International Journal of Research on Financial & Business (IJRFB) ISSN: 3046-4609 (Online)
Vol 2, No 1, January 2024, pp. 85 - 101 ISSN: 3032-7806 (Print)

THE MANIFESTATION OF DELONE AND MCLEAN MODEL IN EVALUATING THE IMPLEMENTATION OF ERP SAP TO FINANCIAL STATEMENTS

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Abstrak. This study aims to evaluate the implementation of SAP S/4 HANA module FICO (Finance and Controlling) in the Accounting and Finance division using the Delone and Mclean Information System Success Model at Perum Jasa Tirta 1 Malang. The company chosen by researchers as an object is a service company that focuses on managing water resources. This research is qualitative research that uses descriptive analysis methods. The data collection technique is using observation, interviews, and documentation. The results of research using the Delone and Mclean Model show that the implementation of SAP ERP at Perum Jasa Tirta 1 Malang was declared successful. This is because most user perceptions are positive towards almost all dimensions in the Delone and Mclean model. There are only two indicators in the six dimensions that are negatively perceived by users, namely format and system responsiveness. Both negative perceptions from users need to be considered again by the company, especially the SAP implementation team for better system improvements in the future.

Keywords: Delone and Mclean, SAP S4/HANA, Finance and Controlling module

I. INTRODUCTION

The current development of information technology means that the industrial world is required to evolve with the times. Therefore, companies today must be aware of the important role of information technology to help achieve company goals (Hapsari, 2012). The acceleration of technology and information in the current era of industrial revolution 4.0 applies a concept centered on automation. Automation itself is the process of controlling the operation of a tool automatically which can replace the role of humans in observing and making decisions, according to Santoso in (Ramdhani, 2023). In the G20 Summit held in Bali, in November 2022 at points 25 and 26 of the G20 Bali Leaders Declaration, technological development is the main key to recovery and empowerment in various sectors, one of which is in the economic sector according to (Indepth, 2023). The form of digital transformation currently being carried out in Indonesia is cloud computing. One of the cloud service providers is SAP (System Application and Product in data processing) which is part of ERP (Enterprise Resource Planning). Manager director of SAP Indonesia Putra (2022) explained that SAP is one of the pioneering software companies that has supported the digitalization of the Indonesian economy. In July 2022, there will be 1,600 companies implementing SAP from various sectors such as industry and MSMEs (Subagyo, 2022).

ERP software itself consists of various types such as Odoo ERP, Workday, Ecount ERP, SAP and so on. One type of ERP (Enterprise Resource Planning) software that is widely used by large companies in Indonesia is SAP (System Application and Product in data processing). Dityawarman & Riyadi (2016) stated that SAP itself is software that has the ability to integrate various modules or business applications. SAP consists of various modules in it. Some modules that are often used in Indonesia are FICO (Finance and Control), PP (Product Planning), MM (Material Management), SD (Sales and Distribution), HR (Human Resources), CRM (Customer Relationship Management) and so on. Investment in information technology by a company is a big decision that needs to be considered both in the short and long term of the investment made. One of them is SAP itself, which is software whose price is estimated to be quite expensive, so a large amount of capital is required from the company before deciding to implement SAP in its business processes. The reason why SAP is so expensive is because it is difficult to implement this software, so a special team in the IT field is needed to help in the implementation process. Companies need to pay for experts and for maintenance of the system itself. In research conducted by Meilani et al, (2023) at PT. Belfoods also stated that the price of ERP itself was relatively expensive, which was a consideration in running the business as well as the initial implementation using two systems, namely the old system and ERP. Apart from the costs incurred by the company which are quite large, the impact of the information technology implemented is also a consideration when the company has implemented the system. So companies need to evaluate the impact of implementing a system for the company.

This research was conducted at Perum Jasa Tirta 1 Malang as an object used by researchers in evaluating the implementation of SAP. The choice of Perum Jasa Tirta 1 Malang as the object was because there had been no previous research examining the SAP implementation process in this company. This is because Perum Jasa Tirta 1 only Go Live in 2020, and now it has been three years since the company has implemented SAP. So companies need an evaluation regarding the SAP system to see the success of a system that has been implemented and its impact on individuals (users) and organizations. Public Company Jasa Tirta 1 Malang is a State-Owned Enterprise which in its business processes manages Water Resources (SDA). In running its business, the company applies several modules in SAP including FICO (Finance and Control), MM (Material Management), SD (Sales and Distribution), HCM (Human Capital Management) FM (Fun Management) and IBO (Intelligent Business Object) . Of the six modules implemented by the company, researchers used one module as the focus of the research, namely FICO (Finance and Controlling). Of the six modules implemented by the company, researchers used one module as the focus of the research, namely FICO (Finance and Controlling). This is because in the process of creating or presenting financial reports, of course this module plays the most important role in the process. In its implementation, the SAP system helps the accounting division in journaling and connects the accounting division with other divisions to obtain the data needed to prepare financial reports. The output produced by this module is in the form of financial reports which of course will have an impact on decision making organizational decisions and external parties who assess the company's performance from the output produced.

Financial reports themselves are very useful information and it is an obligation for companies to report them as a form of accountability for an organization in carrying out its business processes. Before implementing SAP, the company implemented ASGL (Accounting System General Ledger) which is a general ledger system consisting of cash, bank, memorial (non-cash) and sales books. Where existing data must be entered in each diary. After

implementing SAP ERP in the company, it became easier for the finance division to obtain data directly and connectedly from various divisions to obtain the data needed to present financial reports. However, in its implementation, according to one of the informants during pre-observation in the field, the implementation of SAP had several problems, including human error, such as entering the wrong amount according to existing data into the application and the occurrence of double billing. Apart from that, the SAP ERP system itself is a system that is not easily changed or rigid, so users are required to follow all the systematic processes in SAP.

The purpose of this research was to find out how SAP is implemented in the process of presenting financial reports and to evaluate the success of SAP in the business processes run by the company. In this case, researchers used the Delone and Mclean method. The Delone and McLean models are models used to measure the success of information systems implemented in an organization. This understanding is in line with the researcher's goal of seeing the success of implementing the SAP system itself. Apart from being able to be used for quantitative research, the Delone and McLean models can also be used for qualitative research in testing causal relationships between variables. As the results of qualitative research conducted by Falgenti & Pahlevi (2013) stated that almost all components in the six dimensions were declared successful. It's just that what users perceive negatively is completeness in the information quality dimension. Meanwhile, the results of research conducted by (Hapsari, 2012) overall almost all components in the six dimensions of this model were perceived positively by users and became a success factor for the SAP ECC 6.0 information system in the financial accounting module at PT Pupuk Kalimantan Timur. Researchers do not use the intention to use dimension because the SAP system used in the company is an application that must be used in carrying out existing business processes. So the use of the SAP system is not based on the dimension of interest in using it but rather on the obligation to use the application to complete tasks in each division.

Next, a review of previous research will be presented, an explanation of the theory used and an explanation of the methodology used to explain the steps taken in the research, as well as presenting the results and discussion of the research. Researchers used data collection techniques in the form of structured interviews with sources. These sources have several criteria that have been determined by researchers. After conducting the interview, carry out data analysis. Sugiyono (2011:91) in (Hapsari, 2012) states that there are three steps in data analysis, namely data reduction, data display or data presentation and conclusions or verification. Then, at the end This research closes with conclusions, research limitations and suggestions for further research.

II. LITERATURE REVIEW

A. Accounting Information System

An accounting information system is a management tool used to obtain information, analyze and decide, as well as a tool to account for delegated authority (Marina et al., 2017). This form of accountability takes the form of documentation and recording of all transactions in a systematic, easy and orderly manner. From the explanation of the definition above, it can be concluded that an accounting information system is an automated tool for managing various data and reports which can later be used as a source of information for decision making for leadership and management. There are several benefits of implementing an accounting information system according to Mulyani (2016), including increasing work

efficiency in the financial department, increasing the company or organization's ability to make decisions, providing accurate and timely information and increasing knowledge sharing. The benefits of implementing an accounting information system according to Mulyani (2016) include increasing work efficiency in the finance department, increasing the company or organization's ability to make decisions, providing accurate and timely information and increasing knowledge sharing.

B. ERP (Enterprise Resource Planning)

Enterprise Resource Planning is a concept that provides an integrated and structured environment for a company's day-to-day operations (Fathurohman et al., 2023). ERP itself is a system equipped with software and hardware to coordinate and integrate data in each area of business processes (Rahmi, 2013). In this way, ERP can provide financial analysis and reports quickly and in real time, helping the process of creating sales, production reports and so on. Types of ERP include Odoo ERP, Ecount ERP, Workday, NetSuite ERP, SAP ERP and so on. There are several advantages to implementing ERP in an organization's business processes, namely ERP's ability to connect departments within an organization so that divisions can share or exchange data. Apart from that, the existence of ERP also makes it easier for companies to monitor various transactions that occur from the beginning to the end of the process, and can help management make decisions effectively and efficiently (Nisa, 2018). According to Febrianto et al. (2022) ERP systems can provide benefits from both operational and strategic sides. From the operational side, it can be seen from improving service to customers and reducing cycles, and if seen from a strategic side, ERP can support the company's business growth and can build cost leadership.

C. SAP (System Application and Product)

SAP ERP is integrated software, allowing information to be shared between functional areas (Putri et al., 2016). Another definition of SAP according to Dityawarman & Riyadi (2016) states that SAP is ERP software which consists of modules or business applications for each department and has the ability to integrate these modules to help plan and carry out company activities. There are five stages in SAP ERP implementation (Pratama et al., 2016), including

1. Project Preparation

   In this first stage, the company carries out various initial preparations such as defining the scope of the problem, objectives and collecting company data needed in the process of migrating the old system to the SAP ERP system. In this stage, the user who will carry out the task is also identified.

2. Business Blueprint

   In the next stage, the company and the implementation team carry out analysis related to the company's business processes and analysis related to SAP business processes. After that, a gap analysis will be carried out, namely an analysis to compare whether the company's system can be accommodated in the SAP ERP system. So that later, there will be proposals for company business processes that have been adapted to the system.

3. Realization

   At this realization stage, the implementing team or vendor carries out SAP configuration based on the blueprint that was formed in the previous stage. The Blueprint here contains various decisions and goals that have been agreed upon by various parties.

4. Final Preparation

   This stage is carried out to test the SAP ERP application through User Acceptance Testing, to see whether the system used meets the company's needs

5. Go Live & Support

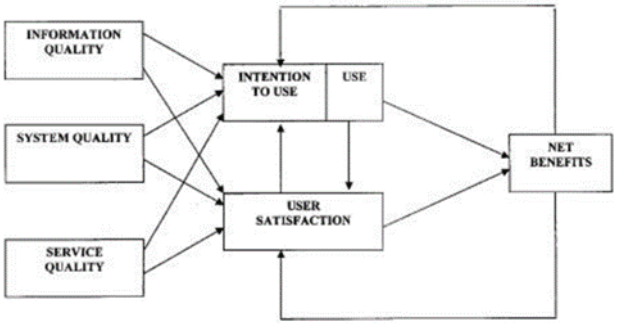
   The final stage, SAP is declared ready for use by users after testing the system.

D. Model Delone and Mclean

The Delone and McLean models are models used to measure the success of a system implemented in an organization. This model was designed simply so that it can be useful by being implemented completely and simply according to (DeLone & McLean, 1992). Hapsari (2017) states that another reason a model must be simple is so that it does not confuse or complicate the actual situation so that it does not result in a loss of value from the explanation. Widodo W et al. (2013) stated that the Delone and Mclean Model is based on processes and causal relationships from the dimensions in the model. In other words, this model consists of several variables that are interconnected with each other.

This model itself underwent changes or additional variables in 2003, this was because several studies using the Delone and McLean models questioned the use of use variables, assuming that these variables were included in the process model, not the causal model. Seddon (1997) in (Hapsari,2012) states that system use is a behavior that is more appropriate if it is included in a process model, not a causal model.

Based on several existing criticisms, in 2003 the Delone and Mclean model underwent changes or modifications to previously existing variables. These changes were made by adding service quality dimensions in addition to the previously existing dimensions, namely system quality and information system quality. The addition of the service quality dimension is because an existing information system is not only used as an information provider, but must also be able to be used as a service provider. Second, there is a combination of impacts for individuals and impacts for organizations into net benefits. This is considered so that an information system can have a wider impact, not only for internal company parties but also for external parties. The final change is to add a dimension (intention to use) or interest in using to complete the dimension of use.



Gambar 2. 1 Model Kesuksesan Delone dan Mclean Terupdate (Sumber: The DeLone and McLean Model of Information Systems Success: aTen-Year Update, 2003)

In research conducted by Falgenti & Pahlevi (2013) stated that the Delone and Mclean model has undergoing renewal has three important stages in measuring the success of a system, namely the creation stage, the usage experience stage and the impact stage of using the system. The manufacturing stage can be measured using three variables in the Delone and Mclean models, namely system quality, information system quality and service quality. Meanwhile, in the second stage, the usage experience can be measured using the dimensions of use and user satisfaction. In the final stage, the impact of using the system can be measured using the net benefit dimension. In research conducted by Falgenti & Pahlevi (2013) stated that analysis of interview data for qualitative research was carried out by giving a positive value (+) if the answer from the informant was in accordance with the indicators being assessed and perception (-) if it was not in accordance with the indicators being assessed.

III. RESEARCH METHODOLOGY

This research is a qualitative type of research that uses descriptive analysis methods. According to Krisnan (2022) states that descriptive research is research that aims to describe or explain existing phenomena, both natural phenomena and man-made phenomena which include activities, characteristics, changes and so on. This research was carried out by describing the process of implementing the SAP ERP system in companies. Then the researcher evaluated the level of success of the system using the Delone and Mclean method, namely by connecting the three stages of each dimension in the model. This research was conducted at the Jasa Tirta 1 Malang Public Company, which is one of the state-owned companies that focuses on water resource management. The object is located on Jalan Surabaya 2A, Malang. The scope of the research was carried out in the accounting and finance division, where this division is directly related to the implementation of the SAP ERP system, especially in the process of presenting financial reports. And researchers need additional information regarding the SAP implementation project in the technology and information division as another resource who still has an important role in implementing the SAP system itself.

The data analysis technique used in this research is descriptive data analysis. Descriptive data analysis means existing data is processed and analyzed to solve research problems. Sugiyono (2011:91) in (Hapsari, 2012) states that there are three steps in data analysis, namely data reduction, data display or data presentation and conclusions or verification. Data reduction is carried out by recording, summarizing, and selecting certain points from the interview results. The researcher used several notes that the researcher considered quite important so that later it would be easy to collect data. In this case, the researcher makes an interview transcript from the results of the interview and observations made in the form of conversation points between the researcher and the informant. Meanwhile, the results of interviews that are not transcribed include activities outside of research, namely light conversations with informants or conversations that have nothing to do with the research topic being conducted. Data display or presentation of data carried out in qualitative

research is narrative or through words (Ramadhanty, 2019). The aim of presenting data with narrative text is to make it easier to compile research (Hapsari, 2012). In this final stage, the researcher begins to draw conclusions based on the data findings that have been presented in a structured manner in the form of important points from interviews and observations. Falgenti & Pahlevi (2013) in (Hapsari, 2012) state that interview results are given a positive value if they match the research indicators and will be given a negative value if they do not match the indicators used in measuring the success of the SAP system with the Delone and Mclean models.

IV. RESULT AND DISCUSSION

A. Dimensions of Information Quality

The quality of information from a system can be seen from how influential the system is on user decision making. The better the quality of the information, the more it will influence the decisions taken by users according to Raminda and Ardini (2014) in (Nurhalimah & Taufik Bustami, 2023). The quality of information from a system can be considered quality if it can provide value for users of a particular system with information characteristics that suit the user's needs (Made et al., 2016). Several indicators used in measuring information quality are accuracy, timeliness, format, completeness and relevance.

Fathurohman et al, (2023) argue that with the SAP ERP system, the quality of the information provided can increase work productivity, as well as information that is accurate, precise, fast and reliable. From the results of the interview above, in terms of accuracy indicators, it shows that the SAP system can provide accurate information for users to minimize errors in recording transactions. This is because the data contained in the SAP system can be tracked easily to identify several transactions that are considered unusual so that it can be easier to make corrections. The more accurate the information produced by the system, the more beneficial it will be for all end-users, especially for decision makers. according to Zunaidi in (Leonardo, 2015). The information here is financial report information which will later be used to make decisions by external and internal parties of the company. So the financial reports produced by SAP must be of high quality.

Angelina Layongan et al. (2022) stated that the use of a computer-based and well-integrated accounting information system is a necessity for companies to produce accurate, complete and timely information in decision making. The SAP ERP system is used to integrate data in real time to make it more effective and efficient according to (Ekawati et al., 2020). From the interview above, in terms of timeliness indicators, it can be seen that with the SAP system, making company financial reports becomes faster and more efficient because users can pull report results from the system at any time and the existing data is always updated. Dwiyani Agung et al. (2017) stated that the longer it takes to submit financial reports, the information will no longer be up to date or relevant, which will reduce the added value for users of financial information.

The prepared financial reports will be useful for users if they are prepared based on a format that complies with established regulations or standards (Linyansyah & Aprini, 2023). The format in SAP has been adapted to applicable standards. Boy (2021) states that one of the advantages of the SAP system is that SAP uses international accounting standards and can be configured according to Indonesian accounting standards. Even though the data produced by SAP for making financial reports is appropriate and detailed, it is still necessary

to re-manage the data using Excel to produce more informative financial information. Boy (2021) stated that the complexity of the SAP application means that companies have to consult a lot with SAP application providers. Falgenti (2012) in his research also stated that reports from the SAP system must be reorganized first using Ms. Excel. Research conducted by (Hapsari, 2012) on format indicators also received negative perceptions from SAP users because financial reports drawn from SAP had to be processed first using Ms. Excel.

Boy (2021) states that SAP is an ERP so that the module facilities are complete and flexible in configuring journal automation, a very large number of users, and the reports produced are more complete such as production reports, distribution reports, administration reports, resource reports, warehouse reports. and financial reports can be generated automatically. The completeness of the SAP system can help to complete user work and has been adjusted to suit needs. From the interview results regarding the completeness indicator, it can be seen that the SAP system has complete features and over time can be easily learned by users. Apart from that, the features in SAP can also be added or updated if there are changes to business processes within the company. Research conducted by Ilmawawn & Pujani (2020) also states that the quality of SAP ERP according to employees has provided complete and easy to understand information and will lead to higher levels of use and satisfaction.

In the accounting information system, the data produced is data that is necessary and relevant for each employee and can be used to support decision making according to (Suardhika et al., 2012). The information produced by the SAP system itself can be used to make good decisions for the long term. long or short for users in particular. From the interview results, it can be seen that the SAP system can help users make several decisions such as tracking transactions, making corrections and consolidating processes with subsidiaries. The results of this research are in line with research by Falgenti (2012) which states that the information obtained from the SAP system is relevant to their tasks, according to logistics staff that the SAP system has provided information that is relevant to the production activities they carry out. Wibisono (2013) states that information can be said to be relevant if it is able to influence users' economic decisions by evaluating past, present or future events, confirming or correcting the results of their past evaluations.

B. Dimensions of System Quality

Good system quality can be felt if information system users feel that using the system is easy and does not require much effort to use it according to (Made et al., 2016). In this case, users can make more efficient use of their time to complete other work. Several indicators used in measuring system quality are ease of use and ease of learning.

According to Davis and Hartono (2007) in Luh et al. (2015) stated that ease of use is a state when someone believes that using AIS is easy and will be free from user effort. Achieving the effectiveness of an information system will depend on how the information system is operated and the ease of the system for its users according to Luh et al. (2015). The SAP system is an accounting information system designed to facilitate existing business processes, which is usually equipped with modules at the start of system implementation.

In the interview results for ease of use indicators, key users, especially those in the accounting and finance division, have transferred knowledge well to end users in the SAP implementation process. This can make it easier for end users to implement SAP in stages. Bakhri (2019) states that a successful knowledge transfer process will provide support that is

faster and easier to improve or repair if there are still system bugs, therefore knowledge transfer affects implementation performance.

(Rasyid (2019) believes that system quality is one of the factors that influence the implementation of SAP ERP, where the more complete the database content or the new features in the ERP system, the easier it will be to learn the ERP system and the more accustomed users will be to using the system so that it will increase user productivity in finish the job. The ease of the system learning process is also inseparable from the role of the consultant who has been selected as the SAP implementer team at Perum Jasa Tirta 1. From the results of the interview on the ease of learning indicators, the role of the consultant here is very important as the management operations team, which means the team tasked with managing the company's SAP operations. if you experience problems during the implementation process. Falgenti & Mai (2014) also stated that the consultant team's contribution was dominant in improving business processes and replacing existing conventional practices with best practices provided in SAP.

C. Dimensions of Service Quality

Service quality is a form of support received by system users from a company or organization. This is in line with the opinion of Falgenti & Mai (2014) which states that companies with a high level of service quality will develop two information systems for service capabilities, namely an information system for management needs and employee motivation and an information system that is considered valuable for customers. Several indicators used in measuring service quality are understanding, training, speed of response, assurance, reliability and empathy.

Lovita & Susanty (2021) state that understanding accounting information systems can help someone in carrying out business processes, such as in making financial reports which are certainly faster and more accurate as a basis for decision making. From the results of the understanding indicator interviews, it can be seen that the majority of employees understand SAP well, because the SAP system itself has been running for quite a long time in the company. Even though at the beginning of implementation, there were difficulties due to the SAP system being rigid and unable to change. This is because the company has to readjust the old system to the system currently used, namely SAP. One of the challenges faced when implementing ERP at PT Pindad was facing the complexity of integration between the old system and the new ERP (Alwan & Ainul Fahmi, 2023).

Training is an activity carried out to support users' abilities regarding a system that has just been implemented in an organization. (Pawirosumarto, 2017) states that with training, users' abilities can be increased as capital for them to use the ERP system after implementation. A similar thing was also explained by (Dewi & Asriani, 2019) who stated that HR competencies which include education and training need to be considered in the successful use of the ERP system. From the results of training indicator interviews, the company has provided support through training policies by the top management team as well as support from vendors during the SAP implementation process. Agustiawan (2011) believes that through providing training carried out with good communication it will foster a sense of participation which in turn can foster a sense of ownership of the new system.

(Tamami, 2020) believes that one of the factors that influences the success of SAP implementation is the network infrastructure that allows successful sending of messages between application modules. (Hapsari, 2012) states that sometimes at certain times the SAP

system experiences long loading due to the withdrawal of quite a lot of data. The results of the response speed indicator interview stated that the SAP system itself had problems in its implementation, especially in terms of networking. When users use SAP together, it is possible that the system will experience quite a long loading time when accessing data. In research conducted by Christine et al. 2019) at PT Telkom at the start of system implementation, server errors often occurred which caused delays in uploading data to the parent company's server.

During the implementation process the company provides facilities through vendors to ensure the success of SAP implementation. During the SAP implementation process, vendors have a large role in helping users adapt to the SAP system. (Fitrah, 2010) states that one of the determining factors for the success of ERP implementation is the greater the support provided by the vendor, the greater the success in SAP implementation. From the results of the interview above, vendors play a very important role in the knowledge transfer process to ensure users understand the system well. The assistance provided by the vendor will certainly influence the success of the SAP implementation process.

Consistent assistance from vendors is important during the SAP implementation process. According to Ananda et al. (2017), vendors must be involved in the ERP implementation project by ensuring that the entire project is on time according to the analysis at the start of the project. From the results of the reliability indicator interviews, it can be seen that the vendor has full responsibility for the success of SAP implementation. The vendor has full responsibility if there is a failure during the SAP implementation process.

Rafika et al. (2015) argue that the biggest difficulty in implementing ERP is "people". No matter how sophisticated the design in the system is, it will be useless if there is no support from employees. From the results of the interview, the initial implementation of the SAP system experienced pros and cons. However, as time goes by, the SAP system can be accepted by most employees, because it has helped make the organization's work more effective, especially in preparing financial reports.

D. Dimensions Of Usage

Dharmawan and Ardianto (2017) in Putri & Irman (2022) stated that the application of information technology in companies is closely related to the use of computers to support various jobs in companies. One of the information technologies that is currently widely used is ERP. ERP is integrated application software that is widely used by organizations to support automation across business and industrial processes and also significantly influences managerial operations (Capri & Rahayu, 2022). From the interview results on user satisfaction indicators, it can be seen that the use of the SAP system is very important in the process of completing work. Users feel that they are very dependent on the system. Users also feel that the current SAP system is certainly better than the system used by the previous company.

E. Dimensions Of User Satisfaction

(Alvianto et al. (2022) state that user satisfaction is an assessment of the performance of an information system as relatively good or bad and whether the accounting information presented is appropriate or not in accordance with the user's objectives. Satia et al. (2022) assess that SAP has data transparency so that all data can be accessed by all parts of the company and the data is real time updated. From the results of the interview, the data in SAP will always be updated from the various existing divisions because they are integrated with each other so as to minimize errors in data input. Fathurohman et al. (2023) also stated that

system users were satisfied because the ERP system did not have many errors and was easy to use. Users can also more easily search for data documents needed by KAP via the document number listed. Without having to search for quite a large number of existing documents one by one, of course.

F. Dimensions Of Net Benefit

The net benefit dimension is a dimension used to measure how much benefit or impact is produced by an information system for both individual users and organizations (Maranaisya & Novita, 2019). These dimensions provide an overview of how an information system has an impact on users and companies. Torkzadeh and Doll (1999) in Basyir & Safitri (2022) divide four categories of benefits from using information systems, including productivity, innovation, management control and customer satisfaction. In this research, customer satisfaction indicators were not used, because the company's SAP system is only used by internal company parties.

Productivity is a comparison between the results achieved and the overall resources used according to (Sitohang & Nuryanto, 2016). Implementing the SAP system is considered capable of increasing company productivity. From the results of the productivity indicator interview, it can be seen that with the SAP system, the company is able to present financial reports more quickly compared to the system used previously and can produce quality financial reports. According to Bakhri (2019) also stated that the impact of implementing SAP in the company was that the process of closing the books by the accounting and finance division at the end of the month became more well organized and timely and the reports issued by SAP met user needs.

Innovation is the introduction of something new into a system (Sari, 2019). Innovation in the SAP system occurs when the features in it are updated. From the results of innovation indicator interviews, the SAP system has experienced feature updates from the beginning of implementation to the present. So that currently users feel that the SAP system is complete and meets the needs of users, especially employees in the accounting and finance division.

Menurut According to Setyodewi et al. (2023) state that good performance management can help a company manage all its activities to achieve predetermined goals. From the results of the interview above, it can be seen that management can assess employee performance based on the timeliness of the company's financial reporting. The faster a company can present financial reports, the better its performance Employees will be assessed as getting better because it makes it easier for management to make decisions quickly and accurately. Leonardo (2015) believes that timeliness in presenting financial reports will also help management in making appropriate and targeted decisions.

V. CONCLUSION

From the researcher's explanation in the previous chapter, measuring the success of the SAP system with the S4/HANA version at Perum Jasa Tirta 1 Malang with the Delone and Mclean models was declared successful. Most of the indicators in the six dimensions of the Delone and Mclean models received positive perceptions from users which later became a success factor for the SAP S4/HANA information system at Perum Jasa Tirta 1 Malang. However, there are several indicators that have negative views from users. Among them are format and speed of response. In terms of user format, they still have to first process the financial reports produced by the SAP system. This is because the company must first

consolidate with its subsidiaries. So it is necessary to create an internal elimination journal outside SAP. Apart from that, the system's response speed sometimes still takes a long time to load at certain times. Such as when closing every month or at the end of the year. However, in everyday life, the SAP system rarely experiences network problems.

Even though there are still indicators that receive negative opinions from users, overall the SAP system has helped the company's business processes run and provided quite significant impacts or benefits for individuals and companies. One of them is that users, especially employees in the accounting and finance division, find it very helpful in compiling financial reports, helping in tracing transactions that are considered unusual so that they can minimize errors, can help in the aging process to find out the age of transactions if there are transactions that are outstanding for a long time to be able to act on them. move on. So that the company's financial reports can be presented more quickly and accurately with the SAP system.

Companies are advised to improve more advanced network control so that at certain times, such as closing time, they do not experience long loading times due to the large number of SAP users at that time. Apart from that, users also withdraw quite a lot of data at the time of closing, causing the system to become slow. In this case, the IT team at the company is expected to be able to provide appropriate repair solutions related to network problems at certain times, especially at the closing time of each month and at the end of the period. In terms of SAP system format, companies need to carry out regular consultations with vendors regarding better feature updates in the future. Both the vendor team and the IT team at the company may be able to carry out consultations regarding this matter to add new features or find other solutions to make them more effective and efficient. So that in the future the financial reports resulting from the SAP system can be used directly without the need for new journals outside SAP. And future researchers are expected to be able to use different objects to produce more recent discoveries. Different objects also make it possible to have different perceptions or views from the users of the SAP system themselves.

ACKNOWLEDGMENT

The author would like to express gratitude to all the people who have helped in the completion of this study.

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