E-learning Teaching Materials: Accounting Information Systems

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Abstract
This study aims to explain further about accounting information systems and serve as reference material for teaching with the e-learning method. This research method is a literature study, analysis of learning needs, development of teaching materials, and evaluation of the effectiveness of the developed teaching materials. Accounting information systems help organizations to collect, store, manipulate, and convey accounting information. This system helps managers to make the right decisions and make income statements more accurate. This system also helps managers to identify and control risks.

Keywords: E-learning, Teaching Materials, Accounting, Information, Systems

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1.0 INTRODUCTION

An accounting information system is a system that helps organizations (Abasilim et al., 2019) to collect, store, manipulate, and convey accounting information. This system uses computer technology to store and process data, generate reports, and help managers make the right decisions. This study aims to explain further about accounting information systems and serve as reference material for teaching with the e-learning method.

2.0 LITERATURE REVIEW

Accounting (Tommasetti et al., 2021) information systems combine computer technology (Saleem et al., 2020) with accounting information to help organizations store, manipulate and communicate accounting data. Accounting information systems can assist managers in making the right decisions by producing accounting reports, such as income statements.

Accounting Information System (AIS) is a system used to collect, process, store and present financial information (Chandra et al., 2018; Nyoto et al., 2023; Renaldo & Murwaningsari, 2023) for management decision making. AIS includes basic accounting processes, such as recording financial transactions, financial reporting, and internal control.

AIS plays an important role in helping organizations manage their finances more effectively and efficiently. With AIS, financial information can be accessed easily and quickly, so management can make the right decisions in less time.

Some of the common features possessed by AIS are:
1. Recording of financial transactions, such as purchases, sales, and payments.
2. Processing of financial transactions, such as aggregation and calculation.
3. Financial reporting, such as balance sheets, income statements, and cash flow statements.
4. Internal controls, such as internal audits and data security oversight.
5. Financial analysis, such as income and expenditure forecasting.

AIS can also be integrated with other management systems, such as inventory management, production management, and HR management, to enable more holistic decision making.
3.0 METHODOLOGY

This research method is a literature study (Sekaran & Bougie, 2016), analysis of learning needs, development of teaching materials, and evaluation of the effectiveness of the developed teaching materials. A literature study will be conducted to gather information about the latest developments in the field of financial accounting and accounting standards, as well as to study existing teaching materials.

Analysis of learning needs will involve identifying challenges and difficulties faced by students in understanding intermediated accounting concepts. In this stage, data will be collected through surveys and interviews with students and experienced teachers. This data will be used as a basis for developing teaching materials that are relevant and in accordance with student needs.

The development of teaching materials will be carried out by taking into account the principles of effective instructional design, including the use of multimedia, logical organization of material, and presentation of clear and easy-to-understand information. The teaching materials developed will include subject matter, practice questions, case studies, and relevant reference sources.

After development, the teaching materials that have been developed will be evaluated for their effectiveness. The evaluation will involve collecting data from students who use the teaching materials. This data will be analyzed qualitatively and quantitatively to evaluate the effectiveness of teaching materials in increasing students' understanding of financial accounting and accounting standards.

4.0 RESULTS AND DISCUSSION

Basic Transaction Recording

Recording of basic transactions is part of an accounting information system that provides a way to store and access accounting data. Recording basic transactions can help organizations to produce accurate accounting reports, such as income statements.

Basic transaction recording is the process of recording financial transactions that occur in a business. Financial transactions are activities that involve the receipt or disbursement of money or goods. Recording of basic transactions is very important in the Accounting Information System (AIS), because this information is used to prepare financial reports and analyze the company's financial performance.

Some examples of basic financial transactions that are commonly recorded in AIS include:

1. Purchase of goods or services from suppliers
2. Sales of goods or services to customers
3. Payment of trade payables to suppliers
4. Acceptance of payments from customers
5. Payment of employee salaries
6. Purchase of office supplies or equipment

Recording of basic transactions usually includes information such as the date of the transaction, a description of the transaction, the amount of money involved, and the accounts to which it relates. Every transaction is recorded in a general journal, which is a chronological record of all the transactions that occur in a business.

Once recorded in the general journal, the transaction information is transferred to individual accounts in the general ledger. The general ledger is an accounting record that records each transaction into special accounts according to the type of transaction. Each account has a balance, which reflects the amount of money involved in the transactions associated with that account.

Accurate and timely recording of basic transactions is essential in AIS. If transactions are not properly recorded or not recorded at all, the resulting financial information may become inaccurate, which may lead to erroneous management decisions.

Adjustment

Adjustment is a process used to ensure that the accounting data stored in the accounting information system has been corrected and adjusted to an accurate income statement. Adjustments can also help organizations identify and correct errors that may occur in the basic transaction recording process.

Adjustment (adjusting entries) in accounting is the process of adjusting the company's financial records at the end of the accounting period, to account for transactions that have not been recorded or transactions that have been recorded but have not been reflected in the company's financial statements. The aim is to ensure that the financial information recorded in the financial statements is accurate and reliable.

Adjustments are usually made at the end of the accounting period, that is, after all transactions have been made and recorded in the general journal and ledger. Some examples of common adjustments are as follows:
1. Adjustment of accounts receivable and accounts payable: if a company has receivables that are due or payable that must be paid immediately, then the accounts receivable or payable must be adjusted to reflect the actual amount.
2. Inventory adjustment: if the company has unsold goods or products at the end of the accounting period, the inventory value must be adjusted to reflect the actual amount.
3. Adjustment of revenue accounts and expense accounts: if a company receives an advance for a particular project or order, the revenue must be adjusted to reflect the actual amount received. If the company buys assets or makes expenses that result in long-term benefits, these costs must be adjusted and recorded as assets.
4. Adjustment of depreciation accounts: if the company has fixed assets such as machinery or buildings, the depreciation value must be adjusted to reflect the actual amount.

After adjustments are made, this information is transferred to the company's financial statements, including the income statement and balance sheet. Adjustment is an important step in the accounting process because it ensures that the financial information presented in the financial statements is accurate and reliable.

Preparation of Financial Statements
The preparation of financial statements is the process of gathering data necessary to produce accurate financial reports. This data usually comes from various sources, including accounting information from accounting information systems, income statements, and other information related to finance.

Preparation of financial statements is the process of collecting, processing and presenting financial information from companies in the form of financial reports. The financial statements that are generally prepared consist of three types, namely income statements, balance sheets, and cash flow statements.

The following are general stages in the preparation of financial statements:

1. Prepare General Journals and Ledgers: All financial transactions are recorded in general journals and general ledgers of the company. The general journal records all transactions chronologically, while the general ledger separates each account into its relevant category. The information gathered from general journals and ledgers is the main material for preparing financial reports.
2. Making Adjusting Entries: End of accounting period adjustments (adjusting entries) are used to reflect unrecorded transactions and to calculate the current value of the company's assets and liabilities.
3. Prepare a Profit and Loss Statement: An income statement presents information about the revenues and expenses of a company during a certain period. This report shows whether the company made a profit or loss in that period.
4. Prepare a Balance Sheet: The balance sheet shows the financial position of a company at the end of a certain period. The balance sheet presents information about a company's assets, liabilities and equity. The balance sheet helps in evaluating the financial health of a company.
5. Prepare a Statement of Cash Flows: A statement of cash flows describes the changes in a company's cash and cash equivalents during a specific period. This report helps in understanding the company's cash inflows and outflows and in evaluating the company's ability to pay financial obligations.
6. Completing Financial Statements: After the income statement, balance sheet, and cash flow statement have been completed, the company must ensure that the financial statements have been reviewed, reconciled, and comply with the applicable accounting principles.

After all stages are completed, financial reports can be presented and used by owners, management, investors and related parties to make the right business decisions and financial information that is accurate and reliable.

Cash and Accrual Basis
The cash basis is a method of accounting that records transactions only when cash is received or paid. The accrual method is an accounting method that records transactions when they occur, not when cash is received or paid.

Cash basis and accrual basis are two methods used in accounting to record financial transactions and prepare financial statements.

The cash basis method records financial transactions when cash is actually received or paid. Under this method, revenues are recorded when cash is actually received, and expenses are recorded when cash is actually paid. So, if a transaction occurs, but payment has not been made, then the transaction is not recorded in the cash basis. This approach is suitable for small businesses and home businesses because it is simple and easy to understand.
Example: If a company makes a sale in December 2022, but customer payments are not received until January 2023, then sales revenue will not be recorded in the company’s financial statements at the end of 2022, but will be recorded in the financial statements in early 2023 when payment is received.

The accrual basis method records financial transactions when they occur, not when cash is received or paid. Under this method, revenue is recorded when sales are made, even if payment has not been received, and expenses are recorded when goods or services are received, even if payment has not been made. This approach is used by large companies because it is more accurate and provides a more complete picture of the company’s financial condition.

Example: If a company makes a sale in December 2022 but customer payments are not received by January 2023, then the sales revenue will be recorded in the company’s financial statements at the end of 2022, because the sales have been made in that period.

Both of these methods have their own advantages and disadvantages and depend on the type of business and the preferences of the company’s financial management. Therefore, choosing the right method is important to ensure that the resulting financial reports are accurate and reliable.

Changes in Estimates and Accounting Principles
Changes in estimates in accounting are changes in the assumptions made by management when recording transactions. The application of Generally Accepted Accounting Principles (GAAP) ensures that financial reports and income statements reflect accurate and reliable information.

Changes in estimates and accounting principles are commonplace in a company’s financial management. The following describes the changes in estimates and accounting principles:

1. Changes in estimates: Estimates are quantitative measurements made using currently available information to estimate the value of assets, liabilities, income or expenses that will occur in the future. The company may change estimates previously made if new relevant information is found or if conditions in the business environment change. Changes in estimates must be disclosed in the financial statements and applied prospectively, i.e., only in the future current period, and do not affect past financial statements.

2. Changes in accounting principles: Companies may change the accounting principles used for a type of transaction or business event if those accounting principles are no longer appropriate for current business conditions or if there is a change in the accounting standards in force. Changes in accounting principles must be clearly disclosed and applied retrospectively, namely in all periods affected by the change, so that past financial statements can be compared consistently with current financial statements.

When a company makes a change in estimates or accounting principles, the company must provide a clear and complete explanation of the reasons for the change, as well as the impact of the change on the company’s financial statements. This is important to ensure that the company’s financial reports remain accurate and can be trusted by stakeholders, such as investors, creditors, and regulators.

Related Information
Related information is information related to the income statement. This information can be in the form of cash flow statements, asset reports, financial reports, and other reports needed to prepare profit and loss statements. This information is used to help managers assess company performance and make informed decisions.

Related information is also used to help managers identify and control risks. Managers can use this information to identify potential problems and take the necessary actions to reduce risks. It also helps managers to identify opportunities to increase revenue.

Advantages of Accounting Information Systems
Accounting information systems provide many benefits to organizations. This system helps improve efficiency and accuracy in collecting and storing accounting information. It also helps managers to make the right decisions quickly and makes income statements more accurate.

Accounting information systems also help managers to identify and control risks. By monitoring the income statement, managers can identify potential problems and take the necessary actions to reduce risks. This system also helps managers to identify opportunities to increase revenue.

An Accounting Information System (AIS) is a system used to collect, process, and manage financial and accounting information within an organization. Following are some of the advantages of using AIS:

1. Efficiency and Accuracy of Financial Data Processing. AIS enables more efficient and accurate processing of financial data. With AIS, accounting processes and financial data processing can be done automatically, reducing manual errors and increasing data accuracy.
2. Better Financial Monitoring Capability. With AIS, management can monitor company finances more effectively and efficiently. AIS can generate real-time financial reports and can provide accurate and timely financial information.

3. Integration with Other Systems. AIS can be integrated with other systems within the company, such as production systems or inventory systems, thereby enabling more complete and accurate information regarding business and financial activities.

4. Improving the Effectiveness of Decision Making. AIS provides accurate and timely financial information for management. This allows management to make better and faster decisions, based on the most up-to-date information.

5. Improving Financial Information Security. AIS can help improve the security of a company’s financial information by granting different access rights according to job level and responsibilities. Thus, only authorized persons can access the company’s financial information.

6. Improve Compliance with Regulations and Laws. AIS helps ensure that companies comply with applicable financial laws and regulations. With AIS, companies can ensure that financial reporting is done in a timely and accurate manner, so companies can avoid unwanted legal and financial problems.

In order to benefit from accounting information systems, companies must invest sufficient resources and time in the implementation and development of these systems.

Benefits of Accounting Information Systems

Accounting information systems offer many benefits to organizations. This system helps improve efficiency and accuracy in collecting and storing accounting information. It also helps managers to make the right decisions quickly and makes income statements more accurate.

Accounting information systems also help managers to identify and control risks. By monitoring the income statement, managers can identify potential problems and take the necessary actions to reduce risks. This system also helps managers to identify opportunities to increase revenue.

An Accounting Information System (AIS) is a system used to collect, process and manage financial and accounting information within an organization. Here are some of the benefits of using AIS:

1. Simplify (Bravo et al., 2015) the Accounting Process. AIS can simplify the accounting process by providing various features, such as automatic recording of transactions and preparation of regular financial reports. With AIS, the accounting process can be done more quickly and efficiently.

2. Improve Data Accuracy (Awan et al., 2020). With AIS, financial data can be processed automatically, reducing the risk of manual AIS errors in data recording and processing. This can improve the accuracy of financial data and produce more accurate financial reports.

3. Facilitate Financial Analysis (Alwi et al., 2022). AIS can facilitate financial analysis by providing real-time and accurate financial information. With AIS, management can analyze company financial data more easily and quickly, so they can make more informed business decisions.

4. Providing Timely (Murtagh & Badi, 2020) Financial Information. AIS can generate financial reports automatically and provide accurate and timely financial information. This can help management to monitor company finances in real-time and make faster business decisions.

5. Allows Integration (Li et al., 2021) with Other Systems. AIS can be integrated with other systems within the company, such as inventory systems or production systems. Thus, companies can obtain more complete and accurate information regarding business and financial activities.

6. Improving the Effectiveness of Decision Making (Lutfi et al., 2022). AIS can assist management in making better and faster business decisions, based on accurate and timely financial information.

7. Increase Efficiency and Productivity. With AIS, accounting processes and financial data processing can be done automatically, reducing manual errors and increasing efficiency and productivity.

8. Improving Financial Information Security. AIS can help improve the security of a company’s financial information by granting different access rights according to job level and responsibilities. Thus, only authorized persons can access the company’s financial information.

In order to benefit from accounting information systems, companies must invest sufficient resources and time in the implementation and development of these systems.

Implementation of Accounting Information Systems

Implementation of accounting information systems is the process of integrating accounting information systems into the organization. This process involves selecting software, configuring the software, and implementing the accounting information system. This process also involves staff training and system testing to ensure that the system is functioning properly.
Implementation of accounting information systems requires an investment of time and costs. However, this investment will help organizations to improve efficiency and accuracy in collecting and storing accounting information. Implementation of accounting information systems will also help managers to make the right decisions and improve company performance.

Implementation of an Accounting Information System (AIS) is the process of recognizing, implementing, and using a system designed to collect, process, and present financial information effectively and efficiently. Following are the general steps in AIS implementation:

1. Identification of Needs and Goals. Identification of company needs and goals in using AIS. Define short term and long-term goals for the AIS, and identify any problems or weaknesses in the accounting system being used.
2. Preparation of Implementation Plans (Liu et al., 2019). Preparation of an implementation plan consisting of an implementation schedule, costs, and required human resources. The implementation plan should include the stages and timeframe needed to implement the AIS.
3. Selection of the Right Accounting Information System. Selection of the right accounting information system based on company needs. Choose an AIS that meets the functional and technical requirements of the company and has adequate technical support.
4. User Preparation (Weston & Gore, 2006). Prepare system users by providing training on how to use AIS and ensure that they understand the functions and benefits of AIS.
5. System Integration (Li et al., 2021). Integrate AIS with other systems used by companies, such as inventory management systems or production management systems.
6. System Test. Do a test run of the system prior to full implementation. Testing will help identify problems that may arise in the use of AIS and ensure that the system is functioning properly before full implementation.
7. Full Implementation (Feng et al., 2021). Once the pilot phase is complete and issues have been fixed, fully implement AIS. Make sure that the system runs smoothly and works as expected.
8. Evaluation and Improvement. Evaluate and improve AIS regularly to ensure that the system remains relevant and effective in addressing company needs.

AIS implementation requires considerable time, resources and costs. Therefore, companies need to evaluate the costs and benefits before deciding to implement AIS. However, the long-term benefits of using AIS in improving business effectiveness and efficiency can outweigh the costs of implementation.

Power point presentation for e-learning can be seen at the following link: https://tome.app/nicholas-diskuss/sistem-informasi-akuntansi-and-laporan-laba-rugi-dan-informasi-terkait-cleb1g5w90e7y74s5noj6zco7

5.0 CONCLUSION

Conclusion
Accounting information systems help organizations to collect, store, manipulate, and convey accounting information. This system helps managers to make the right decisions and make income statements more accurate. This system also helps managers to identify and control risks.

Recommendation
Recommendations for further research in order to make e-learning teaching materials more interesting. Teaching materials are inseparable from accounting information system material, but can also be in the form of environmental performance (Renaldo, Suhardjo, Suyono, Putri, et al., 2022; Sudarno, Renaldo, Hutahuruk, et al., 2022), stock prices (Suyono et al., 2022), earnings management (Renaldo, Suharti, et al., 2022; Sudarno, Renaldo, Veronica, et al., 2022), behavioral accounting (Renaldo et al., 2021), forensic accounting (Renaldo, Sudarno, Hutahuruk, Suhardjo, et al., 2022), social accounting (Renaldo, Fadrul, Andi, Sevendy, et al., 2022; Renaldo, Hafni, et al., 2022; Renaldo, Junaedi, Hutahuruk, Fransisca, et al., 2022; Renaldo, Suhardjo, Suyono, Andi, et al., 2022; Suyono et al., 2021), and others.

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