

Evaluating the Effectiveness of the Algerian Financial Accounting System in Light of Digital Transformation: A Field Study at Agrodiv Company in M'Sila

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Abstract:

This study aims to evaluate the effectiveness of the Algerian accounting system in light of digital transformations. The study included two aspects: the theoretical aspect, which addressed the financial accounting system and the impact of digitization on the development of accounting practices, and the applied aspect, which was based on an interview with an official at an economic enterprise. The results showed that the adoption of digital systems and accounting software contributed to improving the accuracy and speed of financial data processing and increasing the transparency of information, while noting some challenges related to training and system updates. The study indicates that digital transformation enhances the effectiveness of the Algerian accounting system, but it requires the development of human resources and information systems to keep pace with modern developments.

Keywords: Financial Accounting System, Digitization, Digital Transformation, Effectiveness of The Accounting System.

JEL Classification Codes : M41, M15, O33.

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1. INTRODUCTION

Over the past decades, the world has witnessed profound transformations affecting various economic and technological dimensions, as digital transformation has become one of the most prominent features of the contemporary economic environment. The rapid development of information and communication technology has reshaped working patterns within institutions, especially in information-intensive fields, foremost among them accounting. Accounting is no longer limited to recording financial transactions through traditional methods; rather, it has become increasingly dependent on integrated digital information systems, intelligent applications, and interconnected databases.

In this context, the importance of national accounting systems emerges as they constitute the regulatory framework for producing financial information and ensuring its quality and reliability. The Algerian Financial Accounting System represents an important reform step aimed at enhancing transparency, comparability, and financial disclosure, drawing its philosophy from the international standards issued by the International Accounting Standards Board. However, its implementation coincided with an unprecedented acceleration in the process of digitization, which raises the issue of the extent to which it is capable of adapting to a changing and complex digital environment.

Digital transformation has compelled economic institutions to adopt electronic accounting information systems and advanced software such as enterprise resource planning systems, electronic archiving, and cloud computing, which has led to changes in the nature of accounting processes and the mechanisms used in preparing financial reports. In light of these developments, evaluating the effectiveness of the Financial Accounting System is no longer limited to the extent of its compliance with principles and standards; it has also become linked to its ability to integrate with digital systems and its capacity to support processing speed, information accuracy, and data security.

Accordingly, there is a need for a scientific study that seeks to

evaluate the effectiveness of the Algerian Financial Accounting System in light of the current economic and digital transformations by analyzing its readiness to adapt to a digital environment and identifying the challenges facing its implementation in Algerian institutions, based on a field study that reflects practical reality.

Accordingly, the study raises the following main question:

To what extent can the Algerian Financial Accounting System adapt to the requirements of digital transformation and achieve effectiveness in practical application within Algerian institutions?

Under this main question, a number of sub-questions arise, including the following:

- Does the level of digital transformation in Algerian institutions affect the effectiveness of the implementation of the Financial Accounting System?
- Is there sufficient digital infrastructure to support the implementation of the system in a digital environment?
- To what extent is the Financial Accounting System integrated with modern information systems?

To answer the previous sub-questions, the following research hypotheses were adopted:

- Digital transformation contributes to improving the effectiveness of the implementation of the Algerian Financial Accounting System from the perspective of practitioners.
- Algerian institutions face challenges related to technological infrastructure and the competence of accounting staff when implementing the Financial Accounting System in a digital environment.
- There is a gap between what the current legal and regulatory framework of the Financial Accounting System allows and the requirements of actual digital implementation.

1.1 Study Importance:

This study derives its importance from the fact that it addresses a modern and vital topic in an economic environment undergoing rapid

digital transformations, where digital transformation has become one of the main determinants of the effectiveness of accounting systems. The significance of the study lies in evaluating the extent to which the Algerian Financial Accounting System is capable of adapting to these transformations and in analyzing the practical challenges faced by practitioners in institutions.

1.2 Study Objectives:

This study aims to evaluate the effectiveness of the Algerian Financial Accounting System in light of digital transformation from the perspective of practitioners in economic institutions. The objectives of the research can be summarized as follows:

- Evaluating the level of digital transformation in Algerian institutions.
- Determining the extent to which the Financial Accounting System is compatible with the digital environment.
- Identifying the practical challenges faced by practitioners.
- Drawing recommendations for the development of the Financial Accounting System in light of digitization.

1.3 Previous Studies

- Study by Chouki Merdassi and Abboud Zerguine (2018), titled *The Reality of the Implementation of the Financial Accounting System in Algeria After 10 Years Since Its Issuance*, *Journal of Economic and Financial Research*. This study provided a summary of the accounting reforms in Algeria, mainly represented by the Financial Accounting System (SCF), which was issued in 2007. It clarified the options and alternatives that had been available to the supervisory committees. The study aimed to evaluate the accounting reforms carried out by Algeria. It concluded that the implementation of this system had an impact on the tax environment, as well as on accounting education, which kept pace with these reforms through the adoption of the Financial Accounting System starting from the 2010–2011 academic year.
- Study by Meraghni, O., Bekkouche, L., and Demdoun, Z. (2022),

titled *Impact of Digital Transformation on Accounting Information Systems: Evidence from Algerian Firms*, *Journal of Economics and Business*. This study aimed to analyze the impact of digital transformation on accounting information systems in Algerian institutions by distributing a questionnaire to 237 participants from approximately 120 companies. The study found that there was weak awareness of the importance of digital transformation and limited efforts to align accounting information systems with the requirements of digitization, due to several obstacles.

2. Theoretical Aspect

2.1. Overview of the Algerian Financial Accounting System

The Algerian Financial Accounting System is the official reference framework for regulating accounting treatment and preparing financial statements in Algeria. This system emerged within the context of structural economic reforms aimed at transitioning toward a market economy and enhancing financial transparency. It was adopted under Law No. 07-11 dated November 25, 2007, and entered into force on January 1, 2010 (Law No. 07-11, 2007).

The Financial Accounting System replaced the National Accounting Plan, which had been based on a traditional accounting philosophy primarily oriented toward central planning. In contrast, the new system was introduced to meet the requirements of an open economy and to enhance the international comparability of financial statements (Algerian Ministry of Finance, 2010).

In its structure and basic concepts, the Financial Accounting System is based on the conceptual framework and international standards issued by the International Accounting Standards Board. It draws many of its principles of measurement, recognition, presentation, and disclosure from the International Financial Reporting Standards (IFRS). This orientation aims to achieve the following (Algerian Ministry of Finance, 2010):

- Improving the quality and relevance of financial information for decision-making.
- Enhancing transparency and credibility.

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- Enabling investors and various stakeholders to obtain comparable information.
- Supporting the attractiveness of the national economy for foreign investment.

The Financial Accounting System includes three main components:

- The conceptual framework.
- Accounting standards.
- The chart of accounts and financial statements.

The conceptual framework of the system is based on qualitative characteristics of financial information, the most important of which are relevance, reliability, comparability, and understandability, in addition to the going concern assumption and the accrual basis principle as the foundation for preparing financial statements (Algerian Ministry of Finance, 2010).

The Algerian Financial Accounting System is the nationally adopted reference framework for regulating accounting treatment and preparing financial statements in Algerian economic institutions. This system was adopted as part of a comprehensive structural reform aimed at modernizing traditional accounting practice, which had previously been governed by the old National Accounting Plan. It was introduced in response to economic changes and the opening toward international accounting standards and global practices in the preparation of financial information (Benkhalifa & Berhamouma, 2014).

The Financial Accounting System was designed to keep pace with the requirements of a market economy and to ensure comparability and transparency in financial information through the adoption of standard-based principles that closely resemble those contained in the International Accounting Standards and International Financial Reporting Standards. This framework includes a set of basic principles and accounting standards that guide the recording, classification, presentation, and disclosure of financial transactions in a uniform manner within Algerian institutions (Muhammad, 2023).

National studies have also emphasized that this system should not be

regarded merely as an update of the accounting plan, but rather as a body of knowledge that accounting practitioners are required to apply in light of developments in the economic environment. This requires a deeper understanding in order to keep pace with the requirements of modern accounting practices under globalization and interaction with international standards (Ayachi, 2014).

However, some critical studies have pointed to the existence of shortcomings in the conceptual and reference framework of the Financial Accounting System, such as the limited scope of some of its concepts and its incomplete compatibility with international practices, in addition to the limited readiness of the local accounting environment to fully meet its requirements. This is linked to a number of organizational, educational, and environmental factors that limit its effective implementation in practical reality, which makes its study in the context of digital transformation a matter of scientific and practical importance.

2.2. Criteria for Measuring the Effectiveness of the Accounting System

- **Quality of Accounting Information:** The effectiveness of the accounting system is measured by the extent to which the qualitative characteristics of financial information are available, namely relevance, faithful representation, comparability, and understandability, as stated in the conceptual framework for financial reporting.
- **Accuracy and Freedom from Material Errors:** The effectiveness of the accounting system is associated with the absence of material errors and misstatements in the information, which enhances the credibility of the financial statements.
- **Timeliness:** Timeliness is considered a complementary characteristic of relevance, as information loses its value if it is not presented at the appropriate time.
- **Support for Decision-Making:** Researchers in financial accounting theory believe that the primary objective of financial reporting is to provide useful information for economic decision-making.
- **Effectiveness of Internal Control:** The effectiveness of the

accounting system is linked to the efficiency of the internal control system, especially with regard to controlling operations and preventing fraud (Hassan, 2018).

2.3. The Concept of Digitization

Digitization is the process of converting information from paper form into digital form, meaning that it becomes an electronic system. It makes work easier for its users, saves them time and effort, and helps them store and retrieve information easily through the use of various electronic means (Najat, 2023, p. 09).

Digitization means transforming procedures and data from their traditional form into a digital electronic form with the aim of accelerating processing and reducing human errors.

Digital transformation, however, is a broader process that includes not only the digital conversion of data, but also the reengineering of processes and the complete redesign of work systems based on information technology (Mohammed, 2025, p. 147).

In the accounting context, digital transformation is no longer merely about providing hardware and software, but also includes strategies for using technology to improve accounting performance and the experience of end users of financial information.

2.4. Digitization in the Accounting Field

Modern accounting digitization includes a set of elements that demonstrate how digitization can improve the efficiency of the financial accounting system, including the following (Yassin, 2025, p. 62):

- Enterprise Resource Planning systems
- Electronic invoicing and receipts
- Digital archiving and cloud computing
- Automated analysis of financial data
- The use of artificial intelligence in financial auditing
- The integration of digitization with internal control and financial reporting

These elements show how digitization can improve the efficiency of

the financial accounting system.

2.5. Objectives of Digitization in the Accounting Function

Digitization in accounting seeks to achieve several fundamental objectives (Yassin, 2025, p. 64):

- Improving the quality of information through the recording of accurate and error-free data.
- Accelerating operations by speeding up the recording of transactions and the processing of financial information.
- Improving decisions by providing information that supports management and external users.
- Enhancing internal control through technical mechanisms that reduce errors and manipulation.
- Reducing operating costs by decreasing human effort and replacing it with intelligent automation.

Theoretical studies indicate that the effectiveness of the financial accounting system depends on a set of fundamental elements, including the quality and accuracy of financial information, the speed of preparing financial statements, and support for internal control. Recent studies have shown that digitization and digital transformation can significantly improve all of these elements, as digital systems reduce human errors through automated data processing and accelerate the preparation of financial reports with a high degree of accuracy. Digitization also contributes to improving internal control by monitoring operations in real time and providing alerts and notifications about any potential deviations, thereby enhancing the reliability and efficiency of the accounting system.

Moreover, digitization provides advanced analytical tools that enable management to access accurate and detailed information in order to make faster and more effective financial and strategic decisions. From a practical perspective, the degree of digitization varies among institutions according to the readiness of digital infrastructure and the competence of human resources, which in turn affects the effectiveness of the accounting system. Based on this, it can be said that the level of digital transformation represents a major influencing factor in improving the effectiveness of the

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financial accounting system. This is what the present field study seeks to examine through interviews with employees in institutions in order to determine the extent to which digitization is reflected in the quality and efficiency of the system.

3. The Fieldwork Section

After reviewing the theoretical framework related to the Algerian accounting system and the impact of digital transformation on accounting practices, the study now turns to its applied dimension. This section aims to assess the effectiveness of the accounting system within institutions in the context of digitalization, through a practical case study based on an interview with one of the officials in an economic enterprise, with the purpose of identifying the reality of implementing a digital accounting system and the challenges associated with it.

Table 1. interview questions for the financial manager

Question	Answer	Justification
Does the institution rely on the Algerian Financial Accounting System (SCF) in preparing its financial statements?	Yes	Because it is the legally adopted accounting framework in Algeria for the preparation of financial statements.
Does the institution use a digital accounting software program to record financial transactions?	Yes	The institution relies on digital accounting software that helps record and process financial transactions automatically, which contributes to speeding up accounting work and reducing the effort involved in manual data processing.
Has the use of accounting software helped reduce accounting errors?	Yes	The use of accounting software helps reduce errors resulting from the manual recording of transactions, as these programs rely on an automated system that allows data review and the detection of certain errors before final validation.
Are accounting documents stored electronically within the institution?	Yes	The institution seeks to digitize part of its accounting documents in order to facilitate their storage and retrieval when

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		needed, in addition to reducing reliance on traditional paper archiving.
Does the Financial Accounting System contribute to providing accurate financial information to management?	Yes	The Financial Accounting System provides a set of financial statements and reports that reflect the institution's true financial position, which helps management analyze performance and make appropriate decisions.
Has digitization contributed to speeding up the preparation of financial statements?	Yes	Digital systems have made it possible to process a large volume of data in a short time, which contributes to speeding up the preparation of financial statements compared with traditional methods.
Does the institution face difficulties in using some digital accounting systems?	Yes	The institution may face some difficulties related to the use of digital systems, especially with regard to the lack of technical training for some employees or the need for continuous updates of the software used.
Are all employees proficient in using digital accounting systems?	No	Although the institution relies on digital accounting software, some employees still need additional training to improve their skills in using these systems.
Are employees trained to use modern accounting software?	Yes	The institution is keen to provide training courses for its employees in the accounting and digital fields in order to improve their efficiency in using modern accounting software and ensure its proper use.
Has digital transformation contributed to improving the transparency of accounting information?	Yes	Digital systems make it possible to record financial transactions in an organized and accurate manner, and they also allow transactions to be tracked and reviewed easily, which enhances the transparency of accounting information.
Does the Financial Accounting System contribute to facilitating the control of financial transactions?	Yes	The Financial Accounting System is based on a set of rules and procedures aimed at organizing financial transactions within the institution, which facilitates control and follow-up.
Does the institution rely on	Yes	The institution relies on an accounting

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integrated accounting information systems?		information system that allows the integration of various financial and administrative operations, which facilitates the exchange of information among different departments within the institution.
Has digitization contributed to improving the quality of financial reports?	Yes	Digital systems contribute to providing accurate and organized financial data, which helps in preparing clearer and more accurate financial reports that reflect the institution's true position.
Does the implementation of the Financial Accounting System in a digital environment require continuous software updates?	Yes	Given the continuous development in the field of technology and information systems, the implementation of the accounting system in a digital environment requires periodic software updates to ensure efficiency.
Does the Algerian accounting system fully keep pace with digital transformation?	No	Although the Financial Accounting System provides an appropriate framework for organizing accounting work, the rapid development of technology requires continuous updates in order to keep pace with the digital environment.
Do you believe that digital transformation enhances the effectiveness of the accounting system within the institution?	Yes	Digital transformation contributes to improving the processing of accounting information and increasing the speed of access to financial data, which enhances the effectiveness of the accounting system within the institution.

Source: Prepared by the researcher based on the interview conducted at the institution.

4. Conclusion:

Through the analysis of the interview responses collected from the official of the institution under study, it became clear that the institution relies on the Algerian Financial Accounting System (SCF) for recording financial transactions and preparing financial statements, which confirms its compliance with the accounting framework adopted in Algeria. The interview results also showed that the institution uses digital accounting

software to process financial data, which has contributed to improving the speed of recording accounting transactions and reducing errors associated with manual processing.

The results also indicated that the use of digital systems within the institution has clearly contributed to improving the accuracy of accounting information and accelerating the preparation of financial reports, which helps management obtain timely financial information for appropriate decision-making. In addition, digitization has helped enhance the transparency of accounting information and has made it easier to track financial transactions.

On the other hand, the interview revealed the existence of some challenges related to digital transformation, including the need for continuous training for employees in the use of modern accounting software, in addition to the fact that some procedures within the institution still partially depend on traditional methods of preserving accounting documents.

In general, it can be said that the interview results indicate that digital transformations have contributed significantly to improving the effectiveness of the accounting system within the institution by accelerating the processing of financial information and improving the quality of accounting reports. However, achieving the full benefits of digitization requires the continuous development of human resource skills and the ongoing modernization of information systems in order to keep pace with technological developments.

Accordingly, it can be concluded that the Algerian accounting system has the ability to adapt to digital transformations, but its effectiveness remains linked to the degree to which institutions adopt modern technology and provide the necessary training for employees in the accounting field.

Main Findings

- The Financial Accounting System contributes to organizing accounting work within Algerian institutions.
- Digitization helps improve the accuracy and speed of processing accounting information.
- The use of accounting software contributes to reducing accounting

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errors and improving the quality of financial reports.

- Accounting information systems play an important role in enhancing the transparency of financial information.
- Some institutions still face challenges related to training and the use of digital systems.

Recommendations

- It is necessary to strengthen the use of digital systems and modern accounting software within institutions.
- Continuous training should be provided for accountants in the field of technology and digital accounting systems.
- The Algerian accounting system should be developed in line with digital transformation and technological developments.
- Institutions should be encouraged to digitize accounting documents and rely on electronic archiving.
- The role of accounting information systems should be strengthened in improving the quality of financial information and supporting decision-making.

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