

Benefits And Challenges Of Enterprises Resources Planning Systems

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Abstract: Enterprises Resources Planning (ERP) Systems are designed based on business processes that are considered 'best practice' - a common process that is most worthy of imitation. For example, how is the general process that actually applies to purchases (purchasing), the preparation of stock in the warehouse and so on. To get the maximum benefit from an ERP system, our industry must also follow the best practice processes that apply. The Enterprise Resource Planning (ERP) system integrates many interconnected information, especially information coming from the shop floor with accounting and financial information, so that it will provide comprehensive and integrated information that is useful for communication among people in manufacturing systems. that, as well as facilitate the management of the manufacturing industry to take action or make timely decisions in achieving company goals. Through good communication will also increase harmony between departments in manufacturing companies.

Index Terms: Enterprises Resources Planning, Systems, Benefits, Challenges

1 INTRODUCTION

Enterprise Resource Planning (ERP) systems integrate organizational departments and functions into one computer system that aims to serve all users. Through the ERP system, the city aims to automate and integrate most of its business processes and generate and access the latest information quickly. Information systems that are used to integrate business processes in manufacturing companies or services that include operational and product distribution produced The purpose of implementing ERP is to unite all existing divisions within the company into a system that can be centrally controlled. The core of Supply Chain is the flow of material, information, and money from the hands of producers to become ready-to-use products for consumers who pay attention to timeliness, cost, and production factors. According to Deloitte Consulting, an ERP system is a package of devices that allows companies to "automate and integrate the majority of business processes; enabling data sharing from each entity factory in real time. ERP is a software that integrates all departments and functions of a company into a computer system that can serve all the needs of the company, both from the sales department, HRD, production, finance, other departments. The most important requirement of the ERP example system in the company is integration. Integration is combining various needs in one software in a logical database so that it makes it easy for all departments to share information or to communicate. Existing databases can allow each department in the company to store and retrieve information in real-time. The purpose of the ERP system is to coordinate the company's business as a whole. For example: automation and integration in business processes, dividing common databases and business practices through enterprises, generating real-time information, enabling the integration of transaction processes and company activities.

The need for ERP in the company arises due to the lack of a traditional information system model that is separate, namely:

1. The amount of duplication or redundancy of data because each system is functionally different and not integrated.
2. Management and strategic difficulties in obtaining information involving data from various business functions because it requires a process to integrate existing data.
3. Separate data have a high risk of invalidity.
4. Users who have to access the system from several business functionalities are bothered by the number of accounts that need to be remembered to access each system and the user interface model which is sometimes different for each system so that it needs to be studied specifically.

Information technology audits must be carried out to maintain the security of information systems as an asset of the organization, to maintain the integrity of information stored and processed. According to ISACA, one of the objectives of the information system audit and audit control is to advance standards that apply globally to meet needs. The following is an understanding of the information system audit according to some experts as follows: Weber (2006) auditing information systems is a process of collecting and evaluating to determine whether an information system can protect assets, existing information technology has maintained data integrity so that both can be directed towards achieving business goals effectively by using resources efficiently. Gondodoyoto (2007) auditing information systems as separate audits and not part of the audit of the financial statements, it is necessary to examine the level of maturity or readiness of an organization in managing information technology (IT Governance). Gondodiyoto (2007: 474) information system audit is emphasized on several important aspects, namely the examination is carried out to assess whether the computerized system of the organization can support asset security, can support the achievement of organizational goals, have forgiven resources efficiently, and whether data consistency and accuracy is guaranteed.

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2 LITERATURE REVIEW

ERP is an information system intended for manufacturing and service companies that play a role in integrating and automating business processes related to aspects of operations, production and distribution in a company. An ERP application is a software package that can meet the needs of a company in integrating its entire activities, from the point of view of business processes within the company. The involvement of applications/software in the ERP concept is solely because these technology tools can provide added value in the form of: elimination of unnecessary processes (elimination process), simplification of complicated processes or process simplification, process statements - redundant process (integration process), and automation of manual processes (automation process). ERP increases the efficiency of a company. There are companies that are not very successful in implementing the ERP concept. One example is the case that struck Nestle in the early 2000s. ERP is an information system that aims to integrate a business process that aims to streamline operational activities and distribution of a company in order to provide more benefits to the company if implemented properly and correctly. Basically, ERP is built as a module-based system that handles various processes such as manufacturing, logistics, distribution, inventory, invoices, corporate accounting and others. From these modules, the sales, shipping, production, inventory management, quality management and human resources activities can be well controlled and information can be obtained quickly. Some factors that can be taken into consideration in implementing an ERP application, among others:

1. Features

The wrong choice based on feature factors will cause chaos and even hamper the company's operations. Whether or not the features provided can be investigated from the list of consumers who have used ERP applications.

2. Technology

To find out which technology is used is a challenge for the MIS department, EDP is a prospective user company, which is usually more updated than other departments.

3. Human Resources

How successful is the ERP application chosen from abroad, in Indonesia it is not certain to work if it is not supported by strong local support.

4. Infrastructure

Infrastructure includes a support system for implementing an ERP project. The application of ERP applications is a continuous process. Once started it is no longer possible to stop and there is no point of perfection. There is only an improvement process that will not stop.

ERP is an information system that is used to integrate business processes in manufacturing companies or services that include the operation and distribution of products produced. The purpose of implementing ERP is to unite all existing divisions within the company into a system that can be controlled centrally. In this case, the application of ERP is needed so that a company can integrate operational and distribution activities that have a positive impact on the company if implemented properly and correctly. And we also

know various software to support ERP, one of which is SAP (System Application and Product). ERP is the right solution to increase company productivity, by providing information in real-time. The main reason for the presence of the ERP concept is because in general the company wants to integrate a separate system, division, or department as a whole. ERP allows companies to combine separate data sources into one database. This can increase the ability to make reports from data sourced from various departments. To implement ERP, it needs a high enough cost so that it must actually run the process correctly. ERP requires the help of special software called SAP. SAP consists of a number of application modules that have the ability to support all transactions that need to be carried out by a company and each application works in conjunction with one another.

Benefits of ERP implementation:

- Reducing the time period and effort needed to make financial reports and reports.
- Moving from cash basis to accrual accounting methods, which will increase revenue recognition, and reduce the consultation and audit costs needed to convert cash basis to accruals.
- Integrate financial planning and modeling tools to provide direct analytical capabilities.
- Improve information for compliance and contract audits.
- Better in analyzing, managing, and tracking contracts.
- Better control of discretionary expenditures, and reduce the procurement life cycle.
- Automate data in departments to the employee level and implement electronic personnel records.

The ERP system is divided into operating modules as the main modules and financial modules and accounting and human resources as supporting modules. These modules are:

1. financial

- financial accounting is intended to provide sustainable measurement of company profits, measuring the company's financial performance.

2. operation

- sales and distribution
- general logistics
- quality management
- customer services

3. human resource

- makes it easy to carry out effective and timely management of salaries, benefits and related to company HR.

The ERP system can generate significant business benefits for the company. According to O'Brien the benefits of using ERP include:

1. quality and efficiency

ERP creates a framework to integrate and improve the company's internal business processes which results in significant improvements in quality and efficiency. ERP creates a framework to integrate and improve the company's internal business processes which results in significant improvements in quality and efficiency in customer service, production and

distribution.

2. decrease in costs

ERP is useful in significantly reducing transaction and hardware processing costs, software and IT support staff.

3. Decision Support

ERP provides information about cross-functional business performance that helps improve par ability. Manager manager takes decisions in a timely manner.

3 DISCUSSION

Advantages of using the Enterprise Resources Planning system:

- 1) Integration of financial data to integrate financial data so that top management can better see and control the company's financial performance.
- 2) Strandardization of the operating process to standardize the operating process through the implementation of best practices so that there is an increase in productivity, a decrease in inefficiency and an increase in product quality.
- 3) Standardization of data and information to standardize data and information through uniform reporting, especially for large companies which usually consist of many business units with different numbers and types of businesses.

Points that can be used as guidelines during ERP implementation are:

1. ERP is part of the company's infrastructure, and it is very important for the survival of the company to keep running and standing firm. All people and parts affected by the existence of ERP must be involved and give support.
2. ERP to support business functions and increase productivity, rather than reduce productivity. The purpose of ERP implementation is to improve the competitiveness of companies.
3. Learn the success and failure of ERP implementation, do not try to make your own ERP implementation practices, there are certain methodologies for ERP implementation that are more guaranteed to be successful.

Successful implementation must overcome key risks.

Implementing an ERP system requires capital investment, time, and other significant resources from an organization. It is estimated that half of the problems in ERP system failure are not technical, but are related to human and organizational problems. Many failures can be attributed to inadequate training and poor organizational change management. As a result, the main application risks, listed below, emphasize these factors:

- Do not understand the importance of ERP systems. Many ERP projects are unsuccessful because they are considered as IT initiatives and therefore do not have the management support needed to guarantee success. ERP systems must be viewed as business projects and have strong sponsorship and ownership from all city departments.
- Do not do the right resources for the project. Many ERP projects experience difficulties due to misallocated people from the organization. Cities must assign staff who have adequate knowledge of city operations, but must also be creative and able to challenge the status quo if needed.

- Not managing change effectively. Successful change management is one of the most important features in determining the success of an ERP project. Effective change management ensures that city employees are ready, willing and able to embrace new business processes and systems. The city must provide training to staff who explain the business objectives of ERP projects and new business processes, their new roles, and all aspects of the system.
- Not managing benefits. Most ERP projects report in great detail about the cost and time parameters of the project, but very few actively report achievement of benefits. Cities must manage ERP projects to ensure that all benefits have been delivered.
- Does not embrace integration. Many organizations reject the level of integration delivered and driven by the ERP system and try to maintain the existing organizational structure. Cities must consider significant changes to the organizational structure and role of management to extract maximum benefits from ERP systems.
- Do not plan for the end of the project. Many organizations fail to consider the long-term implications of introducing ERP systems to the end of the project, and as a result they reduce project results. Cities need to consider how the ERP system will be supported in the long run and which aspects, if any, will be outsourced.

Examples of companies that use ERP applications

1. Telkomsel

Enterprise Resource Planning (ERP) is a tool in the form of software that consists of modules which are standard functions of business processes, including production, sales, human resources, finance and others that are integrated with an information technology architecture. The application of this ERP tool is due to the demands of a company to follow international standards, the legacy information system, the role of sales, analysis of costs, and how to write best practice, best process and best functionality into a software. Selected system: Options fall on the use of SAP R/3 Enterprise.

2. PT. Semen Gresik

For the management of PT Semen Gresik, the affairs of cement are also synonymous with complex information systems and supply chains that must be integrated. In other words, the business needs to be handled with the help of adequate information technology (IT). Everything will be more simple with the implementation of an integrated and up-to-date IT system. In June 2001, ERP began to be applied to support the business processes in Semen Gresik with the first implementation in the financial sector. As time goes by, implementation is done in the sales section and then in the manufacturing section. After going through a long process - it took almost 1.5 years - Semen Gresik finally decided to use the Edwards ERP JD solution. The reason is, this solution is a Best Practice solution, and is quite flexible and easy to implement.

3. Garuda Indonesia

Garuda Indonesia operates 82 fleets to serve 33 domestic routes and 18 international routes including Asia (Regional Southeast Asia, Middle East, China, Japan and South Korea), Australia and Europe (Netherlands). In 2000 the finance

department experienced problems in exchange and accuracy of data. Because of the ease obtained through ERP, such as data efficiency, data accuracy, time efficiency, ease of monitoring ongoing transactions and making it easier for employees to work (according to figure 4.0). In addition, because business development is very rapid, PT Garuda Indonesia must optimize the performance of each division. The encouragement from competitors from PT Garuda Indonesia, namely PT Luthansa Airlines, which has successfully used SAP and proven successful also caused PT Garuda Indonesia to use SAP.

4. PT. Wismilak Inti Makmur

PT Wismilak Inti Makmur Tbk, one of the largest cigarette companies in Indonesia. The implementation of the ERP system in this company is entrusted to local SAP partners, namely Soltius who has experience in various business lines to support the implementation of the company's information system. The implementation of this ERP system is for hundreds of users in various distribution lines of PT Wismilak Inti Makmur Tbk which include modules on Finance, Controlling, Sales Distribution, Production Planning, Material Management and Project Systems. Before implementing the ERP system from SAP, the company implemented an enterprise information management system by their IT division team, but still encountered various obstacles. As he further revealed, "so far our IT division team has been able to make several programs for each business process, but we need an integrated system for better business processes. Every company line needs accurate data sources, and maintains communication channels at the same time." Wismilak decided to look for a better ERP system. "At least, there are three vendors that we think might be able to accommodate our needs. However, we chose SAP because their solution has so far proven to be the best ERP software application and can be applied to various industries. The key benefit that we expect from the implementation of the SAP ERP system in our company is the accuracy of data processing and efficiency in our business processes. With an integrated system, all business processes will produce productivity, an efficient business process that supports our company's goals to compete in the global business world. In addition, SAP has best practices for every business process.

5. PT. HM Sampoerna

HM Sampoerna is one of the largest cigarette companies in Indonesia besides Gudang Garam and Djarum. In its development, daily operations became very complicated. One of the departments that experienced it was the logistics department whose daily work brought together data on raw material inventory, raw material distribution, production data. These data are collected at the end of working hours, making it difficult. This is done manually, so you can imagine the difficulty if the data consists of thousands of data and requires a long process. This problem encourages PT. HM Sampoerna to build Information Technology, which began in 1992.

4 CONCLUSION

ERP implementation requires changes in organizational culture, especially related to how to work, for example employees are required to continuously update data because the information provided by this system must be real time. Over time, Semen Gresik was able to change the

organizational culture so that users were better prepared to operate the new system. ERP implementation at Semen Gresik can be seen that the company has managed changes fairly well, as evidenced by the following activities:

1. Manage changes that occur as a result of implementation by adopting CAP.
2. Make approaches to the department that will be implemented to get commitment. This commitment is very important to ensure that they will use and support ERP systems.

Another important factor that led to the success of ERP implementation in Semen Gresik was management commitment, where from the beginning the management had the initiative to implement this system. By implementing ERP, companies must choose between changing their business processes to adjust to the ERP system or vice versa. In order to be able to choose, the company that will implement ERP must have a business process so that it can compare with the business process of the ERP system. From these comparisons, if the business process owned by the company has matured, not many changes will be made. Semen Gresik has decided that for some business processes there are those that follow the J.D.Edwards system and some do not. From the discussion that has been done, it can be concluded that several key factors for the success of ERP implementation are: mature business processes, good change management, commitments ranging from management to user level, and changes in organizational culture.

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