

+62 878-9658-6407 (S) 087896586407 (S) https://dinastirev.org/JIMT (S) editor@dinastirev.org (G)

ADVANTAGES FOR THE IMPLEMENTATION OF ERP BASED INFORMATION SYSTEMS IN SERVICE COMPANIES

Maria Widiastuti¹⁾

¹⁾ Universitas Mercubuana Jakarta, Indonesia

ARTICLE INFORMATIONReceived : 13 Januari 2020Revised : 16 Januari 2020	Abstrak: This article is made is to explain that in general service companies operationally have a simpler business process, compared to trading or manufacturing
Issued : 19 Januari 2020	companies, still need an integrated information system. And the importance of Information Systems for the
Corresponding Author: Maria Widiastuti	running of the company, so that it can facilitate the management in making decisions related to the performance of all departments or sections in the
E-mail:	company. Integrated information systems can help the management in making company operational reporting,
	internal control processes over the running of the company's operations, and can provide information needed by management in formulating the company's business development strategy. Companies in developing information systems that can achieve these objectives can use an ERP-based information system
DOI:10.31933/JIMT	(Enterpise Resousch Planning). Kata Kunci: Implementation of ERP based information systems in Service Companies

INTRODUCTION

Software built for people and project centric businesses . Resource planning for the Services Industry comes with a several unique set of challenges- driving expansion with profitability, managing intense competition, and macro challenges specific to the people and project-centric services sector. While professional services move up the value chain, companies need to predict and than analyze requirements in the real-time. In order to achieve Cost optimization, new revenue generation, need take the next step on the path to become a real global company and still retain a local focus, your Enterprise Resource Planning software needs to be specific to the needs of the Services Industry. (*retrifed from https://www.ramco.com/erp-suite/erp-for-services-industry/2018*)

On this occasion the author tries to explain about the use of information systems in service companies. Service companies generally have a simple production process, but this is not the case with health service companies. In this type of service company has a high complexity, so that there is a business process that is quite long, from the start of the process that is starting from the list of patients until the patient goes home.

Some stages of production that must be passed also have a high complexity, where the justification of the management is quite large in this case. So it is very necessary fast and

accurate information in each section that is passed by the business process operational flow. The importance of information in each part of production makes the need for systems in this type of company becomes very important.

The information system is a component in an organization or institution that is related to the process of creating and flowing operational information. The obstacle of an information system in an institution or organization lies in the interrelationship between existing components so that it can produce a useful, accurate, reliable, detailed, fast flow of information relevant to the interests of the institution.

A system that has a high complexity can run well if all processes are supported with high technology, quality resources, and most importantly the company's commitment. In the Management Information system it is also useful to support the management operations function which aims to produce information for the company, where these activities support the company's business processes and need to be considered for the going concern or going concern of a company. For that the commitment of a company to run a Management Information System must be very high so that the processes that occur on the production floor become profitable for the company.

Corporate strategic planning is planning related to the process of setting goals, allocating resources to achieve these goals. And the policies used as guidelines for carrying out the stages of the production process or the process of implementing company work in order to achieve the goals that have been formulated by the company. In formulating the company's strategy in order to achieve the company's objectives where the company's strategy will be a guideline in the preparation of derivative strategies for the operational units. And one of the strategies in facilitating the process of company formulation is to develop a company information system that uses Information Technology this is done so that the company can excel in competing in the same business industry. The role of the Information System can function as a support in terms of operational cost efficiency, improve the accuracy and productivity of operations of various company functions. Apart from that the Information System can be enhanced as a strategic tool to improve business competitiveness, but the development of strategies for the Information System must be adjusted to the company's strategy so that the role and function of the Information System can be increased and ultimately increase the value of the company itself. System requirements that are integrated in an industrial company, which in this type of company has a high complexity in the production process, can be seen in the following picture:



Figure 1. ERP

LITERATURE REVIEW

ERP System Expectations

Previously it was known that Understanding of the system according to Hapzi Ali (2011), a collection of sub-systems or elements that work together and interact to achieve organizational goals (information / target / goal); according to Budi Sutedjo (2002) the system is a collection of elements that are interconnected with each other that form a unity in an effort to achieve goals; according to Raymond McLeond (2001), a system is a group of elements that are integrated to achieve a goal. And in theory and understanding based on management according to Hapzi (2011), is a science, process and art to achieve organizational goals together or through others with the planning process of organizing, directing and controlling.

ERP (Enterprise Resource Planning) is a system for planning and managing all resources in a company or business. As the name suggests, ERP consists of three building elements namely :

- 1. enterprise or organization,
- 2. resource or resources,
- 3. and planning.

ERP (Enterprise Resource Planning) system can support all divisions that exist in a company along with all the functions that exist in the company. In a health services company this ERP system can involve all management functions whether accounting, financial, production, sales, purchasing, production, warehouse, and human resources

According to Daniel E. O'Leary, ERP is a computer-based system designed to process various company transactions and facilitate integrated planning in real time, production, and consumer response. Meanwhile, according to O'Brien, ERP is an integrated cross-functional software that reengineers the manufacturing, distribution, financial, human resources, and other business processes of a company to improve efficiency, agility, and profitability.

The implementation of an ERP system in a healthcare company is very much needed in this operational process to anticipate difficulties in terms of carrying out workflows effectively and collaboration between departments properly. A brief description in the flow of data needs at each stage in this health service company is:

- a patient status service
- action services or patient tretment, information for disease specialization or sections,
- patient history treatment information that is often referred to as medical records,
- information about treating doctors,
- information on the drugs used,
- information on the status of patient care classes,
- information on the types of payments or financing that will be used by patients.

All data related to business operational processes are highly interrelated between parts. For this reason, in this type of business, ERP-based information systems are highly recommended by companies of this type. Other benefits that can be obtained by companies using this ERP system are that can be felt by company management in general, including:

a. Decision support

ERP systems can facilitate daily management tasks in decision making and perform management functions which include among others in the fields of planning, organizing, monitoring and controlling. ERP systems can provide information on cross-functional business performance that is very important quickly for managerial and decision-making levels so that it can significantly improve the ability to make decisions in a timely manner on a company's cross-business.

b. Company Agility

In implementing an ERP system we can eliminate cultural differences between departments, so that data can be integrated. And eliminating the departmental walls and functions of various business processes, information systems and information resources, so as to produce a more flexible organizational structure, managerial responsibilities and work roles, and therefore produce a more agile and adaptive workforce and organizational structure that can be more easily take advantage of new business opportunities.

c. Integrated system

The ERP system offers an integrated system in the company, so that the process and decision making can be done more effectively and efficiently.

d. ERP systems can facilitate the extraction of information

To produce analysis and reports supporting long-term planning that can be used as a decision-making tool as a decision support system. The ERP system generates information from relevant input data to make interdepartmental activity planning so that resources are managed and allocated efficiently and effectively for example planning for purchasing goods, planning for production and planning for cash flow, planning for sales and planning for costs.

e. The ERP system creates an organizational structure

The organizational structure is streamlined and there is an appropriate division of labor using an integrated system for all functions of the functions of sales, purchasing, production and finance so that it can eliminate duplicate jobs and use standardized data for all departments.

f. ERP system guarantees all activities

carried out in accordance with established procedures for example the purchase function must go through the calculation of planning the needs of the goods after the purchase order then receipt of the goods then the recognition of debt. Thus all activities can run efficiently and effectively. In summary, the implementation of ERP system as what has been explained above that has the advantage when compared to the previous information system, these advantages include:

ERP system advantages:

- Has good data integration and consistency
- Reducing unnecessary costs, such as reducing paper costs
- Improve work methods that are more efficient
- Reducing double work
- Improve control and improve information accurately
- Reducing work time
- Improve coordination (cross functional)
- Increase customer satisfaction
- Provides a better way of management analysis in supporting decisions
- Improve business performance
- Increase profits to the maximum for the Company

In implementing ERP, this does not mean that there are no weaknesses or limitations in implementation, these limitations include:

Limitations of ERP Systems:

• Changes occur, which will automatically lead to a resistance in running this ERP system

- Training. The training process for using a new system will be time consuming
- ERP systems are usually relatively expensive
- ERP systems are not user friendly and do not resolve problems related to human error

FINDING AND DISCUSSION

ERP Software Application in Indonesian hospitals

As mentioned earlier, implementing ERP software in Indonesia is no longer a strange thing. Already many IT companies that provide these services making it easier for companies in other fields to get the software. One company that is engaged in the health sector has also begun to implement this software into its daily operations. Yes, hospitals, especially in big cities in Indonesia such as Jakarta, are already using this ERP software in their daily lives.

In its implementation, ERP application software in Indonesia is not always done directly and thoroughly. There are various reasons and many factors that influence why this is done. Indeed, one of the first and best choices in terms of efficiency is the adoption of ERP software as a whole at the same time. This means we buy a complete package for the entire operation that can be covered by the ERP software.

Efficiently, this is the best because it saves a variety of things, such as cost, time and resources. But to be able to apply this directly and thoroughly requires substantial initial capital costs. Not all hospitals in Indonesia even in big cities have sufficient initial capital for this. So to overcome this, some of them chose to do the second option, namely the implementation of ERP software gradually.

A company in this case the hospital has the option to gradually implement ERP software. This is of course done considering the amount of initial capital needed if the application is done simultaneously. Although there are several other reasons why they chose to implement this ERP software in stages, we will discuss it later. With this gradual application, the hospital will use at least two kinds of software in its operation, ERP software and other software. Other software here is operating software that is still being used before being replaced by ERP software.

Modules commonly used

As we know that ERP software consists of various modules. These modules whose application can be divided in stages if we do not have enough capital. Of the various types of modules available, there are some modules that are quite popular, especially in its application in hospitals. Those who choose to implement ERP software in stages usually choose to prioritize these modules. So in addition to this module, they will still use their old software in their daily operations.

The most popular ERP module, especially among hospitals, is the finance module. It feels like this module is also the most popular even for companies other than hospitals. It is even predictable if this module is not only popular in Indonesia but also abroad. The reason is very simple because almost all the operations of any company must also be related to finance or finance. Starting from income, expenses, salaries, purchases, sales, etc. all parts that use money must be connected to finance and vice versa.

Another module that is no less popular than the finance module is the SCM (Supplychain management) module. The SCM module or supply-chain management as the name implies is a module that regulates the entry and exit of goods including products and inventory. Of course, a large hospital really needs an accurate arrangement of goods. This module is very helpful for checking available items such as medicines and equipment from medical to office space.

One ERP module that is also very popular, not only for hospitals but also for other fields, namely the HRD (Human Resource Development) module. It is clear that a company

must have employees, both large and small companies. The difference is only the number of existing employees, the more employees there are, the more difficult it is to monitor each individual. This is where the ERP module for HRD comes into play.

Factors affecting ERP software implementation

Many factors affect an ERP software implementation, especially in hospitals, especially in Indonesia. These factors ultimately lead to the adoption of ERP software as a whole at the same time or be shared in stages. It doesn't even rule out the possibility that a hospital has its own IT team to develop their own ERP software.

The main reason is of course the financial problem. Implementation of ERP software as a whole at the same time, of course, costs quite a lot. The cost ranges from hundreds to billions of rupiah. Although it looks expensive, but this cost is still cheaper when compared to the cost of implementing it in stages.

Gradual implementation seems cheaper but in fact more expensive because we buy modules separately instead of a package. Of course the package price will be cheaper compared to the unit price, this also usually applies to software. Besides that we also need to repeatedly contact the IT companies that become our vendors to carry out the application on a regular basis. This certainly requires additional costs and also takes longer.

Another factor that is considered is the problem of existing resources. Not everyone can easily operate a new system. Although it is certainly a team of our IT vendors who will help and also teach the system. To learn something new will definitely require sufficient time, and this is feared to disrupt overall operations. So in this case the periodic application has an advantage when compared to the overall application at the same time.

Another factor, even arguably a special factor that usually occurs in hospitals is a bureaucratic factor. In a company, decisions are generally taken from above, but it is different with hospitals. Sometimes to decide something is not enough from above but also the need for support from senior doctors and other relations.

CONCLUSION

This ERP software is indeed very useful in various fields and is not closed to just a few types of companies. Many benefits can be taken by various types of businesses, including hospitals and even those in Indonesia. In accordance with its objectives, this ERP software will be very helpful and also speed up all existing processes. Even for a hospital ERP software will also be very useful especially if implemented properly.

It is very unfortunate that there are not many hospitals in Indonesia implementing this ERP software. Many things are the reason, one of which is financial constraints. Although ERP software has been around for a long time in Indonesia, only a few hospitals in big cities have used it.

However, there are still very few hospitals in Indonesia that use ERP software is not always a bad thing. We can see the positive side, such as harmonizing the existing SOP (Standard Operating Procedure) before implementing the available modules. We can also provide early education on the introduction of ERP software and its modules to our employees before implementing. The things above will speed up and simplify the transition from old software currently used to ERP software.

In addition, over time, we can also see and choose vendors from IT companies that are qualified because they have stood the test of time. Because this ERP software is an integrated software, it will be very dangerous if something goes wrong. Vendors are also needed who can properly teach how to operate the software or modules. So that later everything can run optimally according to plan and bring a positive impact for all parties. Thus the article explains the summary of several journals on the benefits or usefulness of the implementation of ERP-based Information Systems in the company. It has become a primary need in company management, where all of the types of information systems can be integrated with each other and can be summarized into one whole information system, which is the company information system, where every information from all parts will be connected to each other, so that each Authorized users can study and view information stored in a company's database or database, and can use it for analysis of decision-making that is important to the company's needs.

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