THE EFFECT OF ENTERPRISE RESOURCE PLANNING IMPLEMENTATION ON INCREASING COMPANY PERFORMANCE

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Abstract

The development of the world as a result of current globalization has led to an increase in worldwide competitiveness among businesses. Consequently, businesses always seek performance enhancements that might drive them to the forefront of commercial rivalry. Good supply chain management is one means of enhancing this performance. Enterprise Resource Planning (ERP) is used by many companies. Enterprise Resource Planning (ERP) is a model of an information system that can assist companies in automating and integrating their fundamental business activities. This study aims to examine the impact of ERP on company performance. Using the process of literature review, data and information were acquired from several literature sources. The results reveal that ERP has an effect on a variety of company aspects, including planning, costs, forecasts, and integration. Furthermore, ERP can also influence management performance in terms of supervision, thereby enhancing the efficacy and efficiency of each business line. Additionally, ERP can increase revenue, contributing to enhanced financial performance.

Keywords: Company Performance, Supply Chain Management, ERP, Data, Information

1. INTRODUCTION

In recent years, as a result of increased globalization, competition in the economic world has become increasingly intense and without gaps, affecting both public and private firms. This is due to the fact that economic actors are unable to avoid the effects of globalization as it currently exists. Globalization is the process of distributing diverse objects and experiences to other people all over the world (Ghasemi, 2012 in (Estuningtyas, 2018). The objects and experiences encompass facets of life, politics, culture, and even economics. In addition to confronting more obstacles than their domestic and foreign counterparts, businesses around the world face a greater number of difficulties. For this reason, every company that wishes to remain competitive must be able to increase its performance and ensure that its company value is greater than that of comparable businesses (Zulianti & Aslam, 2022).

There are four management functions: planning, organizing, implementation, and supervision (Terry, 2020 in (Widiawati, 2015). Good performance management is management that is capable of doing all of the above functions. Managers can also contribute to the organization's achievement of its objectives if these responsibilities are carried out
effectively. The company's primary objective is to maximize economic profit through the most effective and efficient means possible.

The information utilized by management to decide the company's direction and strategy begins with bad or good management of a company to fulfill the goals of an organization or corporation (Prasetyo, 2022). The information is processed in this instance so that it can be used to make good decisions. Because data is a tool or approach that helps managers make decisions, the availability of information for company management is crucial.

In order to provide relevant information, the company's attempts to fulfill its objectives require harmonic cooperation and communication between management and employees. The success of management is also dependent on the source, timeliness, precision, and significance of the data held. Information plays a crucial role in this regard for management and decision-making processes. Timeliness, precision, pertinence, and brevity are characteristics of information that is significant.

Supply chain management is one of the company's management systems that must focus on performance management and continual improvement. A system that can provide a holistic supply chain performance evaluation is required for good performance management. The performance evaluation have to:

1) Carry out the control and monitoring activity
2) Communicating company goals to all functions in the supply chain
3) Find out the company's position against competitors
4) Establish improvement strategies in order to create excellence (Pujawan and Mahendrawati, 2010 in (Devi & Vanany, 2014)

The purpose of combining various information systems within a company is to boost efficiency and control. Enterprise Resource Planning (ERP) systems have been implemented by many organizations. Enterprise Resource Planning (ERP) is a model of an information system that can assist companies in automating and integrating their fundamental business activities. ERP is an information system that may integrate company functions such as the resource function, the financial function, the production function, and the marketing function, and others (Pracita et al., 2018). ERP on a company or organization is able to eliminate traditional work barriers and become a data exchange facilitator between all users.

The primary objective of adopting an ERP system is to integrate all information and operations under a single system. Geographically separated business divisions are able to share data. ERP is company-built software that automates and integrates multiple business activities. Besides, it can s hare a common database and real-time data production for enterprise-wide business activities. This allows companies to combine transaction processing with planning. In addition, it is anticipated that the implementation of ERP will lower costs through enhanced efficiency as a result of the computerization of the process, maximize decision making with accurate information, facilitate better contact with consumers and suppliers, and improve business control (Dwi et al., 2019).

Based on the foregoing description, researchers are inspired to investigate the impact of implementing a supply chain system based on Enterprise Resource Planning on the performance of a company in question.
2. LITERATURE REVIEW

2.1. Company performance

Performance is a representation of the level of success or failure of an organization's operations and primary functions in achieving its goals, objectives, vision, and mission. It is measured in terms of revenue collected and amount spent. Put simply, performance can be defined as the level of success that a company can accomplish over a specified period of time.

The performance of a company is outlined as the conditions it has produced over a given period of time based on previously agreed-upon standards (Edelia & Aslam, 2022). It is vital to explain the empirical status of companies of all sizes in order to gauge company performance. Stakeholders may decide that agreed performance is the capability, effort, and opportunity of a person, team, or organizational unit to complete duties in order to attain the stated strategic objectives.

Common performance indicators include return on assets (ROA), return on equity (ROE), and return on investment (ROI) (ROI). This company's accounting performance indicator is a ratio derived from its balance sheet and income statement (Hau Nguyen et al., 2021).

The performance of a company is extremely useful to its management because it is an assessment and evaluation of the organization's actions. This explains the company's financial status as a result of their activity. This condition indicates the performance throughout a specified time period. Several elements, including as leverage, company size, and environmental performance, have an impact on the operations of a company and must be considered by management.

A balanced approach to leverage, environmental performance, and firm size in accordance with existing legislation should also be used to support improved corporate performance. As a result of the relationship between firm size and environmental performance, three interconnected pillars must be in place to enable leverage: the government apparatus as a regulatory agency, the business world as marketers, and the general public as the final consumer of goods and services (Tri Hastuti, 2018).

2.2. Supply Chain Management

Throughout the media, the terms "supply chain" and "supply chain management" have become well-known and are frequently used interchangeably. The two concepts above, on the other hand, are frequently misunderstood, whether in management journals, bulletin boards, newspapers, books, or discussion forums. A lot of people refers to the supply chain as if it were a piece of software or an application. Some people even believe that the supply chain is only for organizations who are solely engaged in the manufacturing industry. Supply chain management is a relatively recent subject, having emerged in the early 1990s. A management consultant coined the phrase "supply chain management," which first appeared in the early 1990s and has since become widely used (Cooper, 1990 in Anwar, 2013).

The supply chain can be defined as a sequence of activities associated with the process of converting and distributing products (in the form of units/equipment) from raw natural materials into items that are ready for consumption and distributed by target consumer. Therefore, the supply chain is made up of companies that transport raw materials from nature, companies that process raw materials into semi-finished products or components,
suppliers of auxiliary materials, fabricators, distributors, and retailers who sell products to final consumers. There are various key participants in the supply chain who share common interests, including: Supplier, Producer, Distributor, Retail store and Customer.

a. 1st Chain: Supplier
   As the channel's first source of material, this is where it all begins. These main materials can be in the form of raw materials, starting materials, auxiliary materials, commodities, spare parts, and others.

b. 1-2-3 Chain: Distribution-Supplier-Producer
   Products produced by manufacturers go on sale to customers. There are many ways to ship products to customers. However, the products usually go through distributors, and this is often implemented by most supply chains.

c. 1-2-3-4 Chain: Supplier-Producer-Distributor-Retailer
   Wholesalers often have their own warehouse or can be rented from someone else. Warehouses are used to store goods before they are distributed to retailers. By developing shipping models from both production warehouses and retail stores, they will have the opportunity to realize savings in inventory and warehouse costs.

d. 1-2-3-4-5 Chain: Supplier-Producer-Distributor-Retailer-Customer
   Retailers provide goods directly to customers or customers or users. This includes retail stores such as grocery stores, supermarkets and stalls.

Furthermore, there are three types of things to deal with in the supply chain.

a. First, the flow of goods downstream from upstream, namely raw materials sent from suppliers to factories. When production is complete, it is shipped to distributors, retailers, and end users.

b. Second, the flow of funds from downstream to upstream.

c. Third, the flow of information, from upstream to downstream and vice versa.

On the other hand, supply chain management is an integrated application that provides support for management information from the perspective of providing products and services to companies. Relationship management between partners to maintain the optimal level of availability of the company's products and services. Supply chain management integrated with shipping and ordering processes, tracking information, purchasing orders for raw materials, dissemination of after-sales service cooperation plans and new product development.
Consequently, if the supply chain is a physical channel, in which case businesses are involved in sourcing raw materials, manufacturing things, and distributing to customers, supply chain management is a management method, instrument, or approach to effectively manage the network (Anwar, 2013).

The objectives of supply chain management within the company are as follows:

1. Increase customer satisfaction through timely delivery of products.
2. Reduce company costs.
3. Increase output over the entire supply chain.
4. Saving time.
5. Centralize all activities from planning to distribution.

As for the benefits of supply chain management are as follows:

1. **Customer satisfaction**
   
   The target user of the product or referred to as the consumer is the main goal of the production activities of all products produced by the company. The consumers mentioned in this context are certainly long-term loyal consumers. For consumer loyalty, consumers must be satisfied with the company's services first.

2. **Increase company revenue**
   
   Consumers and company partners are increasingly loyal, meaning, they will also increase the company's revenue. For this reason, companies must be able to ensure that the products produced by the company are not "junk" products so that consumers are interested.

3. **Cost reduction**
   
   Integrating the product flow from the company to the final consumer also means reducing distribution channel costs.

4. **Increased utilization of company assets**
   
   Company assets, especially the human factor, will be better prepared and of good quality in terms of knowledge and skills. Human workers can upgrade high-tech capabilities as needed to implement supply chain management.

5. **The company will grow**
   
   Companies with a good supply chain are able to get benefits from all sides, so the product distribution process will get bigger and grow very strongly.

### 2.3. Enterprise Resource Planning (ERP)

An ERP system is a modular software package that extends a conventional enterprise resource planning system (MRP II Manufacturing Resources Planning). The term ERP was coined by the Gatner Group, which has gained popularity in recent years. Generally, each department or function owns and controls a computer system that is optimized for the normal operations of the business. Companies typically use classic closed database architectures with separate and isolated databases, resulting in ineffective system communication.

Overall, enterprise resource planning (ERP) incorporates everything into a single, integrated system that accesses databases, enables a range of information, and promotes communication within the organization. ERP systems are responsible for ensuring a seamless and transparent flow of information throughout the organization by creating a connection between the supplier and the consumer. Application-independent databases are
used to build ERP systems. Information is communicated between users through application-based views that show information in a way that is relevant for all users (Pracita et al., 2018).

ERP is a system that requires prerequisites and tools to function. ERP system means standardized, clear and efficient business processes. Should cover production planning, purchasing, inventory management, sales, marketing, finance and HR. ERP systems integrate, combine, and synchronize data or information with all business processes. The use of hardware and software in ERP implementation is an absolute must. One of the most important elements of ERP is database integration for processing and distribution between different business units. Therefore, IT is the key to implementing ERP systems (Madanhire and Mbohwa, 2016 in Greece, 2017).

To be effective, it is important to have an implementation roadmap for ERP and supply chain management. The four steps to implementing an ERP system include (Greece, 2017):

1) The preparation phase focuses on the activities that need to be prepared to achieve the benefits and effectiveness of the MRP. Management should be able to initiate and make appropriate actions for the next steps. At this stage, we need to clarify what the user expects.

2) The realization phase focuses on the benefits of implementing ERP. This step is important for operations, organization, and management.

3) The attainment stage focuses on the overall benefits of implementation. This step is strategic and important to achieve the business vision.

4) The last stage is the audit, the audit process pays special attention to the ongoing analysis of the current and future results and benefits of ERP.

3. RESEARCH METHOD

This research is a literature study in which the authors collect information and data related to Enterprise Resource Planning (ERP) in the management of a company. The results of this review will be used to determine how ERP can affect the performance of companies that implement it. Based on Sugiyono (2012) literature study is a theoretical study using reading references, and other non-fiction literature related to culture, norms, values that grow in the social atmosphere being studied.

The type of methodology used to write this scientific treatise is a qualitative description method based on literature studies from various sources. According to Sugiyono (2017), a qualitative approach is based on a philosophical interpretation or postmodernism whose purpose is to study the state of scientific objects (Yaqin et al., nd).

4. RESULT AND DISCUSSION

Currently, ERP is utilized in nearly all industries. ERP is costly and time-consuming, but the benefits are tremendous, and the needs of the business can be simply controlled with this software. If a corporation utilizes ERP, this does not mean that it can operate without human oversight; to be competitive, a company still requires the backing of a talented leader. Good performance management is the execution of the functions of planning, organizing, implementing, and supervising. Managers can assist their organizations in achieving their objectives if these responsibilities are carried out effectively.
Management must have the sufficient resources to meet the company's objectives. Data or information is one of these concepts. An ERP system is needed in order to combine one information system with another in order to achieve better management efficiency. ERP systems are seen to have a positive impact on a company's ability to manage its resources. When a company's performance improves, it might build a new culture that will have an impact on future profits.

The implementation of supply chain management using ERP in a company can affect the company's performance because it has a significant impact on several aspects of the company including the influence in planning, costing, forecasting, and integration aspects.

The first impact relates to planning. In this instance, problem planning encompasses the formation of corporate plans and organizational management. Planning and management are more regulated as a result of the implementation of an ERP system that may supply multiple sorts of data. Each department of the organization supports the methodical, real-time, and comprehensive control and monitoring of business processes that occur within the organization. It is widely known that the information produced by each department is crucial to the future viability of the firm. The correct implementation of the ERP system will enable the organization to examine all the generated data, which will also aid in the formulation of future policies and strategies.

Not only affects planning, ERP implementation can affect the performance management of each department. That is, through ERP implementation, managers can be assisted in their duties to monitor the activities of each department. So that ERP can increase the effectiveness and efficiency of the performance of each company department.

The second impact of implementing ERP is on costs. In this case, the costs connected with data correctness can be reduced. Implementing an ERP system for costing enables businesses to make judgments and define definitions that go beyond models and approaches to product or service evaluation criteria developed based on the type/category of products and company policies. Consequently, every product transaction and related element may be examined in real time, and the adoption of ERP can effect the movement and changes in the company's financial situation, as well as the financial statements generated by the organization. Companies will be able to submit financial reports more quickly. Cost-effectively implementing ERP is a realistic choice for businesses, given that internal financial reporting is a key metric for evaluating a company's performance.

The third impact of using ERP is in terms of forecasting or prediction. In this case, prediction relates to optimization and efficiency. ERP systems help companies assess the factors that influence them. In this case, the ERP system will provide support tools to encourage appropriate and appropriate decision making for the company. ERP systems can flexibly meet future needs. By improving integration, efficiency, and data flow, companies can improve their ability to plan and control the issue that arise.

The fourth impact of ERP adoption is integration. In this case, the integration is related to the integrated enterprise ecosystem. Generally, businesses often have problems accessing information. Meanwhile, data is an important indicator for companies. Therefore, ERP applications available in the company's integrated ecosystem can help automate business operations using cloud-based ERP software. Without an ERP system, it will be difficult to manage workflow efficiently and build collaboration between departments.
As a result of the latest ERP implementation, the company's financial transparency has increased. At the same time, by using this ERP system, companies can understand the company's cash flow in real time and know the company's financial status. In addition, ERP implementation makes it easier for all stakeholders and management to see the company's financial status in detail. Management is also able to know every income and expense as well as profit and loss of every place and even every department of the company.

One company that implements ERP as its supply chain management is PT Telkom, Tbk. In fact, several studies related to the effect of ERP implementation on the performance of PT Telkom, Tbk have been carried out. One related research is research conducted by Rahmani (2018) which found that the financial performance of PT Telkom, Tbk is also influenced by the implementation of ERP, where 92.4% of research respondents agree that ERP has an effect on the graph of financial ratio analysis which is increasing in three years. Meanwhile, from a non-financial perspective, ERP also has a significant impact on company performance (Rahmani, 2018).

5. CONCLUSION

5.1. Conclusion

Rapid globalization has an impact on the world's increasingly competitive businesses. These businesses require a significant management system to boost performance and remain competitive in this increasingly advanced environment. Supply chain management is an integrated information system for all functions of a company or organization. Enterprise resource planning (ERP) is one type of supply chain management. A modular software package that is an expansion of the standard enterprise resource planning system is known as an ERP system. ERP integrates everything into a single system that accesses databases, facilitates a variety of information, and promotes internal communication. Companies can improve their performance in terms of finance and management by implementing ERP. ERP has an impact on many parts of the company, including planning, costing, forecasting, integration, and integration. Management is supported in monitoring by the adoption of ERP, allowing each unit to function more effectively and efficiently. ERP can also reduce the time it takes from production to distribution to consumers, enhancing customer satisfaction and ultimately increasing company revenues.

5.2. Suggestion

Although ERP has a significant impact on company performance due to its positive impact, not all companies are ideal for ERP implementation. When selecting a type of supply chain management, companies must continue to take into account the circumstances, conditions, and needs. Due to this reason, the costs incurred will not be in vain and will positively impact the company's future success.
REFERENCES


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