



# Digital Accounting Systems (DIS): Concepts, Components and Roles in Business

**Dao Thi Hong Nhung**

Dong Nai Technology University, Bien Hoa, Viet Nam

**Email address:**

[daothihongnhung@dntu.edu.vn](mailto:daothihongnhung@dntu.edu.vn)

\*Corresponding author

**To cite this article:**

Dao Thi, H. N. Digital Accounting Systems (DIS): Concepts, Components and Roles in Business. International Journal of Research in Vocational Studies (IJRVOCAS), 3(1), 10–14. <https://doi.org/10.53893/ijrvocas.v3i1.182>

**Received:** 01 12, 2023; **Accepted:** 03 06, 2023; **Published:** 04 25, 2023

---

**Abstract:** Today, with the continuous development of science and technology, the most advanced technology has been applied to the field of human activities, from production and business to monitoring and management. Technology helps people manage work more efficiently and quickly, while providing timely and reliable information. Accounting is a leading important part of the economic and financial management system, playing a great role in controlling, managing and operating the production and business activities of enterprises, especially in the financial sector. current period. That requires businesses to apply technology to the organization that performs accounting work with the aim of creating an effective accounting information system. Such system must be reasonable, rigorous, provide truthful, timely and reliable information with the most advanced processing techniques. That not only contributes to increasing competitiveness but also improves operational efficiency in enterprises. This is an inevitable development trend and is consistent with the renovation process, especially in the current period of economic integration. In this article, Research on the concept of a digital accounting information system and a plan to develop an accounting information system in an enterprise.

**Keywords:** Digital Accounting Information System (DIS), Business Analysts, Management, Chief Financial Officers (CFOs)

---

## 1. Introduction

A digital accounting information system (DIS) is a structure that an agency or business uses to collect, aggregate, manage, store, process, retrieve, and report its financial-accounting data me. Accounting information systems can be used by accountants, consultants, business analysts, management, chief financial officers (CFOs), auditors, or managers. and tax authorities [1-2].

Our accountants are highly trained to work with the DIS, ensuring the highest accuracy rates in your financial transactions and financial records, and ensuring your financial

data is always available. ready for use while keeping the original data intact [3].

## 2. Components of a digital accounting information system

A basic accounting information system usually consists of four main components: people, procedures and instructions, data, and software. Let's take a look at each of those components in detail below [4].

## 2.1. Humans

The person in the accounting information system is simply the user of the system. Professionals who need to use the system in an organization include: accountants, consultants, business analysts, managers, chief financial officers and auditors. The accounting system helps different departments in the business work together [5-6].

With a well-designed accounting information system, all employees in an organization are authorized to be able to access the system and get the required information. The system also simplifies receiving information for people outside the organization when needed [1-3].

Accounting information systems should be designed to meet the needs of users, be efficient, easy to use, and limit improvements.

## 2.2. Procedures and instructions

An accounting information system's procedures and instructions are the methods it uses to collect, aggregate, store, manage, retrieve, and process data. These methods all work automatically. Data can come from both internal sources (e.g., employees within the business) and external sources (e.g., customers' online orders) [4-7].

These procedures and instructions will be codified in the accounting information system through documentation and training. For maximum effectiveness, procedures and instructions must be followed consistently.

## 2.3. Database

To store information, an accounting information system must have a database structure similar to that of a structured query language (SQL), a computer language frequently applied to databases. The system will also need various inputs for data entry and for each user of the system, as well as different output formats to meet the needs of different users and different types of information [8].

The data contained in the system is all financial-accounting information relevant to the business practice of the enterprise. Any business data that impacts a business's financial system must go into the system.

The type of data in an accounting information system will depend on the size and type of the business, but it may include the following types of data:

- Bill of sale
- Customer payment reports
- Business analysis reports
- Purchases
- Invoice from supplier
- Check the registry
- General Ledger
- Inventory data
- Information related to payroll
- Timesheets
- Tax information

These types of data can then be used to prepare accounting reports. Storing all this data in a single place – in an accounting information system will facilitate record keeping, analysis, reporting, auditing or decision making. For data to be truly useful, it must be complete, accurate, and reliable [7-8].

## 2.4. Software

Accounting information system software is computer programs used to store, manage, retrieve, process and analyze financial-accounting data of an enterprise. Before computers, systems were manual, paper-based systems, however now most businesses are using accounting software as the basis for the system [9-10].

## 2.5. Function of an accounting information system

Collect and store data on business activities of enterprises. Process and provide useful information to stakeholders such as:

- Provide financial statements to external parties (customers, investors, auditors).
- Provide accurate, timely and reliable information for planning purposes.
- Provide useful information for management activities, check and control the implementation of the plan.
- Provide fast and accurate information for daily business operations.

Support control activities in the enterprise.

- Control the compliance with business processes in the enterprise.
- Protect physical and intellectual property of the business.
- Control activities related to information in the enterprise to ensure that it is always handled accurately and in a timely manner.

### **2.6 Accounting information system in business**

Currently, building and developing management information systems in general and accounting information systems in enterprises in Vietnam are still facing many difficulties. The design of information systems in the 4.0 technology era needs to be quickly implemented and perfected in order to enhance management efficiency and improve competitiveness for businesses.

## **3. Designing accounting information systems in enterprises**

To design an effective accounting information system in your business, you can refer to our suggestions below.

Firstly, enterprises must organize an accounting apparatus with a combination of financial accounting and management accounting. In order for the accounting information system to work effectively, businesses need to organize a management accounting apparatus in combination with financial accounting in the same department. However, this combination still needs to be separated and clearly assigned on the content and scope of information provision as well as the relationship between management accounting and financial accounting, between the cost accounting department and the financial accounting department. information and general accounting department to avoid overlapping and delay in processing and providing information [4-9].

Second, it is necessary to establish a process for circulating accounting vouchers. Enterprises need to redesign the voucher rotation process to effectively serve the accounting information system. First of all, it is necessary to develop some more production documents to serve the cost management and cost calculation of accountants. Also, give items like process writer, reviewer, tester. In addition, the content should be mentioned: list of documents used; regulations on the time of document circulation and the prescribed time limit, the credit sale process [9-11].

Third, develop an accounting account system in the direction of providing administrative information. Based on the system of accounting accounts issued by the Ministry of Finance, enterprises can redesign the accounting information system table to be able to track fixed costs, variable costs, and management codes in accordance with the regulations. information management needs [8],[10].

Fourth, building accounting books in the direction of providing information for management. The detailed books, general ledgers, balance sheets, business results reports, etc. of the accounting book system all play a role in serving management accounting. The accounting information system is not required to be built according to the prescribed form. Based on management purposes, the enterprise will set up a bookkeeping system to track and provide timely and accurate information to managers [12-13].

Fifth, organize the reporting system. The reporting software in the accounting information system is designed, prepared and presented flexibly and in accordance with the needs of users.

Derived from the size, type of business and requirements of the manager, the following types of reports are required: Information and reporting needs for the planning function of the administrator; Serving the inspection of the administrator; Information and reporting needs for decision-making activities of managers.

Applying information technology is the key to helping businesses analyze and quickly process collected information, as well as make timely reports, ensuring the usefulness of information [14].

## **4. Control accounting information system**

To ensure the safety of information systems in general and accounting information systems in particular, enterprises need to focus on implementing the following measures:

First, protect the accounting information system from illegal access: Illegally penetrating the computers of accountants and servers containing accounting software and data can cause many risks. for Business. Therefore, protecting the enterprise's data system from unauthorized access is the first measure that should be prioritized for deployment.

Second, monitoring system access activities: In addition to preventing illegal access, enterprises must also monitor and monitor all access activities to the accounting information system. Accordingly, enterprises can use access logs, which will usually be part of a secure operating system module, to monitor and control login time, type of access request, access code and data. access.

Third, protect against unauthorized physical intrusion of processing devices: In order to minimize the risk of loss of computer equipment, or information disclosure or destruction,

strict control of material access is required. management of the enterprise's computer system is extremely necessary.

Fourth, use advanced technologies to prevent data destruction: In fact, the risk of data insecurity is quite closely related to the theft or alteration of data by using technology techniques. Therefore, to ensure the security of the accounting data system, enterprises also need to use corresponding technologies to prevent data destruction [12-14].

Fifth, ensure security for accounting data storage: Measures to ensure security for accounting data storage include: storage devices such as floppy disks, hard disks, compressed disks, disks CD, USB or magnetic tape, backup data.

Sixth, ensure security for data transmission: Enterprises need to closely monitor computer networks to detect security weaknesses early, thereby enhancing maintenance and data backup activities. materials... in order to reduce risks and hazards.

Seventh, plans to recover and rebuild lost data: Enterprises need to have a plan to prevent and recover data by performing data backup. For particularly important data, it should be stored in a safe place, as far as possible outside the enterprise. At the same time, businesses need to install application software that allows the fastest recovery of lost data [15].

## 5. The role of accounting information systems

### 5.1. Data storage and processing

Science and technology are developing more and more, leading to the strong development of other economic sectors. That has posed a huge challenge for businesses in terms of storing and managing financial-accounting information. At this time, the role of the system will maximize. The accounting information system is responsible for storing and processing information to provide the most useful and reliable information for strategic decisions of the business.

### 5.2. Bridge for operational systems and management systems

The accounting information system is developed as a bridge between the management system and the operational system of organizations and enterprises. In addition to the main role of storing and processing information, the system also has the task of general statistics to produce accurate

accounting reports, from which businesses can solve accounting work quickly, enhance interactivity in the working process.

### 5.3 Save time and money

The accounting information system contributes significantly to saving costs and time for businesses to use. When using the system, managers will avoid unnecessary errors in information storage. Thereby, somewhat limiting possible losses, helping businesses avoid serious financial losses.

## 6. Conclusion

In summary, the accounting information system has partly solved three major problems of private enterprises today. Firstly, support and enhance the competitiveness of enterprises. The second is to support business decision-making. Finally, professional support, production and business activities help businesses develop more and more prosperously.

In this article, we analyze general information about accounting information systems in enterprises. Hopefully, through this article, readers have understood the role of digital accounting in business organization, management and administration

---

## References

- [1] Chen, Y., Visnjic, I., Parida, V., & Zhang, Z. (2021). On the road to digital servitization—The (dis) continuous interplay between business model and digital technology. *International Journal of Operations & Production Management*, 41(5), 694-722.
- [2] Fichman, R. G., Dos Santos, B. L., & Zheng, Z. (2014). Digital innovation as a fundamental and powerful concept in the information systems curriculum. *MIS quarterly*, 38(2), 329-345.
- [3] Deshmukh, A. (2006). *Digital accounting: The effects of the internet and ERP on accounting*. IGI Global.
- [4] Hall, J. A. (2015). *Accounting information systems*. Cengage Learning.
- [5] Garbowski, M., Tiutiunnyk, S., Tiutiunnyk, Y., Kondukotsova, n., & karpenko, o. (2021). Digitalization of transfer pricing as an element of the management accounting system in the company. *Academy of Accounting and Financial Studies Journal*, 25(1), 1-8.
- [6] Bogasiu, I., & Ardeleanu, N. (2021). Advantages and disadvantages of digitalisation in accounting. *EIRP Proceedings*, 16(1).
- [7] Murodovich, G. R., & Ziyadullaevna, B. S. (2022). Prospects for Use of Digital Information Technologies in Accounting. *American Journal of Social and Humanitarian Research*, 3(12),

- 244-253.
- [8] Dudin, M. N., Reznik, E. A., Romanova, Y. A., & Smirnova, I. L. (2019). Development of Information Digital Warehouse Accounting System through the Introduction of Radio-Frequency Identification Technology. *International Journal of Engineering and Advanced Technology*, 8(5), 1677-1681
- [9] Hunton, J. E. (2002). The impact of digital technology on accounting behavioral research. In *Advances in Accounting Behavioral Research* (Vol. 5, pp. 3-17). Emerald Group Publishing Limited.
- [10] Garbowski, M., Tiutiunyk, S., Tiutiunyk, Y., Kondukotsova, N., & Karpenko, O. (2021). Digitalization of transfer pricing as an element of the management accounting system in the company. *Academy of Accounting and Financial Studies Journal*, 25(1), 1-8.
- [11] Mancini, D., Lamboglia, R., Castellano, N. G., & Corsi, K. (2017). Trends of digital innovation applied to accounting information and management control systems. In *Reshaping Accounting and Management Control Systems: New Opportunities from Business Information Systems* (pp. 1-19). Springer International Publishing.
- [12] Uktamovich, P. K., & Boxodirovich, e. F. (2022). Ways of introduction of digital technologies in the development of accounting. *Gospodarka i Innowacje.*, 22, 169-172.
- [13] Hosseini, S. (2022). Digital Accounting Systems for Sole Entrepreneurs.
- [14] Nazarova, H., Kashchena, N., Nesterenko, I., Kovalevska, N., & Kashperska, A. (2022). Theoretical and methodological aspects of improving the functioning of the accounting system.
- [15] Rahmayanti, A. Y., & Rahmawati, D. (2020, April). Digital accounting for small to medium enterprises using mobile applications. In *3rd International Conference on Vocational Higher Education (ICVHE 2018)* (pp. 172-176). Atlantis Press.