknote printing, and cash in transit companies. In Indonesia, the company which was observed to have started its business in 2012 by winning the maintenance contract of 16 units of machinery and then grew to

1,055 units of machinery in 2018, in other words, an increase of 65 times in a period of 6 years. In increasing accountability, credibility, and professionalism, the company was observed to work wth KPMG (Klynveld Peat Marwick Goerdeler), which is an international professional services company in the fields of financial audits, taxes, and financial advisors. From the findings of KPMG in 2017, it was found that there was a mismatch of data in the inventory system between finance and warehouse in the observed companies. After searching, it was found that there were differences in data from gross inventory of 1.38 billion Rupiah. This was allegedly due to the monthly closing and balancing process; the finance division requested monthly inventory updates from the warehouse division manually. Here the controlling function is not optimal because the finance division cannot check the data received because there are no tools that can be used besides direct physical check. In some cases, the warehouse division does not get an update of every PO that has been released by the commercial department. As a result, goods in transit are not updated correctly. On the other hand, in sales and marketing activities, the warehouse division does not get clear information regarding the condition of goods that are warranty. As a result, the consumption of spare parts on products that are still under warranty is recorded as consumption. This results in unnatural consumption of goods in a project. To deal with this problem, there needs to be a database that is shared between warehouse, finance, and commercial. Especially at this time, the role of information technology is essential in order to achieve company goals that support the company's information system in processing data into quality information. Therefore, company management must be able to maintain the reliability of the information it has by implementing Enterprise Resource Planning (ERP). One reason why ERP is used as a software that is quite popular is the ability to integrate data and business processes in an organization.

Seeing the observed business development of the company in Indonesia, which is quite promising, in 2018, the company will start implementing ERP by cooperating with an expert consulting firm for the ERP system in its manufacture. The modules contained therein are for warehouse, commercial, sales, and finance, where all the divisions are connected to the same database. Every purchase order (PO) will be processed by the commercial division. After the PO is issued, the warehouse division can see the purchase. Once the goods are received, the warehouse team will confirm the good in transit and goods received notes on the ERP system, which indicates that the goods from the PO have been received according to the conditions. With this confirmation, finance conducts a three-way match with the documents they received for the payment process from the PO, and the system records the transactions that have occurred. For sales orders, the sales division will inform through the ERP system that the company receives requests for services/goods via the PO from the customer as a follow up to the quotation/offer previously offered. If the demand for goods / spare parts is available at the warehouse, the warehouse division will prepare the product following the request from the customer's PO. In the ERP system, the warehouse team will issue the following order with a pass order containing the product identity information (serial number, article number) and its accessories. When the travel permit is issued, the finance will issue an invoice to the customer for billing. A study states that the ability of flexibility is needed in the current ERP system so that changes in organizational business processes that are generally dynamic can develop. Therefore, cost and time are used as the main factors that must be considered in ERP implementation activities. Flexibility, scalability, maintenance, and customization can be an issue to support in addition to the two factors above, in changing the company's business processes (Baharum, Ngadiman, & Haron, 2009).

2. LITERATURE SURVEY

2.1. Enterprise Resource Planning (ERP)
Enterprise Resource Planning (ERP) or in Indonesian is called corporate resource planning. It is an information system for manufacturing and service companies that have a role in integrating all departments and functions in the company into a system that can meet the needs of companies (Rahman, 2018).

ERP is a way of managing company resources that use information technology. The use of this ERP system is equipped with hardware and software that is integrated with information data from the business processes area to produce information that will be useful in making quick decisions, analyzing and making fast financial reports, sales reports that are right and production and inventory reports (Yasin, 2013).

ERP's concept is the integration of systems in each line process to achieve transparency and better corporate management accountability (Surawijaya, Prakoso, Syahrial, & Nina, 2017). ERP is a strategic tool for the synchronization, integration, and efficiency of data and organizational processes into a single system to gain a competitive advantage in uncertain business conditions (Madanhire & Mbohwa, 2016).

A similar sentiment was also conveyed by Yen and Chou (2014) in the journal Kurniawati, Gunarta, & Baihaqi (2015), ERP systems implemented in companies can increase competitiveness that can affect corporate strategy. (Kurniawati, Gunarta & Baihaqi, 2015)

ERP can support more efficient operations by integrating all business processes. The following is the anatomy picture of ERP (Enterprise Resource Planning) of the company being observed. ERP system has three main criteria, namely integration, real-time

data, and sharing. The various functions and uses of ERP systems have been further expanded in recent years to include business intelligence, customer relationship management, and trade.

ERP is an abbreviation of 3 (three) word elements, namely Enterprise (Organization/company), Resource (Resources), and Planning (Planning). The third description of the word reflects a concept that ends in a verb, 'planning,' which emphasizes the aspect of planning.

While the word 'enterprise' can be described as a group of people with a specific goal, who has the resources to achieve that goal, this 'enterprise' viewpoint is different from the traditional organizational or corporate point of view, where the whole organization/company is considered a system and each department is a subsystem.

While the word 'resource' can be briefly translated as a resource that includes all matters that are the responsibility and management challenges to be managed to generate profits (Dhewanto & Falahah, 2007).

2.2 ERP Implementation

ERP is used to integrate critical corporate processes that can respond to company needs better planned more efficiently. Each department has a formed computer system so that performance can be optimized in each department or division. ERP combines everything into one integrated system that accesses one database. This resulted in the spread of information and increased communication within the company.

Some believe that ERP implementation can be a solution to the challenges in competition in the business world. Companies are trying to increase the number of consumers with fast service and low cost compared to their competitors. ERP can be trusted as a manifestation of a company's success by integrating information systems, increasing the efficiency of the information system to produce more efficient management of a business process. If the increase in company efficiency is already visible, the company's competitiveness will also increase.

2.3 Determinants of ERP Implementation Success

Similar to applying other application software systems, the main factors that are the problem in implementing ERP are management support, user involvement, and clear project objectives and objectives. According to Olson (2004) in the journal Rahman (2018), the factors that determine the success of an ERP system are:

• Clear understanding of strategic goals
• Commitments from all levels of management
• Good project management implementation
• Good implementation team
• Can overcome technical issues
• Reengineering business processes
• Organizational commitment to change
• Intensive education and training
• Accurate data
• Intensive socialization and communication
• Clear and focused performance measurement
• Can overcome multi-site issues.

2.4 ERP Implementation Concerns

Investment in ERP implementation is not small because many concerns arise from the managerial company in implementing it. The implementation of an ERP system can also experience failures caused by (Rahman, 2018):

1. Time and cost of implementation that exceeds the budget.
2. Pre-implementation is not done well.
3. The operating strategy is not in line with the business process design and development.
4. HR is not prepared to accept and operate the new system.

2.3. Interpretive Structural Modelling (ISM)

ISM is a methodology for mapping the structure of relationships of factors in complex systems [33]. ISM helps interpret the structure of the system in the form of relationships between elements of a system and presents it in the graphical form [34]. Some types of contextual relationships can be in the form of influence, helpers, contributions, interests, and drivers [35]. ISM allows researchers to use expert opinions based on various management techniques such as interviews, brainstorming, group discussions, and others in mapping the contextual relationships between factors [36]. In this study, researchers consulted with experts from Cosmetics SMI and association in identifying the nature of contextual relationships between factors.

The ISM methodology introduces several terms. First is the SSIM or Structural Self Interaction Matrix. SSIM is a matrix that shows the relationship between factors that represent respondents' perceptions of goals. The interpretation process for SSIM filling consist of four relationships symbolized by V, A, X, and O. The explanation for the VAXO symbol is:

• The symbol V indicates that the X-factor influences the Y-factor.

• The symbol A indicates that the factor Y influences the factor X.

• The symbol X indicates that the X factor and the Y-factor influence each other

• The symbol O indicates that the factors X and Y do not affect each other

The second terminology in ISM is RM or Reachability Matrix. RM is a matrix that shows the change from SSIM symbol patterns to binary numbers. RM illustrates how strong driving power and dependent power are. The third is a revised matrix that uses the transitivity rule to correct SSIM values and get consistent values. This matrix compares the value of each SSIM cell with the rules if factor A influences factor B and factor B affects factor C, then factor C will also affect factor A. Fourth is a Micmac analysis which classifies the direct and latent relationship of the reachability matrix results into four quadrants [37], i.e.

1. Autonomous Quadrant I. The factors in this quadrant do not have the power of influence or dependence. They have no attachment to the system.
2. Quadrant II Dependent. In this quadrant, factors have a low influence strength but a high dependence on the system.
3. Quadrant III Linkage. The factors in this quadrant have a strong influence and dependence.
4. Quadrant IV Independent. This position shows high influence strength but low dependence.

3. RESEARCH METHODOLOGY

The method of analysis in this study, comprises of following steps;

1. Feasibility Study

Learn the system used previously in the finance division and warehouse division, where each division uses its respective applications. Next, analyse the running ERP system. With the increasing business processes in this company, we can be sure of the need for an application that can help the work process with certainty. The feasibility study consists of:

1. Analysis of user training, including:
   a. What is the role of user training in ERP system implementation?
   b. How do you understand the business processes in ERP system modules?
   c. What training methods are used so that users can use the ERP system?
2. Data analysis, including:
   a. What is the form of data exchange and structure?
   b. What form of data integration?
   c. What is the relevance and accuracy of the data generated?
   d. What data access process?
3. Implementation analysis, including:
   a. How does top management provide support in implementing ERP systems?
   b. How is the designated vendor response?
   c. The extent to which increased efficiency and achievement of effectiveness of ERP implementation?
   d. What about corporate accountability after implementing an ERP system?

2. Design Function

Analyzing system design in detail, starting from context diagrams, data, flow diagrams, file designs, data relations, user rights, and so on that form a complete system following its functions.

3. Features

Analyzing the features that exist in the ERP system, especially features for the benefit of work in the warehouse division.

4. Implementation

At the implementation stage, several methods of analysis are carried out, namely:

• Testing

Done to find out whether the programming work has been done correctly so that it can produce the desired functions. Testing is also intended to determine the limitations and weaknesses of application programs that are made to be as much as possible perfected and carried out testing directly online.

• Training

Before being handed over to the user, the vendor is responsible for training the user or operator and the maintenance team that wants to operate. This party is also obliged to provide accurate and open information so that it will not be difficult for users in the future.

• Maintenance

 The resulting ERP system cannot be finished after being handed over, but it still continues until a sufficient deadline to ensure that the submitted application can operate properly, and there are no significant obstacles.

•Documentation

The document was made to see the progress of the research being carried out and as a reference for troubleshooting in the event of an obstacle, as an operational guideline in the form of a manual handbook for ERP system operations.

4. RESULT AND DISCUSSION

Standard deviations indicate heterogeneity that occurs in the data under study or can be said to be the average amount of variability in a set of observational data. The higher the value of the standard deviation, the greater the distance the value of each unit of data is to the mean count. The smaller the standard deviation, even equal to or near zero indicates that all values in the set are the same. From this study, it can be seen that there is heterogeneity of the data under study which is shown in the graph in Figure 1
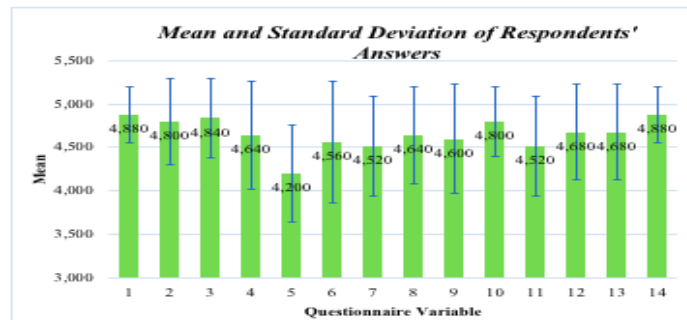

Figure 1 Mean and Standard Deviation of Respondents' Answers

A validity test is used to measure the validity or invalidity of a questionnaire. If the items in the statement of variables and sub-variables can express something that will be measured through the questionnaire that can be done by comparing the calculated value with rtable, the questionnaire can be said to be valid. From the calculation results contained in Table 1, each statement on this questionnaire is valid because the r count value is higher than the rtable value.

Table 1 Validity test

Var.	Question	r count	r table
A. *User Training*			
V1	To understand and run ERP software properly, training is very important	0,716	0,505
V2	The training that followed helped me understand the changes in the business application process before and after implementing the ERP system	0,845	0,505
V3	The training that followed was directly applicable to the ERP system with the intranet.	0,775	0,505
B. *Data Analysis*			
V4	ERP system implementation makes the exchange of data carried out for the better	0,908	0,505
V5	The application of data levels allows the ERP system implementation process to run optimally.	0,772	0,505
V6	Data integration and maintenance of ERP systems make leaders able to make appropriate policies	0,903	0,505

V7	The company gets relevant data from the ERP system	0,869	0,505
V8	ERP systems can provide accurate data	0,876	0,505
V9	ERP system access is easier to get the information needed.	0,746	0,505
C. ERP Implementation Success			
V10	*Top management provides support in implementing ERP systems*	0,748	0,505
V11	Vendors accommodate the needs expected	0,800	0,505
V12	*ERP systems improve work efficiency*	0,815	0,505
V13	The implementation of an ERP system makes work more effective	0,866	0,505
V14	*ERP systems create corporate accountability*	0,728	0,505

The questionnaire is said to be reliable or reliable if someone's answer to the statement is consistent or stable so that the instruments used in this study can be trusted as data collection tools and can reveal the real information in the field. Cronbach's Alpha values for variables and sub-variables are higher than rtable. From the calculation results contained in Table 2, each statement on this questionnaire is reliable because it can be interpreted that each statement on this questionnaire is reliable or trusted as a data collection tool in research.

Table 2 Reliability Tests

Var.	*Cronbach's Alpha*	r$_{tabel}$
V1	0,956	0,505
V2	0,936	0,505
V3	0,881	0,505
V4	0,915	0,505
V5	0,936	0,505
V6	0,912	0,505
V7	0,922	0,505
V8	0,916	0,505
V9	0,935	0,505
V10	0,860	0,505
V11	0,847	0,505

V12	0,826	0,505
V13	0,808	0,505
V14	0,866	0,505

From the Y multiple linear regression equation Y = 4,323 + 0,492 X_1 + 0,445 X_2. It can be seen that the relationship between the success of ERP implementation with user training and data analysis is positive. If X (user training and data analysis) increases, then Y (ERP implementation success) will also increase. Without being influenced by the X value, the average Y is 4.323 assuming the other variables are fixed. The coefficient of user training for the X1 variable is 0.492 and is positive. This indicates that user training has a direct relationship to the success of ERP implementation. This implies that each increase in one unit of user training, the beta variable (Y), will increase by 0.492, assuming that the other independent variables are fixed. Likewise, with the coefficient of data analysis for the X2 variable of 0.445 and is positive, this shows that the data analysis has a direct relationship with the success of ERP implementation. This implies that each increase in one unit of data analysis, the beta variable (Y), will increase by 0.445, assuming that the other independent variables are fixed.

Hypothesis test research conducted through the partial test or t-test aims to determine whether the independent variable or independent variable (X) partially influences the dependent variable or the dependent variable (Y). From the calculation results contained in Table 3 it is known that the significance value (Sig.) Of X1 variable is 0.003. Then the value of Sig. 0.003 <0.05. Thus the first hypothesis (H1) is accepted. For the significance value of variable X2 is 0,000. Then the value of Sig. 0,000 <0.05. Thus the second hypothesis (H2) is accepted.

Table 3 Partial Tests

Model	*t*	*Sig.*
(Constant)	2,681	0,014
User Training (X1)	3,354	0,003
Data Analysis (X2)	7,816	0,000

Hypothesis testing of this study can also be done by comparing t-counts with T-tables. From table 3 it is known that the calculated value of X1 variable is 3.354. For table is 2,074. Then the value of T-count is 3.354> 2.074 table. Thus the first hypothesis (H1) is accepted. For the t-value of the variable X2 is 7.816. Then the value of T-count is 7.816> 2.074 table. Thus the second hypothesis (H2) is accepted. Thus it can be stated that user training and data analysis influence ERP system implementation.

User training is considered to play a critical role in the successful implementation of ERP. In training, the user will be told how the ERP system works, how to interpret and use the information on the ERP and run the company's business processes on the ERP system. It is crucial to get a deep understanding of the concept of ERP, then see how this ERP system impacts on organizational performance. Thus the ERP system implementation process can run smoothly. Lack of user training and also errors in understanding how a company's application works can be a problem in implementing ERP systems. This can also be seen in the companies studied, where user training influences ERP system implementation. This can be seen from the results of the partial test or t-test, where the significance value of the user training variable is 0.003, which is smaller than the significance limit value of 0.050. And also, from the results of the comparison of the tcount on the user training variable of 3.354, higher than the T-table value of 2.074. This proves that user training influences the success of ERP implementation.

The implementation of user training in the introduction of the concept of business processes and ERP systems is given in the form of on-job training (OJT) so that the process of knowledge transfer given to users is directly implemented using the ERP system. With the OJT method, users will be better able to understand the purpose, function of each module, and understand the flow of available business processes and how to check and control functions for each transaction made. Thus the user will be more quickly familiar with the system used.

An information system can enhance company strength. ERP system implementation forms a data warehouse that can be the backbone of the company so that top management can have quick access to accurate information for making a decision. Respondents' responses showed that data analysis and processing influenced the implementation of the ERP system. This is evidenced by the results of the partial test or t-test, where the significance value for the data analysis variable is 0,000, lower than the significance limit value of 0.050. And also from the comparison of the value of T-count is 7.816, which is higher than the T-table value of 2.074. This proves that the data analysis influences the success of ERP implementation

Respondents rated the ERP system as being able to make data exchange better. This is because all divisions are connected to the same network and database. Thus for the accuracy of data, the relevance of data can certainly be justified. The information system that was built through the implementation of the ERP system is very much felt by respondents when there is a spare parts administration process from a warranty machine. Previously, the warehouse division only received requests for spare parts without knowing and having complete and transparent information about whether the spare parts were warranty or not. This is what results in a mismatch in the inventory records between the warehouse division records and the finance division that are the auditor's findings. Process flow diagram for spare parts before ERP implementation can be seen in Figure 2
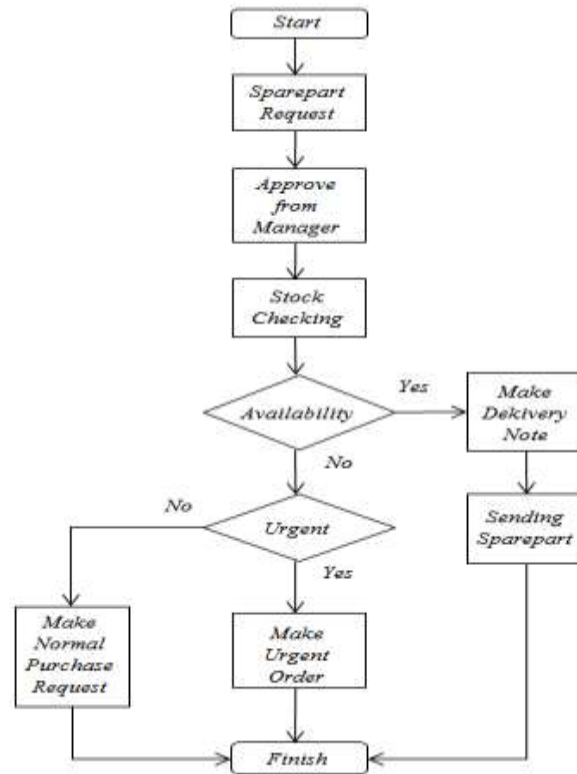

Figure 2 Process Flow Diagram of Spare Part Out Before ERP Implementation

After implementing the ERP system, the warehouse division already has clear information on the module regarding spare parts replacement, whether used on warranty machines or not. If the spare part is used on the warranty machine, there will be a warranty claim process. If the spare part is used on a machine that is no more extended warranty, it will be counted as a consume. The process flow diagram for the spare parts after the ERP implementation can be seen in Figure 3.
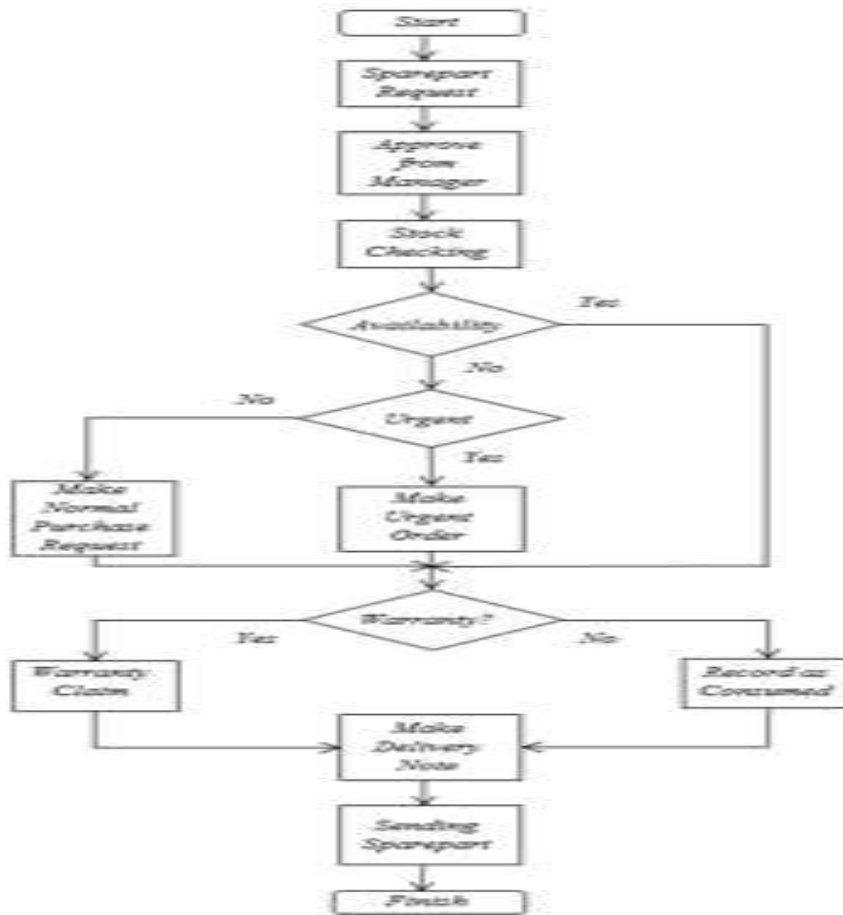
Figure 3 Process Flow Diagram of Spare Part Out After ERP Implementation

The ERP system that has been used in this observed company has met the expectations of the company. But the results of the questionnaire for sub-variable 5 regarding the level of data access, the weight value, and also the average value of respondents' answers for the sub-variables are quite low. From the results of the brainstorming conducted, the author wants to provide a proposal for the process flow out of spare parts after the ERP implementation as shown in Figure 4.
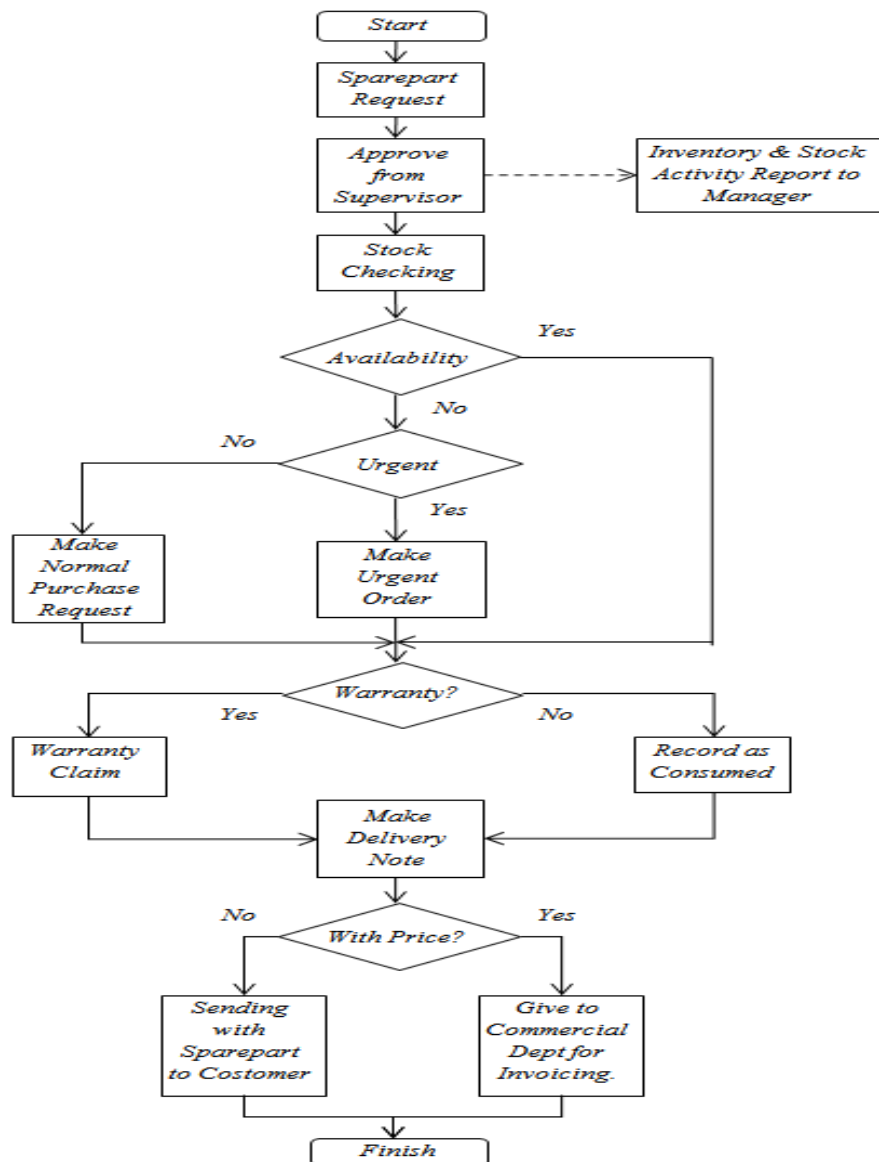
Figure 4 Proposed Flow Diagram of Spare Part Exit Process

In the current ERP system, the warehouse division has got clear information on each use of spare parts, whether the spare parts are used on machines that are still in warranty status or on machines that are no longer warranty. If the spare parts are used on machines that are under warranty, the warehouse team will request a replacement from the spare parts used to the vendor, supplier, or principal as a warranty claim. Thus, stock inventory will balance. However, if the spare part is used on a machine that is no longer in the warranty period, then the spare part will be recorded as consumption. This is very helpful for warehouse officers in reviewing and avoiding errors in inputting data of spare parts that have happened before, which are the findings of auditors.

To approve the release of spare parts, it is sufficient to be carried out by officials at the supervisor's level, not necessarily at the level of manager. Managers only need to receive information and reports from supervisors regarding inventory conditions. So there needs to be an accessor user right adjustment for this. Users accept this proposal because they see the busyness of the manager often makes the process of sending spare parts to be delayed. After all, there is no approval from the manager regarding the release of goods from the warehouse. Then for the delivery note, the author sees the price of the item printed on the delivery note. The author considers that the price of goods is still a company secret. The parties who are not directly involved in the company's business processes will be comfortable to find out the prices of goods in the company under study. It will be quite dangerous if competitors know this. This is not very good in the company's business climate.

For this reason, it is necessary to have choices in printing the delivery notes, with and without the value of the goods. For delivery notes, without the price of goods can be affixed to the package of goods to be sent to consumers. As for the delivery note, the price of the item is used as a complement to the document for invoicing purposes.

For the process of requesting the purchase of goods, in the previous system, this process was only carried out on existing applications in the commercial division. To get approval, it is done manually on the request sheet and is signed—furthermore, the warehouse division only information in the form of a copy of the document. In the ERP system implementation, all parties have been integrated and can approve the ERP system. The request sheet is printed only as an orderly administration and company documentation. Flow chart of the process of requesting the purchase of goods can be seen in Figure 5
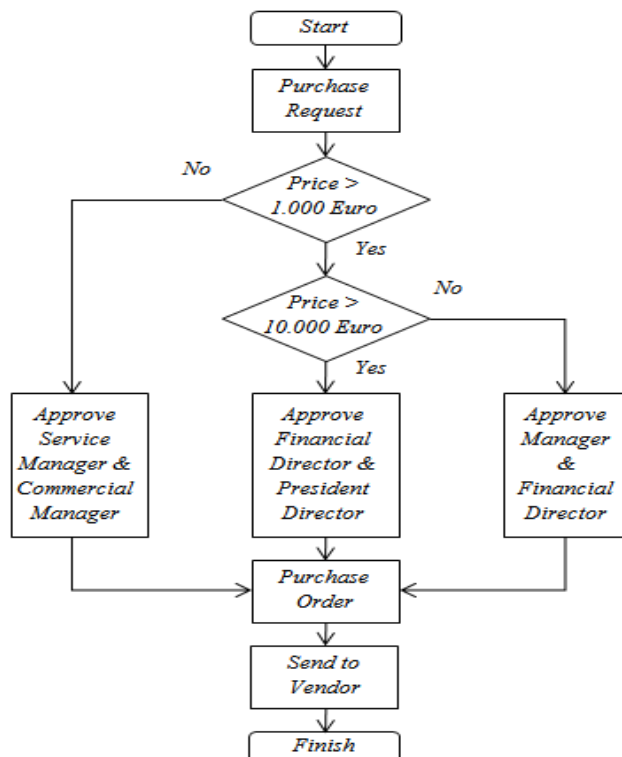

Figure 5 Flow Chart of the Purchase Request Process

In this process, the author wants to suggest improvement, before the purchase request is approved, there needs to be confirmation from the requestor at supervisor level to be sure whether all the proposed purchases are entered in the system correctly or not, whether in the form of the name of the item, the number of goods, part number of goods, price of goods and their vendors. If there are errors, then there is still a chance to revise them before the request is approved by the manager. The flow chart of the proposed improvement in the purchase request process can be seen in Figure 6
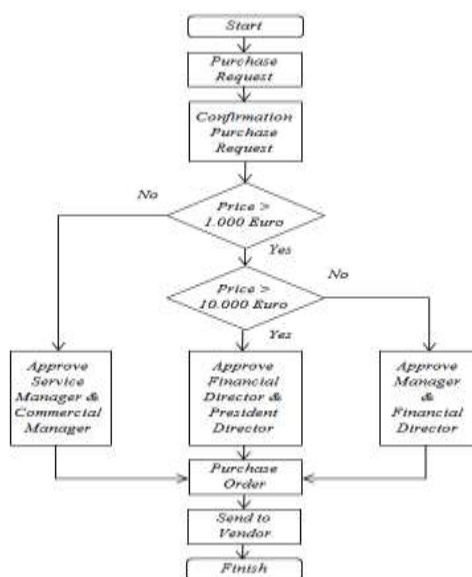

Figure 6 Proposed Flow Diagram of Goods Purchase Request Process

For the payment process, the ERP system has implemented a three-way match. Thus the control function of the process of purchasing goods and corporate accountability for the better. In this process, when goods from the process are received, the warehouse team will check the suitability of the goods with documents. If there is an error from the item received, the warehouse team will return the item to the vendor for replacement. If there is a difference less than the amount of goods received, the warehouse team will request an addition to the difference.

Furthermore, the commercial division will check the completeness of the documents sent. If something is missing, then the vendor will be asked to complete it. If all documents are complete, then the finance division will make payments from the purchase of goods. The flow chart of the process of receiving and paying for goods can be seen in Figure 7.
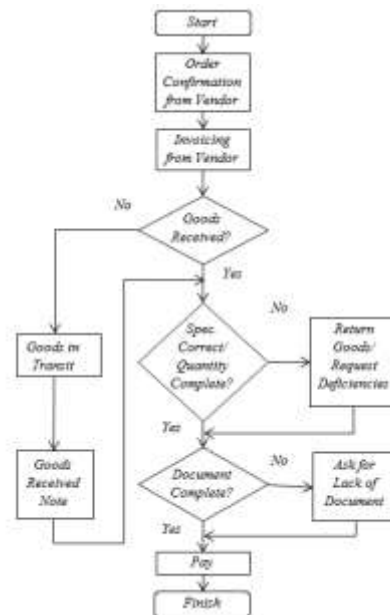

Figure 7 Process Flow Chart for Receiving and Paying for Goods Purchases

ERP implementation has a positive impact and can make a significant contribution to the efficiency and effectiveness of the company and is an important instrument that enables companies to achieve better and higher levels of performance. From the results of the 2018 audit, differences in inventory data between warehouse and finance were no longer found. The results of the stocktaking by the auditor did not find any difference in the physical quantity of spare parts with accounting data. The auditor gave a fair rating to the trading and service companies studied for the 2018 financial statements.

5. CONCLUSION

From the results of research conducted, the authors make the following conclusions:

1. User training and data analysis influence ERP system implementation. Hypothesis testing proves that the t value is more significant than T-table. The known value of the calculated X1 variable is 3.354, where as T-table is 2.074. ... Then the value of T-count is 3.354> 2.074 T-table.. Thus the first hypothesis (H1) is accepted; in other words, user training has an influence on the implementation of the ERP system. For the t-value of the variable X2 is 7.816. Then the value of T-count is 7.816 > 2.074 T-table. Thus the second hypothesis (H2) was accepted; in other words, the data analysis also influenced the successful implementation of the ERP system.

2. ERP systems that are used already accommodate user needs. However, for delivery notes, it is necessary to have an option in printing delivery notes, namely at prices and without prices. This aims to avoid the leakage of the prices of goods owned because this includes company secrets. Besides, before the purchase request is approved, there needs to be confirmation from the supervisor's requestor to ensure whether all the proposed purchases are entered correctly or not in the system, in the form of goods name, number of goods, part number of goods, price of goods and vendors -his. The author also sees the need to adjust access or user right

On approval of the process of releasing goods from the warehouse from manager to supervisor. The busyness of the manager often makes the process of sending spare parts delayed because there is no approval from the manager regarding the release of goods from the warehouse.

Suggestions - Suggestions

The suggestions that the author can convey are as follows:

1. For processes that are daily routines such as inputting incoming goods, the authors assume the determination of user rights needs to be reviewed. Sometimes the user's work must be stopped because it requires approval from superiors. This can be done by a user with a supervisor level; no need to be a manager-level user.

2. Because employee turnover in this company is quite high, it is necessary to have a manual book in Indonesian that will later facilitate and speed up the retention of new users in the operation of this ERP system.

3. In the future research can analyze the implementation of ERP systems from several companies to see the extent to which ERP can have an impact on company progress.

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EMAIL: Bethriza@mercubuana.ac.id and Jakfat.haekal@mercubuana.ac.id