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Fixed Asset Information System Analysis (Case Study at XYZ Bank)

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Abstract

This study aims to examine the fixed asset management information system in banks. In banking companies, fixed assets are not dominant, but nevertheless play an important role in supporting daily bank operations. This study uses a qualitative approach with a case study at XYZ Bank. This qualitative approach based on case studies allows for deeper and more specific observations of phenomena. Results of this study show that the old offline asset management information system caused inaccurate fixed asset information at XYZ Bank. Improvements to the old system were made not only to improve the accuracy of the information but also to respond to various changes in government regulations and accounting standards related to fixed assets that must be met by XYZ Bank as a company engaged in the banking sector. However, the new system that has begun operating still contains several shortcomings that need to be followed up immediately. It can be concluded that the process of improving information systems is dynamic and must be carried out continuously in accordance with developments in business environmental conditions.

Keywords: Information System, Fixed Assets, Qualitative Approach, Bank

Introduction

After the Asian financial crisis in 1997, banking in ASEAN countries (Thailand, Malaysia, Philippines, Singapore and Indonesia) experienced rapid growth due to financial reforms implemented in each country to deal with the crisis (Lerskullawat, 2017). This statement is also supported by Hamilton (2018) who highlighted the Indonesian financial system. Furthermore, Hamilton showed that there was an increase in assets in commercial banks in Indonesia in the period from 2014 to 2017. Despite the fact that the Indonesian government has tried to

develop the capital market as an alternative source of funds for the real sector. Hamilton stated that the Indonesian economy is still dominated by the banking sector as a source of funding (2018).

XYZ Bank is a company operating in the banking sector. As a company that continues to develop, the assets owned by XYZ Bank have also experienced significant development. The rapid development of assets requires good management to support the principle of prudence in the banking industry as well as to achieve

the profit target that has been set in the annual shareholders' meeting. Good asset management requires the support of an adequate accounting information system to support the business decision-making process related to the assets owned. One of the factors that supports an adequate asset management information system is the management of a good asset database that is updated regularly, so that the information presented related to the assets owned is the latest information that has added value for decision makers.

The asset management information system based on a manual information system is no longer sufficient to support business processes at XYZ Bank. Based on this, the development of an integrated asset management information system is very important. In developing the asset management information system, improving the asset database is the most important step. The database must cover all assets owned that are spread throughout the operational areas of XYZ Bank and can capture the current conditions in the field. For this reason, the purpose of this study is to analyse the management information system of fixed assets in XYZ Bank in order to make better decisions.

The results of this study are expected to provide recommendations for system improvements. In addition, the new information system is also expected to be able to produce information that has more added value for decision makers so that it can support the strategic decision-making process and support the daily management of fixed assets for the smooth operation of XYZ Bank.

Literature Reviews

Assets are all wealth owned by a person or company, tangible or intangible, which is valuable or valuable and will bring benefits to the person or company. The future economic benefits embodied in assets are the potential of the assets to contribute, either directly or indirectly, cash flow and cash equivalents to the company. In a company, assets referred to as assets are included in the balance sheet with a normal debit balance. These assets are either in the form of objects or power of attorney and to obtain recognition as assets, all economic resources must first be measurable in currency units, be it dollars, rupiah, or other currencies. To obtain assets, for example by buying, building it yourself, and exchanging assets.

In accounting, there is something called fixed assets, namely assets that have a form and are ready to be used/functioned in company operations, have a long or permanent life because they have a physical form and are owned and used by the company and are not for sale as part of operations. There are several ways to obtain assets, namely they can be obtained by producing or building them yourself, they can be obtained by buying them, and also by exchanging assets or donations from other parties. Assets are tangible and intangible.

Productive assets are the types of assets that are used to generate income or profit. These assets can be tangible assets (such as machinery, equipment, or leased property) or intangible assets (such as patents or trademarks). In essence, productive assets are assets that are used to generate added value or profit for their owners. Bank productive assets are investments made by banks, both in rupiah and foreign currency, with the aim of earning income. These productive assets can be in the form of credit, securities, placements in other banks, capital participation, and various other forms of provision of funds that can be equated.

The Productive Asset Quality Report and other information are prepared based on items presented in related and unrelated party groups. While for the Monthly Publication financial report, the items are not grouped into related and unrelated. Related parties are parties related to banks and companies in the same group as the bank as stipulated in Bank Indonesia's provisions on the Maximum Credit Limit. The components of Productive Assets are differentiated based on their quality, namely consisting of Current (C), Special Mention (SM), Less Current (LC), Doubtful (D) and Loss (L) in accordance with Bank Indonesia provisions.

Based on Bank Indonesia Board of Directors Decree No. 31/147/KEP/DIR concerning Productive Asset Quality, the components of productive assets consist of: Credit, Placement, Securities, Capital Investment, Commitments and Contingencies in Administrative Account Transactions. Credit is the provision of money or bills that can be equated with it, based on an agreement or loan agreement between a bank and another party that requires the borrower to repay the debt after a certain period of time with the provision of interest. Placement is the investment of Bank funds in other banks in the form of demand deposits, interbank call money, time deposits, certificates of deposit, credit and other similar fund investments. Securities are letters of credit, notes, shares, bonds, credit securities, or any derivatives thereof, or other interests, or obligations of the issuer, in a form commonly traded in the capital market and money market.

Capital Investment is the Bank's investment of funds in the form of shares in banks and other financial companies as regulated in applicable laws and regulations, such as leasing companies, venture capital, securities companies, insurance, and clearing, settlement and storage institutions, including investment in the form of convertible bonds with equity options or certain types of transactions that result in the Bank owning shares in banks and/or companies operating in other financial sectors. Finally, Commitments and Contingencies in Administrative Account Transactions are commitment and contingency obligations which include, among others, the issuance of guarantees, letters of credit, standby letters of credit, undrawn credit facilities, and/or other commitment and contingency obligations.

Related with procurement of fixed assets, Millenia et al. (2022) stated that a backup archive must be created so the internal control operations can optimally support the security of the accounting information system for the procurement of fixed assets. Angrita & Haninun (2015) investigated the effect of level quality of the bank productive assets. In the daily activities bank has function as intermediation institution for gathers and distributes funds. Channelling funds among banks is done through a wide range of credit products offered both to credit used to personally or company. The bank's productive is not just credit, but there are other productive assets owned by the bank which the bank funds placement with other banks, securities, investment capital, are bills, bills and derivatives, as well as administrative account transactions.

Natalia et al. (2018) analysed the implementation of fixed asset accounting policy based on the Statement of Financial Accounting Standards (PSAK) no.16 in company activities. In carrying out its fixed asset activities, PT. SulutGo Bank has referred to PSAK No. 16. In practice, companies distinguish types and ways of obtaining fixed assets by cash purchases or by establishing themselves. Depreciating fixed asset using the straight-line method and the declining balance method in accordance with implementation of Accounting Standards. Terminating fixed assets whose useful lives

have expired or are no longer used by removing assets from the register of ownership and releasing them through sales through auction. Presentation and disclosure of assets in accordance with the pattern of financial standards and some information disclosed in financial statements.

In the previous researches above, the researchers used qualitative approach, other research (Fitra et al., 2024) uses quantitative approach to determine the effect of fixed asset administration (X1) and organizational commitment (X2) toward the quality of SKPD Financial Statements in The Regional Government of West Bandung Regency (Y). The 94 respondents of 47 SKPD from the Regional Equipment Working Unit (SKPD). The results found that the fixed asset administration and organizational commitment have significant effect on the quality of SKPD Financial Statements. It concluded that good fixed asset administration and high organizational commitment were important aspects to improve the quality of financial statements.

Eva et al. (2023) analysed the role of accounting information systems in improving the effectiveness of internal control of fixed assets. Using the qualitative approach, this study found that the accounting information system plays a role in improving the effectiveness of internal control of fixed assets at the Ciamis District Education Office. It is proved from implementation of accounting information systems have been done well and the internal control has been carried out effectively. Another study related with fixed asset accounting that used as reference in this research is conducted by Nova (2024). Nova (2024) analysed the implementation of PSAK 16 on companies in Indonesia. This study used a literature review approach. The data source is secondary data that has been analysed and developed in order to elaborate the research topic. The results of the study that the recognition, measurement, and disclosure of fixed assets in companies in Indonesia have generally been in accordance with PSAK No. 16.

Based on the results of the previous researches, this study wants to analyse the accounting treatment of fixed asset in the XYZ Bank. This study wants to confirm the result whether it still the same with previous research or not.

Research Method

The type of research used is the qualitative method. Where it only describes the data as it is and explains the data or events with explanatory sentences qualitatively. So that the information collected and processed remains objective and is not influenced by the researcher's own opinion. The data source in this study with primary data directly obtained from the original source and processed by the researcher directly from the subject or object of the researcher who handles asset management at Bank XYZ. The data collection method used is through observation or observation and direct experience in handling this case as part of the Bank XYZ company, and through studies and available company data.

The analysis method used in this research is an Information System designed using an object-oriented approach. In this study, an information system of fixed asset is proposed as an improvement and refinement of the existing system to produce information in the form of real-time asset value which is integrated with the Institution's Financial Information System.

Results and Discussions

XYZ Bank Profile

As a company engaged in the banking sector, XYZ Bank in managing its fixed assets needs to consider the following important things as the basis for its policies, namely: government policy, adjust the new chart of accounts, adjusting interest developments, and implementation of XYZ Bank Information System Application. XYZ Bank is obliged to comply with the regulations set by the government concerning activities in the banking sector. Therefore, whenever there is a change or update in government regulations, XYZ Bank is obliged to make the necessary adjustments in its business activities.

XYZ Bank management has updated the existing chart of accounts to adjust to business developments. The information system related to fixed asset management must also adjust to the new chart of accounts. Current accounting principles related to fixed assets are directed towards presenting fixed assets based on fair value and no longer based on historical data. Thus, the development of fixed asset prices becomes an important consideration in its management, so that this element must be well accommodated in the new fixed asset management information system. Fixed asset management requires the support of an information system that is capable of presenting the most up-to-date information about the condition of fixed assets owned by the company.

The XYZ Bank web-based Fixed Asset Management Information System application developed by a joint team from several divisions is an online inventory application with core banking, systematic and centralized, presenting reports quickly and accurately for the needs of the institution's quarterly and annual reports.

Asset Management Information System

Asset management information system of XYZ Bank is adopted from state-owned enterprises asset management. According to Maryono et al. (2010), the asset management information system is an asset management application aimed at large companies or state-owned enterprises with large amounts of assets that would otherwise require a separate division for managing these assets. In carrying out its activities, the company will definitely sell goods or services to be able to increase or gain profit from the company's operations. XYZ Bank is a service company engaged in banking services. Fixed assets are one of the most important parts in the implementation of company operations.

Initially, the Inventory System Application used by XYZ Bank was a Fixed Asset Management Information System where the application was used to perform depreciation calculations and Fixed Asset Inventory reports manually. Because the application is offline, it is still separate from the Bank XYZ core system, so it requires 2 transactions to input assets, namely from the Application and Core system side at Bank XYZ. So, this often causes differences due to users who miss the process that must be done or input the wrong amount and nominal price. If there is a process error in the application, it will take a long time to revise the unit concerned and cannot be monitored. The depreciation process is not centralized and at different times. The application uses vendor services so that if there is damage to the application, XYZ Bank must pay for repair services and adjustments to the system.

According to the old policy at Bank XYZ, fixed assets including inventory are grouped as follows: 1. Land; 2. Buildings; 3. Inventories; 4. Vehicles; 5. Communication equipment; 6.

Machines and AC; 7. Computers; 8. Electrical installations; 9. Art and sports equipment; and 10. Lease assets. This grouping policy has been updated by the management of XYZ Bank. Based on the new policy, the grouping of fixed assets and inventory has also changed. Changes occurred in groups number 6, 7 and 10 while the other groups remained as before. The new groups number 6, 7 and 10 are as follows: group number 6 becomes Machinery and equipment; group number 7 becomes Computers/hardware; and group number 10 becomes software.

Related to the recognition of fixed assets and depreciation calculations, there are the following policy updates: 1. Fixed assets begin to be depreciated when the assets are ready to be used for operational purposes or have been paid off and/or have been reclassified from assets in progress; 2. For vehicles, inventory, network installations, hardware and software, depreciation begins when they are used and paid off; 3. For all fixed assets that are not ready to be used for operational purposes and have not been paid off are classified as assets in progress; 4. Depreciation is calculated using the basic depreciation value of the first year which is taken from the value or acquisition price of the fixed assets. Depreciation is calculated proportionate from the month in which it is carried out until the end of December by referring to the provisions that have been described previously; 5. The basic depreciation value for the second year and thereafter is calculated based on the remaining book value at the end of December; and 6. Special treatment is applied to building/building type assets, where the basic depreciation value is the initial acquisition value or price, both for calculating depreciation in the first year and in subsequent years.

In measuring fixed assets, there are 2 measurement models, namely the cost model and the revaluation model. The cost model refers to the principle of using historical data in accounting records, where the initial acquisition price is used as a reference by calculating accumulated depreciation. While in the revaluation model, the value of fixed assets is measured from their fair value. Fair value is obtained from the revaluation process. With the revaluation model approach, the things that must be considered are that there is a possibility of a decrease in the value of fixed assets, which can cause losses due to impairment. In addition, the revaluation process must be carried out regularly with sufficient regularity to avoid material differences in the value of the fixed assets. In this case, XYZ Bank takes a policy that still refers to the cost model.

If there are fixed assets and inventory that have been paid off and are ready to be used for operational purposes carried out either at the head office or at the branch office for the opening of a new office but the new office is not yet operational, then the depreciation expense is arranged in such a way that it will only be charged to the new office when the new office starts operating. This means that before the new office is ready to operate, depreciation is still a burden on the head office or the related branch office for the current year.

In the new grouping of fixed assets and inventory, there is a new group, namely software. Software is defined as all programs that can be used on the computer operating system in the XYZ Bank environment. In some cases, there is computer software found on computer-controlled machines. The software is an integral part of the hardware. In such cases, as a unit with the hardware, the software will be categorized as a fixed asset. The same thing also happens to a computer's operating system. If the software is not an integral part of a particular hardware, then the software will be treated as an intangible asset. The acquisition price is calculated by

including the purchase price of the software including the sales tax paid and other costs incurred in connection with the software.

Fixed Asset Management Information System Analysis

Based on the conditions and problems that exist at XYZ Bank related to the management of fixed assets and inventory, the analysis of the Information System for the future can be described in the following explanation. According to Laudon and Laudon (2013) in system analysis, it is necessary to identify the problems faced related to the management of fixed assets and inventory at XYZ Bank. Changes in government regulations and accounting standards are important things that must be anticipated in designing a new information system. For this reason, it is necessary to identify the consequences of these changes on the management of fixed assets and inventory. These changes can have consequences for the process of recognizing, assessing/measuring and presenting different fixed assets and inventory. Decision makers need to know about these new regulations on how to manage fixed assets and inventory in their work areas so that they can be carried out efficiently without violating current accounting regulations and standards. For this reason, the follow-up that needs to be taken before the process of improving and perfecting the new Asset Management Information System is to update the asset and inventory database throughout XYZ Bank's operational areas, including at the head office, to get an overview of the current condition of fixed assets and inventory. From this database update, we can find out what data components are still missing and must be completed to comply with changes in regulations and accounting standards that are currently in effect.

After the database is updated, the next step is to coordinate with all branches to collect additional data needed in relation to compliance with current accounting regulations and standards. In addition, it is also necessary to identify information needs at each managerial level, especially at the branch office level, to make it easier for them to manage fixed assets and inventory in accordance with applicable regulations. Identification of information needs can be done by simultaneously socializing regulations, new policies and new accounting standards that must be understood and followed. Operational managers at the branch level are the parties who play the most important role considering that they are the people who are directly related to the use of fixed assets and inventory to support their operational activities. Thus, it is very important to involve these operational managers in identifying information needs for the management of fixed assets and inventory.

Some important things that must be accommodated in the new fixed asset and inventory management information system are as follows: first, database update procedure. The update procedure must be set so that any changes to fixed assets and inventory as a result of operational activities can be done immediately to produce up-to-date information. The database update procedure must be set in such a way that it continues to be carried out by following the latest applicable standards and policies. Second, for the fixed asset group in the form of software, an inventory process must be carried out to identify all existing software and used for operational purposes as stated in the latest policy applicable at XYZ Bank. This inventory is needed not only to identify existing software, but also to identify the acquisition price of the software. Given the rapid development of software, it is also necessary to consider the useful life of the software owned.

Third, computers and hardware have rapid development. As with software, it is necessary to conduct an inventory throughout the

operational areas of XYZ Bank to be properly identified and its usefulness can be evaluated in the long term. Fourth, there needs to be a clear procedure related to the transfer of fixed assets and inventory from one operational area to another. Thus, the fixed assets or inventory can still be tracked properly and the depreciation charging process can be carried out properly.

Management of fixed assets related to computers, hardware, software and networks needs to be considered carefully. This is because the banking sector in an increasingly modern business environment really needs the support of a reliable information technology-based information system. Various modern banking products are highly dependent on reliable information technology capabilities to improve customer service. For this reason, XYZ Bank in managing fixed assets and inventory related to information system facilities and infrastructure must be done carefully but still pay attention to the company's competitive advantage position among its competitors. Improving the database of information technology facilities and infrastructure is very important to find out XYZ Bank's weaknesses related to information technology in the banking world. Thus, information technology updates can be carried out appropriately to support XYZ Bank's competitive advantage compared to other banks in the same market share.

Web-based Fixed Asset Management Information System Application, namely the XYZ Bank Inventory System Application developed by a team consisting of several divisions that are directly related to the use of this application. This inventory system application is online with core banking, systematic and centralized, presents reports quickly and accurately for quarterly and annual reporting needs, if a problem occurs, the resolution can be monitored directly by the head office.

Improvement Analysis

The advantages of the current system are: 1. Data can be obtained in real time; 2. Can be updated in real time; 3. Can perform data input transactions throughout the XYZ Bank work area; 4. Already online with Core Banking so that it only requires 1 transaction to make a record and also reduces data input errors; 5. If there is a process error in the application and it will make it easier to make revisions for branches and can be monitored; 6. The depreciation process is centralized and at the same time; and 7. Does not use vendor services for repairs if there is damage to the application, XYZ Bank will not incur costs for the repair service.

The weaknesses of the running application need to be immediately added and improved because this will be very necessary to support operations and the need to make decisions, including: 1. The application must be fixed by filling in important fields so that when updating the database, the update cannot be done if the important fields have not been filled in; 2. The application cannot update automatically after holidays; 3. Extra-computer assets have not been accommodated; 4. Daily file backup is still manual; 5. Resetting must be done when printing barcodes so that barcodes cannot be read by scanners during the asset labelling process; 6. Reports at the end of the month cannot be accessed every day as needed because they can only be done 1 (one) time, so if the user cannot print or forgets to print, the user does not have the report. And a restore must be done for the requested data; and 7. End-of-month reports can only be done 1 time, namely 1 (one day) after the end of the month by making an agreement. So, it still depends on the IT team.

The refinement analysis of the Fixed Asset Management Information System is carried out by identifying system needs, activities that occur in the system and parties involved in activities in the system. The following is an analysis of the refinement of the XYZ Bank Asset Management Information System: 1. A field is needed that can input data other than fixed asset data; 2. A field is needed that can place assets according to their location; 3. A field is needed that can distinguish and separate the condition of good, damaged, repaired, and deleted assets, as a basis for decision making regarding existing assets; 4. A field is needed for scheduled maintenance and inventory check activities to review and update system user needs; 5. A system improvement is needed that can sort asset data based on category and procurement year correctly; 6. A system improvement is needed so that it can print fixed asset data reports in PDF format and cannot be converted into Excel to ensure data accuracy and minimize data changes for certain purposes; and 7. A field is needed that has a level of authorization and records of users who make changes, delete or add data.

Conclusion

Good management of fixed assets and inventory integrated with all operational areas at XYZ Bank is very necessary to support its operational activities. In addition, what is more needed by XYZ Bank is the results obtained from the management of the fixed asset database into an accurate information technology that will greatly assist management in decision making. Therefore, there must be behavioural interaction with technology, especially in the current digital era, where the banking sector, which is very dependent on technology in its competition. For this reason, XYZ Bank is required to focus more on the management of fixed assets and inventory related to information system facilities and infrastructure.

For this reason, database updates and identification of information needs by operational managers at the branch and head office levels are very important. This must also be accompanied by clear data update procedures that are well socialized to the operational level, so that it can help ensure database updates. The application program is improved by adding the necessary fields and data as well as input from users regarding data information needs and any reports needed according to user requests. The administrator level process or approval to ensure that the data entered into the system is in accordance with existing procedures so that it can complete the information needs required.

The rapid advancement of technology today makes it possible to meet management needs to obtain good information and can be presented in various forms. Where in the information system there is a data collection flow, processing and analysing data, storing data and disseminating information according to the needs and provisions at Bank XYZ to achieve the company's strategies and goals. For example, barcodes or labelling on fixed assets will facilitate the management of fixed assets themselves, starting from the acquisition process, maintenance to asset disposal.

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