



Fixed Assets Information System at PT.Pln (Persero) North Sumatra

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ABSTRACT

Depreciation is the allocation of the acquisition price of fixed assets into expenses into the accounting period that enjoys the benefits of these fixed assets, there are three factors that need to be considered in determining the depreciation expense for each period, namely the acquisition price is the entire amount of money spent to acquire an asset used by the company, residual value is the estimated selling price of the fixed assets at the end of the useful life of the fixed assets, the amount of the estimated residual value will also be greatly influenced by its economic age, inflation, currency exchange rates, line of business and so on. The estimated useful life is the estimated useful life of the fixed assets. The useful life is the estimated economic life of the fixed assets, not the technical life. The estimated useful life can be expressed in units of a year's period. Therefore the application is made using the Visual Basic programming language. Net 2010 and SQL Server 2008 as the database. With the existing tools in the calculation of depreciation of fixed assets, it can assist companies in making depreciation reports that exist in these companies.

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1. INTRODUCTION

PT.PLN (Persero) for the North Sumatra Region is a government-owned company, which is responsible for the management and maintenance of the electricity control control system facilities and is also an important asset that must be maintained properly(Supriyatin & Islami, 2021),(Arva, 2021). Where this company is engaged in providing state electricity, it is demanded that it must provide good facilities and infrastructure such as the sale of electricity. So that current assets (cash receipts) from customers increase(INDRIYANI, n.d.),(Rochaety & Tresnati, 2022), because there is trust from the public for the facilities provided by the company in the provision of electricity services. In terms of fixed assets (machinery, equipment and transformers), the company must keep the equipment in good condition throughout the company's operations. PT.PLN (Persero) North Sumatra Region in recording fixed assets has been computerized using the ERP (Enterprise Resource Planning) program(FROM, Tarmizi, & Anita, 2021). ERP within the company is an information system intended for manufacturing and service companies whose role is to integrate and automate business processes related to aspects of operations, production and distribution in the company concerned. Activities in the management of fixed assets are data storage, asset recording, and preparation of fixed asset reports.

According to Rudianto (2009: 272) states that Fixed Assets are tangible goods owned by companies that are relatively permanent and are used in the normal activities of the company, not for sale and purchase.(SITUMORANG, 2022).

According to Rudianto (2009: 276) states that Depreciation is the allocation of the acquisition price of fixed assets into expenses into the accounting period that enjoys the benefits of these fixed assets(Siregar, 2017).

At PT.PLN (Persero) for the North Sumatra Region there are also journal forms and ledgers that are in accordance with accounting standards because the books of PT.PLN (Persero) for the North Sumatra Region already have a profit and loss report and balance sheet(Syahputra, 2019).

2. RESEARCH METHOD

2.1 Existing System Analysis

In completing this thesis the author uses 2 (two) study methods, namely

a. Field Study

Is a method that is carried out by conducting direct studies in the field to collect data, namely direct observation to the study location.

a) Observation

Observing the process of recording and calculating depreciation of fixed assets.

b) Interview

Collecting data or information on this method can be done by holding question and answer directly to Mr. Yudhi Priguna, Amd, SE who is in charge of the finance section, while the data obtained is: fixed asset data and fixed asset depreciation calculations.

c) Sample

Take examples of the data needed, especially data on the assets of the North Sumatra Region PT PLN (Persero).

b. Library Studies (Library Research)

The author conducted a literature study to study the theory of Fixed Assets, Information Systems, UML, Microsoft Visual Studio and Microsoft SQL Server.

2.2 Research sites

Research Locations The author chose the research location at PT. PLN (Persero) North Sumatra Region, address at Jalan Laut Commodore Yos Sudarso No. 284 Medan 20115.

3. RESULTS AND DISCUSSIONS

3.1 Results Display

The following describes the display of results from the design of the fixed asset depreciation application system at PT. PLN (PERSERO) FOR THE REGION OF NORTH SUMATRA.

a. Login Form

The login form is a form for user access that can use this application by entering the correct username and password as shown in Figure 1 below:



Figure 1.Login Form

b. Main course

This main menu form functions for the initial form after logging in. In other words, it is in this form that program users can practically call functions of other forms as shown in Figure 2 below:



Figure 2. Display of Main Menu Form

c. User Data Forms

The user data form is used to enter depreciation user part information as shown in Figure 3 below:

Pegguna

Kode Pengguna

Nama Pengguna

Tambah **Simpan** **Edit** **Hapus** **Batal** **Keluar**

Kode Pengguna	Nama Pengguna
01	Bagian Keuangan
02	Bagian Hrd
03	Bagian Pemasaran

Figure 3. User Data Form

d. Asset Type Data Form

The asset type data form is used to enter information on the company's fixed asset types as shown in Figure 4 below:

Jenis Aktiva

Kode Jenis

Nama Jenis

Tambah **Edit** **Hapus** **Simpan** **Batal** **Keluar**

Kode Jenis	Nama Jenis
01	lemari
02	bangku
03	Kursi

Figure 4. Asset Type Data Form

e. Fixed Asset Data Form

From fixed asset data used to generate company fixed asset information as shown in Figure 5 below:

Kode jenis	Kode Aktiva	Nama Akuntansi	Jumlah	Masa manfaat	Masa Fungsi	BI/Th Perolehan	BI/Th Pembukuan	Bukti Pembukuan	Perolehan Awal	Nilai Sisa
01	140118101	Lemari	15	5	5	01/01/2011	01/01/2012	OP/0511/10202	5000	
02	140118101	Ruang	100	5	5	01/02/2008	28/02/2013	OP/0512/10202	12000000	

Figure 5. Fixed Asset Data Form

f. Asset User Process Form

The asset user process form is used to enter fixed asset data information for the company as shown in Figure 6. below

No Pemakaian	Kode Aktiva	Nama Akuntansi	Pengguna
1	140118101019	Lemari Besi	Bagian Keuangan
2	140118101020	Bangku Kayu	Bagian Hrd

Figure 6. Fixed Asset User Process Form

g. From Straight Line Shrinkage Process

The asset depreciation processing form is used to enter information on the company's annual fixed asset depreciation as shown in Figure 7. Below

No Penyusutan	Kode Aktiva	Tgl Penyusutan	Beban Penyusutan	Akumulasi Penyusutan	Nilai Buku
1	140118101019	01/01/2011	500		6.000
2	140118101019	01/02/2011	500	500	5.500
3	140118101019	01/03/2011	500	1.000	5.000
4	140118101019	01/04/2011	500	1.500	4.500
5	140118101019	01/05/2011	500	2.000	4.000
6	140118101019	01/06/2011	500	2.500	3.500
7	140118101019	01/07/2011	500	3.000	3.000

Figure 7. Straight Line Depreciation Process Form

- h. Report on List of Types of Fixed Assets
The display of the report listing the types of fixed assets is as shown in Figure 8. Below;

NO	Kode Jenis	Nama Jenis
1	01	tanah
2	02	bangku
3	03	Kursi

MEDAN: 11-September-2013
(DASMAN)
MANAJER BIDANG

Figure 8. Report on the List of Types of Fixed Assets

- i. Fixed Asset Card List Report
The view of the report on the list of Fixed Asset Cards is as shown in Figure 9. Below;

KARTU AKTIVA TETAP

Kode ABB	14011210009	Pembelian Awal	Rp 8.000
Nama Akunansi	Lemari	Pembelian Akhir	Rp 0
Jumlah	10	Bulan Pembelian	01/01/2011
Masa Manfaat	1	Bulan Penjualan	01/01/2012
Masa Pungki	1	Buku Penjualan	01/0811/K0202000

Bulan/ Tahun	Beban Penyusutan	Akumulasi Penyusutan	Nilai Buku
01/01/2011	Rp800	Rp0	Rp8.000
01/02/2011	Rp800	Rp800	Rp8.000
01/03/2011	Rp800	Rp1.600	Rp8.000
01/04/2011	Rp800	Rp2.400	Rp8.000
01/05/2011	Rp800	Rp3.200	Rp8.000
01/06/2011	Rp800	Rp4.000	Rp8.000
01/07/2011	Rp800	Rp4.800	Rp8.000
01/08/2011	Rp800	Rp5.600	Rp8.000
01/09/2011	Rp800	Rp6.400	Rp8.000
01/10/2011	Rp800	Rp7.200	Rp8.000
01/11/2011	Rp800	Rp8.000	Rp8.000
01/12/2011	Rp800	Rp8.800	Rp8.000
01/01/2012	Rp800	Rp9.600	Rp8.000

MEDAN, 22-Oktober-2013
 (DASMAN)
 MANAGER/IT

Figure 9. Report on List of Fixed Asset Cards

j. Display of Asset Depreciation Report

The display of the monthly asset depreciation report is as shown in Figure 10. Below;

REKAPITULASI AKTIVA TETAP MENURUT JENIS SELURUH BULAN PERUBAHAN

Tahun : 2011
 Nama Akunansi : Lemari

No	Tanggal	Harga Pembelian	Beban Penyusutan Bulanan	Akumulasi Penyusutan	Nilai Buku
1	01/01/2011	Rp8.000	Rp8.000	Rp0	Rp8.000
2	01/02/2011	Rp8.000	Rp8.000	Rp800	Rp8.000
3	01/03/2011	Rp8.000	Rp8.000	Rp1.600	Rp8.000
4	01/04/2011	Rp8.000	Rp8.000	Rp2.400	Rp8.000
5	01/05/2011	Rp8.000	Rp8.000	Rp3.200	Rp8.000
6	01/06/2011	Rp8.000	Rp8.000	Rp4.000	Rp8.000
7	01/07/2011	Rp8.000	Rp8.000	Rp4.800	Rp8.000
8	01/08/2011	Rp8.000	Rp8.000	Rp5.600	Rp8.000
9	01/09/2011	Rp8.000	Rp8.000	Rp6.400	Rp8.000
10	01/10/2011	Rp8.000	Rp8.000	Rp7.200	Rp8.000
11	01/11/2011	Rp8.000	Rp8.000	Rp8.000	Rp8.000
12	01/12/2011	Rp8.000	Rp8.000	Rp8.800	Rp8.000

MEDAN, 22-Oktober-2013
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Figure 10. Asset Depreciation Report

3.2 Discussion

In developing this fixed asset information system, the author uses the Microsoft Visual Basic programming language. Net 2010 and uses SQL Server 2008 as the database. The commands in the program that the author made are also quite easy to understand because the user only needs to click on the available buttons as needed. To run the application that has been built requires supporting software and hardware.

4. CONCLUSION

Based on research data (survey) conducted at PT.PLN (Persero) North Sumatra Region, the research concludes the following matters: This system is capable of producing reports of depreciation of fixed assets at PT.PLN (PERSERO) REGIONAL SUMATRA UTARA. The system

for recording depreciation of fixed assets using the straight-line depreciation method applied by the company to the fixed assets owned is appropriate for use and time. In addition, these fixed assets, whether used or not used, are depreciated over their economic life. Applications designed with Microsoft Visual Basic software. Net 2010 and using SQL Server 2008 database.

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