THE EFFECT OF SYSTEM ANALYSIS AND PRODUCT IN DATA PROCESSING ON INFORMATION QUALITY OF FINANCIAL STATEMENTS

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ABSTRACT

Quality accounting information is needed in a company. By producing accounting information that is accountable or open in company information, especially in its financial information to external parties and internal parties. This openness will attract stakeholders' trust in the company. The company's management needs information that can support them in decision making. One of the decisions regarding accounting information. Accounting information systems play a very important role in controlling and securing company assets. This study aims to find out the effect of system analysis and product in data processing (SAP) on quality information of financial statement. The variables tested were system analysis and product in data processing (SAP) on quality information of financial statements. The method used in this research is descriptive method. The results in this study system analysis and product in data processing (SAP) affect the relevance of accounting information. The benefits of integrating SAP system modules can save time in every cross-functional business process. This time saving can make companies report their financial statements in a timely manner.

Keywords: System, Data Processing, Information Quality, Financial Quality, Financial Statements

1. INTRODUCTION

The development of information system technology will continue to grow over time. As the changing of times are very fast, making the development of information system technology predicted to continue to occur and impact changes in all aspects of life [1, 10]. One of the impacts of this development can be felt by various companies that use information system technology to facilitate their economic and operational activities [2, 11]. Developments are also occurring in the increasingly competitive business world, requiring every company to make efforts to improve quality and create excellence by utilizing the use of information system technology or digital transformation in order to produce quality information that is relevant, accurate and in a short time so that decisions can be made. quickly and precisely.

The problem of the quality of information output so far has not satisfied the users caused by several factors, namely like so much existing data on the company so it takes a long time to organize it, the application of information technology that have not been met and the ability to run the new technology is lacking. This matter resulting in the running of the system being disrupted and less than optimal resulting in frequent crashes the occurrence of delays in the presentation of financial statements. Companies really need systems information that is well integrated so that the data presented is real time data. Besides displays real time data, another requirement of the information system needed at
Information quality is the output quality in the form of information generated by the information system used [4]. A quality accounting information has four dimensions namely the accuracy of the data means that the accounting information truly reflects the existing situation and conditions. Relevant, can be interpreted that the resulting accounting information really fit the need. Timely, means that accounting information is available when the information is needed. Complete, can be interpreted that accounting information produced is as complete as desired and needed. According to Susanto (2017: 10) the better the quality of information owned by a company, the better the communication that occurs within the organization. With the increasing quality of communication within a company, the better the integrity of the organization. Thus it can be concluded that the quality information very influential on the course of company activities to achieve company goals.

The use of technology in companies aims to be able to accommodate all transactions that occur in the company's business processes such as sales processes, purchasing processes, production processes, inventory management, accounting recording processes and others. Application of enterprise resource planning (ERP) is one of the uses of information technology systems that can manage company resources and carry out overall business processes [9,18] ERP information system implementation is one of the efforts in digital information. Enterprise Resource Planning (ERP) is an information system that integrates several interrelated parts in a company (Wahyuddin & Afriani, 2018). ERP has the ability to integrate all existing processes within the company's functional areas (Dewi & Asriani, 2019). Thus one of the advantages of an ERP system is that it can integrate existing business processes in the company, so that data changes that occur in a business process can affect data in other business processes because of integration [12].

The use of an integrated ERP system where all business process data is inputted into the system and produces output in the form of reports from each part of the company will produce fast and relevant information that can assist in decision making. According to Akbar and Harahap, information quality is output quality in the form of accurate, relevant, complete and timely information generated by the information system used, from the research results it can be proven that the ERP system has an effect on the relevance of accounting information [5]. This shows that using the ERP system has an impact a significant impact on accounting information generated by increasing the relevance of the company's accounting information (Akbar & Harahap, 2021). Therefore, digital transformation by utilizing ERP information systems in managing company processes is expected to simplify processes, increase productivity, make effective and efficient decisions, real-time information, and data that is accurate and easy to access. Facts in the field show that the average failure rate for ERP (SAP) software implementation in the world, based on survey results, is 50 percent to 70 percent [3, 15].

Satisfaction with use is an assessment that concerns whether the performance of an information system is relatively good or bad and also whether the information system presented is suitable or not suitable for the user's goals (Wahyuddin & Afriani, 2018). Digital transformation will demand changes in user habits from the old system to the new system. User satisfaction with the acceptance of the new system by system users is an important factor in supporting the success of digital transformation [1].

Wahyuddin and Afriani (2018) in their research regarding the effect of using system application and product (SAP) accounting software and the quality of the value of financial reporting information on user satisfaction of accounting software in one of the BUMNs in Indonesia in the Aceh regional office [100. The results showed that the use of SAP accounting software can affect system user satisfaction and the quality of the value of financial reporting information can affect system user satisfaction [11].

Delays in the presentation of financial statements in Indonesia are still common. This matter evidenced by the announcement letter issued by the Indonesia Stock Exchange in 2019, that there are 10 companies that have not presented financial statements as of December 31 2018. Of course this resulted in the company being fined and its financial statements experienced a decrease in quality which had an impact on the investment policy of investors [13].

However, the decision to implement an SAP system is not easy due to several factors such as expensive system implementation and changing habits of users from the old system with the new
system and ERP system implementation also requires quite a long time [15]. The use of the ERP system is expected to provide accurate and fast information so as to achieve timely presentation of financial reports. In practice, if a company does not use a digital-based system in preparing financial reports, it will wait for data results from each section and consolidate data manually and this will result in the length of time needed to produce. According to (Wibisono, 2013) the implementation of the ERP system, it is able to increase the timeliness in publishing financial reports [16].

This research is expected to (1) provide input as input regarding the benefits of implementing system analysis and product in data processing (SAP) so as to improve the quality of corporate information; (2) this research is expected to be used as material for consideration that is useful for making investment decisions, especially in assessing the quality of information about a company. For academics, this research is expected to add insight and knowledge regarding the effect of system analysis and product in data processing (SAP) on the quality of information and the timeliness of information in financial reports [18].

From the introduction that has been stated, the author wants to conduct research with the research title "The Impact of system analysis and product in data processing (SAP) on Information Quality of Financial statements".

2. LITERATURE REVIEW

2.1 Agency Theory

Agency theory explains the relationship that occurs between agents/managers and shareholders. This theory shows that there is delegation from principals (shareholders) to company managers to run a company (Wardoyo, Kurniadi, 2022).

According to (Jensen & Meckling, 1976) explains the agency theory regarding contractual agreements between shareholders who use the services of managers to perform services in the interests of shareholders in exercising some authority to make decisions.

Agency theory has a relationship between ERP system users who will produce reports from company operational data that will be used by stakeholders in decision making. Agency theory has a relationship with the quality of financial reporting caused by the party who is given the right to manage (the agent) who is obliged to provide all the information needed by the principal (Dewayanto, Aryonanto 2022. The problem that can occur between the agent and the principal is if the agent provides asymmetry information that will reduce stakeholder confidence [14].

2.1 Enterprise Resource Planning

Attayah and Sweiti (2014), defining an Enterprise Resource Planning system is not an easy job. Many researchers describe it based on their respective understandings. The basic definition of ERP is a broad enterprise information system, which integrates and controls business processes within the company as a whole (Al-Fawaz et al., 2006). Based on the opinion of Nah and Lau (2001), in Atayyah and Sweiti (2014), ERP is a package of business software systems that allows companies to manage the efficiency and effectiveness of the use of resources (raw materials, human resources, finance, etc.) through total provision, and is an integrated solution for the company's information availability process. Fui-Hoon Nan and Delgado (2006), state that the success factors for implementing Enterprise Resource Planning are: 1. Business plan and vision 2. Change management 3. Communication 4. Team composition ERP, capability and compensation (ERP team composition, skills and compensation) 5. Management support and competition (management support and championship) 6. Project management 7. System analysis, selection and technical implementation (system analysis, selection and technical implementation).

The Enterprise Resource Planning (ERP) system is a solution for companies to manage business processes to be effective and efficient. According to Wijaya and Darudiato (2009:27) ERP system is an integrated application program that can be adapted to the company's business process design to link all information in functional areas within an organization. Meanwhile, according to (Nawawi, 2022) ERP is a system that integrates core organizational activities such as manufacturing and logistics, finance and accounting, sales and marketing, and human resources and improves business process management. We can conclude that ERP is an information system designed according to the company's business processes to carry out company resource planning by integrating all departments within the organization [19].

Susanto (2014:20), explains “Enterprise Resource Planning (ERP) is specially designed
integrated software package to provide comprehensive integration related with company information systems.” ERP Software as a system that uses it through the media electronics both computers, gadgets and so on can be connected with an internet connection. Scope information systems can facilitate the management of company to obtain that information required by the company to ensure continuity of company operations. ERP system has a fatal function for the company because ERP system can ensure a goal internal control is running as expected. Namely controls on accounting to ensure the resulting financial reporting is reliable. Basically by standard, ERP software in general divided into main standards, namely Operations and standards assistants namely Finance and Accounting as well as Resources Human Power.

ERP systems are now starting to develop and many kinds of software have been developed. In this study the ERP system will focus on System Application and Product (SAP) software. According to Wahyuni, Afriani, Mira (2018) in Indonesia there are hundreds of companies that have implemented the SAP system and the first company to use SAP was PT Krakatau Steel. The SAP system is built by adjusting existing business processes in an organization so that it can be used by various industries such as manufacturing, mining, services and others.

2.2 Timeliness of Submission of Financial Reports

According to PSAK No. 1, financial statements are a structured presentation of the financial position and financial performance of an entity. The financial statements contain information related to the company's financial performance that is useful for the company's internal and external companies/third parties as a basis for decision making. Therefore, the timeliness in presenting financial statements is something that needs attention, the faster the presentation of financial statements, the more relevant information is used as a basis for decision making.

2.3 Information Quality

The quality of the information produced by the ERP system is a factor in timeliness in submitting financial reports and also one of the factors in the successful use of the ERP system. Good quality information will result in good decisions in decision making. This is in accordance with the research conducted by Indrayani and Maulidahniiar, 2017 that the implementation of the ERP system has a positive and significant effect on the output quality of BUMN companies in Lhokseumawe City. And according to Nawawi and Fajr (2021) the use of an ERP system can directly affect the quality of information perceived by users. Meanwhile, according to research (Dessyana & Yolanda, 2022) that the quality of information has no effect on ERP-SAP user satisfaction at PT Inalum (Persero) North Sumatra.

Information quality is output quality in the form of information generated by the information system used, the better the quality of the information system, the better the quality of the information produced by Wahyudin, Mira, Afriani (2018). Information quality shows the quality of products produced by information system applications where the information generated will affect its users (Akram, Arimah, & Basuki, 2017). The quality of information comes from all transactions or data that has been input by the user every day for the company's operational activities and from this data that has been input into the system, it will be able to produce information that is expected to be useful in decision making.

According to McGill et al, 2003 in Wahyudin (2016) indicators for measuring the variable quality of accounting information are measured into 5 dimensions, including: (a) accuracy, information that has no errors and is not misleading (b) timelines, information obtained on time (c) relevance, useful information for users (d) informativeness, clear informative information (e) completeness, complete information

2.4 ERP System Use

The characteristics and benefits of the ERP system have resulted in the high use of ERP systems in Indonesia and is likely to continue to grow. Success in implementing ERP systems can be seen from the satisfaction of system users. According to (Akram, Arimah, & Basuki, 2017) user satisfaction influences the use of the ERP system, it can be said that the implementation of the ERP system has a positive impact on users. And according to Wahyudin (2018) who examined the satisfaction of using the ERP system in a case study at PT PLN in Aceh, there was a significant influence between the use of the ERP system on user satisfaction.
With the ERP system, the company expects to accelerate the delivery of financial reports where the data in the ERP system is real-time and can be accessed at any time. Timeliness can be seen from the date of the financial statements and the period has been closed. According to Wibisono (2013) the use of an ERP system can increase the timeliness in publishing financial reports. According to (Akbar & Harahap, 2021) the use of an ERP system in companies can help make it easier to make financial reports and can shorten processing time. Therefore, many companies in Indonesia use ERP systems in order to shorten the time for presentation of financial reports so that financial reports can be presented in a timely manner. However, in practice there are still companies that are late in submitting financial reports even though they have used an ERP system.

3. RESEARCH METHODOLOGY

This research was conducted in several stages through searching journals and articles with the keywords impact of the ERP system, system analysis and product in data processing (SAP), quality of information and timeliness of submission of financial statements, and ERP system design. In this study will use qualitative research methods with descriptive methods. Qualitative methods are research procedures that produce descriptive data in the form of written or spoken words from the person or behavior being observed. The purpose of descriptive research is to describe, record and interpret the conditions that occur by gathering information about the events that occur (Mardalis, 1999). All measurements are based on subject responses to a series of items using differential semantics. Differential semantics is an attitude scale used to measure a stimulating concept on a bipolar scale with seven unitary steps from one end to the other (Margono, 2013). This scale was developed by Osgood which is used to measure attitudes, but it is not in the form of multiple choice or checklist but is arranged on a continuum line with "very negative" answers on the left and "most positive" answers on the right or vice versa (Sugiyono, 2012).

4. RESULTS AND DISCUSSION

4.1 ERP System

System analysis and product in data processing (SAP) is a system that is implemented in companies that function to help integrate all existing functions within the company. The implementation of system analysis and product in data processing (SAP) must be supported by integrated technology that can accommodate all existing business processes in the company. There is an implementation team formed by the company consisting of people who have integrity in their fields and have strong access and influence in the company, so that they can keep implementation projects running on track. In addition, the role of the user is very influential on the successful implementation of system analysis and product in data processing (SAP) in a company and they must be people who are truly experts and trained. With the role of users who are experts in their fields, it is hoped that the implementation of system analysis and product in data processing (SAP) in these companies will be able to improve the company's business processes and can also improve the quality of information, especially regarding the quality of accounting information in this case to produce company financial reports that are useful for information users both external parties and internal parties of the company. With quality accounting information, it will be useful in terms of decision-making by management (Dwinita & Sri Restu, 2009). The research results of Attayah & Sweiti (2014) show that the implementation of system analysis and product in data processing (SAP) has a positive effect on the relevance of accounting information systems, where one of the dimensions of information system success according to Delon & McLean (1992) is the quality of information.

Enterprise resource planning is a system for the process of enterprise resource planning. This ERP system can be used by companies to connect each part/function of the company's business, then company can manage its resources properly. One of the current ERP systems that is widely used by large companies in Indonesia is the System Analysis and Product in Data Processing which in this study is called SAP.

SAP was founded in 1972 by several former IBM employees who jointly built a software system that enabled companies to conduct business transactions in real time. SAP was first introduced with the SAP R/1 version, with the rapid development of the current era, SAP has carried out several developments by making improvements to the system. Version development on the SAP system includes:

- 1972: SAP R/2 – Mainframes
The ERP system SAP is now widely used by several large companies in Indonesia, based on the website pages of IT consulting service companies that provide SAP systems such as PT Soltius and PT Trimitra Sistem Solusindo, several companies that have used SAP include PT Petrosea, United Tractors, PT Tuah Turangga Agung, PT Archi Indonesia, PT Riung Mitra Lestari, PT Assa and others. Now the company has started implementing an ERP system to assist in managing the amount of data from the company's business transactions. Its making companies to get information quickly and can be used in decision making.

4.2. Modules in SAP

In the SAP system there are several modules that represent each business function. The modules in the SAP system are integrated with each other so that companies can use them to plan and manage existing resources in the company. The modules in SAP include:

1. FICO-Financial and Controlling

This FICO module can record accounting, cash management, cost control, asset management, debt and receivable management so that it can produce financial reports such as income statements, balance sheets, cash flow reports, and other reports. Business functions that can use this module include treasury, finance, accounting, asset management, and cost controllers.

2. PP-Production Planning

This PP module is used to be able to carry out the process of planning, control and production activities, especially in manufacturing companies. The business function that can use this module is the production team

3. MM-Materials Management

This MM module is used to carry out stock management in the warehouse, managing the procurement process. Business functions that can use this module include purchasing and warehouse teams

4. PM-Plant Maintenance

This PM module is used to carry out activities and control the equipment/machine maintenance process. Business functions that can use this module are the plant maintenance team

5. PS-Project System

This PS module is used to carry out activities and control existing company projects, both capex and opex projects. Using the PS module, companies can carry out cost planning, schedule planning, describe activities, monitor materials, and close the project when it is finished. Business functions that can use this module include engineering and cost controllers

6. SD-Sales Distribution

This SD module is used to carry out sales activities to customers from the contract process, making sales orders to the process of receiving payments. Business functions that can use this module include the sales and marketing team, and finance

7. HCM-Human Capital Management

This HCM module is used to process employee recruitment, time management, employee roster and travel management, to payroll. Business functions that can use this module are the human resources team
All modules in SAP are integrated with each other to form a single unit and lead to the finance and accounting team so that they can produce financial reports. In addition to financial reports, the ERP system also provides reports on each business function according to the data input into the system and can perform analysis for development purposes for each business function. The following is an example of the flow of the integration process in the SAP system:

In the picture above it is explained that each module in the SAP system is integrated with each other, the first module that can be seen is the MM (Material Management) module, this module is integrated into several modules such as PP, SD, PM, and FI. In the MM module, we can perform business functions in the form of procuring materials/parts/services and managing stock in the Warehouse. Each material/part purchased by the purchasing department can be used for the production process on the PP module or use parts for the plant and maintenance team in repairing equipment, machines or units. The production process (PP) is integrated with several modules such as CO, PS, and MM. The PP module will produce finished goods which will then be stocked in the warehouse and these finished goods can be used by the SD module in sales activities. While the integration between CO and PP will be able to calculate product costing in the SAP system. Regarding the HCM module which regulates all employee activities, there is integration into several SAP modules, including FI and PM. All HCM, CO, PP, MM, PS, and SD modules will be integrated into the FI (Finance) module, including the process of recording inventory values in real time from

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**Figure 1 : Integration Between Modules In SAP**
goods movement activities in the SD, PM, MM, and PP modules. Then the process of recording revenue from the SD module, the process of recording payroll from the HCM module, and the integration of the CO module with cost control and cost allocation. So that the results of the activities of all business functions can produce financial reports in real time and produce accurate information in decision making by stakeholders.

A. Process Closing SAP

In the business processes of all business modules/functions everything will end in the FICO module and in the final process in SAP there will be a month-end closing process to close the accounting books. The following is the flow of the closing process in the SAP module.

Figure 2: Flow Process Closing FICO SAP

The first process is to open the next period so that the logistics team can continue inventory movement activities and not hamper operational activities. Next, accounting team updates the exchange rate to carry out revaluation, bank reconciliation, carry out cost allocation and cost settlement in the cost object. The closing process is continued by ensuring that all financial transactions during that period have been inputted into the system. In the finance accounting section, it can carry out several functions to view reports on cost center variations to perform cost variance analysis on plan costs and actual costs, if the closing process is complete, finance accounting can obtain financial reports from the SAP system.

The result of this integration allows the company to get real-time and accurate data according to what is happening in each of the company's business functions. So that the process of making financial reports can be completed effectively and efficiently. Together with the data that is inputted by each business function into the SAP system, it can be organized properly so as to produce good quality information so that it can help interested parties in making decisions. The benefits of quality information and timeliness in presenting these financial reports can provide satisfaction for stakeholders because they make the decision to use the SAP system, where SAP implementation requires quite a large amount of money.

5. CONCLUSION

The conclusion of this study is that by using the SAP system, companies can record all activities that occur in each of the company's business functions and these business functions are integrated with each other so that it allows companies to obtain good quality information and can provide accurate and timely information to stakeholders. The benefits of integrating SAP system modules can save time in every cross-functional business process. This time saving can make companies report their financial statements in a timely manner. Agency theory predicts that agents (managers) are self-interested and tend to behave negatively so that their behavior will harm investors. Forms of negative behavior include not wanting to work hard, being lazy and this will delay company activities including delays in submitting financial reports. ERP system implementation is expected to produce quality and timely information so that it is useful in decision making (Sudirman, 2013). Arif (2013) after the implementation of system analysis and product in data processing (SAP) is getting lower or more precise in publishing financial reports so that the timeliness of submitting financial reports will increase. Application of system analysis and product in data processing (SAP) improves data accuracy more secure, simplify performance management, improve efficiency and effectiveness of the organization through the optimal allocation of corporate resources, as well as improving the quality of information accounting for decision making. In accordance with the opinion of Galy & Saucedo, (2014) that, system analysis and product in data processing (SAP) has one important thing in the company, namely system analysis and product in data processing (SAP)/ERP can provide accurate and real time information to the company.

This research contributes to the benefits of implementing system analysis and product in data processing (SAP) in companies in improving the quality of company information, as a useful consideration for making investment decisions, especially in assessing the quality of company financial reports. For academics, this research adds insight and knowledge related to system analysis and product in data processing (SAP) in producing quality and timely information.
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