

Analysis of the Impact of Information and Communication Technology on the Financial Performance of Saidal Group – Algeria

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Abstract:

This study aims to examine the extent to which the use of Information and Communication Technology (ICT) influences the development of financial performance at the Saidal Complex in Algeria. To achieve this objective, 80 questionnaires were distributed to members of the study sample, with 78 valid responses retrieved for statistical analysis. The data were analyzed using the Statistical Package for the Social Sciences SPSS V30.

The findings of this study indicate a statistically significant impact of ICT on the financial performance of the Saidal Complex, attributable to digital communication skills and management support for digital transformation.

Keywords: Financial Performance, Digital Transformation, Information and Communication Technology, Financial Information, Saidal Complex.

JEL Classification: M15; O33; G38.

Introduction

Information and Communication Technology (ICT) today is no longer merely a set of tools, means, or techniques; it has evolved into a fundamental infrastructure that shapes how interaction and work take place. It serves as an overarching framework that encompasses digital computing and communication networks for the exchange, storage, and retrieval of information whenever needed. More precisely, this is referred to as the concept of information management.

Relying on ICT to perform financial activities such as analyzing financial data and generating valuable financial decisions is among the most significant positive aspects of this technology. Moreover, it enables the group to collect and analyze data from multiple sources and present it in a simple and understandable way. The use of ICT as an analytical tool for forecasting future revenues and expenses helps in developing effective financial plans and improving strategic decision-making related to the group's long-term financial performance.

Research Problem: In light of the above, the research problem can be formulated in the following main question:

To what extent does the use of information and communication technology contribute to improving the financial performance of Saidal Group?

The research problem is divided into a set of theoretical and field-based sub-questions to simplify the analysis and ensure a systematic approach to achieving the study's objectives:

- What is the nature of the relationship between ICT and financial performance at Saidal Group?
- How does ICT contribute to the development of financial performance at Saidal Group?

Research Hypotheses: The hypotheses of this study are primarily based on the questions derived from the research problem. Accordingly, the main hypotheses are as follows:

- Main Hypothesis 1: There is a statistically significant effect of the availability of ICT infrastructure on the financial performance of Saidal Group.
- Main Hypothesis 2: There is a statistically significant effect of digital communication skills on the financial performance of Saidal Group.
- Main Hypothesis 3: There is a statistically significant effect of management support for digital transformation on the financial performance of Saidal Group.

- Main Hypothesis 4: There is a statistically significant effect of information cybersecurity on the financial performance of Saidal Group.

Research Methodology: To address the research problem and test the hypotheses, the researcher relied on the deductive approach using the descriptive method, by defining the study variables and the theoretical foundations underlying them, as well as the analytical method through the analysis and interpretation of the study's results.

Given the nature of the topic namely, the impact of ICT on the development of financial performance a case study approach was adopted, focusing on Saidal Group in Algeria. The case study was supported by a field study involving employees from the selected sample within the group and its branches, in order to analyze the research topic in a precise, systematic, and academic manner.

1- The Theoretical Aspect of Information and Communication Technology (ICT) and Financial Performance

The use of information and communication technology has increasingly expanded across various fields of life in order to benefit from its advantages and enhance the quality of related business operations.

1-1- Information and Communication Technology (ICT)

Some define ICT as a set of technologies used to simplify a given activity and enhance performance. It includes a group of devices concerned with processing and exchanging information such as computers, software, and various computer-related equipment. However, its primary goal is to facilitate communication through networks. (Bakhti & Shaoubi, 2009)

Another definition describes ICT in terms of its uses, viewing it as a combination of communication supports that form the foundation, source, and driver of change within entities or their subsidiaries. These supports enable the search, processing, storage, and transmission of information. ICT thus serves as an essential tool that guides and drives action, encompassing both computer science and telecommunications. (Karou, 2004)

A further definition views ICT as a set of knowledge, expertise, technical practices, and interrelationships among sub-systems of work, whose applications contribute to fulfilling real or anticipated economic and social needs. (dusage, 1994)

1-2- Financial Performance

Accordingly, financial performance is the attainment of financial goals reducing costs while maximizing benefits through the optimal use of financial resources as a comprehensive and dynamic mechanism. This

requires following various processes and achievements to ensure continuous updates. Financial performance is multi-criteria, encompassing cost, time, and quality. (Yahiaoui & Bouhidid, 2014)

From another perspective, it is defined as the diagnosis of an entity's financial situation to determine its ability to create value and face future risks based on the content of its financial statements, while taking into account the prevailing economic environment and the industrial sector in which the entity operates. (Arnaud, 2005)

It is also understood as the efficient and optimal use of resources and capabilities with the aim of maximizing results and desired outcomes by minimizing the resources used to achieve objectives. (Boumsabah, 2021)

Based on the above definitions of financial performance, a common denominator can be identified: the ability of an economic entity to achieve its set financial objectives through the optimal use of available resources.

2- Sample characteristics and reliability of the study instrument

The study sample was selected from the employees and executives of the Saidal Group in Algeria, with a total of 78 valid questionnaires retrieved for analysis. This will be addressed in this section.

2-1- Characteristics of the Study Sample

The employees of the Saidal Group in Algeria possess a set of characteristics, which we will outline and highlight as follows:

2-1-1- Age

This characteristic is illustrated in the attached table, which shows the distribution of individuals according to the age variable.

Table number (01): Distribution of the study sample according to the age variable

Age Group	Frequency	Percentage (%)
Less than 30 years	03	3.8
From 30 to less than 40 years	14	17.9
From 40 to less than 50 years	23	29.5
More than 50 years	38	48.7
Total	78	100

Source: Prepared by the researcher based on the results obtained from SPSS V30.

From the table above, it is evident that most of the human resources working in the field of finance and accounting at Saidal Group are over 50 years old, representing 48.7% of the total sample. This is followed by the 40–49 years age group, which constitutes 29.5%. The 30–39 years age

group accounts for 17.9%, while employees under 30 years old represent only 3.8% of the sample.

These results indicate a diversity in the age distribution of the study sample. However, the high proportion of employees aged over 50 suggests that the Group and its subsidiaries rely heavily on older age categories, reflecting a lack of workforce turnover within the organization. This, in turn, is expected to enhance the quality of the study results, as the responses obtained are likely to be more accurate and experience-based.

2-1-2- Educational Qualification

This variable presents the distribution of the study sample according to their educational qualification, as shown in the following table.

Table number (02): Distribution of the Study Sample According to the Educational Qualification Variable

Educational Qualification	Frequency	Percentage (%)
Postgraduate Studies	27	34.6
University (Undergraduate)	44	56.4
Secondary or Below	7	9.00
Total	78	% 100

Source: Prepared by the researcher based on the results obtained from SPSS V30

Based on the data presented in the attached table, it is observed that 56.4% of employees at Saidal Industrial Group hold a university degree, followed by postgraduate degree holders who represent 34.6%, while the secondary education or below category accounts for 9.0%.

These results indicate that Saidal Group in Algeria relies heavily on university graduates, while also seeking to attract postgraduate degree holders, as it is an economic entity that focuses on the financial sector and encourages its employees to pursue further education, given its need for advanced academic competencies such as those possessed by postgraduate graduates.

2-1-3- Seniority (Years of Experience)

To present the distribution of the study sample according to the seniority variable, the following table was prepared:

Table number (03): Distribution of the Study Sample According to the Seniority Variable

Seniority (Years of Experience)	Frequency	Percentage (%)
Less than 10 years	10	12.8
From 10 to 20 years	15	19.2
More than 20 years	53	67.9
Total	78	% 100

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Source: Prepared by the researcher based on the results obtained from SPSS V 30.

Based on the data presented in the table above, it is clearly observed that 67.9% of the employees in the Group have more than 20 years of experience, followed by those with 10 to 20 years of experience at 19.2%, while employees with less than 10 years of experience represent 12.8% of the sample.

These results indicate that the majority of employees have extensive professional experience exceeding 20 years, which can be attributed to the nature of the Group's operations, requiring the recruitment and retention of highly skilled and experienced personnel. This is essential for making appropriate decisions at the right time in order to strengthen and improve the Group's position compared to previous years or other economic entities operating in the pharmaceutical sector.

2-1-4- Category

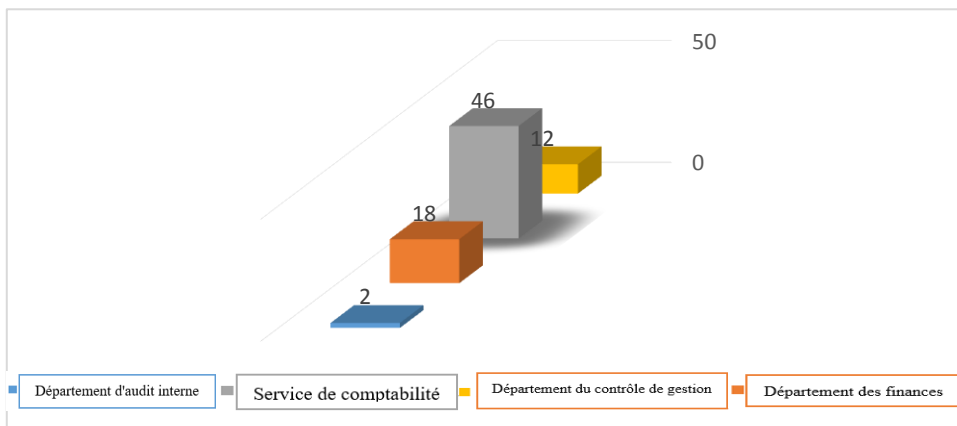
To present the distribution of the study sample according to the category variable, the following table was prepared:

Table number (04): Distribution of the Study Sample According to the Category Variable

Category (Department)	Frequency	Percentage (%)
Internal Audit Department	2	2.6
Finance Department	18	23.1
Accounting Department	46	59.0
Management Control Department	12	15.4
Total	78	% 100

Source: Prepared by the researcher based on the results obtained from SPSS V30.

Figure number (01): Distribution of the Study Sample According to the Category Variable



Source: Prepared by the researcher based on the results obtained from SPSS V30.

From the attached table and the figure above, it is evident that the majority of the sample members at Saidal Group and its subsidiaries in Algeria belong to the Accounting Department, representing 59% of the total. This is followed by the Finance Department with 23.1%, the Management Control Department with 15.4%, and finally the Internal Audit Department with 2.6%.

These results show that the diversity of the study sample was not intentional, but rather reflects the actual structure of the workforce at Saidal Industrial Group, particularly within the Finance and Accounting Directorate, where most employees' primary responsibilities are related to accounting functions.

2-2- Validity and Reliability Testing of the Study Instrument

The study instrument was tested to verify its ability to measure the variables for which it was designed, and the following tests were used for this purpose:

2-2-1- Face Validity of the Questionnaire

The apparent validity of the questionnaire refers to the extent to which each statement belongs to its respective domain and to the overall comprehensiveness of the questionnaire in addressing the research problem and objectives. The questionnaire was reviewed by a panel of experts and specialists from various universities to ensure that the items corresponded to their intended dimensions and to modify any statements linguistically or conceptually when necessary. This process confirms the face validity of the questionnaire.

2-2-2- Construct Validity of the Questionnaire

This consistency is measured by determining the internal homogeneity of the questionnaire, that is, the degree of coherence and harmony among all items within the same dimension. This is done by calculating the Pearson correlation coefficients between each item and all other items belonging to the same dimension. The following table presents these results in detail.

Table number (07): Pearson Correlation Coefficients for the Internal Consistency Between Each Statement and the Dimensions of Information and Communication Technology

Axis of Information and Communication Technology (ICT)			
Dimension No. 01:	Dimension No. 02:	Dimension No. 03:	Dimension No. 04:

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Availability of Infrastructure and Information Technology		Digital Communication Skills		Management Support for Digital Transformation of Communications		Information Cybersecurity	
Statement Number	Correlation Coefficient	Statement Number	Correlation Coefficient	Statement Number	Correlation Coefficient	Statement Number	Correlation Coefficient
01	0.817**	05	0.715**	10	0.779**	14	0.800**
02	0.806**	06	0.824**	11	0.809**	15	0.828**
03	0.613**	07	0.805**	12	0.725**	16	0.866**
04	0.776**	08	0.766**	13	0.823**	17	0.856**
-	-	09	0.733**	-	-	18	0.801**

Source: Prepared by the researcher based on the results of the SPSS V 30.

* Significant at the 0.05 level.

** Significant at the 0.01 level.

From the table above, it is clear that all correlation coefficients for the questionnaire items related to the Information and Communication Technology (ICT) axis are statistically significant at the 0.01 level.

Table number (08): Correlation of Dimensions with the Information and Communication Technology (ICT) Axis

Variable	Information and Communication Technology (ICT)			
	Availability of Infrastructure and Information Technology	Digital Communication Skills	Management Support for Digital Communication Transformation	Information Cybersecurity
Value	0.780**	0.873**	0.847**	0.871**

Source: Prepared by the researcher based on the results of the SPSS V 30.

* Significant at the 0.05 level.

** Significant at the 0.01 level.

It is observed from the table above that all correlation coefficients for each dimension of the independent variable Information and Communication Technology (ICT) are statistically significant at the 0.01 level.

Table number (09): Correlation Coefficients for Internal Consistency between Each Item and the Dimensions of Financial Performance

Financial Performance Dimension					
Dimension No. 01: Ensuring the Quality of Financial Information		Dimension No. 02: Financial Performance Evaluation		Dimension No. 03: Indicators of Competitive Advantage and Quality	
Statement Number	Correlation Coefficient	Statement Number	Correlation Coefficient	Statement Number	Correlation Coefficient
19	0.874**	29	0.639**	23	0.787**
20	0.880**	30	0.776**	24	0.727**
21	0.768**	31	0.728**	25	0.809**
22	0.741**	32	0.684**	26	0.770**
-	-	-	0.633**	27	-
-	-	-	0.816**	28	-

Source: Prepared by the researcher based on the results of the SPSS V 30.

* Significant at the 0.05 level. ** Significant at the 0.01 level.

It is evident from Table 09 that all correlation coefficients for the questionnaire items related to the dependent variable, represented by financial performance, are statistically significant at the 0.01 level.

Table number (10): Correlation of Dimensions with the Financial Performance Variable

Variable	Financial Performance		
Dimension Title	Ensuring the Quality of Financial Information	Financial Performance Evaluation	Indicators of Competitive Advantage and Quality
Value	0.874**	0.952**	0.860**

Source: Prepared by the researcher based on the results of the SPSS V 30.

* Significant at the 0.05 level. ** Significant at the 0.01 level.

It is observed from the table above that all correlation coefficients for each dimension of the dependent variable, represented by financial performance, are statistically significant at the 0.01 level.

2-3 Questionnaire Reliability Level:

To confirm the reliability level, Cronbach’s Alpha coefficient is calculated to measure the degree of dependability of the questionnaire in obtaining the necessary data. A higher value of the coefficient, approaching 1, indicates a greater degree of reliability. The values are presented in the following table:

Table number (11): Cronbach’s Alpha Reliability Coefficient

Axes	Number of Items	Cronbach’s Alpha Reliability Coefficient
Information and Communication Technology (ICT)	18	0.922
Financial Performance	14	0.911
Total Items	32	0.954

Source: Prepared by the researcher based on the results of the SPSS V 30.

From the table presented above, it is observed that the Cronbach’s Alpha value for the Information and Communication Technology (ICT) axis reached 0.922, while for the Financial Performance axis it reached 0.911. The overall Cronbach’s Alpha value for all items across the axes was 0.954, which is considered statistically good and acceptable.

These values represent a strong indication of the validity and reliability of the questionnaire for implementation, ensuring that it can effectively achieve its intended objectives after responses are collected. This

also indicates that the study results are reliable and can be reproduced upon reapplication.

3- The Applied Study on the Impact of Information and Communication Technology on Financial Performance at the Saidal Group

We will present and analyze the results of the study variables and their dimensions related to the complex, based on the Statistical Package for the Social Sciences (SPSS) version 30.

3-1- Presentation and Analysis of Results Related to the Axes of Information and Communication Technology at the Saidal Group:

To analyze the level of Information and Communication Technology (ICT) within the Saidal Industrial Group from the perspective of its employees, it was necessary to calculate the arithmetic mean, standard deviation, and the relative importance of each statement.

Table number (12): Trends in the Study Sample’s Responses to the Statements of the Dimension “Availability of ICT Infrastructure

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	The group is equipped with modern computers and devices to provide electronic services.	4.24	0.809	1	Strongly Agree
02	Information and communication technology facilitates both internal and external communication.	4.18	0.679	2	Agree
03	There is a high internet bandwidth ensuring easy information transfer.	4.08	0.802	4	Agree
04	Information and communication technology is used in all branches of the group.	4.18	0.698	3	Agree
	Overall Mean and Standard Deviation	0.560	4.17	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

The table above (Table 12) shows that the arithmetic mean of the responses from the study sample to the statements related to the dimension of ICT infrastructure availability reached 4.17 with a standard deviation of 0.560. Statement 1 ranked first with a mean of 4.24 and a standard deviation of 0.809, which clearly indicates that Saidal Group strives to provide modern equipment to deliver the best electronic services. Statement 2 came in second place with an “Agree” rating, a mean of 4.18, and a standard deviation of 0.679, confirming that ICT plays an active role in facilitating both internal and external communication. In third place came statement 4, with a mean of 4.18 and a standard

deviation of 0.698, which also shows that ICT is available both at the group’s headquarters and its branches. Finally, statement 3 ranked fourth with a mean of 4.08 and a standard deviation of 0.802, with a moderate rating, indicating that internet coverage within the group is available but could be improved.

Thus, it can be concluded that Saidal Group is working towards achieving comprehensive quality in its services by paying close attention to its ICT infrastructure, providing the latest electronic devices (computers, printers, etc.) and the most up-to-date software and applications, which contribute to the group’s overall management and operations efficiently and equitably.

Table number (13): Trends in the Study Sample’s Responses to the Statements of the Dimension “Digital Communication Skills

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	Training contributes to enhancing technical efficiency in task performance.	4.22	0.732	1	Strongly Agree
02	The group provides training programs for employees in the field of modern technology.	3.82	0.818	5	Agree
03	The group’s management allocates financial support for the development of digital platforms.	4.06	0.744	2	Agree
04	Information and Communication Technology facilitates access to new markets.	4.03	0.683	3	Agree
05	Information and Communication Technology helps reach new customers and improve the services provided to them.	4.00	0.483	4	Agree
	Overall Mean and Standard Deviation	4.03	0.535	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

It is evident from the table above that the arithmetic mean of the responses from the study sample regarding the statements related to the Digital Communication Skills dimension reached 4.03 with a standard deviation of 0.535. Statement 1 ranked first with a mean of 4.22 and a standard deviation of 0.732, indicating that training enhances the technical competencies of the group’s human resources. Statement 3 ranked second with an “Agree” rating, a mean of 4.06, and a standard deviation of 0.744, showing that the group’s management prioritizes the development of its digital platform by allocating financial resources for this purpose. Statement 4 ranked third with a mean of 4.03 and a standard deviation of 0.683, reflecting that ICT plays an effective role in accessing new markets, especially with the rise of e-commerce. Statement 5 ranked fourth with a

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mean of 4.00 and a standard deviation of 0.483, indicating that ICT has facilitated reaching new customers. Statement 2 ranked fifth with a mean of 3.82 and a standard deviation of 0.818, which is a moderate rating, suggesting that the training needs of employees are being covered through periodic training programs.

Thus, it can be concluded that Saidal Group aims to achieve a leap in communication skills by developing the competencies of its human resources through appropriate training programs, with a focus on entering new markets and serving its clients effectively through high-quality services.

Table number (14): Trends in the Study Sample’s Responses to the Statements of the Dimension “Management Support for Digital Transformation of Communications

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	The group provides sufficient funding to develop its capabilities in the field of infrastructure.	3.90	0.549	4	Agree
02	The group has specialists and technicians to provide fast technical support.	3.96	0.591	1	Agree
03	Cloud computing is used to store and process data.	3.92	0.576	3	Agree
04	Communication systems and software are updated periodically.	3.94	0.709	2	Agree
	Overall Mean and Standard Deviation	3.93	0.477	–	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

It is evident from the table above that the arithmetic mean of the responses from the study sample regarding the statements related to the Management Support for Digital Transformation of Communications dimension reached 3.93 with a standard deviation of 0.477. Statement 2 ranked first with a mean of 3.96 and a standard deviation of 0.591, reflecting the availability of specialized ICT technicians to ensure technical support for devices and equipment, including preventive maintenance. Statement 4 ranked second with a mean of 3.94 and a standard deviation of 0.709, indicating the periodic updating of software used by the group and its branches. Statement 3 ranked third with a mean of 3.92 and a standard deviation of 0.576, showing that the group relies on cloud computing to store and protect its financial data. Statement 1 ranked fourth with a mean of 3.90 and a standard deviation of 0.549, reflecting that ICT has facilitated

access to new clients. Statement 5 ranked fifth with a mean of 3.82 and a standard deviation of 0.818, which is a moderate rating, indicating that the group allocates funds specifically for developing communication infrastructure.

Thus, it can be concluded that Saidal Group strives to achieve excellence in the digital transformation of financial management by providing specialized technical staff, ensuring software and application updates, and relying on cloud computing to securely store financial data across the group and its branches. All of this is supported by dedicated financial allocations to guarantee a smooth and effective digital transformation.

Table number (15): Trends in the Study Sample’s Responses to the Statements of the Dimension “Information Cybersecurity

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	There are firewalls and antivirus systems in place.	4.03	0.558	4	Agree
02	The group follows a security policy.	4.13	0.589	1	Agree
03	The group uses information security techniques to reduce the risks associated with ICT usage.	4.08	0.598	2	Agree
04	The group complies with laws and regulations related to information security.	4.05	0.579	3	Agree
05	Information and Communication Technology is used to protect the group’s digital assets.	4.13	0.589	1	Agree
	Overall Mean and Standard Deviation	4.08	0.484	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

Table 15 shows that the arithmetic mean of the responses from the study sample regarding the statements related to the Information Cybersecurity dimension reached 4.08 with a standard deviation of 0.484. Statements 2 and 5 ranked first, both with a mean of 4.13 and a standard deviation of 0.589, indicating that these two statements are equally important in reflecting the cybersecurity dimension. They show that the group follows a security policy to protect its electronic information, data, and digital assets from breaches related to ICT usage. Statement 3 ranked second with an “Agree” rating, a mean of 4.08, and a standard deviation of 0.598, reflecting that the group uses a set of techniques to minimize various electronic risks. Statement 4 ranked third with a mean of 4.05 and a standard deviation of 0.579, highlighting compliance with laws and regulations in Algeria related to information security. Statement 1 ranked fourth with a mean of 4.03 and a standard deviation of 0.558, showing that the group provides firewalls and antivirus programs to mitigate potential risks.

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Thus, Saidal Group achieves information cybersecurity through implementing security policies and supporting technologies to reduce risk levels, in accordance with Algerian legislation, by activating firewalls and updating antivirus programs, thereby protecting information that is considered a key asset for decision-making.

To rank the ICT dimensions according to the employees' responses, based on the arithmetic mean, the results are as follows:

- Availability of ICT Infrastructure: Mean = 4.17
- Information Cybersecurity: Mean = 4.08
- Digital Communication Skills: Mean = 4.03
- Management Support for Digital Transformation of Communications: Mean = 3.93

3-2- Presentation and Analysis of Results Related to the Financial Performance Axis at Saidal Group, Algeria:

To analyze the level of financial performance practices at Saidal Group from the perspective of its employees, it is necessary to calculate the standard deviations and arithmetic means, as well as to indicate the relative importance of each statement. This approach helps to understand the tendencies of the respondents regarding this axis, which will be presented in the following tables.

Table number (16): Trends in the Study Sample's Responses to the Statements of the Dimension "Ensuring the Quality of Financial Information"

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	Data analysis platforms are used to prepare accurate reports on the group's financial performance.	4.14	0.716	2	Agree
02	The method of preparing financial information complies with IFRS (International Financial Reporting Standards).	4.19	0.740	1	Agree
03	Management discloses all information necessary for shareholders to make investment decisions.	3.91	0.668	3	Agree
04	Financial reports are subject to auditing and review processes.	4.14	0.716	2	Agree
	Overall Mean and Standard Deviation	4.10	0.580	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

It is evident from the table above that the arithmetic mean of the responses from the study sample regarding the statements related to the

“Ensuring the Quality of Financial Information” dimension reached 4.10 with a standard deviation of 0.580. Statement 2 ranked first with a mean of 4.19 and a standard deviation of 0.740, indicating that the preparation of financial information complies with international standards (IFRS). Statements 1 and 4 ranked second, both with a mean of 4.14 and a standard deviation of 0.716, reflecting that management relies on digital platforms for data analysis to produce high-quality financial reports, which are subsequently verified through internal and external audits. Statement 3 ranked third with a mean of 3.91 and a standard deviation of 0.668, showing that management discloses information to enable shareholders to make effective decisions.

Thus, it can be concluded that Saidal Group has made a significant leap in utilizing ICT to ensure the quality of its financial outputs by preparing global-standard financial reports using digital platforms for data analysis. Moreover, these outputs are reviewed by auditors to guarantee accuracy and reliability for all stakeholders, particularly the shareholders.

Table number (17) : Trends in the Study Sample’s Responses to the Statements of the Dimension “Financial Performance Evaluation

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	The use of Information and Communication Technology (ICT) in the group leads to increased profitability compared to previous years.	4.09	0.628	2	Agree
02	Shareholders receive investment returns on a regular basis.	3.94	0.690	5	Agree
03	The group meets its short-term obligations on time.	4.05	0.622	3	Agree
04	The group relies on external financing.	3.76	0.706	6	Agree
05	The group manages its assets efficiently.	3.99	0.470	4	Agree
06	The group uses a dashboard with a set of financial indicators to monitor financial performance and make decisions.	4.10	0.656	1	Agree
	Overall Mean and Standard Deviation	3.99	0.451	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

From Table 17, it is observed that the arithmetic mean of the responses from the study sample regarding the statements related to the “Financial Performance Evaluation” dimension reached 3.99 with a standard deviation of 0.451. Statement 6 ranked first with a mean of 4.10 and a standard deviation of 0.656, indicating that the group monitors its financial performance using a dashboard that includes all financial and production data from its branches to support decision-making. Statement 1 ranked second with a mean of 4.09 and a standard deviation of 0.628, showing that

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the group relies heavily on ICT to enhance profitability. Statement 3 ranked third with a mean of 4.05 and a standard deviation of 0.622, reflecting that the group fulfills its short-term financial obligations on time. Statement 5 ranked fourth with a mean of 3.99 and a standard deviation of 0.470, indicating efficient management of assets and resources. Statement 2 ranked fifth with a mean of 3.94 and a standard deviation of 0.690, showing the regular distribution of financial returns to shareholders during the study period. Statement 4 ranked sixth with a mean of 3.76 and a standard deviation of 0.706, reflecting the group’s reliance on external financing to cover financial needs when necessary.

Thus, it can be concluded that Saidal Group relies on a financial dashboard to track performance indicators, enabling informed and accurate financial decisions aimed at increasing profitability compared to previous years. This is achieved through efficient management of resources and assets, timely fulfillment of short-term obligations, and sharing profits with shareholders, while also utilizing external financing as required.

Table number (18): Trends in the Study Sample’s Responses to the Statements of the Dimension Competitive Advantage and Quality Indicators

N°	Statement	Arithmetic Mean	Standard Deviation	Rank	Evaluation Level
01	Customer trust and access to new markets are indicators of product quality.	4.01	0.549	3	Agree
02	Cost control contributes to maximizing profit margins.	4.22	0.573	1	Strongly Agree
03	The group benefits from the technology used in planning and preparing periodic reports to achieve a competitive advantage.	4.04	0.545	2	Agree
04	The group continuously addresses complaints and suggestions.	3.91	0.793	4	Agree
	Overall Mean and Standard Deviation	4.05	0.475	-	Agree

Source: Prepared by the researcher based on the results of SPSS V 30.

The table above indicates that the arithmetic mean of the responses from the study sample regarding the statements related to the “Competitive Advantage and Quality Indicators” dimension reached 4.05 with a standard deviation of 0.475. Statement 2 ranked first with a mean of 4.22 and a standard deviation of 0.573 (Strongly Agree), showing that the group’s management has significant control over costs to ensure a wider and higher profit margin. Statement 3 ranked second with a mean of 4.04 and a standard deviation of 0.545 (Agree), indicating that the group relies on modern technology in planning and periodic reporting to achieve quality outputs and a competitive advantage in a dynamic environment. Statement 1 ranked third with a mean of 4.01 and a standard deviation of 0.549,

reflecting that entering new markets and gaining customer trust is evidence of the quality of the products offered by the group. Statement 4 ranked fourth with a mean of 3.91 and a standard deviation of 0.793, showing the group's awareness in responding to stakeholders' expectations by addressing complaints and considering suggestions within its capacity.

Thus, it can be concluded that Saidal Group seeks to achieve a competitive advantage through the quality of its services and products, which drives it to control expenses and costs to increase profitability, and to utilize modern technology in planning to maintain quality and gain customer trust. To ensure customer loyalty, complaints are addressed via the official platform, and suggestions are considered.

To rank the dimensions of the dependent variable, Financial Performance, based on the responses of Saidal Group employees:

- Ensuring Financial Information Quality – Mean: 4.10
- Competitive Advantage and Quality Indicators – Mean: 4.05
- Financial Performance Evaluation – Mean: 3.99

Conclusion

Information and Communication Technology (ICT) has become a focal point in recent years due to evolving economic conditions, intense competition, the expansion of e-commerce, and global market integration. These factors have created unprecedented opportunities for economic entities worldwide.

Algerian economic institutions are similarly experiencing rapid transformations, giving rise to numerous challenges. Addressing these challenges effectively requires high-quality performance, which depends on the optimal utilization of material, human, and financial resources to secure market share and maintain institutional sustainability.

This study employed an inductive approach, combining descriptive and analytical methods, to examine the impact of ICT on the financial performance of Cidal Industrial Group in Algeria. The findings of the field study reveal the following:

- There is a statistically significant relationship between ICT adoption and financial performance.
- Key ICT dimensions namely digital communication skills and management support for digital transformation significantly influence the Group's financial outcomes.
- Management support for digital communication transformation produces measurable improvements in financial performance.
- Cidal Industrial Group ensures transparency by disclosing critical information through annual board reports published on its official website.

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- The Group enhances internal communication efficiency across all administrative levels and clarifies strategic objectives via structured workshops.

Recommendations to improve financial performance and strengthen competitive advantage include:

- Fostering a digital culture and ICT competencies among employees through targeted training programs and strategic policies.

- Enhancing financial and competitive performance in the pharmaceutical sector by adopting efficient practices, monitoring performance effectively, and implementing a robust financial performance measurement system.

- Ensuring regular updates of organizational information on the official website and periodic publications to maintain transparency and reflect operational realities accurately.

- Attracting and retaining highly skilled personnel, capable of leveraging ICT for digital transformation, informed decision-making, and effective technical supervision and leadership.

Overall, the study confirms that ICT adoption, combined with managerial support and employee competency development, significantly enhances financial performance and strengthens institutional competitiveness within the Algerian pharmaceutical sector.

Bibliography

Arnaud, T. (2005). *Evaluation Des Entreprises Technique De Gestion*. Paris, France: Edition Economica.

Bakhti, I., & Shaoubi, M. F. (2009). BThe Role of Information and Communication Technology in Developing the Tourism and Hotel. *Al-Bahith Journal, Issue 07, Volume 7, 275*.

Boumsabah, s. (2021). Evaluating the Financial Performance of an Economic Enterprise Using Financial Ratios: A Case Study of Algeria Telecom Mobile – Mobilis. *Journal of Development Research and Studies, 8(2), 219*.

dusage, P. (1994). *bemard ramanantsoa* . édition international: technologie et stratégie d'entereprise.

Karou, y. (2004). *Influence des technologies de l'information et de la communication sur la qualité de flux informationnels au sein des PME – PMI algériennes*. Biskra Université Mohamed Khider: Actes du 2ème séminaire international de la gestion des entreprises Dynamique de la gestion de la PM.

Yahiaoui, I., & Bouhidid, I. (2014). . Governance and its Role in Improving the Financial Performance of Algerian Enterprises: The Case of the New Algerian Canning Company in Rouiba. *Journal of Algerian Enterprises Performance, 3(1), 64*.