

Application AVATAR (Accounting Virtual Report) on PT Pelindo Terminal Petikemas

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Application AVATAR (Accounting Virtual Report) on PT Pelindo Terminal Petikemas

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Abstract. This research discusses the application of asset maintenance at PT Pelindo Terminal Petikemas. This research aims to determine the asset maintenance system at PT Pelindo Terminal Petikemas, as well as to create a web-based asset maintenance application program at PT Pelindo Terminal Petikemas. The theoretical framework of this research involves information system analysis, by examining the information needed by management, related functions, documents used, as well as document flowcharts. MySql is used as a database, with the PHP programming language. The research results show that the recording process at PT Pelindo Terminal Petikemas has been computerized but still uses Microsoft Excel. The weakness of this method is that it is difficult to look back at archived data for the previous year because you need to search for the file first and there is a risk of losing the file. Therefore, the application called AVATAR (Accounting Virtual Report) in this research is expected to help produce asset maintenance reports more effectively and efficiently, thus providing benefits for the company.

Keywords: AVATAR (Accounting Virtual Report), Asset Maintenance, Web Based Application Program

INTRODUCTION

Pelindo Terminal Petikemas (TPKB) is an important part of PT Pelabuhan Indonesia (Pelindo), which focuses on managing container terminals or container terminals. This terminal consists of several key parts that make it operate efficiently. First, there is a terminal area which includes a dock where ships dock for the process of loading and unloading containers, as well as a container yard where containers are temporarily stored. Here, container cranes and other heavy equipment, such as reach stackers and forklifts, are used to move containers. In its activities, PT Pelindo Terminal Petikemas records asset maintenance manually using Microsoft Excel, which has the weakness that each year the Excel file used is different, which makes it difficult to find data from the previous year. Therefore, PT Pelindo Terminal Petikemas needs an asset maintenance application that can simplify the data archiving process and make data accessible in *real time*.

LITERATURE REVIEW

An Accounting Information System is a framework that involves hardware, software, procedures, and people who work together to collect, store, process, analyze, and present financial information in an organization. Assets are ownership of assets, assets, and wealth that support company activities and can be exchanged in the form of cash. **Fixed assets or assets**

are assets that will become one of the company's economic resources that will be used for the company's operational activities. For example, land as a place to carry out production, buildings that will be used as factories or offices, machines and also several equipment as tools for carrying out production, and so on. The PHP programming language is a technological tool that supports the development of web-based applications, while the MySQL database provides a structure for managing the data base.

RESEARCH METHODS

This research uses a case study method to examine all asset maintenance activities and design an asset maintenance system at PT Pelindo Terminal Petikemas using the PHP programming language. This research uses the waterfall system development method. It is called a waterfall because the stages you go through must wait for the completion of the previous stage and run sequentially. A web-based accounting information system with the PHP programming language and MySQL database is used to record asset maintenance. The data collected includes quantitative data such as RKAP data, contracts, and qualitative data such as company profile, company location, and company structure. The data source consists of primary data obtained through interviews with employees related to asset maintenance and secondary data in the form of previous year asset maintenance Excel files as a reference in making applications. Data collection methods include interviews, documentation, and observation. The data obtained was analyzed quantitatively and qualitatively using relevant theories through the stages of system analysis, application program design, and program implementation to ensure the application can be used by interested parties in the area. PT Pelindo Container Terminal.

FINDINGS AND DISCUSSION

PT Pelindo Terminal Petikemas is a company engaged in managing container terminals in Indonesia. Previously, to manage ports in Indonesia, 4 Pelindos were formed which were divided into different regions. Merger or integration of the four Pelindos into one Pelindo which was then named PT Pelabuhan Indonesia. Pelindo II acts as the holding company (parent company) and the 3 Pelindos (I, III, IV) act as sub-holdings. The formation of sub-holdings that manage business clusters is aimed at increasing Pelindo's service capacity and business efficiency. In 2012, based on an idea from the Ministry of BUMN, Pelindo I, II, III, and IV formed a consortium to establish PT Terminal Petikemas Indonesia (PT TPI) and began

operating actively in 2014. However, along with the integration of Pelindo which was carried out on October 1, 2021, PT TPI changed its name to PT Pelindo Terminal Petikemas based on the name change deed issued on October 11, 2021, which is currently one of Pelindo's integration sub-holdings. Pelindo Terminal Petikemas or Pelindo TPK is a terminal operator that provides container services with an integrated and standardized network system, under the auspices of the largest port operator in Indonesia, and has a strategic role in encouraging national economic growth and equality.

Problem Analysis

Based on research and data collected, several weaknesses were identified in the asset maintenance recording system at PT Pelindo Terminal Petikemas. The recording process is still done manually using Microsoft Excel, making it difficult to find data from previous years, because it is not combined into one file and there is a possibility that the data will be lost. Asset maintenance reports are also felt to be less effective because the data cannot be accessed in real-time.

Solution to problem

After analyzing the problem, it is developed application AVATAR (Accounting Virtual Report). Companies need asset maintenance reports that can be monitored in *real time* and can also archive data from previous years. Recommended documents include RKAP and Asset Maintenance Report. The implementation of these documents and reports is expected to increase the effectiveness and accuracy of the company's accounting system.

1. Application Interface Design

a) Login Form

The login form is the initial page that appears when the application program is run. The following is a display of *the login form* in Figure 1.1.



Figure 1.1 Login Display

b) Dashboards

Serves to provide information about the company and the benefits of the application.

The dashboard display can be seen in Figure 1.2.

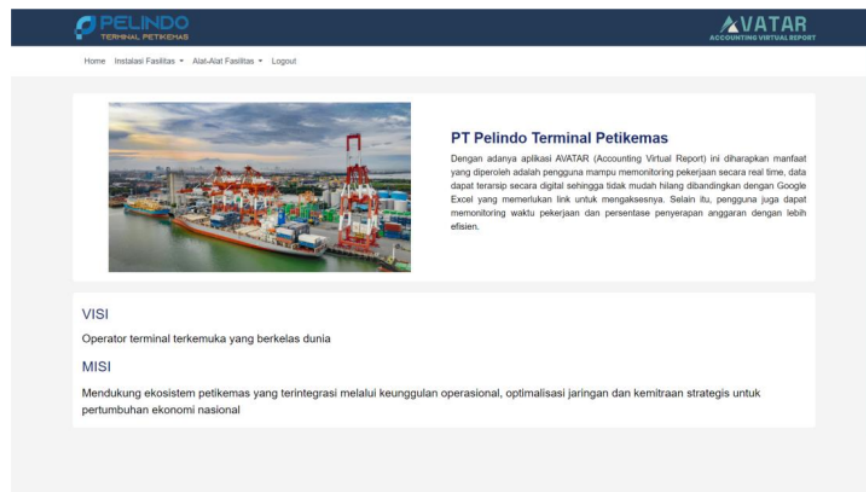


Figure 1.2 Dashboard

c) Asset Maintenance Work Report Page

On this page, you can see information regarding the contract value, physical realization and payment realization. In addition, it also displays maintenance details, including job description, implementation date, and status. You can also see information

regarding the budget and budget realization, as well as the status of funds availability. This page can be used to monitor project performance and manage budgets. The report can be seen in Figure 1.3

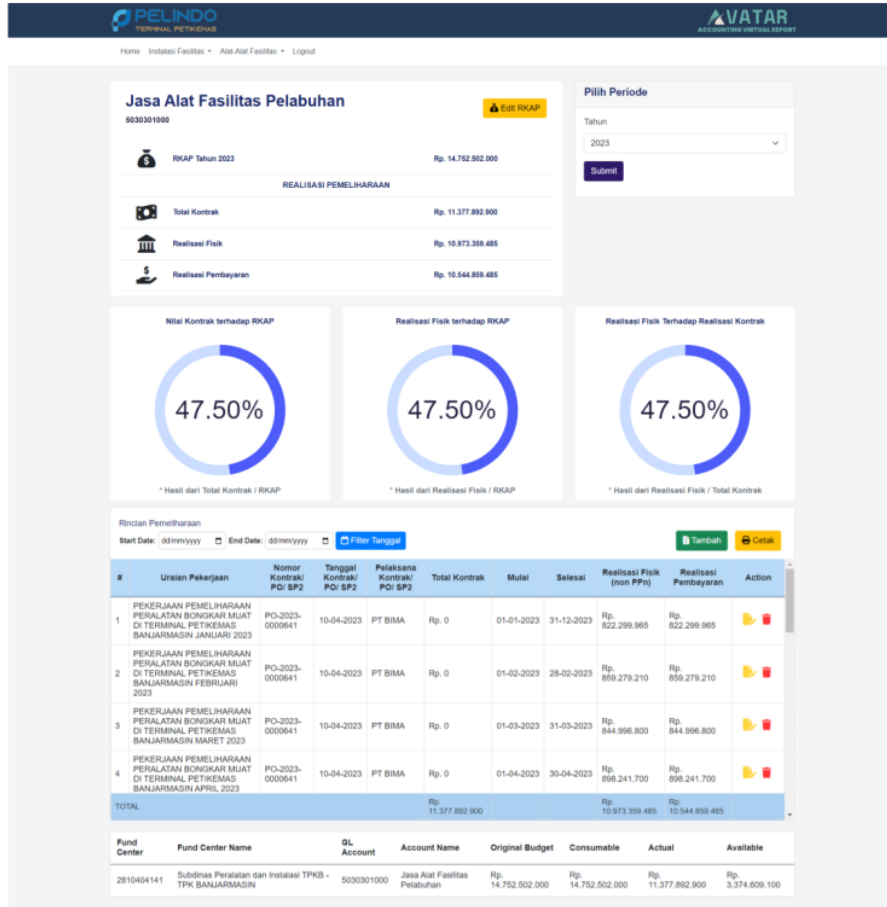


Figure 1.3 Asset Maintenance Work Report Page

d) Print Page

Used to produce printable output. The display can be seen in Figure 1.8.

#	Uraian Pekerjaan	Nama Kontrak/PO/SPK	Tanggal Kontrak/PO/SPK	Pelaksana Kontrak/PO/SPK	Total Kontrak	Mulai	Akhir	Realisasi Fisik (per %)	Realisasi Pengerjaan			
1	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode Januari	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-01-2023	30-12-2023	Rp. 45.362.050	Rp. 45.362.050			
2	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode Februari	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-02-2023	29-02-2023	Rp. 45.362.050	Rp. 45.362.050			
3	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode Maret	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-03-2023	31-03-2023	Rp. 45.362.050	Rp. 45.362.050			
4	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode April	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-04-2023	30-04-2023	Rp. 45.362.050	Rp. 45.362.050			
WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode Mei									45.362.050	2023	2023	45.362.050
6	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS BANJARMASIN periode Juni	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-06-2023	30-06-2023	Rp. 45.362.050	Rp. 45.362.050			
7	PEKERJAAN OPERASI DAN PEMELIHARAAN INSTALASI DI WILAYAH TERMINAL PETIKEMAS	PO-2023-0000008	06-04-2023	PT LEGI	Rp. 45.362.050	01-07-2023	31-07-2023	Rp. 45.362.050	Rp. 45.362.050			

Figure 1. 4 Print Page

CONCLUSIONS AND RECOMMENDATIONS

Based on the research results, the author concludes that the information system for recording the recapitulation of maintenance work assets at PT Pelindo Terminal Petikemas currently still uses a semi-manual method with Microsoft Excel. Based on user experience, this method has several disadvantages, including: every year the Excel file must be updated, which increases the risk of file loss if it is stored for years. To overcome this, the author designed a web-based application to manage asset maintenance reports more efficiently. This application is capable of monitoring maintenance work in real time, reducing the risk of data loss and the data can be stored safely for years. The author suggests that PT Pelindo Terminal Petikemas use this application as a means to make it easier to create and archive asset maintenance reports

BIBLIOGRAPHY

- Abror, N. (2023). Design and Development of a Web-Based Office Equipment Maintenance Information System at Bmkg Sultan Syarif Kasim II Meteorological Station Pekanbaru. *Indonesia Journal of Informatic Research and Software Engineering (IJIRSE)* , 3 (2), 103–110. <https://doi.org/10.57152/ijirse.v3i2.899>
- Afra F. (2023). 5 Types of Data Collection Techniques and Their Definitions . <https://www.detik.com/edu/detikpedia/d-6950098/5-Jenis-teknik-pengumpulan-data-beert-pengertiannya>
- Alvian. (2019). Relationship and Differences between Javascript, HTML, CSS, JQuery and

PHP in Web Development . BINUS. <https://sis.binus.ac.id/2019/02/25/leksi-dan-besar-javascript-html-css-jquery-dan-php-di-dalam-web-development/>

Asana, T. (2024). *What is a flow chart? (Symbols, types and how to read them)* . Asanas. <https://asana.com/id/resources/what-is-a-flowchart>

Christmas, OTM (2022). *Budget Information System for Maintenance, Damage and Construction Costs in the Administration Section* . 2 (2), 175–184.

Handayani. (2019). *Accounting Research Methodology (For Vocational Education)* .

Ilhar¹⁴ Fikriansyah. (2022). *Maintenance Is: Meaning, Examples, Objectives, and Types* . DetikJabar. <https://www.detik.com/jabar/berita/d-6252301/maintenance-dapat-arti-empat-besar-dan-jennyanya>

Latifatunnisa, H. (2022a). *Understanding Qualitative Data, Important Functions, Types, and Examples* . <https://revou.co/panduan-teknis/data-kualitatif-jadi>

Latifatunnisa, H. (2022b). *Definition of Quantitative Data, Functions, Types and Examples* . <https://revou.co/panduan-teknis/data-kuantitatif-ilah>

Mudiar, W. (2019)¹¹ *Web-Based Asset Management Information System at Perbanas Institute. ETHNIC: Journal of Economics and Engineering* , 1 (1), 12–21. <https://doi.org/10.54543/etnik.v1i1.9>

Mulyadi. (2023). *Accounting Systems, 4th Edition* . Salemba Publishers.

OCB¹⁵ (2021). *Getting to Know Assets, Definition, Properties, Types, & Examples* . OCBC. <https://www.ocbc.id/id/article/2021/06/23/aktiva-hadap>

Qotrui, A. (2021). *Case Study Research Method: Methodology, Types, and Benefits* . Scholastic. <https://www.gramedia.com/literasi/studi-case/>

Rizky, D. (2019). *Types of Flowcharts and Their Symbols* . <https://medium.com/dot-intern/jen-flowchart-dan-simbol-simbolnya-ef6553c53d73>

Salma Nurshafa. (2023). *Company Organizational Structure: Functions, Types, and Examples* . <https://catapa.com/blog/structure-organization-corporate-functions-types-and-examples>

Salsabila, M. (2022). *Note! 4 Differences between Secondary Data & Primary Data in Data Analysis* . <https://dqlab.id/data!-4-difference-data-sekunder-and-data-primer-dalam-analysis-data>

STV Channel. (2020). *PPL Materi¹² [Meeting 5] Application of the Waterfall Method in Library Information Systems* . www.youtube.com. <https://www.youtube.com/watch?v=crHV3TdxYE>

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