

**FEASIBILITY STUDY OF ENTERPRISE RESOURCE PLANNING (ERP)  
INFORMATION SYSTEMS BUSINESS DEVELOPMENT SBU (BUSINESS  
STRATEGY) XYZ DEVELOPMENT**

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**Abstract**

The development of information systems in the industrial era 4.0 is currently very fast, so a company must be able to compete and follow the developments of the current digitalization era. The era of the industrial revolution 4.0 changed the concept of work, the structure of work, and the competencies needed by the world of work. To keep up with the development of the industrial era 4.0, a company needs an interactive, dynamic, and integrated information system. This study aims to analyze the feasibility study of the Enterprise Resource Planning (ERP) information system for the business development of the SBU (Business Unit Strategy) XYZ Shipyard. The feasibility study of the information system was analyzed using Strengths, Weakness, Opportunities, Threats (SWOT) analysis and analysis based on aspects of human resource management, Marketing management, engineering and technology management, and industrial environmental management. This research uses descriptive qualitative method. For data collection using observation techniques and interviews with several informants. In addition, the methods of extension of participation, triangulation of data sources, discussion and theoretical adequacy were used to maintain the validity of the data. Meanwhile, the data analysis in the field uses the Miles and Huberman model. The results of this study found that internal factors and external factors of the company which resulted in superior internal factors, namely: information technology systems that can minimize costs, information technology systems that facilitate the administration of ship customers, making advertising space for marketing promotion media, network system management integrated computer, so this research deserves to be implemented further. However, if viewed from the analysis of aspects of human resource management, marketing management, technical and technology management, and industrial environmental management, it is feasible to be implemented further. This is evidenced by the information systems or devices that already exist in the XYZ Shipyard technically support, experienced human resources in the field of information technology, the average number of ship customers per year is 24 vessels. Implementing an Enterprise Resource Planning (ERP) information system at the XYZ Shipyard requires support from top management in terms of budgets, policies and making SK for the Enterprise Resource Planning (ERP) team.

**Keywords:** Information systems, Enterprise Resource Planning (ERP), SWOT, shipbuilding, aspects of feasibility studies

**INTRODUCTION**

International Data Corporation estimates that the use of cloud-based Enterprise Resource Planning (ERP) Information systems will more than double from 2019 to 2024. This is illustrated

in Figure 1.1 where there are 2 comparisons of ERP information systems, including ERP information systems. cloud-based and local server ERP information system.

According to Manggala (2020) ERP or Enterprise Resource Planning is a modular software system designed to integrate the main functional areas of the company's business processes into one integrated system. Enterprise Resource Planning (ERP) standardizes, simplifies, and integrates business processes such as finance, human resources, procurement, distribution and other departments. Enterprise Resource Planning (ERP) information systems have the benefit of facilitating the overall business coordination process within a company. In addition, Enterprise Resource Planning (ERP) can be used to integrate business processes and generate real-time information. The Enterprise Resource Planning (ERP) system will facilitate the process of controlling and monitoring business processes where the Enterprise Resource Planning (ERP) system can make decisions and make better predictions for the company. Enterprise Resource Planning (ERP) systems can also unite many units within the company's ecosystem where the company's ecosystem can be well integrated. With the implementation of the Enterprise Resource Planning (ERP) implementation, developing companies can adapt more flexibly to all future needs.

The object of this research is the XYZ Shipyard which is a shipyard located in the Tanjung Perak area, precisely on Jl. West Nilam number 39, North Perak, Surabaya. As a legal entity, XYZ Surabaya Shipyard is one (Strategic Business Unit/SBU). The condition of XYZ Shipyard SBU currently does not have an information system that can integrate business processes between departments. Business processes that have not been integrated are business processes for production, procurement and warehouse, marketing, Running Repair (RR), Floating Repair Dock (FRD) and finance. Currently, the employees of SBU Shipyard XYZ carry out business processes manually, using Microsoft Word and Microsoft Excel, not systematically. Employees in production, procurement and warehouse, marketing, Running Repair (RR), Floating Repair Dock (FRD) and finance divisions find it difficult to access real-time, updated and online data information. One example is when the warehouse manager wants to know reports of goods in and out of the warehouse in real time, update and online. However, this cannot be done systematically. For the finance department, there is an information system using the GL Oracle application which is used to process AP (account payable), AR (Account Receive), Cash Flow (in/out), and General Journal. The GL Oracle application is connected to the database at the Jakarta head office using a Virtual Private Network (VPN). As for the production, procurement and warehouse, marketing, Running Repair (RR), Floating Repair Dock (FRD) departments, there is still no information system or application that is used to simplify work, update information in real time, speed up decision making, can control and monitor the process. XYZ Shipyard SBU company business.

To facilitate growth and competition in the shipbuilding business in Indonesia, it is necessary to invest in a management information system that can help XYZ Shipyard management increases productivity and quality of production. The system is expected to improve performance, improve the monitoring system, accelerate data availability and can help speed up the right decision making. As the ultimate goal, it can help realize 'Sustainable Growth. To examine research on

the feasibility study of the Enterprise Resource Planning information system for XYZ Shipyard Business Development into an information system that is easily accessible online via the internet, a business feasibility analysis is carried out which consists of aspects of Human Resources management, marketing aspects, technical and technological aspects, and aspects of human resources management. industrial environment. In addition, researchers also conducted a SWOT analysis to find out important aspects of the strengths, weaknesses, opportunities, and threats in the feasibility of the Enterprise Resource Planning (ERP) information system.

### **FORMULATION OF THE PROBLEM**

How is the SWOT analysis of the Enterprise Resource Planning (ERP) Information System for business development at the XYZ Shipyard. How is the investment feasibility of the Enterprise Resource Planning (ERP) Information System in XYZ Shipyard business development based on aspects of Human Resources management, marketing aspects, technical and technological aspects, and industrial environmental aspects.

#### Research purposes

Based on the background described above, this research is focused on the following: How is the SWOT analysis of the Enterprise Resource Planning (ERP) Information System for business development at the XYZ Shipyard?

How is the investment feasibility of an Enterprise Resource Planning (ERP) Information System in XYZ Shipyard's business development based on aspects of Human Resources management, marketing aspects, technical and technological aspects, and industrial environmental aspects?

### **THEORETICAL STUDY**

#### **Business Feasibility Study**

A feasibility study or also known as a feasibility study is a research on whether or not a project or business plan is appropriate to run by considering the risks that may be incurred and the benefits that will be obtained. According to Kasmir and Jakfar (2012: 6), a feasibility study or business is an activity that studies in depth or the business to be run, in order to determine whether or not the business is feasible to run. Umar, in Nazhara (2016), defines a business or business feasibility study as an activity that studies in depth about a business or business that will be run, in order to determine whether or not a business or business is feasible to run, then according to Nitisetmito and Burhan (1995). ), a business feasibility study is a method of exploring a business idea about whether or not the business idea is feasible or not.

#### **Information Systems**

The information system is a regulated way to collect, enter and process and store data, and a regulated way to report, control, manage and even store information so that the organization can achieve its goals (Putri & Siptiana: 2019). According to Moekijat Prasojo (2011: 152), "The system is every thing consisting of objects, or elements, or components that are interrelated and structured.

relationship to each other, in such a way that these elements constitute a particular processing unit or processing. So, the system is a collection of interrelated elements and interact to achieve a certain goal. Information is data that is processed/interpreted to make a decision (Sutabri, 2012). Information is the result of processing data through a set of processes and processed in such a way that it is useful for knowledge and decision making. According to O'brian in Yakub (2012:16), "An information system is an organized combination of people, hardware (hardware), software (software), communication networks, and data resources that collect, transform, and disseminate information within an organization". Based on the opinions expressed above, it can be concluded that the information system is a system that provides information for management in making decisions and can also run company operations, where the system is a combination of people who run, information technology and organized procedures.

### **Enterprise Resource Planning (ERP)**

Various definitions of understanding about Enterprise Resource Planning (ERP) have been put forward by experts and researchers from various related fields, including: According to Hall (2011) Enterprise Resource Planning (ERP) is a holistic model in which the entire organization is driven or controlled by a single system. According to Monk et al. (2013) Enterprise Resource Planning (ERP) program is the core software used by companies to integrate and coordinate information in each business area. The Enterprise Resource Planning (ERP) program helps organizations to manage enterprise-wide business processes using one database and one management reporting system. In general, O'Brien et al. (2011)

defines Enterprise Resource Planning (ERP) as the basis of e-business, all enterprise transactions are connected, message sales processes, equipment management and control, production and distribution planning, and finance. Enterprise Resource Planning (ERP) is a multifunctional enterprise system driven by integrated application modules that assist the company's internal business processes. According to (Ridho Syahdindo: 2019) the notion of Enterprise Resource Planning (ERP) stands for 3 (three) word elements, namely Enterprise (company/organization), Resource (resources), and Planning (planning). The most important requirement of an Enterprise Resource Planning (ERP) system is integration. The integration is meant to combine various requirements on one software in one logical database, making it easier for all departments to share information and communicate

### **Strategic Business Units (SBUs)**

A strategic business unit (SBU) is an adaptation of divisional structures in which various divisions or subdivisions are grouped based on shared strategic elements, usually associated with differences in specific products/markets (Pearce and Robinson, 2007). : 429).

### **Shipyard**

According to Bibit Saputra (2017: 354) Shipyard is an industry in which there is a transformation process of input in the form of materials (steel, wood, fiberglass, etc.) into an output (output) which can be in the form of ships, or offshore buildings and other floating buildings . The product shipbuilding industry is finally included in the Product Oriented or Job Shops Production

classification (Storch 1995). A product Oriented or Job Shops Production can often also be referred to as an industry that works by order (Job Order).

### **SWOT analysis**

According to Syam (2016) said that the SWOT analysis is an analysis based on the assumption that something comes from a company's internal resources (strengths and weaknesses) and a company's external resources (opportunities and threats). McKean (2012), said that SWOT certainly consists of strengths, weaknesses, opportunities and threats that will unite different ideas. SWOT is useful in helping companies to identify and recognize their strengths and weaknesses as well as opportunities and threats to their company, so that a company can prepare and find solutions if there are things that threaten the company's survival.

- a. Strengths. An advantage of resources relative to competitors and the needs of the center served or to be served by the company, the power possessed by a company compared to competitors.
- b. Weaknesses (weaknesses). Limitations or deficiencies in resources, skills and abilities that seriously hinder the company's performance.
- c. Opportunities (opportunities). Opportunity is an area of buyer need in which a company can operate profitably and to win more customers than its competitors.
- d. Threats (threats). Challenges and threats faced by a company from other competitors in capturing consumers

### **Marketing Aspect**

According to Danang Sunyoto (2013) marketing is an overall system of business or business activities aimed at planning, pricing, promoting and distributing goods and services that can satisfy the needs of existing buyers and potential buyers. According to Stanton in Tambajong (2013) says that marketing is a system of business activities designed to plan, determine prices, promote and distribute products that can satisfy desires in achieving company goals. According to Kotler and Armstrong (2012: 29) said that "Marketing as the process by which companies create value for customers and build strong customer relationships in order to capture value from customers in return", means stating that marketing as a process by which companies create value for customers and build strong customer relationships to capture value from customers in return.

### **Technical and Technological Aspects**

A business idea is declared feasible based on technical and technological aspects if a suitable location has been obtained, can achieve optimal production area, technology is available, and can arrange business layouts, both factory and office optimally. According to Suliyanto (2010: 133) said that things that need to be analyzed in technical and technological aspects are as follows:

- a. The choice of factory location because of the strategic location of the factory is one source of competitive advantage,
- b. Selection of machines and equipment because the machines and equipment used are very influential on the success of the production process, the selection of technology because the right

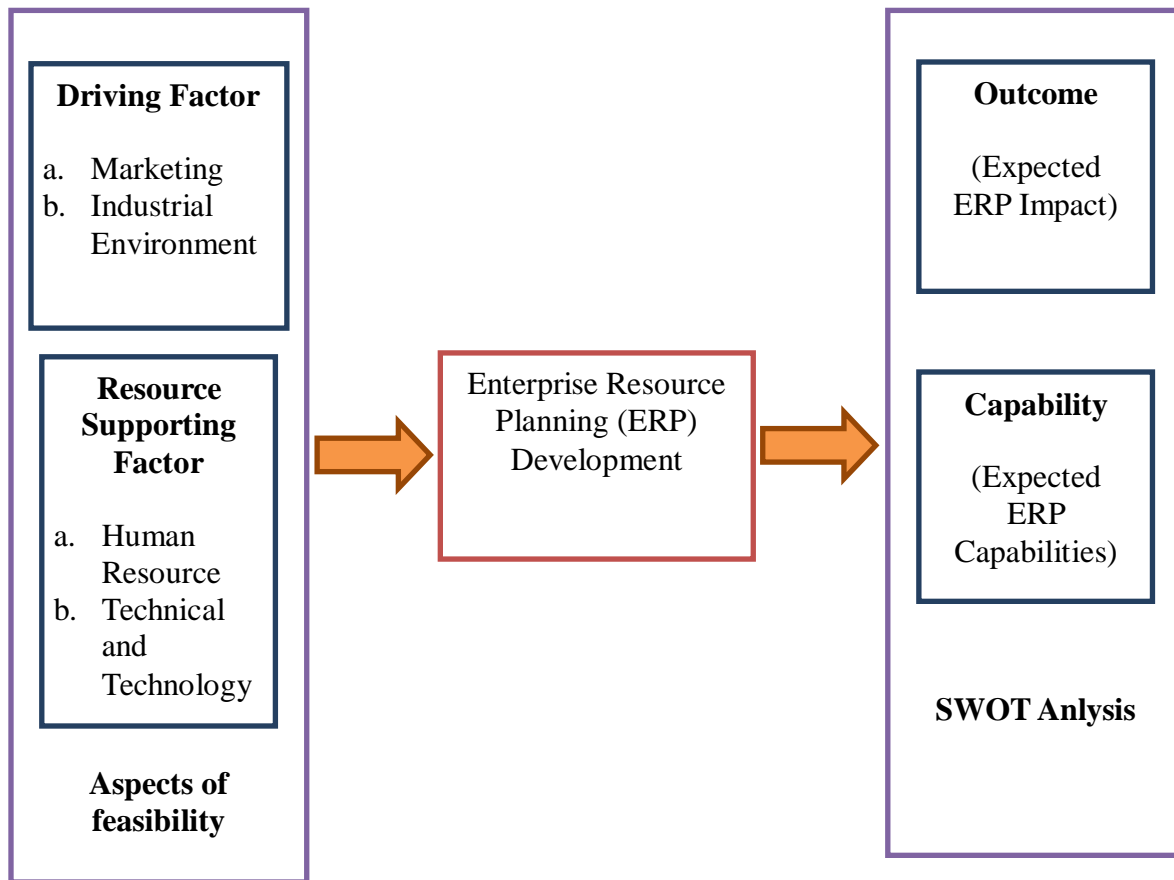
technology enables the company to produce products with good quality in a fast time and at a lower cost

c. Determining the layout of factories and buildings because a good layout will increase the efficiency and effectiveness of the production process. A business idea is declared feasible based on technical and technological aspects if a suitable location has been obtained, can achieve optimal production area, technology is available, and can arrange business layouts, both factory and office optimally.

**Industrial Environmental Aspects**

According to Sendang Nurse to (2012: 73) says that the industrial environment is a series of threat factors from new business actors, suppliers, buyers, substitute products, and the intensity of competition among competitors that directly affect the company and its competitive actions and responses. Overall, the interactions among these five factors determine the industry's profit potential.

**FRAMEWORK**



**Research methods**

**Sample**

The unit of analysis according to Hamidi (2010) is "the unit under study can be an individual, group, organization, object, or a social event such as an individual or group activity". The unit of analysis in this study is one of the SBU Strategy Business Units (SBU) of State-Owned Enterprises (BUMN) in Indonesia. The XYZ Shipyard SBU company is engaged in ship repair. The object of this research has a case in terms of information systems that are not yet computerized and integrated. Based on the current condition of the company, it is necessary to have an idea or idea to change the system at the XYZ Shipyard SBU company. The idea of changing the system is a feasibility study of a conventional-based Enterprise Resource Planning (ERP) information system (ERP software module) for the business development of the XYZ Shipyard SBU. This is done by the company in order to keep pace with the era of the industrial revolution 4.0 that is currently happening, where many companies in Indonesia have implemented Enterprise Resource Planning (ERP) information systems.

**Research data**

No	Informant Criteria	Informant Name	Informant Position
1	Fully responsible for the development of the company as well as maintaining and improving performance and fulfilling internal and external customer satisfaction	Mr. IP	General Manager
2	Implement policies, control, monitoring, supervision, analysis, evaluation, and reporting of financial management & taxation, accounting, general administration.	Ms. EA	Head of General Administration & Finance
3	Implement policies, control, monitoring, supervision, analysis, evaluation and reporting of production performance of Floating Repair Dock (FRD) goods.	Mr. CA	Head of Floating Repair Dock
4	Implement policies, control, monitoring, supervision, and reporting of production activities for ship repair services (RR) with quality that is maintained, timely, effective and efficient.	Mr. SP	Head of Running Repair Urusan
5	Implementing policies, controlling, monitoring, supervising, analyzing, evaluating, and reporting on marketing, quality, and K3LH management.	Mr. IHJ	Head of Marketing
6	Implement policies, control, monitoring, supervision, and reporting of procurement, purchasing & warehousing administration activities in a timely, effective and efficient manner	Mr. YAP	Head of Purchasing & Warehousing
7	Implement information technology management effectively and efficiently	Mr. YP	Information Technology Staff
8	Implement policies, control, monitoring, supervision, and reporting of Human Resources and General with quality that is maintained, timely, effective and efficient.	Mr. ARF	Head of HR & General Affairs
9	ERP Application Consultant at XYZ Company	Mr. AK	Consultant

## Research methods

Researchers in conducting this study used data collection techniques, including:

### **1. Interview**

Researchers used this interview method to obtain information directly from the research subject. This interview was submitted to top management, structural officials and employees or employees at the XYZ Shipyard SBU company. According to Kartono (2013) said that "an interview is a conversation directed at a particular problem". This is an oral question and answer process, where two or more people face each other physically. So it can be concluded that the interview is a question and answer process between an interviewer and several informants or sources to get in-depth information about a matter and the conversation is directed at a particular problem that is the topic of discussion. In addition, researchers also use research instruments such as company secondary data, pictures, electronic mail recordings (email), and social media chat (whatsapp and skype).

### **2. Observation**

Researchers conducted direct observations, where researchers took part directly and conducted field surveys. This is done by researchers to observe all activities in the field. According to Sugiyono (2015: 204) said that "observation is an activity of loading research on an object. When viewed in the implementation process of data collection, observations are divided into participants and non-participants. The type of observation used in this study is participant observation. Researcher in this case has the status as an employee at the SBU Shipyard XYZ company so that researchers are directly involved with daily work activities where the subject is being researched or used as a source of research data. The observations made by the researchers were reviewed from various aspects, including aspects of Human Resources management, marketing aspects, technical and technological aspects, and industrial environmental aspects. This observation is used by researchers as a feasibility study for a conventional-based Enterprise Resource Planning (ERP) information system (ERP software module) for business development of SBU Shipyard XYZ.

### **3. Documentation**

Researchers use useful documentation studies as supporting data in conducting this research. The documentation data is in the form of photos or field drawings, the company's Standard Operational Procedure (SOP), company policy regulations and other supporting documents or files. According to Sugiyono (2018: 240) says that documentation is a data collection technique by collecting records of events that have passed. Documents can be in the form of writing, pictures, or monumental works of someone. Documents in the form of writing include diaries, life histories, stories, biographies, regulations, and policies. Documents in the form of images, such as photos, live images, sketches and others. Document study is a supporting or complementary data tool for the use of this research, where the researcher uses observations and interviews in this qualitative descriptive analysis research. Documentation studies are expected to assist researchers in conducting this research



### **Analysis Tools**

Analysis is used to understand the relationships and concepts in the data so that hypotheses can be developed and evaluated. Data analysis in this study was carried out by using interactive models or inductive analysis techniques. among others:

#### **1. Data Collection (Data Collection)**

Data collection is the first and main activity in digging up information, data and matters relating to the problems studied. Data collection is an activity to collect data from informants directly, either from related documents or archives.

#### **2. Data Reduction (Data Reduction)**

Reducing data can mean summarizing, choosing the main things, focusing on the things that are important, looking for themes and patterns. Thus, the reduced data will provide a clearer picture, and make it easier for researchers to conduct further data collection.

#### **3. Data Display (Data Presentation)**

After the data is reduced, the next step is to present the data. In qualitative research, data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts and the like. By presenting the data, it will be easier to understand what is happening.

#### **4. Conclusion Drawing / Verification**

Conclusions can be drawn based on the results of research carried out and already exist by taking into account the results of interviews, and documentation in the form of initial data that is not ready to be used in analysis, after the data is reduced and presented.

### **RESULTS AND DISCUSSION**

Proposition 1: SWOT analysis can be used for strategic planning of Enterprise Resource Planning (ERP) information systems in XYZ Shipyard business development

Initial interview conducted with MR. CA As Head of Floating Repair Dock (FRD): "Our divisions/units need a system that can monitor operational activities in a mobile, updated, systematic, and integrated manner". Then continued with the initial interview with MR. IHJ Head of Marketing: "Our division needs an interactive and effective system that is efficient in terms of online marketing". From the results of the initial interview with the informant, the researcher began to conduct deeper research and was directly involved in this research. Researchers began to conduct in-depth interviews on the division or work unit of the informant so that researchers could create a SWOT matrix table.

The SWOT matrix will explain the Enterprise Resource Planning (ERP) information system business development strategy as follows:

#### **1. SO Strategy (Strengths–Opportunities)**

Based on the results of interviews, observations, focus group discussions, and the extension of the researcher's participation in the research object in the field, it is known that the feasibility study of the Enterprise Resource Planning (ERP) information system at the XYZ Shipyard is

based on the SO (Strengths – Opportunities) strategy: implementing an information technology system that can minimize costs. By having a financial information system that is already SAP, it requires technological devices such as computers that have good specifications, and computer networks that are well managed. In addition, the creation of advertising space for marketing promotion media for XYZ Shipyard needs to be done. This aims to increase the company's income where there are sponsors or advertisements that will be displayed on the website or Instagram social media. To support the strategy of existing strengths and opportunities, a well-integrated computer network management system is needed.

#### 2. WO Strategy (Weakness – Opportunities)

Based on the results of interviews, observations, focus group discussions, and the extension of the researcher's participation in the research object in the field, it is known that the feasibility study of the Enterprise Resource Planning (ERP) information system at the XYZ Shipyard is based on the WO (Weakness – Opportunities) strategy: Development of an Enterprise Resource Planning (ERP) information system ) which the system can speed up, control the work of customer ships in the dock pool area and ships queuing outside the dock pool, so that the administrative system used today is a manual system and requires a document archive storage area to be abandoned. The Enterprise Resource Planning (ERP) information system includes system integration between units of the Floating Repair Dock (FRD), Running Repair (RR), warehousing, finance, HR & General Affairs, and marketing. In addition, redesigning existing website content and redesigning the appearance or graphics of the website by adding the dock space schedule service information feature so that it can make it easier for customers.

#### 3. ST Strategy (Strengths – Threats)

Based on the results of interviews, observations, focus group discussions, and the extension of the researcher's participation in the research object in the field, it is known that the feasibility study of the Enterprise Resource Planning (ERP) information system at the XYZ Shipyard is based on the ST (Strengths - Threats) strategy: in collaboration with fellow state-owned companies, namely PT. Telkom to improve technology infrastructure information. The collaboration in question is to access internet connections and Virtual Private Network (VPN) connections so that XYZ Shipyard is not inferior to competitors or competitors. Making interactive, dynamic and attractive websites needs to be updated. This aims to add value to the XYZ Shipyard and can attract the attention of regular ship customers and new customers in conducting marketing promotion activities. In addition, in order to compete with competing companies, XYZ Shipyard can update computer equipment, CCTV and computer networks with high specifications.

#### 4. WT Strategy (Weakness – Threats)

Based on the results of interviews, observations, focus group discussions, and the extension of the researcher's participation in the research object in the field, it is known that the feasibility study of the Enterprise Resource Planning (ERP) information system at the XYZ Shipyard is based on the WT (Weakness - Threats) strategy: Build an adequate information technology infrastructure system by how to have your own server, have an integrated technology system between units of the Floating Repair Dock (FRD), Running Repair (RR), warehousing, finance,

HR & General Affairs, and marketing, and have an interactive, attractive, and dynamic website information system so that can compete with competitors who already have a good information technology infrastructure system. In addition, another strategy that needs to be done to reduce weaknesses and reduce threats from competitors of BUMN shipyard companies and private shipyard companies that have implemented an integrated information system is to create a marketing promotion information system by the android system or app store where the application system can make it easier for regular customers and new customers in terms of getting information about ship docking schedules.

Proposition 2: Analysis of the Enterprise Resource Planning (ERP) Information System for XYZ Shipyard business development based on aspects of Human Resources management, marketing aspects, technical and technological aspects, and industrial environmental aspects is feasible.

### 1. Aspects of Human Resource Management

The Human Resources owned by the Strategic Business Unit (SBU) of XYZ Shipyard are the majority of the millennial generation, which on average are familiar with how to operate or use information systems or applications. One example is the application or information system that is currently available in the Human Resources section, namely E-Office applications, email, and personnel applications where employees or employees in daily administrative activities use the application or information technology system. In addition, from the results of interviews with informants, it is known that the Human Resources at SBU Shipyard XYZ average graduates from public universities in Surabaya, which are intellectually above average and always have creative ideas.

### 2. Marketing Aspect

In this study, market and marketing aspects are very important things that need to be considered in a business feasibility study. These aspects can later help a business to determine the direction, goals, and objectives of marketing the products to be offered. To conduct a feasibility test from the marketing aspect, researchers conducted field observations and conducted interviews with several informants in the marketing unit section so that the data obtained that the XYZ Shipyard marketing unit currently uses promotional media such as websites, Instagram, Facebook online. An offline marketing tool using a company profile book that has been designed in an elegant and attractive manner. Website XYZ shipyard still has drawbacks where the website cannot be dynamic and interactive. The admin can't add galleries or photos of ship customers who have just done docking. This is because the website is static, so the information only contains a company profile. The admin of the marketing unit is more dominant in updating activities and promotions to social media such as Instagram. Offline marketing is done by using the company profile book

### 3. Technical and Technological Aspects

The existing network system at the XYZ Shipyard currently uses a Virtual Private Network (VPN) network and an internet network. The XYZ Shipyard's Strategic Business Unit (SBU) Local Area Network (LAN) network is well managed in which each unit can be connected and integrated. XYZ Shipyard's Strategic Business Unit (SBU) cooperates with a state-owned company engaged in information and communication technology (ICT) services. To monitor the

existing network, the network admin uses a mikro tik device where this device can monitor the XYZ Shipyard Strategic Business Unit (SBU) network outside the office online.

#### 4. Industrial Environmental Aspects

The XYZ shipyard has a strategic geographical location where the location is in the outermost position of the silver river channel so that ships entering the silver river channel do not have too much silt. The XYZ shipyard is located in an industrial area engaged in ship building and repair in the silver area of Surabaya. In addition, based on the results of interviews, observations, focus group discussions, and the extension of the researcher's participation in the object of research in the field, it is known that the XYZ Shipyard is also involved with relevant stakeholders such as state-owned port companies in terms of the port system, ship arrival and departure reports. The information system provided by the stakeholders can simplify the administrative process and it is hoped that the system provided by the stakeholders can be integrated with the existing information system at Glangan XYZ.

#### **Conclusion implication Advice and Limitations**

Based on the results of the research and the findings in the field, the researcher can draw the conclusion that the case study: Strategic Business Unit (SBU) of the XYZ Shipyard in the city of Surabaya is feasible. This is explained as follows:

##### 1. SWOT analysis

In conducting a SWOT analysis, researchers have divided into 2 factors, including internal factors in the form of strengths and weaknesses from within the company and external factors in the form of opportunities and threats from outside the company. These two factors are used in the implementation of strategy making:

##### a. Internal factors

Internal factors in this research include not having a server (central server in Jakarta), the absence of an IT system in each unit to control field work and technical online. except Bag. Finance and HR, manual systems for the FRD and Warehouse sections which cause the risk of fraudulent transactions in and out of goods and old work processes, the administrative system still uses manual books and requires document storage, the financial information system does not cover every unit so that financial checks in other sections are still done manually, the website technology information system is still not interactive and interesting, and the absence of an information technology system in the marketing department for booking dock space.

##### b. External Factors

External factors in this study include competitors who have built integrated, systematic, easy-to-control IT infrastructure and work more regularly, state-owned shipyard companies and competitors have implemented integrated IT systems, and competitors have built attractive, interactive, dynamic and elegant websites.

If you look at internal and external factors, those who have a lot of problems are internal factors compared to external factors. Factors internally obtained from data collection on the SWOT matrix. The comparison is weakness with threats. Meanwhile, when viewed from the advantages, the internal factors that have many advantages. So it can be concluded that the development of an Enterprise Resource Planning (ERP) information system needs to be implemented further.

## 2. Feasibility Analysis From Aspects:

### a. HR Aspect

The results of the case study: XYZ's Fieldwork from the Human Resources aspect is feasible, in this case it is said to be feasible because Human Resources are experienced in the field of information technology systems with more than 5 years of experience.

### b. Marketing Aspect

The results of the case study: XYZ's promotion from the marketing aspect is feasible, it is supported by the number of customers from year to year who experience The increase before the covid 19 pandemic is as shown in Figure 17. In addition, to maintain the trust of regular customers and the ease of information for customers, an interactive, dynamic, and attractive marketing information system is needed.

### c. Technical and technological aspects

The results of the case study: XYZ Shipyard from a technical and technological aspect is feasible, this is supported by the existing system or equipment in the Strategic Business Unit (SBU). XYZ Shipyard is adequate and has a local computer network as well as internet network and Virtual Private Network (VPN) network. already available

### d. Industrial Environmental Aspects

The results of the case study: XYZ shipyard from the aspect of the industrial environment is feasible, this is supported by several competitors from state-owned shipbuilding companies and private shipyard companies that have implemented an integrated Enterprise Resource Planning (ERP) information system, making it easier to monitor and accelerate work. With the Enterprise Resource Planning (ERP) information system, the ship's customers are well served with the accuracy of work. In addition, the need for support from stakeholders related to the integrated system of one-stop services.

Limitations of the study, this research is intended to conduct a feasibility study of an Enterprise Resource Planning (ERP) information system: a case study of the Strategic Business Unit (SBU) of the XYZ Shipyard in Surabaya. The purpose of this research is to be applied to the object of research in increasing the number of ship customers and making it easier, accelerate, and control work so that fraud does not occur. The following are some of the technical and theoretical limitations of this study:

1. Limitations of conducting interviews with informants face-to-face. This is due to the COVID-19 pandemic which causes informants to be less willing or awkward to conduct face-to-face interviews. So there are several interviews conducted virtually online.

2. Limited time for some informants at the time of the interview, considering that the informants have a lot of work agendas such as virtual meetings with customers/ship customers, virtual meetings with top management in Jakarta, doing their daily work routines so that the informants have little time. However, the researcher continued to conduct interviews in a brief, concise and clear manner.

3. Research topics and reference sources related to Enterprise Resource Planning (ERP) Information Systems are not widely available, especially in Indonesian. So with theoretical limitations it allows inaccuracy in finding information related to the research topic.

Suggestions, based on the conclusions regarding the SWOT analysis and the feasibility analysis of the Enterprise Resource Planning (ERP) information system in Surabaya, the researchers try to provide suggestions regarding the results of their research in order to help the Strategic Business Unit (SBU) of the XYZ Shipyard in developing the Enterprise Resource information system. Planning (ERP) as follows:

1. Research with quantitative methods should be required for the calculation of the value of the project to be carried out.
2. Need Top Management support from state-owned shipping companies and XYZ Shipyard Strategic Business Unit (SBU) management in implementing Enterprise Resource Planning (ERP) information technology systems. The management support is in the form of budgets, policies, and the formation of a decree for the Enterprise Resource Planning (ERP) team.
3. Support from relevant stakeholders (State-Owned Port Company) is needed for the development of an integrated one-stop service information system.

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