

Requirements for Adapting Algerian Auditing Standards in Collecting Electronic Evidence in the Context of the Digital Operating Environment in Algeria - An Analytical Study on a Sample of Accounting Experts and External Auditor-

Bouguerra Khaled^{1,*}, Kebaili Mohamed²,

¹ University of Blida 2, Iounici Ali (Algeria)/ laboratory of challenges of the Tax System in Algeria in Light of Economic Transformations

EEK.bouguerra@univ-blida2.dz

² University of Blida 2, Iounici Ali (Algeria)/ laboratory of challenges of the Tax System in Algeria in Light of Economic Transformations

mohamedkeb@hotmail.fr

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Abstract:: This study aims to assess the extent to which Algerian auditing standards have adapted to the requirements of using electronic evidence in light of the transition toward a digital operating environment in Algeria. The study adopted a descriptive analytical methodology, both theoretical and field-based, through an analysis of the fundamental concepts of electronic evidence and a presentation of relevant local and international standards, in addition to a questionnaire directed at a sample of external auditors.

The results revealed an increasing awareness among Algerian auditors of the importance of using electronic evidence; however, their actual reliance on it remains limited. This is due to the inadequacy in the adaptation of local standards and the insufficiency of the legislative and regulatory framework. The study recommended the need to adapt Algerian auditing standards to the requirements of the digital environment, develop professional training programs for auditors, and update the legal framework to keep pace with modern technological developments and the requirements of collecting and using electronic evidence.

Keywords: Electronic evidence, Algerian auditing standards, digital operating environment.

Jel Classification Codes : M42; C87

*Corresponding author.

Introduction:

With the rapid advancement of digital transformation, the auditing profession is facing a new reality that requires integrating information technology into all stages of the audit process, especially in collecting and evaluating evidence. The growing reliance on electronic accounting systems has introduced electronic audit evidence as an alternative or complement to traditional forms, raising challenges related to its nature, collection methods, reliability, and legal and professional validity. However, there is still a lack of clear local standards regulating its use, while international standards provide only limited guidance.

In Algeria, these challenges are further complicated by the absence of a comprehensive legislative and professional framework defining electronic evidence, its admissibility conditions, and handling mechanisms. Although implicitly recognized in texts like Executive Decree No. 09-110 on electronic accounting and Civil Law No. 15-04 on electronic signatures and authentication, this legal and regulatory gap forces auditors to rely on personal judgment rather than clear standards. As a result, the effective use of electronic evidence remains limited, highlighting the urgent need to develop local standards adapted to the evolving digital environment.

Study Problem:

Accordingly, the study problem can be formulated as follows:

To what extent can the current Algerian auditing standards be adapted to the collection of electronic audit evidence? And to what extent do external auditors rely on them in the digital operating environment?

Study Hypotheses:

- The auditors' awareness of the importance of adapting Algerian auditing standards has a statistically significant impact on the extent of their reliance on them in the collection and use of electronic audit evidence;

- The effectiveness of training in applying Algerian auditing standards has a statistically significant impact on the level of difficulties encountered by external auditors in collecting and using electronic audit evidence amid the transition to a digital operating environment.

Study Importance:

This study is highly significant amid rapid developments in financial and accounting auditing and the shift toward a digital environment, which has created new challenges for external auditors, particularly in collecting and using electronic audit evidence. Algerian auditing standards serve as a key reference guiding auditors' work, yet their effectiveness depends on auditors' ability to understand, apply, and adapt them to digital changes. The study seeks to address essential questions about how these standards can be adapted to the process of collecting electronic audit evidence within an evolving digital environment.

Study Objectives:

This study aims to:

- Diagnosing the reality of the use of electronic audit evidence by external auditors in Algeria;
- Measuring the extent of auditors' reliance on Algerian standards when collecting and using electronic audit evidence.

Study Methodology:

The descriptive analytical method was adopted for the theoretical aspect of the study, in order to analyze the conceptual and legislative framework related to electronic audit evidence and Algerian and international auditing standards. As for the practical aspect, the quantitative method was used through a questionnaire directed at a sample of external auditors to assess their opinions and attitudes regarding the study topic.

To achieve the objectives of the study, the Study was divided into the following:

I-. Electronic Audit Evidence in Light of International

I.1.The Concept of Electronic Audit Evidence:

The Canadian Institute of External Auditor defined electronic audit evidence in its report on electronic audit evidence as all information that is prepared, transmitted, exchanged, processed, recorded, and/or stored electronically to support the auditor's opinion and the content of their report on the financial statements (Ouargli & Boukhalfi, 2024, p. 94)The same report also clarified that electronic evidence is not limited to electronic documents and papers but may also come in the form of images, audio clips, or videos. Some auditors prefer to print electronic audit evidence and convert it into paper form, but in this case, it is still considered electronic and not manual, given that it was prepared, transmitted, and stored in electronic form. (Mohamed & Bourkaib, 2025, p. 253).

I.2.Statements and Auditing Standards Complementary to the Practice of Auditing in the Context of the Digital Operating Environment

As a result of the expansion in the use of modern technology and the transition to a digital transformation technology environment and its impact on auditing, the International Auditing and Assurance Standards Board (IAASB) issued several international audit practice statements, starting in 1987, then amended them in 2001, and later withdrew them in 2004 (Araban & Bousbaine, 2020, p. 356). However, it later referenced them in several paragraphs of International Auditing Standard (315), revised in 2008, titled Understanding the Entity and Its Environment and Assessing the Risks of Material Misstatement. Given the importance of electronic auditing and the increasing demand for it amid the widespread use of information technology, the IAASB issued a set of statements and international auditing standards as follows:

- International Auditing Practice Statement No. (1001): Electronic Information Systems Environment under the Use of Small Computers, aimed at providing assistance to auditors when implementing international auditing standards, especially when the audited entity relies heavily or entirely on small computers to process its financial data;
- International Auditing Practice Statement No. (1002): Electronic Information Systems Environment under Online Computer Systems, which highlights online computer systems that enable users to directly access data and programs through electronic accounting systems;
- International Auditing Practice Statement No. (1003): Electronic Information Systems Environment and the Use of Database Systems; (Sfahlo & Bouzian Rahmani, 2019, p. 18)
- International Auditing Statement No. 1008: Consideration of Internal Control in a Computerized Environment – Characteristics and Considerations for Computer-Based Systems. This statement serves as an annex to International Auditing Standard No. 400, Risk Assessments and Internal Control, and includes guidelines and directions for assessing risk within information systems;
- International Statement No. (1009): Computer-Assisted Audit Techniques (CAATs), intended to provide auditing methods assisted by computers;
- International Auditing Standard No. 401: Auditing in a Computer Information Systems Environment, aimed at providing the procedures that must be followed when conducting audits of entities that process their financial data electronically;
- International Auditing Standard No. 620: Using the Work of an Expert, which provides guidance on how to benefit from the work of an expert in the field of information technology;

As part of the IAASB's efforts and in order to raise awareness about financial statement auditing issues in the field of e-commerce, International Auditing Statement No. 1013 was issued. Its purpose is to provide guidance on how to apply international auditing standards

when an entity uses a public network such as the Internet for e-commerce. The board emphasized that this statement relates to the application of International Auditing Standard No. 300, Planning an Audit of Financial Statements, International Auditing Standard No. 315, Identifying and Assessing the Risks of Material Misstatement through Understanding the Entity and Its Environment, and International Auditing Standard No. 330, The Auditor's Responses to Assessed Risks (Halimi, 2022, p. 89).

The objective of these statements and standards, which relate to the fieldwork of auditing in a digital environment, is to collect sufficient and reliable audit evidence in order to effectively achieve the overall goal of expressing an opinion on the financial statements.

II– Requirements for Relying on Electronic Audit Evidence According to International and Algerian Releases and Algerian Legislation

II.1. Determinants of Using Electronic Audit Evidence in the Digital Operating Environment: A Reading in International Auditing Releases

In order to enhance the auditor's understanding of electronic audit evidence and how to deal with it properly, they need guidelines or standards that direct them and identify the main issues they face in collecting such evidence within an electronic accounting environment, which may become obstacles if they do not adapt to or handle them properly. The auditor also needs solutions or general guidance that may help in adapting to electronic evidence and reducing its obstacles. The Auditing Standards Board (ASB) of the American Institute of Certified Public Accountants (AICPA) issued Auditing Standard SAS No. 80 titled Electronic Audit Evidence, which replaced Auditing Standard SAS No. 31 bearing the same title. This standard includes the impact of information technology on the audit evidence relied upon by the auditor. The differences lie in the change in the nature of the evidence and the change in procedures for collecting it.

As for the International Standards on Auditing (ISA), they have not issued any specific standard or report concerning electronic audit

evidence. Instead, they have only made very limited references to it within ISA 500 titled Audit Evidence.

Regarding studies and reports, in 1997, the Auditing Standards Board (ASB) of the AICPA issued a study titled *The Information Technology Age: Audit Evidence in the Electronic Environment*, aiming to provide explanations and practical guides on how auditors should deal with electronic evidence to reduce the problems they may face. The Canadian Institute of External Auditor (CICA) issued a research report in 2003 titled *Electronic Audit Evidence*, which included a definition of electronic audit evidence, its most important types, the difference between it and its manual counterpart, the risks associated with it, and the procedures for collecting it (Bourkaib, 2019, p. 357).

II.2. The Legal Authority of Electronic Audit Evidence in Algerian Legislation

Although Algerian legislation does not explicitly address electronic audit evidence, it implicitly recognizes it through Executive Decree No. 09-110 on electronic accounting, which requires dating, numbering, and securing computerized outputs and grants auditors the right to request technical documentation as electronic evidence. The Civil Code also broadened the concept of writing to include electronic formats if the source is verified and securely preserved, while Law No. 15-04 linked the legal validity of electronic documents to electronic signatures, confirming identity and detecting alterations. These provisions affirm the legal value of electronic evidence in forming audit opinions and defending auditors before the judiciary.

However, the current legal framework remains insufficient due to the lack of clear definitions, classifications, and professional standards guiding auditors in handling electronic evidence, particularly in complex cases. Existing laws mainly address textual documents, neglecting non-textual evidence such as images, videos, and digital files, while the temporary nature of electronic evidence poses additional challenges as it may be deleted after use. This highlights the urgent need for a comprehensive legal and professional framework that defines concepts, classifies evidence types, and sets conditions for their admissibility, thereby enhancing audit quality and ensuring legal

protection in a digital environment.(Mohamed & Bourkaib, 2025, p. 254).

II.3. Methods of Obtaining Electronic Audit Evidence According to Issued Algerian Standards

the following presents some of the methods used in obtaining electronic audit evidence and how their compatibility is adapted with the issued Algerian auditing standards as follows (Mohamed & Bourkaib, 2025, p. 254):

Table (01): Methods of Obtaining Electronic Audit Evidence According to the Adopted Algerian Standards

Adopted Algerian Auditing Standard	Method of Obtaining It	Electronic Audit Evidence Guide
Algerian Auditing Standard No. 500 Persuasive Elements	The auditor may use information technology to conduct compliance tests and evaluate general control procedures, relying on the audited entity’s computers to verify hardware features, operating systems, and accounting software, and to confirm information obtained from documentation or interviews.	Electronic Examination
Algerian Auditing Standard No. 505 External Confirmations	The auditor may use electronic confirmations via the internet to contact customers, suppliers, banks, and government bodies, reducing time and cost while allowing a larger number of confirmations to be sent at different times. This method is more efficient than traditional mail confirmations, which are slower and risk non-delivery.	Electronic Confirmations
Algerian Auditing Standard No. 520 Analytical Procedures	The use of computers and specialized applications in operations research and econometrics makes these techniques highly important and effective in analytical review. This includes tools like the PERT network, time series analysis, and simple linear regression. Evidence can also be gathered through graphs, electronic spreadsheets showing trends and relationships, and electronic financial analysis reports.	Use of Operations Research and Econometrics Techniques

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Algerian Auditing Standard No. 500 Persuasive Elements	General ledger audit programs on electronic computers can be used to verify accounting operations at the audited entity, such as recalculating allowed discounts on sales or recalculating bonuses granted to sales representatives based on achieved turnover or other criteria.	Verification of Multiplication and Addition (Electronic Accounting Review)
Algerian Auditing Standard No. 510 Initial Audit Engagements - Opening Balances	Audit evidence can be obtained from electronic transaction records, bank reconciliation reports, and input/output documents. Transaction detail tests also help ensure objectives like existence, completeness, accuracy, classification, timing, posting, and disclosure are met.	Electronic Transaction and Balance Testing
Algerian Auditing Standard No. 580 Written Representations	Evidence can be obtained through official email messages from management or electronically signed written representation forms.	Electronic Declarations

Source: Prepared by the researchers based on: (Ali Abdel Samad, 2018, pp. 230-240)

III- An Analytical Study of the Requirements for Adapting Algerian Auditing Standards in the Collection of Electronic Audit Evidence from the Perspective of External Auditors in the Digital Operating Environment of Institutions

Before addressing the field study and analyzing the results of the questionnaire, it is necessary to address the methodological framework of the study, which is considered the foundation fororganizing ideas and information in order to reach conclusions and assess the validity or invalidity of the hypotheses.

III.1. Defining the Study Population and Sample

- **Study Population:** The study population consists of External Auditors and accounting experts across the national territory.
- **Study Sample:**The questionnaires were distributed to a group of external auditors and accounting experts from various provinces.

A total of 60 questionnaires were distributed to the study sample, of which 48 were returned and subjected to analysis.

III.2. Structure of the Questionnaire

The questionnaire includes two sections:

III.2.1. First Section

Personal data of the demographic variables, which include gender, current profession, academic qualification, and number of years of professional experience.

III.2.2. Second Section:

This section is divided into two axes:

A. First Axis:

The importance of relying on Algerian auditing standards in the use and collection of electronic audit evidence in light of digital transformations in the operating environment of institutions. It includes 5 statements.

B. Second Axis:

The level of practice in using and collecting electronic audit evidence in light of Algerian auditing standards and within the context of the shift to a digital operating environment in Algeria. It includes 10 statements distributed across two perspectives:

- The perspective of external auditors on the use of electronic audit evidence in light of Algerian auditing standards and within the shift toward a digital operating environment.
- The perspective of external auditors on the collection of electronic audit evidence in light of Algerian auditing standards and within the shift toward a digital operating environment.

The following table illustrates the measurement of the questionnaire as follows:

Table (02): Scale Score Categories According to the Five-Point Likert Scale

Average	Scale Degrees	Ratings
[1 - 1.79]	1	Never
[1.80 - 2.59]	2	Rarely
[2.60 – 3.39]	3	Sometimes
[3.40 - 4.19]	4	Often
[4.20 - 5]	5	Always

Source: Prepared by the researchers

To interpret the data, a response scale ranging from (1 to 5) was adopted, known as the Five-Point Likert Scale, where the closer the response is to (5), the greater the level of agreement.

III.3. Reliability of the Questionnaire

- **Tool Reliability:** The results of the Cronbach’s Alpha test were as follows:

Table No. (03): Reliability Coefficient (Cronbach’s Alpha)

Axes and Their Divisions	Number of Statements	Cronbach’s Alpha Coefficient
Axis One: Algerian Auditing Standards	5	0.866
Axis Two: Use of Electronic Audit Evidence	10	0.845
All Questionnaire Statements	15	0.897

Source: Prepared by the researchers based on the outputs of SPSS-v24 software.

It is observed from the table above that all the Cronbach’s Alpha values are greater than 60%, which indicates the reliability of the measurement tool in terms of the statements included in the questionnaire and that it can be relied upon in the field study. For the first axis, the value reached 0.866, for the second axis it reached 0.845, and finally, the overall coefficient for the questionnaire was 0.897.

III.3.1. Analysis of Personal Data

To identify the characteristics of the sample, we calculated the frequencies and percentages of the sample individuals, and the following results appeared:

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Table No. (04): Characteristics of the Sample Units

Variable	Category	Frequency	Percentage %
Current Profession	External Auditors	37	77.08%
	Accounting experts	11	22.92%
	Total	48	100%
Academic Qualification	Bachelor's Degree (License)	12	25%
	Master's Degree	20	41.67%
	Magister	9	18.75%
	Doctorate	7	14.58%
	Total	48	100%
Years of Experience	Less than 5 years	18	37.50%
	From 5 to 10 years	11	22.91%
	From 10 to 15 years	13	27.09%
	More than 15 years	6	12.50%
Total		48	100%

Source: Prepared by the researchers based on the outputs of SPSS-v24

From Table No. (04), we observe the following:

- It is clear from the variable of current profession that the vast majority of the sample are External Auditor, representing more than three-quarters of the sample, 77.08%, while the remaining 22.92% are certified public Accounting experts.
- As for the distribution according to the educational level variable of the sample individuals, 25% hold a Bachelor's degree, 41.67% hold a Master's degree, 18.75% hold a Magister degree, and 14.58% hold a Doctorate degree. From this, we conclude that the educational levels among the sample members are high, which is a good sign. This indicates that most of the sample individuals have high academic qualifications, reflecting a good academic level of the target group, which enhances the credibility of their opinions and analyses in the study.
- It is also noted that the majority of the sample (around 60%) have less than 10 years of experience. The medium experience category (10 to 15 years) represents a significant proportion at

27.09% of the total sample, while the high experience category (more than 15 years) accounts for 12.5%.

III.3.2. Analysis of the Sample’s Orientation Toward the Study Axes

III.3.2.1. First Axis: The importance of relying on Algerian auditing standards in the use and collection of electronic audit evidence in light of digital transformations in the operating environment of institutions

Table No. (05): Analysis of the Sample's Orientation Toward the Statements of the First Axis

No.	Statements	Always	Often	Sometimes	Rarely	Never	Mean	Std. Deviation	Trend
The importance of relying on Algerian auditing standards in the use and collection of electronic audit evidence in light of digital transformations in institutions' operating environments									
1	Are Algerian auditing standards currently the main basis relied upon for collecting electronic audit evidence?	10 (20.83%)	31 (64.58%)	5 (10.42%)	2 (4.17%)	0 (0.00%)	4.021	0.699	Often
2	Are the current Algerian auditing standards sufficient for collecting electronic audit evidence?	6 (12.50%)	10 (20.83%)	17 (35.42%)	8 (16.67%)	7 (14.58%)	4.167	1.222	Sometimes
3	Do you believe there is a need to adopt new auditing standards compatible with the method of collecting electronic audit evidence?	20 (41.67%)	17 (35.42%)	10 (20.83%)	1 (2.08%)	0 (0.00%)	3.542	0.834	Always
4	Are there training programs on the proper application of Algerian auditing standards amid digital transformations in terms of collecting and using electronic audit evidence?	10 (20.83%)	12 (25.00%)	20 (41.67%)	6 (12.50%)	0 (0.00%)	3.254	0.967	Sometimes
5	Is there legislative support in Algeria to promote the implementation of new auditing standards specific to electronic audit evidence?	4 (8.33%)	9 (18.75%)	24 (50.00%)	8 (16.67%)	3 (6.25%)	3.062	0.997	Sometimes
General trend of the second axis							3.609	0.955	Sometimes

Source: Prepared by the researchers based on the outputs of SPSS-v24 software

It is clear from the table above that the general arithmetic mean of responses to the first axis reached (3.609) with a standard deviation of (0.955). According to the study scale, this dimension indicates that the opinions of External Auditor and Accounting experts in Algeria suggest they **sometimes** rely on Algerian auditing standards as a basis for collecting and using electronic audit evidence. We also notice that the average responses of the sample individuals to the statements of this axis were positive, with means ranging between (4.167 - 3.000) and standard deviations between (0.699 - 1.222), which indicates a

variation in the opinions of the respondents. From these statistical findings, we conclude that there is a general positive perception of the importance of Algerian standards in supporting the audit of electronic evidence as a basis for collecting and using it.

III.3.2.2.Second Axis: The level of practice in using and collecting electronic audit evidence in light of Algerian auditing standards amid the shift toward the digital operating environment in Algeria from the perspective of external auditors

The following table shows the statements of the second axis as follows:

Table No. (06): Analysis of the Sample’s Orientation Toward the Statements of the Second Axis

No.	Statements	Always	Often	Sometimes	Rarely	Never	Mean	Std. Deviation	Trend
External auditors’ perspective on the use of electronic audit evidence in light of Algerian auditing standards and the shift to the digital operating environment									
1	Does the use of electronic audit evidence enhance the accuracy of financial reports?	6 (12.50%)	10 (20.83%)	17 (35.42%)	13 (27.08%)	2 (4.17%)	3.104	1.013	Sometimes
2	Are there challenges in verifying the credibility of electronic evidence?	20 (41.67%)	15 (31.25%)	10 (20.83%)	3 (6.25%)	0 (0.00%)	4.083	0.943	Always
3	Is there difficulty in using the appropriate tools to collect electronic audit evidence?	25 (52.08%)	14 (29.17%)	8 (16.67%)	1 (2.08%)	0 (0.00%)	4.312	0.826	Always
4	Does electronic audit evidence help in forming an opinion about the legality of financial statements in a shorter time and with less effort?	10 (20.83%)	12 (25.00%)	20 (41.67%)	6 (12.50%)	0 (0.00%)	3.542	0.967	Sometimes
5	Can electronic audit evidence be considered legally sufficient to support its validity?	4 (8.33%)	8 (16.67%)	25 (52.08%)	8 (16.67%)	3 (6.25%)	3.041	0.966	Sometimes
External auditors’ perspective on collecting electronic audit evidence in light of Algerian auditing standards and the shift to the digital operating environment									
6	Do you verify multiplication and addition (accounting review) using electronic computing?	8 (16.67%)	16 (33.30%)	11 (22.92%)	10 (20.83%)	3 (6.25%)	3.333	1.152	Often
7	Do you perform electronic examination of digital records in terms of consistency and accuracy?	5 (10.42%)	12 (25.00%)	15 (31.25%)	9 (18.75%)	7 (14.58%)	2.979	1.121	Sometimes
8	Do you rely on electronic confirmations when using external confirmation methods?	13 (27.08%)	18 (37.50%)	10 (20.83%)	6 (12.50%)	1 (2.08%)	3.75	1.062	Often
9	Do you rely on the work of an IT expert to obtain sufficient electronic audit evidence?	5 (10.42%)	9 (18.75%)	14 (29.17%)	17 (35.42%)	3 (6.25%)	2.917	1.106	Rarely
10	When requesting certain declarations from managers or administrators in the institution, do you request them in electronic form?	10 (20.83%)	14 (29.17%)	16 (33.33%)	6 (12.50%)	2 (4.17%)	3.501	1.092	Often
General trend of the second axis							3.456	1.039	Sometimes

Source: Prepared by the researchers based on the outputs of SPSS-v24 software

The results show that the axis “Using and Collecting Electronic Audit Evidence in Light of Algerian Auditing Standards” recorded a general mean of **3.456** with a standard deviation of **1.039**, indicating that opinions tend toward “sometimes.” Response averages ranged

from 2.917 to 4.312, with the highest showing that auditors agree institutions with effective information systems face fewer difficulties in handling electronic evidence. The lowest average reflects hesitation or limited reliance on IT experts to obtain sufficient electronic audit evidence. The standard deviations ranged between (0.943 - 1.152), indicating that opinions are dispersed around their mean, which shows a relative divergence in the perspectives of external auditors.

III.3.3. Testing the Study Hypotheses

III.3.3.1. Testing the First Hypothesis:

The first hypothesis of this study stated that: Auditors' perception of the importance of adapting Algerian auditing standards has a statistically significant impact on the extent of their reliance on them in collecting and using electronic audit evidence.

Accordingly:

- **H0 (Null Hypothesis):** Auditors' perception of the importance of adapting Algerian auditing standards does not have a statistically significant impact on the extent of their reliance on them in collecting and using electronic audit evidence at a significance level of 0.05.
- **H1 (Alternative Hypothesis):** Auditors' perception of the importance of adapting Algerian auditing standards has a statistically significant impact on the extent of their reliance on them in collecting and using electronic audit evidence at a significance level of 0.05.

Table No. (07): The Impact of Adapting and Relying on Algerian Auditing Standards in Collecting and Using Electronic Audit Evidence

First Hypothesis	Statistics	Estimate
Auditors' perception of the importance of adapting Algerian auditing standards has a statistically significant impact on the extent of their reliance on them in collecting and using electronic audit evidence	Correlation Coefficient	0.656
	Coefficient of Determination	0.344
	Significance Level	0.002

Source: Prepared by the researchers based on the outputs of the SPSS-v24 program The statistical test showed that adapting and relying on Algerian auditing standards has a statistically significant and strong impact on external auditors' ability to collect electronic audit evidence. The

results revealed a high level of statistical significance ($p\text{-value} = 0.002$), leading to the rejection of the null hypothesis. The correlation coefficient ($R = 0.656$) confirmed a strong positive relationship, indicating that the higher the level of compliance with and adaptation of these standards, the greater the auditors' ability to collect reliable and sufficient electronic evidence. Moreover, the coefficient of determination ($R^2 = 0.344$) indicated that the standards explain **34.4%** of the variance in the process of collecting and using electronic evidence. Therefore, adapting Algerian auditing standards is a key factor in improving mechanisms for collecting electronic evidence, highlighting their vital role in meeting the requirements of digital transformation and enhancing the quality and reliability of audit tasks.

III.3.3.2. Testing the Second Hypothesis:

The second hypothesis of this study stated that: The effectiveness of training in applying Algerian auditing standards has a statistically significant impact on the level of difficulties faced by external auditors in collecting and using electronic audit evidence in the context of the transition to the digital operating environment.

Accordingly:

- **H0 (Null Hypothesis):** The effectiveness of training in applying Algerian auditing standards does not have a statistically significant impact on the level of difficulties faced by external auditors in collecting and using electronic audit evidence in the context of the transition to the digital operating environment at a significance level of 0.05.
- **H1 (Alternative Hypothesis):** The effectiveness of training in applying Algerian auditing standards has a statistically significant impact on the level of difficulties faced by external auditors in collecting and using electronic audit evidence in the context of the transition to the digital operating environment at a significance level of 0.05.

Table No. (08): Study of the Impact of Training Effectiveness in the Application of Algerian Auditing Standards on the Level of Difficulties Related to Collecting and Using Electronic Audit Evidence

Second Hypothesis	Statistics	Estimate
The extent to which the effectiveness of training in applying Algerian auditing standards has a statistically significant impact on the level of difficulties faced by external auditors in collecting and using electronic audit evidence in the transition to a digital operating environment	Correlation Coefficient	0.547
	Coefficient of Determination	0.278
	Significance Level	0.006

Source: Prepared by the researchers based on the outputs of the SPSS-v24 program

The statistical study evaluating the impact of training effectiveness on the application of Algerian auditing standards in addressing the challenges of collecting and using electronic audit evidence in a digital environment revealed a moderately strong and highly significant positive relationship between the two variables, with a significance level (p-value) below 0.05. This result confirmed the importance of the relationship and allowed for the rejection of the null hypothesis in favor of the alternative. The correlation coefficient of **0.547** indicates that better training is associated with changes in the level of challenges, while the coefficient of determination (**R² = 0.278**) shows that training effectiveness explains about **27.8%** of the variance in the difficulties faced by auditors. Based on these findings, the challenges related to collecting electronic evidence — whether technical, legislative, human, or organizational — are statistically significantly influenced by the effectiveness of training, highlighting the need to develop professional training programs and overcome existing obstacles to improve the quality of electronic auditing.

CONCLUSION

The study concludes that digital transformation poses new challenges to the auditing profession, particularly regarding electronic audit evidence, amid regulatory and professional gaps at both international and national levels. This situation calls for the development of specialized standards and the enhancement of auditors’ competencies to ensure the quality and reliability of the auditing process

Through the field study results, it became clear that external auditors in Algeria show a relative awareness of the importance of electronic evidence and the extent of the need to adapt Algerian auditing standards in collecting it. However, their actual reliance on it remains limited due to the lack of adequate training, professional guidance, and legislation, which confirms the urgent need to adapt Algerian standards to the requirements of auditing in the digital age. The study also found that external auditors face practical challenges in collecting electronic evidence due to the limited Algerian legislative and regulatory framework. Although the Algerian legal framework implicitly recognizes electronic evidence, it does not provide detailed provisions regulating its use in the auditing profession.

Recommendations of this study:

- Update Algerian auditing standards or issue new standards specifically aimed at regulating electronic audit evidence
- in line with the current digital transformations of institutions.
- Expand specialized training for auditors in the field of electronic evidence collection and analysis techniques, and connect them with information technology experts.
- Strengthen the Algerian legislative framework with clear provisions that explicitly recognize electronic evidence, define the controls of its legal validity, and regulate its use in auditing accounts.
- Encourage auditors to gradually adopt electronic evidence by integrating it into standard field audit tools and providing advanced auditing software.

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