

The Feasibility of Adopting Cloud Accounting as an Alternative to Computerised Accounting to Improve the Quality of Financial Reports: A Case Study of SAIDAL Group, Batna Branch

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Abstract: This research seeks to evaluate the viability of implementing cloud accounting as a substitute for computerised accounting systems to enhance the quality of financial reporting, utilising a case study of the SAIDAL Group's Batna branch. Utilising a descriptive-analytical methodology, the study's primary data-gathering tool was a questionnaire given to a sample of 40 employees from a variety of technical and accounting-related areas.

According to the findings, SAIDAL Group's Batna Branch's present accounting system processes transactions and generates reports with an appropriate degree of accuracy. Nevertheless, it has drawbacks with regard to maintenance issues and manual data entry. Despite some infrastructure-related issues and change aversion, the data also showed a positive trend among employees towards cloud accounting adoption. According to the study, using cloud accounting helps to increase the quality, accuracy, and transparency of financial data. Based on these findings, the study concluded that adopting cloud accounting in a thoughtful and appropriate manner is a strategic choice for improving the quality of financial reports and enhancing transparency in Algerian institutions, especially in light of the rapid digital transformation.

Keywords: Computerised Accounting; Cloud Accounting; Quality of Financial Reports; SAIDAL Group.

JEL Codes: M41; M15; M48; L65.

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Introduction:

Since accounting is the main tool for documenting financial transactions, processing them, and turning them into accurate and trustworthy information that aids management in performance evaluation and strategic decision-making, it is regarded as one of the fundamental pillars of any economic institution. Cloud accounting has emerged as one of the contemporary innovations that organisations aim to implement in order to get around the constraints imposed by traditional or computerised accounting systems, given the swift changes occurring globally in the domains of digitalisation and information technology.

Even though **computerised accounting systems** process data more quickly and produce more accurate results than manual systems, they still have some drawbacks, such as high costs, updating challenges, a significant reliance on manual data entry, and restrictions on real-time

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data access and sharing. Here, **cloud accounting** is a clear strategic choice that can help with these issues by offering flexible cloud-based accounting services, enabling real-time data access, boosting transparency and credibility, and improving the calibre of financial reports.

Given its significance, the current study is to investigate the viability of implementing cloud accounting as a substitute for Algerian institutions' current computerised system, with an emphasis on SAIDAL Group's Batna branch as an example of a pre-eminent industrial establishment. In view of the rapidly growing digital revolution, the study aims to evaluate this branch's preparedness to use the cloud accounting system, pinpoint its main benefits and drawbacks, and emphasise its contribution to enhancing financial report quality and bolstering financial transparency.

Hence, the central research question of this study is posed as follows:

"What is the feasibility of adopting cloud accounting as an alternative to the computerised accounting system to improve the quality of financial reports in the SAIDAL Group – Batna branch?"

To answer the main research question, the following sub-questions were formulated:

- In terms of accuracy, timeliness, and financial reporting, how successful is SAIDAL Group's Batna branch's current accounting system?
- How do staff members at SAIDAL Group branch in Batna feel about the cloud accounting system's acceptance, and what are the primary barriers to its deployment?
- What effect does SAIDAL Group's Batna branch's adoption of the cloud accounting system have on the calibre of financial reports?

Research Hypotheses

To answer the sub-questions, the following hypotheses were developed:

- SAIDAL Group's Batna branch's present accounting system has a high degree of efficacy in financial reporting and data processing.
The cloud accounting system is seen favourably by SAIDAL Group employees in the Batna branch, despite some infrastructure-related challenges and change aversion.
- By increasing accuracy, speed, and transparency, the cloud accounting system helps to raise the calibre of financial reports produced by SAIDAL Group's Batna branch.

Significance of the Study:

This study derives its significance from the following aspects:

- It tackles a current issue, specifically the viability of using cloud accounting in place of a conventional computerised accounting system in a top industrial organisation like SAIDAL Group's Batna branch. In Algeria's industrial sector, this organisation is a significant role model.
- It draws attention to the shortcomings of the computerised accounting system that is currently in use.
- In the context of Algeria, it enhances the scholarly literature on digital accounting.

Objectives of the Study:

This study aims to:

- Assess the efficiency of the computerised accounting system that SAIDAL Group's Batna branch currently uses.
- Recognise the main obstacles to cloud accounting's implementation and learn how employees feel about its acceptance.
- Examine how cloud accounting can enhance the accuracy, speed, transparency, and credibility of financial reporting.
- In accordance with the demands of digital transformation, make actionable suggestions for SAIDAL Group on the possible switch to cloud accounting.

I. Theoretical Framework of the Study Variables

1. Computerised Accounting

1.1 Definition:

Computerised accounting has been defined as: *“An accounting system that relies on the use of computers and accounting software to process and record financial transactions and accounting data instead of the traditional manual method. This enhances performance speed, reduces human errors, and enables quick access to financial reports and financial analysis for institutions.”* (Dimitriu, Stefanescu, & Popa, 2015, p. 854)

1.2 . Reasons for the Emergence of Cloud Accounting

Notwithstanding its benefits, computerised accounting still has certain drawbacks and restrictions that limit its effectiveness and capacity to satisfy institutions' changing needs, especially when it comes to managing massive amounts of financial data, protecting data, enabling remote access, and fostering quick organisational growth. Because of these restrictions, cloud accounting emerged, providing more adaptable and effective solutions in these areas.

These limitations —, which can also be seen as **reasons for the emergence of cloud accounting** — include the following:

- **High infrastructure costs:** This covers the acquisition of cutting-edge hardware, software licences, frequent upgrades, and continuing upkeep. These costs push businesses to look for more economical ways to cut costs without sacrificing effectiveness. (Itang, 2020, p. 39)
- **Operational complexity and need for qualified personnel:** To guarantee correct operation and system maintenance, a computerised system needs personnel with specialised training. This reduces the ability to quickly expand operations and increases reliance on technical skills. (Kanyanga, 2022, p. 30)
- **Potential security risks:** The integrity of financial data may be threatened by any failure or vulnerability, even with sophisticated security measures in place. Institutions

are compelled by this to implement systems that provide enhanced security and regulated user access. (Itang, 2020, p. 39)

- **Dependence on a centralised system:** Decision-making speed and support for multi-site operations are impacted when data is difficult to obtain remotely or from numerous locations. This demonstrated the necessity of a decentralised system that enables remote, real-time data access. (Kanyanga, 2022, p. 30; Atieno Kanyanga, 2022, p. 30)

Given some issues that have hindered computerised accounting's effectiveness, cloud accounting has become a viable alternative that provides creative and adaptable financial data processing solutions. The cloud-computing environment has developed into a helpful technological framework that helps organisations get past long-standing constraints and implement more sophisticated and efficient accounting procedures.

This calls for an in-depth look into the **concept of cloud accounting** and its **Advantages**.

Cloud Accounting

2.1 .Definition

- Defined as:

“Cloud accounting is the use of accounting applications that operate via the internet, allowing organisations to manage and securely access their financial data from anywhere and at any time, without the need to install software or maintain internal infrastructure.”
(Alagbe & Yinus, 2025, p. 1558)

- Also defined as:

“An accounting system based on a cloud computing environment that enables companies to process financial information, store it, and prepare accounting reports on a constantly updated platform, while supporting collaboration among users inside and outside the organisation.”
(Iswari, Suaryana, Sudana, & Ariyanto, 2025, pp. 1630–1631)

According to the aforementioned, cloud accounting is a contemporary accounting system that uses a cloud computing environment to help businesses handle and process their financial data in a secure and flexible manner. It also makes it easier to prepare accurate reports and encourages user collaboration, all of which help to improve the quality of financial data.

2.2 . Importance of Cloud Accounting

The importance of cloud accounting lies in the following aspects:

- **Real-time access to financial data:** Through the internet, cloud accounting provides instant access to financial data at any time and from any location. This improves an organisation's capacity to track its financial performance over time. This adaptable access speeds up strategic and operational decision-making and enhances management's ability to react quickly to changes in the market. (Iswari, Suaryana, Sudana, & Ariyanto, 2025, p. 1631)

- **Reduction in operational costs:** Instead of requiring costly investments in local servers and software, cloud accounting uses a monthly or annual subscription model. By lowering maintenance and internal technical support expenses, this model makes it possible for small and medium-sized businesses to make use of cutting-edge technology without incurring significant financial obligations. (Rawashdeh & Rawashdeh, 2023, p. 412)
- **Improved quality and accuracy of financial reports:** Every time a new transaction is entered, the cloud system automatically updates the data, minimising human mistakes brought on by manual entry or processing delays. This feature promotes adherence to international accounting standards and aids in the production of more trustworthy and transparent financial reports. (Alagbe & Yinus, 2025, p. 1558)
- **Enhanced collaboration between work teams and auditors:** Employees of the company and outside auditors or financial advisors can share accounting data at the same time thanks to the cloud-based digital environment. This accelerates auditing procedures and enhances internal collaboration. This kind of real-time communication boosts productivity and cuts down on the amount of time needed to process information. (Hamzah, Suhendar, & Zainul Arifin, 2023, p. 442)
- **Flexibility for organisational expansion and growth:** Because cloud accounting is so scalable, businesses may quickly expand their processing and storage capacity as transaction volume increases or new markets are opened up without having to stop operations or make hardware purchases. Businesses can rapidly and effectively adjust to shifting demands because of this flexibility. (Hamzah et al., 2023, p. 443)
- **Integration with modern technologies:** Cloud accounting facilitates the integration of big data analytics, block chain, and artificial intelligence (AI), which improves an organisation's capacity to produce sophisticated financial insights. Block chain protects data from manipulation, AI helps automate recording and verification procedures, and data analytics provide precise indicators to assist with financial planning and strategic decision-making. (Alagbe & Yinus, 2025, p. 1558)

2.3 . Requirements for Cloud Accounting

A number of crucial elements are needed for cloud accounting implementation in order to guarantee the system's effectiveness and success in fulfilling organisational requirements. Among these elements, the most crucial are:

- **Cloud Infrastructure:** This serves as the cloud accounting system's cornerstone. For processing financial data, it offers strong virtual servers and adaptable storage space. Without having to buy more gear or make expensive physical changes, this architecture enables businesses to scale their technical resources up or down based on transaction volume and user count. (Hamzah, Suhendar, & Zainul Arifin, 2023, p. 443)
- **Continuous Internet Connectivity:** For the cloud system to guarantee real-time data availability and updates, fast and reliable internet access is very necessary. Transactions

can be stopped or financial data updates delayed by any disconnections or bad network quality, which could affect report accuracy and decision-making speed. (Tawfik et al., 2022, p. 6)

- **Cloud Accounting Software:** To create financial reports and manage accounts and invoices, the system needs sophisticated software. Routine accounting processes like periodic budgeting and invoicing should be automated with the help of these apps. This facilitates real-time financial reporting to enhance strategic planning, lowers human labour, and increases data accuracy. (Hamzah et al., 2023, pp. 442–443)
- **Security Measures:** Keeping financial data safe is one of the main issues with cloud accounting. To guarantee data security and guard against breaches or data loss, the system incorporates robust encryption technologies, access control protocols, and routine backup solutions. By taking these steps, companies are encouraged to trust the system more when handling sensitive financial data. (Hamzah et al., 2023, p. 446)
- **User Management & Permissions:** Based on job roles, the technology enables businesses to specify exact user access permissions. For instance, a financial manager may have access to analytics and reports, but an accountant may only be permitted to document transactions. This lowers the possibility of unwanted access and minimises human mistakes in data **handling**. (Tawfik et al., 2022, p. 6)
- **Technical Support & Training:** Cloud service providers give consumers training packages and continuous technical assistance to guarantee optimal system utilisation. While technical assistance guarantees that operational difficulties are promptly resolved to preserve system continuity, proper training helps increase staff productivity and lower technical obstacles. (Hamzah et al., 2023, p. 446)

2.4. The Difference Between Cloud Accounting and Traditional Accounting:

The differences between traditional accounting and cloud accounting can be summarised in the following table:

Table 1: The Difference between Cloud Accounting and Computerised Accounting

Key Dimensions	Computerised Accounting	Cloud Accounting
Data Storage and Access	Relies on storing data on local servers or specific computers within the organisation. Access is limited to the workplace. Higher risk of data loss if devices fail.	Relies on virtual servers online. Users can access data anytime, from anywhere. Enables real-time financial tracking without geographical restrictions. (Iswari et al., 2025, p. 1631)
Infrastructure and Costs	- Requires purchase of high-performance servers, local storage, and software licences. - Needs an internal IT team for maintenance and security. - Expanding operations increases costs, which burdens SMEs.	- Subscription-based model where the provider handles infrastructure, maintenance, and storage. - No large initial investments; pay based on actual usage. - Resources can be scaled instantly. (Rawashdeh & Rawashdeh, 2023, pp. 412–414)
Updates and Maintenance	Manual updates that consume time and may cause work interruptions.	Automatic updates by the service provider, ensuring access to the latest features without manual intervention. (Hamzah et al., 2023, p. 443)
Accessibility and Collaboration	Access is limited to specific devices. Sharing data across locations is difficult and limited.	Multiple users can work on the system simultaneously from different locations. Enhances internal and external collaboration. (Alagbe & Yinus, 2025, p. 1558)
Security and Data Protection	Security relies on internal backups and efforts. Risk of data loss from hardware failures or weak protection measures.	Uses advanced encryption and regular backups across multiple servers. Lower risk of data loss and higher protection. (Hamzah et al., 2023, p. 446)

2.5. Challenges of Implementing Cloud Accounting

Despite the significant advantages that cloud accounting offers, organizations face several challenges when adopting it. These can be summarised as follows:

- **Weak digital infrastructure:** Due to complete dependency on the internet, ineffective adoption is hampered by expensive or unreliable connectivity. (Pages 442–443 of Hamzah, Suhendar, & Zainul Arifin, 2023)
- **Information security concerns:** Concerns regarding confidentiality and the possibility of cyber-attacks are raised when data is stored on external systems. (Page 446 of Hamzah et al. 2023)
- **Lack of clear legal frameworks:** Organisations are hesitant since there is no particular legislation on data protection and electronic transactions. (Page 1634 of Iswari, Suaryana, Sudana, & Ariyanto, 2025)
- **Shortage of skilled personnel:** Accountants' limited technological proficiency limits their capacity to take full advantage of cloud services. (Page 1559, Alabe & Yinus, 2025)
- **Organisational resistance to change:** certain leaders and employees who express concerns about relinquishing control slow down the adoption process. (Page 1635, Iswari et al., 2025)

- **Initial transformation costs:** Small businesses may be deterred from implementing the system by the requirement to upgrade technology and train staff. (Pages 412–414, Rawashdeh & Rawashdeh, 2023)

3. The Contribution of Cloud Accounting to Improving the Quality of Financial Reports

Improving the efficiency and calibre of financial reporting is largely dependent on cloud accounting. It facilitates the provision of precise, trustworthy, and comprehensible data that aids in organisational financial decision-making. The definition and significance of financial reporting quality will be covered first in this context, and then the effects of cloud accounting will be discussed.

3.1 Definition of Financial Reports

“Financial reports are compiled financial information that reflects the financial position and performance of a company over a specific period. They are prepared by the financial management of a public or private company to provide reliable information that assists in decision-making.” (Hasbullah, Tullah & Farhan, 2023, p. 60)

3.2 Definition of Financial Reporting Quality

“Financial reporting quality is the ability of financial reports to provide accurate and reliable financial information that helps decision-makers evaluate the financial performance of the organisation and make well-informed decisions.” (Pura, 2021, p. 60)

Key Elements of Financial Reporting Quality (Pura, 2021, p. 60)

1. **Relevance:** Giving users information they can rely on for planning and assessment that is pertinent to financial decisions.
2. **Reliability:** Making sure the data accurately depicts the organisation's financial situation and is free of prejudice and inaccuracies.
3. **Comparability:** Giving consumers the ability to easily compare financial data between businesses or over time.
4. **Understand ability:** Providing information in a structured and unambiguous way to enable intended users to comprehend it and make wise judgements

3.3 Importance of Financial Reporting Quality

The importance of high-quality financial reporting is reflected in the following key aspects:

1. Supporting Financial Decision-Making

- High-quality financial reports, assisting analysts, investors, and regulators in making well-informed financial decisions provide accurate and trustworthy information.
- Increases the company's competitiveness and lowers the risk of bad investments by empowering management to more effectively allocate resources and evaluate financial performance.
- With this data, the business may predict its future financial requirements and make well-informed strategic choices. (Mesioye & Bakare, 2024, pp. 1145–1146)

2. Enhancing Transparency and Credibility

- Excellent financial reports show the company's true financial performance in a straightforward and transparent manner, which builds trust with stakeholders, including lenders, investors, and consumers.
- This openness lowers the possibility of fraud or false information, promoting the stability of the financial system and enhancing the company's reputation over time. (Mesioye & Bakare, 2024, pp. 1145–1146)

3. Supporting Financial Market Stability

- Clear financial information helps prevent financial resource misallocation by giving a clear view of the company's financial situation.
- It reduces the impact of inaccurate information on the market by guaranteeing that decisions based on financial reports are accurate and trustworthy, strengthening the stability of the financial system.
- It also makes it possible for investors to foresee possible hazards and take precautions, safeguarding investments and preserving market equilibrium. (Mesioye & Bakare, 2024, pp. 1147–1148)

4. Ensuring Compliance with Accounting Standards

- Generally Accepted Accounting Principles (GAAP) and International Financial Reporting Standards (IFRS) are followed by high-quality reports, preserving the company's reputation with regulators and investors.
- By adhering to these standards, reports are guaranteed to be in line with worldwide best practices, making it easier to compare the financial performance of the business with rivals in other markets. (Mesioye & Bakare, 2024, pp. 1145–1146)

3.4 Impact of Cloud Accounting on the Quality of Financial Reports and Statements

A significant shift in the creation of financial reports and accounting statements, cloud accounting uses cutting-edge technologies to record and process financial transactions in real time over the internet. Its effects are noticeable in the following domains:

Enhancing Financial Data Accuracy

- Cloud accounting drastically lowers the chance of human error by using automated technologies to record all financial transactions promptly.
- Financial statements, such as income statements, balance sheets, and cash flow statements, are more dependable and audit-friendly since data is entered once and automatically synchronised throughout the system, eliminating the need for human reprocessing. (Alagbe & Yinus, 2015, p. 6)

Accelerating the Preparation of Financial Reports

- Compared to traditional or on-premise systems, cloud technologies enable businesses to create monthly or annual financial statements considerably more quickly since they update accounting data in real-time.
- This improves financial and operational planning by cutting down on reporting delays and assisting in timely compliance with investor and regulatory requirements. (Alagbe & Yinus, 2015, p. 6)

Enhancing Transparency and Reducing Earnings Manipulation

- It is simple to identify any changes thanks to real-time, traceable financial data.
- Cloud systems record all changes, including timestamps and user identities, which makes managing revenues more challenging.
- This openness increases investor trust and fortifies the accuracy of financial disclosures. (Mesioye & Bakare, 2024, pp. 1145–1146)

Improving Accrual Recording

- According to IFRS, cloud solutions enable the automatic application of the accrual principle, which recognises revenues and expenses in the appropriate financial period.
- This gives a realistic view of operational performance and profitability and lowers inaccuracies from manual journal entries.
- It also makes financial trend analysis easier and enhances comparability across periods. (Mesioye & Bakare, 2024, p. 1146)

Enhancing Audit Quality, Transparency, and Accountability

- Cloud technologies make it easier to review accounting entries by giving internal and external auditors real-time access to financial data and change logs.
- Comprehensive change histories enhance the trustworthiness of financial statements, lowering manipulation or significant errors, and support recurring audits. (Mesioye & Bakare, 2024, pp. 1146–1147; Alagbe & Yinus, 2015, p. 6)

Enabling Strategic Financial Decision-Making

- Management and investors may make strategic decisions about budgeting, cash flow management, and investment evaluation with the use of accurate, current financial data.
- It also facilitates real-time analysis of performance metrics and profitability, allowing businesses to react swiftly to shifts in the economy. (Alagbe & Yinus, 2015, p. 6; Mesioye & Bakare, 2024, pp. 1145–1148)

Supporting Compliance with Accounting Standards

- Cloud accounting assists organisations in adhering to national and international standards by means of automated updates and ongoing monitoring.
- This lowers legal and regulatory risks from mistakes or non-disclosure and increases the accuracy and openness of financial reports. (Alagbe & Yinus, 2015, p. 6)

Reducing Risks of Manipulation and Weak Governance

- Although cloud systems have many benefits, misuse may be possible due to ambiguous access regulations or inadequate internal controls.
- These dangers are considerably decreased by contemporary cloud systems, which come with robust security features, including role-based access control, immutable audit logs, and notifications for modifications to sensitive data. (Mesioye & Bakare, 2024, pp. 1145–1147)

Instant Access to Financial Data from Anywhere

- Cloud systems make it possible for stakeholders and management to view financial reports and statements online at any time.

- This facilitates ongoing supervision and expedites the processes of analysis and decision-making.
- It improves the organisation's capacity to promptly resolve any operational or financial problems. (Alagbe & Yinus, 2015, p. 6)

II. The Field Aspect of the Study

1. Study Sample, Tools, and Methodology

1.1 Study Sample

To gather data and information for the study, the researchers employed a questionnaire. Since they are the ones most involved in financial, administrative, and technical tasks pertaining to digital transformation and the flow of accounting information, it was given to department heads, accountants, and internal auditors at SAIDAL Complex – Batna Branch.

- Forty surveys were sent out in total.
- Of the returned valid surveys, 32 were judged appropriate for analysis.

1.2 Study Tool

To test the study hypotheses, a structured **questionnaire** was used, consisting of **two main parts**:

Part One: Personal and Professional Information

This section gathered demographic and job-related data from respondents, including:

- Gender.
- Age.
- Academic qualifications.
- Professional certifications.
- Years of experience.

III. Hypothesis Testing and Related Variables

The study's primary hypotheses were covered in this section, which was organised into three major topics, each of which has a number of related sub-items:

1. **First Theme:** precision, speed, and calibre of financial report preparation of SAIDAL Complex-Batna Branch's present accounting system.
2. **Second Theme:** Views of SAIDAL staff members at the Batna Branch about the cloud accounting system's uptake and possible obstacles to its deployment.
3. **Third Theme:** The effect of cloud accounting on SAIDAL Complex's Batna Branch's financial report quality.

Likert Scale Used

As indicated in the following table, the study employed a five-point Likert scale to code the replies of the sample participants. There are five levels on the scale:

Table 2: Coding of Response Options

Response Category	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Code	1	2	3	4	5

Statistical Processing of the Study

The Statistical Package for Social Sciences (SPSS), version 19, was used to do the statistical analysis following the completion of the collection of the study's 32 valid questionnaire forms.

1.4 Questionnaire Validity

Presenting the questionnaire to a committee of subject-matter experts and specialised professors confirmed its authenticity. They were requested to comment on the following and assess the questionnaire items' applicability to the study topic:

- Removing.
- Modifying, or.
- Adding new items.

This process aimed to **enhance the precision and appropriateness of the tool** for the study objectives.

1.5 Reliability of the Study Tool

Each set of measuring items had its Cronbach's Alpha coefficient determined in order to assess the questionnaire's reliability (internal consistency).

Table 3: Cronbach's Alpha Coefficient for Assessing the Reliability of Questionnaires

Dimensions	Number of Items	Cronbach's Alpha
D1 – Effectiveness of the current accounting system	6	0.852
D2 – Employees' perception of cloud accounting and barriers to adoption	7	0.838
D3 – Impact of cloud accounting on the quality of financial reports	6	0.898
All Dimensions Combined	19	0.875

Source: Prepared by the two researchers based on the SPSS outputs.

As can be seen from the above table, all three axes' Cronbach's alpha coefficients are high and fall beyond the acceptable minimum limit of 0.70, ranging from (0.838) to (0.898). We are confident in the questionnaire's validity for assessing the results, responding to all research questions, and testing the hypotheses because the overall value for all areas was 0.875, indicating a high degree of internal consistency and reliability.

Statistical processing used in the study: The questionnaire was inputted and analysed through the Statistical Package for the Social Sciences (SPSS) software.

- **Normality test:** Skewness and kurtosis coefficients were used to test whether the data follow a normal distribution.

Table 4: Results of the normality test

Axis	Skewness Coefficient	Kurtosis Coefficient
M1	-0.392085	-0.932802
M2	-0.047678	-0.275964
M3	-0.669801	0.383684

Source: Prepared by the two researchers based on SPSS outputs.

All of the skewness coefficient values, according to the table results, are within the permissible range (± 1), indicating a moderate distribution with no notable deviations. The data's normal

distribution is further supported by the kurtosis coefficient values, which range from -0.933 to 0.384 and lie within the acceptable statistical bounds. As a result, the data distribution for these domains is normal, and the study hypotheses will be addressed by parametric testing. The statistical instruments listed below were employed:

- Frequencies and percentages to identify and analyse the responses of the sample individuals;
- Mean and standard deviation to determine the trends and tendencies of the sample individuals' opinions regarding all the questions posed;
- Student's t-test (also known as T-test) to generalise the study to the population.

2. Study Results Analysis

1.2 Description of the Study Sample Characteristics:

- Gender

Table 5: Distribution of the Sample According to Gender

Gender	Male	Female	Total
Frequency	23	9	32
Percentage	71.9%	28.1%	100.0%

Source: Prepared by the two researchers based on SPSS outputs.

The table indicates that, at 71.9%, men make up the bulk of the sample, and women only make up 28.1%. The larger representation of men in the sample than women can be explained by SAIDAL Complex's operation in an industrial and technological field that frequently calls for technical expertise and the capacity to tolerate work pressure.

- Age

Table 6: Distribution of the Sample According to Age

Age Group	Under 30 years	30 – 50 years	51 years and above	Total
Frequency	3	25	4	32
Percentage (%)	9.4%	78.1%	12.5%	100%

Source: Prepared by the two researchers based on SPSS outputs.

As can be seen from the table, 78.1% of the sample members are between the ages of 30 and 50. Next in line are those who are 51 years of age or over (12.5%), and lastly, those who are under 30 (20.4%).

- Years of Experience:

Table 7: Distribution of the Sample According to Years of Experience

Experience	Less than 5 years	From 5 to 10 years	More than 11 years	Total
Frequency	7	19	6	32
Percentage (%)	21.9%	59.4%	18.7%	100%

Source: Prepared by the two researchers based on SPSS outputs.

According to the table, the majority of sample members—59.4%—have five to ten years of experience, followed by those with fewer than five years of experience (21.9%) and those with more than eleven years of experience (18.7%). According to these findings, the majority of the sample members have a great deal of professional experience, which allows them to respond to the questionnaire questions with a high level of impartiality and openness.

- Job Position:

Table 7: Distribution of the Sample According to Job Position

Job Position	Accountant	Internal Auditor	Others	Total
Frequency	20	6	6	32
Percentage (%)	62.5%	18.8%	18.8%	100%

Source: Prepared by the two researchers based on SPSS outputs.

As can be seen from the above table, the majority of sample members—62.5%—have an accounting position. This is followed by the group that holds an internal audit position (18.8%) and the category of other positions (18.8%). These findings suggest that the majority of respondents had direct experience in the accounting industry, which strengthens the validity of their viewpoints on the subject of the study.

2.2 Analysis of Hypotheses Results

Analysis of the items of the first axis: "Effectiveness of the current accounting system at SAIDAL Complex, Batna branch, in terms of accuracy, speed, and quality of financial report preparation."

Table 8: Analysis of the items of the first axis

First Axis Statement	Mean	Standard Deviation	Calculated T	Significance Level
The current system processes all daily financial transactions with high accuracy.	3.03	1.121	15.294	.000
Preparing financial reports using the current system is fast and efficient.	3.06	1.105	15.673	.000
Financial reports can be easily accessed without the need to refer to specific devices.	3.63	0.833	24.623	.000
The reliance of the system on manual data entry leads to repeated errors.	2.87	1.040	15.645	.000
Current system maintenance requires significant time and effort, hindering continuity.	2.94	1.014	16.387	.000
The system ensures an adequate level of internal control over financial operations.	3.53	1.135	17.592	.000
Effectiveness of the current accounting system at SaIDAL Complex, Batna branch in terms of accuracy, speed, and quality of financial report preparation	3.1771	0.793040	22.662	.000

Source: Prepared by the two researchers based on SPSS outputs.

From the table, we observe:

- With a mean score of 3.03 and a standard deviation of 1.121, the sample members' opinions on the system's accuracy in handling everyday financial transactions were moderate. This suggests that while the precision provided by the system is adequate, it is not particularly high.
- With a mean score of 3.06 and a standard deviation of 1.105, the sample members' judgements on the second item also tended towards a moderate level with regard to the

efficiency and speed of financial report preparation. This indicates that although the system completes reports somewhat quickly, it is not very efficient.

- With a mean of 3.63 and a standard deviation of 0.833, the third item showed a tendency towards agreement about the ease of getting financial reports without the need for specialised devices, indicating a strength of the current system.
- With a mean of 2.87 and a standard deviation of 1.0, the findings for the fourth item indicated that opinions were neutral about the problem of errors resulting from human data entry. This indicates that while the problem still exists, its effects are not particularly severe.
- With a mean of 2.94 and a standard deviation of 1.014, the opinions inclined towards moderate agreement about the fifth item, which was that system maintenance requires a lot of time and effort, which makes it difficult to continue working.
- With a mean of 3.53 and a standard deviation of 1.135, the majority of sample members agreed in the sixth item that the system guarantees a sufficient degree of internal control over financial operations, indicating an appropriate level of control system efficacy.

All axis elements had an overall mean of 3.1771 and a standard deviation of 0.79304. The significance level was 0.000, which is less than 0.05, and the computed T-value was 22.662, which is higher than the critical value. This suggests that the following hypothesis has been accepted: **"A good degree of effectiveness in data processing and financial report preparation characterises the current accounting system at SIDAL Complex, Batna branch."** This demonstrates that, despite its limitations in comparison to future development requirements in the context of digital transformation, the current traditional system achieves acceptable performance effectiveness.

Analysis of the items of the second axis: *"Perceptions of employees at SAIDAL Complex, Batna branch, regarding adopting the cloud system and potential obstacles to its implementation."*

Table 10: Analysis of the items of the second axis

Second Axis Statement	Mean	Standard Deviation	Calculated T	Significance Level
I have a clear understanding of the cloud accounting system and how it works.	3.44	0.914	21.284	.000
Using the cloud system improves the accuracy of financial data and speeds up report preparation.	3.16	1.110	16.080	.000
Availability of real-time data enables management to make faster and more accurate financial decisions.	3.41	0.875	22.029	.000
Employees are ready to adopt the system when appropriate training and support are provided.	3.16	0.884	20.200	.000
The cost of adopting the cloud system represents a financial burden on the institution.	3.09	1.118	15.660	.000
The current technical infrastructure is insufficient to support the cloud system.	2.97	1.257	13.362	.000
Resistance to change or difficulty learning the system may hinder its effective implementation.	3.94	1.045	21.308	.000
Employees' perception of adopting the cloud system and obstacles to its implementation	3.3080	0.73840	25.343	.000

Source: Prepared by the two researchers based on SPSS outputs.

From the table, we observe:

- With a mean of 3.44 and a standard deviation of 0.914, the sample members' responses to the first item tended towards moderate agreement regarding their understanding of the cloud accounting system and how it operates. This indicates that employees have a good, if not entirely high, level of system awareness.
- With a mean of 3.16 and a standard deviation of 1.110, the sample's views on the second item inclined towards neutrality regarding the cloud system's contribution to increasing the accuracy of financial data and expediting the compilation of reports. This implies a somewhat aware but not quite convinced understanding of the system's significance.
- With a mean of (3.41) and a standard deviation of (0.875), the majority of respondents agreed that the availability of real-time data helps management make quicker and more accurate financial choices. This indicates that this feature is one of the cloud system's main advantages.
- With a mean of 3.16 and a standard deviation of 0.884, the sample's opinions on the fourth item inclined towards neutrality about employees' readiness to adopt the system when proper training and support are given, suggesting that readiness is dependent on adequate instruction and direction.
- With a mean of 3.09 and a standard deviation of 1.118 for the fifth item, the results indicated that the cost of implementing the cloud system is a moderately significant barrier, suggesting that it is one of the possible barriers but not the largest one.

- With a mean of 2.97 and a standard deviation of 1.257, the sample's opinions on the sixth item—the suitability of the current technological infrastructure to support the cloud system—were nearly neutral, indicating this as a vulnerability that could restrict system adoption.
- With a mean score of 3.94 and a standard deviation of 1.045, the majority of the sample strongly agreed with the seventh item, which showed a high knowledge of issues pertaining to human factors: resistance to change or trouble learning the system may limit its effective implementation.
- All axis items had an overall mean of 3.3080 and a standard deviation of 0.73840. The significance level was 0.000, which is less than 0.05, and the computed T-value was 25.343, which was higher than the critical value. This suggests that the hypothesis is accepted: *“Employees of SAIDAL Complex, Batna branch, have a positive perception toward the cloud accounting system despite some obstacles related to infrastructure and resistance to change.”*

Analysis of the items of the third axis: *“The impact of cloud accounting on the quality of financial reports at SAIDAL Complex, Batna branch.”*

Table 12: Analysis of the items of the third axis

Third Axis	Mean	Standard Deviation	Calculated T	Significance Level
Using the cloud system improves the accuracy of financial data and reduces errors caused by manual entry.	3.69	0.896	23.287	0.000
Cloud accounting speeds up the preparation of reports and financial statements compared to the traditional computerised system.	3.34	1.125	16.817	0.000
The cloud system provides real-time data that enables management to make faster and more accurate financial decisions.	3.38	1.070	17.841	0.000
Relying on the cloud system enhances the transparency of financial information and reduces opportunities for profit manipulation.	3.59	1.012	20.098	0.000
Cloud accounting enables internal and external auditors to instantly access data to support auditing and review processes.	4.06	0.878	26.187	0.000
The cloud system facilitates compliance with local and international accounting standards and increases the credibility of reports.	3.91	0.734	30.089	0.000
The impact of cloud accounting on the quality of financial reports	3.6615	0.78229	26.477	0.000

Source: Prepared by the two researchers based on SPSS outputs

From the table, we observe:

- With a mean of 3.69 and a standard deviation of 0.896, the sample members in the first paragraph tended to agree that using the cloud system increases the accuracy of financial data and decreases errors resulting from manual entry, indicating that employees are aware of the system's efficacy in boosting reliability.

- With a mean of 3.34 and a standard deviation of 1.125, the respondents' opinions in the second paragraph tended towards moderate agreement regarding the speed at which cloud accounting prepares reports and financial statements in comparison to the traditional computerised system, suggesting a favourable but not particularly strong perception.
- Regarding the third paragraph, the findings indicated that, with a mean score of 3.38 and a standard deviation of 1.070, employees generally concur that the cloud system offers real-time data that aids management in making quicker and more accurate decisions. This highlights the significance of the feature that allows for instant data updates.
- With a mean of 3.59 and a standard deviation of 1.012, the results in the fourth paragraph demonstrated that depending on the cloud system improves financial information transparency and lowers the possibility of profit manipulation, highlighting the system's contribution to bolstering the institution's financial credibility.
- With a mean of 4.06 and a standard deviation of 0.878, the fifth paragraph made it evident that the majority of sample members firmly agreed that one of the system's strongest features is that cloud accounting allows internal and external auditors to access data instantly to support auditing and review.
- With a mean of 3.91 and a standard deviation of 0.734, respondents strongly tended to agree in the sixth paragraph that the cloud system makes it easier to comply with local and international accounting standards and boosts the credibility of reports, illustrating the function of cloud accounting in boosting legitimacy and transparency.

The calculated (T) value was 26.477, which is higher than the tabular value; the significance level was 0.000, which is less than 0.05; and the mean for all axis paragraphs was 3.6615, with a standard deviation of 0.78229. This indicates that the following hypothesis is true: **"By increasing accuracy, speed, and transparency, the cloud accounting system helps to improve the quality of financial reports in SAIDAL Complex, Batna branch."**

IV. Conclusion

In light of rapid digital transformations, Because of its correctness, openness, and convenience of real-time access, the cloud accounting system stands out as one of the most significant contemporary models capable of attaining qualitative progress in the compilation and presentation of financial reports. The findings of this study, which employed SAIDAL Complex-Batna branch as a case study, demonstrated that by enhancing the calibre of financial reports and facilitating efficient decision-making, implementing a cloud system could be a successful substitute for the conventional computerised accounting system.

In addition to allowing the organisation to create more flexible and quick financial reports, it was discovered that moving to a cloud system helps to improve the efficiency of accounting processes and lower technical expenses. A supportive legislative and regulatory climate, the availability of appropriate digital infrastructure and the investment in qualified human resources and training to meet the demands of this transition are all-necessary to achieve these benefits.

Based on this, it can be concluded that implementing the cloud accounting system at SAIDAL Complex-Batna branch is now a strategic necessity rather than a backup plan in order to keep up with the digital revolution and guarantee the enhancement of the quality of the institution's financial reporting.

Study Results

Through the theoretical and practical study, a set of important findings were reached, summarised as follows:

- The results of the practical application demonstrated that the cloud accounting system offers significant benefit in terms of improving the quality and accuracy of financial data and speeding up the preparation of financial statements and accounting reports, with the possibility of real-time access by senior management, thereby enhancing decision-making efficiency.
- It is evident that SAIDAL Complex – Batna branch primarily relies on the traditional computerised accounting system, which, despite helping to automate processes, suffers from obvious limitations, most notably difficulty in updating, limited compatibility with contemporary applications, and lack of flexibility in meeting the changing requirements of financial reports.
- The cloud model makes it possible to lower operating expenses related to the acquisition and upkeep of technical equipment as well as the strains associated with software updates, all of which have a beneficial impact on the complexes administrative and financial performance efficiency.
- By enhancing access to financial data and enabling precise operation tracking, the cloud system improved openness and internal control, boosting the reliability of financial data and fostering greater confidence in reports that were released.
- According to the study, implementing a cloud system helps increase institutional flexibility facilitates prompt adaptation to legislative and regulatory changes, and aids in the preparation of financial reports that are more in line with international standards and internal control requirements.
- Notwithstanding these advantages, the study identified difficulties and barriers that prevent the cloud system from fully utilising its potential. These include risks associated with data security and protection, employee resistance to change, inadequate digital training, and a limited technological culture.
- It was discovered that SAIDAL Complex-Batna branch's cloud system transition will only be successful if digital infrastructure is available, human resources are qualified and ready, senior management is supportive, and a clear strategic vision that is in line with the demands of digital transformation is adopted.

Recommendations

Based on the above, a set of practical recommendations can be made:

- During the transformation phase, implement a phased plan for moving to the cloud accounting system while guaranteeing its interaction with the current system.
- Provide enough funding and technical assistance to ensure the cloud transition project's ongoing viability.
- Set up ongoing training programmes for staff members in cyber security and cloud accounting.
- Create efficient guidelines for safeguarding financial information and improving cyber security.

- Encourage a digital culture within the organisation to encourage staff members to interact favourably with the new technology and lessen change aversion.
- Create an integrated information network between the branches of SAIDAL Complex to facilitate the safe and quick sharing of financial data.
- Request that authorities revise the legal and regulatory framework to conform to the demands of data protection and cloud accounting.
- Promote SAIDAL Complex experience as a successful, generalizable practical model for other Algerian industrial organisations.

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