Ain temouchent university Belhadj Bouchaib

Faculty of Economics, Business, and Management Sciences.

Department of Finance and Accounting.

Specialisation: Accounting and Taxation.

Title:

The Role of Artificial Intelligence in Improving The Quality of Financial Statements.

Paper submitted as part of the requirements for a Master's degree (Academic)-secondcycle LMD.

Prepared by The following Students:

BENMOKRANE SOUAD

TAIBI MERIEM

Presentation to the discussion committee composed of:

Professor: ABDERRAHIM NADIA	**Chair**
Professor: BENSABEUR SLIMEN ASMA	**Supervisor**
Professor: BENHADDOU AMINA	**Examiner**

Academic Year: 2025-2026

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بسم الله الرحمن الرحيم

Thanks and Appreciation:

Praise be to God, first and last, beginning and end. Praise be to god, who has blessed us, guided us, and granted us the determination to complete this thesis. Praise be to god abundantly.

We also extend our warmest thanks and gratitude to our supervisor, professor **"BENSABEUR SLIMEN ASMA"**, who generously shared her guidance, advice, and wealth of information, which greatly enriched the subject of our research. Thank you once again, professor, and we promise we will never forget you throughout our lives.

We also extend our thanks to the members of the thesis defense committee, whose discussion and evaluation we will have the honor of receiving .

We would also like to extend our sincere thanks to all the faculty and staff at Belhaj Bouchaib university in Ain temouchent.

We would also like to thank the staff of the accounting office in BENDELLA, where our fieldwork was conducted.

We would also like to thank my colleagues, whose contributions to our report-through their suggestions and insights-helped us complete this study.

To all of you, we offer our deepest thanks and appreciation.

Dedication:

BENMOKRANE SOUAD

To my dear parents, may God grant them long life, I dedicate this graduation, and especially to my mother , who supported and encouraged me throughout my academic journey, for she was like a candle that burned to light my way.

I also dedicate this work to my brothers, Mohamed and Zineddine, for their unwavering support, and to all my family members, may God bless them all.

I extend my sincere thanks to my colleague who collaborated with me on this project, may God grant you success.

And to all the people I hold in high unintentionally forgotten, you will always remain in my heart.

Benmokrane Souad.

Dedication:

TAIBI MERIEM

To the pure soul of my late father may God have mercy on him and grant him eternal peace .

I dedicate this work to the most precious person in my life, my mother, whose unwavering prayers, constant support, and boundless love have illuminated my path and guided me throughout my journey. Her strength, patience, and encouragement have been the foundation of my perseverance and success. It is to her that I owe my deepest gratitude and respect.

I also dedicate this work to my dear husband and my son, for their understanding, support, and encouragement, as well as to my beloved brother and all my respected family members. May God almighty protect and bless them all.

My sincere appreciation is extended to my classmates and to my dear friend who shared with me the journey of this thesis. May God grant them success in all their endeavors.

Finally, I extend this dedication to all those whom my words may have unintentionally omitted, yet who remain forever cherished in my heart.

Taibi Meriem.

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Abstract in english:

This study aimed to analyze the role of AI in improving the quality of financial statements. We present the implication of AI in the accounting field through the various technologies used. To test this impact, we used a questionnaire in the applied section to ascertain the views of a group of professionals and academics regarding the extent to which AI technologies affect the quality of financial statements through both positive and negative impacts. The study's findings concluded that the use of AI improves the quality of financial statements by detecting errors and manipulations in a timely manner, while also helping to increase accuracy and transparency and expedite the process of accounting treatment and financial statements preparation. conversely, the study also revealed some drawbacks, such as weak technological infrastructure and a lack of personnel qualified to handle advanced technologies.

Keywords: Artificial Intelligence, Quality of financial statements, Accounting, Machine learning.

Abstract in arabic:

هدفت هذه الدراسة إلى تحليل دور الذكاء الإصطناعي في تحسين جودة القوائم المالية. وسنعرض تأثير الذكاء الإصطناعي في المجال المحاسبي من خلال مختلف التقنيات المستخدمة. ولإختبار هذا التأثير, إستخدمنا الإستبيان في الجانب التطبيقي لتحديد آراء مجموعة من المهنيين والأكاديميين بشأن مدى تأثير تقنيات الذكاء الإصطناعي على جودة القوائم المالية من خلال التأثيرات الإيجابية والسلبية. وتوصلت نتائج الدراسة إلى أن إستخدام الذكاء الإصطناعي يحسن جودة القوائم المالية من خلال إكتشاف الأخطاء والتلاعبات في الوقت المناسب, مع المساعدة أيضا على زيادة الدقة والشفافية وتسريع عملية المعالجة المحاسبية وإعداد القوائم المالية. في المقابل, كشفت الدراسة أيضا عن بعض العيوب, مثل ضعف البنية التحتية التكنولوجية ونقص الموظفين المؤهلين للتعامل مع التقنيات المتقدمة.

الكلمات المفتاحية: الذكاء الإصطناعي, جودة القوائم المالية, المحاسبة, التعلم الآلي.

General introduction

The world in the current era, and especially in recent years, has witnessed a tremendous acceleration in the field of digital technology. Among the most prominent of these digital tools, Artificial Intelligence has emerged as an inevitable and necessary tool for use in the field of accounting through its technologies. This application has contributed to bringing about fundamental changes by helping accountants to work in a more creative way to achieve better results for their institutions, and thus improve the quality of the financial information provided.

Financial statements are considered the most important output of any company's accounting system, as they form the basis upon which all stakeholders, such as investors, shareholders, management and various regulatory bodies, rely to assist them in decision-making. Therefore, it is essential that these financial statements be of high quality, possessing qualitative characteristics such as relevance, reliability, and understandability, as well as being available in a timely manner. This is where artificial intelligence has emerged as a fundamental tool in the field of accounting. This is achieved through adopting its technologies to analyze massive amounts of data, detect manipulation, predict financial risks that could cause problems for the company, and enhance its competitiveness with other companies.

Despite the numerous advantages and benefits of AI technologies impacting the accounting field, there are always drawbacks and challenges that hinder its use in this field, such as concerns related to information security and the lack of competence capable of dealing with this rapid development of these technologies. Thus, it can be said that efforts must be intensified to try to eliminate these gaps that pose a threat to the company in order to ensure a better future for the application of AI in the accounting field.

First: Research questions:

Based on the foregoing, the following question can be posed:

To what extent can Artificial intelligence improve the quality of financial statements?

Second: Research hypotheses:

Based on previous studies, we can abswer the problem through the following two hypotheses:

H1: There is a statistically significant relationship between the use of artificial intelligence and the improvement in the quality of financial statements, due to its positive effects.

H2: There is a statistically significant relationship between the use of artificial intelligence and its impact on the quality of financial statements through its negative effects.

Third: The importance of the study:

This study is of great importance, given the novelty of our research topic, which falls under the heading of "the role of Artificial intellegence in improving the quality of financial statements". This importance lies in both theoretical and practical aspects, on the theoretical side, we explored various modern AI techniques in the field of accounting by highlighting their role in improving the quality of financial statements, as well as the challenges they face in this erea. On the practical side, we relied on a questionnaire, as this study contributed to providing a realistic picture of this topic in the Algerian context by financial statements. This importance lies in both theoretical and practical aspects, on the theoretical side, we explored various modern AI techniques in the field of accounting by highlighting their role in improving the quality of

financial statements, as well as the challenges they face in this area. On the practical side, we relied on a questionnaire, as this study contributed to providing a realistic picture of this topic in the Algerian context by gathering the opinions of a group of professionals and academics regarding the pros and cons of AI in the preparation of financial statements.

Fourth: Objectives of the study:

To explore the concept of AI and its technologies.

To examine the impact of AI technologies on the quality of financial statements.

To examine the extent to which AI technologies improve the quality of financial statements, as well as the various challenges involved, within the Algerian context, among a sample of accountants, auditors, heads of finance and accounting departments, and university professors in finance and accounting.

Fifth:Research methodology:

In this study, we adopted a descriptive-analytical approach. On the theoretical side, we collected data from books, articles, and theses to describe the role of AI in improving the quality of financial statements. Conversely, on the practical side, a questionnaire was used as the primary tool for data collection. The study sample included a group of accountants, ouditors, heads of finance and accounting departments, and university professors in finance and accounting in Algeria. The data was analyzed using SPSS software.

Sixth: Reasons for choosing this study:

Among the reasons that led us to choose this topic are:

A personal interest in researching the topic of AI, as well as its relative novelty in the field of accounting.

The scarcity of Algerian studies that have addressed this topic specifically within the Algerian context.

Our personal belief in the importance of introducing this contemporary topic to the Algerian context.

The desire to leave it as a reference for students to benefit from in their studies, as well as the desire to explore it further in the future.

Seventh: Scope of the study:

Time limits: 2025-2026.

Geographical boundaries: the study was conducted in the provinces of Oran and Ain temouchent.

Human boundaries: the study targeted a sample of accountants, auditors, and heads of finance and accounting departments in accounting firms and companies, as well as university professors in finance and accounting.

Subject-matter limits: this study is limited in scope to examining the extent to which AI technologies affect financial statements, without delving into into the technical details of how these technologies work.

Eighth: Structure of the study:

We have divided our research topic into two chapters. The first chapter consists of three sections in which we address the theoretical framework of AI and financial statement quality, the impact of using AI technologies on financial statement quality, the impact of using AI technologies on financial statement quality, and various studies that have addressed this topic. In the second chapter, we address the practical framework, which is divided into two sections, through the administration of a questionnaire. To a sample of professionals and academics, followed by an analysis of the results.

Chapter one: The conceptual Framework of Artificial Iintelligence and The quality of Financial Statements.

Introduction:

The world has recently witnessed rapid technological and digital developments, perhaps the latest of which is Artificial intelligence, whose impact has become evident in all financial , economic, and social aspects and sectors, and has even extended to the accounting and institutions have relied on it for the speed and accuracy it provides in analyzing and preparing their financial statements. Because financial statements and their quality are the basis for decision -making by stakeholder and are considered an indicator reflecting the quality, reliability and comparability of accounting information, the need arose to use artificial intelligence due to its advanced technology, this is what we will discuss in this first chapter, where we will learn about three sections:

-Section one: The nature of (AI)and the quality of financial statements.

-Section two: The role of (AI) in improving the quality of financial statements.

-Section three: Review of previous studies.

Section one: The nature of (AI) and the quality of financial statements.

-The human mind has contributed to several new inventions and innovation that have helped realize many dreams that were previously almost Impossible. One of the most Important of these innovation is (AI), which is like the science that creates humans in machines and computers, resembling, albeit to a limited extent, humane intelligence, it understands the processes into their equivalent computational processes, which helps in solving difficult problems. In the business world, financial statements are defined as reports that evaluate a company's financial performance and identify its strengths and weaknesses. The quality of financial statements lies in the extension to which they possess qualitative characteristics such as relevance and reliability. In this section we will address three subsections;

-Subsection one: The origins of (AI),its concept and Importance .

-Subsection two: Types of (AI), its technologies and characteristics

-Subsection three: The concept of financial statements quality its components and characteristics.

Subsection one :The origins of (AI), its concept and importance.

The term artificial intelligence is one of the most widely used and popular terms today due to its paramount Importance in all fields. Therefore, in this subsection, we well discuss the origins of (AI),its concept and its importance.

Sub-subsection one: The origine of (AI)

Opinions have varied and differed regarding the actual beginning of (AI), however it is believed that the first explicit appearance of the concept of (AI)came two years after General Electric (GE) launched the first computer intended for use in the business sector, the term (AI) has been associated with the scientist John MC Carthy since 1956,when it emerged as a topic of discussion at conference help at Dartmouth University.(AI)has since gone through several stages, which can be summarized as follows : (Belaid & Benhawas, 2024, p. 1033).

In the 1960 s,Research in (AI) witnessed remarkable development during this period, with the improvement of several previous theories and the emergence of new ideas. The field of (AI) received significant government funding during this time, with the US government allocating over two million dollars to support research related to the department of defense. In the late 1960s, the world witnessed the first appearance of a robot with advanced capabilities, named shakey.

In the 1970s, witnessed a remarkable continuation of research in the field of artificial intelligence. Despite this, what distinguishes this period most is the emergence of precise sub-specializations as a result of the multiplicity and branching of theories . each branch focused on a specific type of solution related to artificial intelligence problems. One of the results of this assessment is several benefits in focusing efforts in specific areas, which contributed to strengthening and supporting this field. (Abdanour, 2005, pp. 24-25)

In the 1980s, the 1980s were marked by a remarkable revival in the field of attificial intelligence, thanks to the success of expert systems designed to replicate the expertise of individuals in their respective fields. The role of knowledge engineers was to conduct meetings

with experts and carefully observe them to analyze their knowledge in a way that could be understood by artificial intelligence programs, and then use these systems in various application, including decision-making.

With the dawn of the new century, (AI) achieved remarkable success, surprising even its specialists .Many chose to revisit existing theories, not to change them, but to ground them in new mathematical and scientific foundations, thereby transforming(AI) into a firmly established science (Molai, Taibi, & Benazarka, 2021, p. 191).

Sub-subsection two :The concept of the (AI).

Ther are several definitions of (AI),including :

Artificial intelligence is a modern and widespread science the has become prevalent in many industrial and research fields, it is a scientific field that seeks to enable computers and digital machines to possess intelligent capabilities so that they can perform tasks that were previously exclusive to humans, such as thinking and creativity.

John Mc Carthy defined it as: A science and engineering aimed at developing intelligent machines with high capabilities, such as computer programs, that aim to incorporate human intelligence ,without being limited to methods observable by humans.

Martin weik defined it as the science specializes in developing machines that are capable of performing tasks that require human intelligence when preforming them, such as adapting to changes. It is also known as the imitation of some aspects of human intelligence through programs or applications (Saltani, 2025, pp. 318-319).

Arnoux defines it as : (AI) is a branch of computer science that specializes in developing systems capable of making decisions similar to human behavior in various fields. (AI) systems are defined as technologies specifically designed to perform tasks that require human intelligence, such as carrying out work that depends in its nature on this intelligence and applying it in reality. It is also defined as creating intelligent systems capable of understanding their environment, in order to adopt steps that contribute to enhancing their chances of succes (Ahmed Ibrahim, 2021, p. 2815).

Here are some definitions of (AI), divided into 4 categories :

-IT is defined as the study of mental abilities through the adoption of mathematical models, meaning the analysis of computational processes that enable perception and reasoning .

-It is also defined as the design of intelligent agents capable of making sound decisions.

-It is further defined as the new endeavor and goal of enabling computers to think like sentient beings-both figuratively and literally -so that they become capable of making decisions, finding solutions, and acquiring knowledge.

-It is also defined as the skill of creating mechanisms that perform functions requiring intelligence when carried out by humans-that is, researching how to make computers accomplish tasks that require intellectual effort even when performed by humans (Russell & Norving, 2010, p. 2) .

Artificial intelligence is a science that aims to understand and study the nature of human intelligence by developing programs capable of mimicking intelligent human behavior. It also means enabling the computer to solve problems and make decision in different situations based on specific data. This program shows that it itself determines the appropriate methods and approaches to solve problems, relying on a set of pre-programmed reasoning and processing mechanisms. This development represents a qualitative and fundamental leap, as reasoning processes no longer depend on humans, who are primarily responsible for analysis and replication, given the existence of computers equipped with advanced technologies . (Bonih, 1993, p. 11) .

Artificial intelligence has been defined is many ways, but it can be summarized as a combination of hardware and software designed to mimic the workings of the human brains such as decision-making and performing complex analyses based on available data. Computer systems based on (AI) help to make human life easier. (Puthukulam, Ravikumar, Sharma, & Meesaala, 2021, p. 1185).

Sub-subsection three: The importance of (AI) :

The importance of (AI) is evident in several points, the most important of which are :

-The role of(AI) has evolved, with its use bwcoming widespread in many fields, such as assisting in the diagnosis of diseases and prescribing treatments, as well as in the security and military fields.

-(AI) supports decision-making processes, as its decisions are characterized by obgectivity and independence, far removed from all froms of error and influence.

-(AI) also enables humans to interact with machines using natural language instead of complex programming languages, which makes technology easier for people of different ages and abilities, thus reducing the pressure on humans. On the other hand,(AI) makes it possible to preserve human expertise by transferring it to intelligent systems, which contributes to the continuity of knowledge and its efficient use. In addition, (AI) supports the goals of sustainable development. (Sabaa, Yosfi, & Mloki, 2018, p. 34).

Subsection two: Types of (AI),its technologies and characteristics.

Artificial intelligence has several types and a range of technologies, and it is characterized by many features, which we will mention below :

Sub-subsection one :The type of artificial intelligence.

There are three types of artificial intelligence, which are as follows :

Strong (AI): Or what is called artificial general intelligence, this type has not actually been achieved yet. This type of system is capable of performing various intelligent tasks with high efficiency that surpasses humans, and its existence is limited to the realm of imaginary works. Examples of it are robots that can communicate with humans and understand their feelings, and even reach a level of self-awareness (Mirzaie, 2025, p. 126).

Weak artificial intelligence: Also called narrow artificial intelligence, its task is to focus on designing specialized technical systems capable of handling specific problems or tasks with

high accuracy and efficiency. This type is used in specialized applications such as machine translation and data analysis.

Superintelligence: Also called hyperintelligence, it is a very advanced type of (AI) that aims to reach a level of intelligence that greatly exceeds human mental capabilities, with the distinctive ability to learn and develop independently. However, this type is still considered part of science fiction, and is the focus of ongoing discussions among specialists because of the challenges it poses to humanity in the future (Artbaz, 2022, p. 1254).

Sub-subsection two : Artificial intelligence technologies.

The most important (AI) technologies are as follows :

Machine learning(M.L):Is a technique that allows system to evolve by dealing with problems, here the system attempts to find solutions, and if it fails, it moves to an alternative method until a suitable solution is found, after this it retains the pattern that allowed it to succeed, giving it the ability to perform future tasks based on past experiences, in other words, it has the ability to adapt .

Deep learning (D.L): This technology is considered one of the most advanced and powerful artificial intelligence technologies. It is based on advanced algorithms designed to simulate the working of human neural networks, which enables it to learn or acquire knowledge in a specific field, whether with or without human intervention at all (Amari, 2021, p. 707).

Robots :Or what is called a robotic human, is one of the modern (AI) technologies, whose development in the current era has led to its widespread use. Today, it is able to perform many tasks instead of humans, as most of these robots work independently without the need for human intervention, by simulating human mental abilities using intelligent systems. Robots are used to accomplish various and precise tasks in several fields such as administration and medicine (Abdannabi, 2020, pp. 1456-1457).

Noural networks(N.N) :These are a method of machine learning, designed to mimic the workings of the human brain in terms of its composition of cells and neural connections. These networks are characterized by their ability to self-modify in order to improve their performance in the tasks they learn, as well as their ability to adapt. Chiu wescott also expressed his opinion on the extent to which neural networks can be used to assess risks, which are among the essential components of the auditing process (Hasan, 2022, p. 452).

Robotic process automation(R.P.A):This can be defined as software robots that have the ability to use existing applications to process data and interact with various other systems. Thes robots can be trained and programmed to perform large-scale repetitive tasks and interact with user interfaces in the same way that people interact. This eliminates the need for modification to application suchas enterpris resource planning systems and payroll systems. Robotic process automation has become widely used in departments due to its effectiveness, example of the use of programming robots include reading and sending emails, and analysing and updating data.

Despite their tremendous development, there are some task that they cannot perform, such as scanning doucuments, which requires human intervention to enter them manually because they are not capable of handling unstructured data (Ezenwa & Nkem, 2021, pp. 17-18).

Expert systems :These can be defined as branch of (AI). They are intelligent programs capable of addressing and solving problems that require a combination of knowledge and experience. Their purpose is to support organization in acquiring the knowledge necessary for success. Originally, they are a creation of the human mind, combining advanced technology with various fields such as engineering and medicine. This technology primarily relies on computer use and aims to simulate the knowledge of an expert by integrating this knowledge within the system. Thes expert systems contain a vast amount of information possessed by an expert in a specific field, and when they use logical reasoning rules, they achieve results that depend entirely on the stored data (Adjila & kannia, 2019, p. 62).

Natural language processing (N.L.P): This refers to the development of technologies and programs that enable computers to understand human language. Studies in this field have led to the creation of programming languages specifically designed to achieve a more natural and seamless interaction between humans and machines through the understanding of natural languages. This aspect focuses on researching methods that enable computers to easily comprehend and analyze human language, allowing them to understand texts and words as intended and produce natural languages. This aspect focuses on designing technologies that help and enable computers to generate texts in a natural and understandable language, such as formulating coherent sentences in arabic or english.

Computer vision: it can be defined as enabling the computer to recognize people and different shapes in the surrounding environment. This is achieved through advanced image analysis techniques and facial recognition techniques. This is through a technology that aims to provide computer systems with advanced visual sensors, thus enabling them to see the world and interact with it in a way that resembles human capabilities (Boubahha, 2022, pp. 97-98).

Internet of things :It can be defined as network that connects physical objects through digital communication, enabling the collection, monitoring, and interaction of data within the company and with various parties in the supply chain. This contributes to enhancing flexibility and transparency, and facilitates accurate and timely planning and control across the various stages of the supply chain (Ben daya, Hassini, & Bahroun, 2019, p. 4721).

Sub-subsection three: Characteristics of Artificial intelligence.

Artificial intelligence has several characteristics that can be summarized as follows :

-(AI) contributes to providing effective solutions to problems even in the absence of information.

-He possesses skills in learning and perception, in addition to benefiting from past experiences to employ them in the future. He also supports administrative decisions by providing appropriate information, as well as possessing skills in visualization and understanding, and he is distinguished by his ability to respond quickly to all changes (Ayad Hadi, 2023, p. 69).

Subsection three: The concept of financial statements quality, its components and characteristics.

Financial statements are among the most important tools relied upon by institutions to present their financial position, they are also very important to several other parties with an interest in

the institution, such as management and investors. Therfefore, in this subsection we will dixuss the nature and quality of financial statements.

Sub-subsection one :The concept of financial statements and their objectives and importance.

Financial statements are recognized as the most important tool relied upon by accounting to convery information to parties outside the organization, financial statements are considered the final output of accounting, as the data they contain consists of capital and financial results,both of which are linked to an accounting unit that may be an individual organization, a partnership, a joint stock company, or a limited liability company, regardless of the sector in which it operates, whether commercial, industrial or service-oriented, and whether its goal to generate financial income or not.

The international accounting standards board defined it in international accounting stabdard IAS1(Presentation of financial statements)as a presentation that shows the financial position of an entity and the various activities it undertakes, thes activities are presented in the same way as the entity`s financial position and performance, given their importance to a large segment of user, in order to assist themin making economic decisions, the financial statements are prepared by the unit`s management once a year, within a maximum of four months after the end of the financial period, based on the monetary unit. These statements contain information that allows the entity to make comparisons with previous periods. If a comparison is not possible, the data for the previous period must be adjusted to be comparable, and explanations for these changes must be provided in the appendix (Benkattib & Hattab, 2019, pp. 9-10).

They are also known as summaries of the various financial operation of the institution, expressing its profits and financial position in the long and short term (Echahid, 2000, p. 24).

It can be defined as a comprehensive set of accounting and financial documents that aim to give a true picture of the financial position of the institution,it is also known as the main tool for financial reporting on the institution,as its information is considered a reflection of its financial position and performance ,it is also considered a summary of all financial transactions and their impact on the institutions assect,liabilities and ownership rights.

Based on the above definition,it can be said that financial statements are documents that contain various financial information outside the organization,they consist of the balance sheet,income statements of changes in financial position,and nots (Saidi, 2014/2015, pp. 3-4).

Ther are several objectives that the institution aims to achieve when preparing financial statements :

-These financial statements serve to meet the various needs of stakeholders in the organization, but they do not provide all the necessary details for making complete economic decisions. This is because the nature of financial statements reflects the financial consequences of past events, which means they may not include non-financial information that may be of great importance .

-Providing a clear picture of the institutions financial situation, given its importance to the various groups that use it in making their economic decisions.

-Financial statements allow us to judge the efficiency of management in performing its tasks, as they allow users such as shareholders, banks and others to evaluate management performance and help them make decisions such as whether to continue holding their investments within the organization or abandon them (Mousa, 2023, pp. 64-65).

The importance of financial statements can be summarized as follows:

-Their importance lies in their role as a fundamental tool for providing accurate information about the nature of a company's obligations to its creditors and the owners' equity in its net assets,through the analysis of return indicators and ratios, as well as assessing its liquidity and flexibility.

-Financial statements also serve as a tool to assist management and all stakeholders in making informed decisions regarding future resource allocation and its effective use. Furthermore, the information contained in financial statements helps in analyzing the company's performance and managerial efficiency.

-Financial statements enable the provision of useful data on all of the company's investment activities, reflecting its performance policies, whether expansionary or contractionary, as helping it to assess the company's financial position and the efficiency of its use of available resources to achieve its goals. (Khalad & Dahmani, 2014/2015, p. 6).

Sub-subsection two :Components of financial statements :

The financial accounting system has been required, in line with international accounting standards IAS1,to present financial statements which are :

Blance sheet :Also known as the financial position statement, it can be said that it is not just an account but a financial report, as it is presented in the from of an account but a financial report ,as it is presented in the form of an account that starts at the top with assets and ends with liabilities, with the aim of showing the financial positin of the institutions on the date of preparing the budget, it relies on the balances of open accounts for preparing the budget, it relies on the balances of open accounts for assets , liabilities and capital in preparing its balances (Elkobaisi, 2008, p. 487).

The balance sheet is a comprehensive statement that shows us the true financial position of the institution in a transparent manner, as it reveals everything that the institution owns and is known as assets, and in return what is required of it and is known as liabilities. That is, it consists of two main sections. The first section is assets, which includes various type such as tangible, intangible, and financial assets, inventories, outstanding taxes, as well as customers, other debtors, similar assets, and finally, the asset treasury. As for the second section, liabilities, it is divided into equity, in addition to non-current and current liabilities, assets are also divided according to their degree of liquidity into current and non-current assets, while liabilities are divided into current liabilities and equity, according to their degree of maturity. (Sahrawi & Ybala, 2020, p. 163).

Income statement:It is one of the most important financial statements, as it presents the results of the organization's work and assesses its ability to achieve profits during a specific period of time. In the case of industrial companies, this statement includes the integration of operating

accounts, profit and loss accounts, and trading accounts, while it is limited to the integration of trading accounts and profit and loss accounts only in the case of commercial institution. The statement also presents revenues and expenses in a way that allows for comparison in order to reach the final result that reflects the financial performance of the progect. (Khanfar & Elmatarna, 2011, pp. 29-35).

Statement of Cash flows :This statement is also considered one of the important statements, and it means the movement of cash, whether inside or outside the institution, as a result of various activities such as selling products and obtaining revenues, or spending cash on purchasing raw materials or paying off obligations and other expenses. The ability to image liquidity is considered an essential factor that directly affects the sustainability of the company and its financial future, which makes this statement necessary to understand this aspect clearly. This statement includes the changes that have occurred in cash, whether an increase or a decrease, which resulted from the various operating activities of the company, which include sales and purchasing activities, paying off debts or obtaining loans. From an analytical point of view, it is divided into 3 main section, which are cash flows from operating activities, investing and financing.

Statement of changes in equity: Or list of changes in shareholders right, this list complements the other lists mentioned changes in shareholders rights (Baddar & Thabih, 2017, p. 25).

Notes: Also called appendices, they refer to information that helps in understanding the financial position of the institution more. They are classified into 3 types: notes that highlight the accounting policies used by the company in preparing the financial statements, such as the policy on how to recognize revenues, notes that aim to provide additional information to clarify an item that may require extensive explanation that cannot be included in the financial statements, and notes that include providing additional financial disclosures about items that were not presented or disclosed directly in the financial statements. (Maddahi, 2012, pp. 224-225).

Sub-subsection three :The concept of financial statement quality and its characteristics.

The quality of financial statements is defined as the extent to which a company is able to present a comprehensive picture of its financial position, such that these statements are free from manipulation in all its forms, such as falsification, the quality of financial statements is considered the primary reference for many decision-makers, who rely on them to make the necessary decisions and take the necessary actions, the concepts related to the quality of financial statements are numerous and include, for example, earnings management and corporate governance. Although these concepts differ in their relative details, they all converge on asingle goal the credibility of financial statements and ensuring they are free from manipulation that might serve the interests of company management (Fadil & Mahmoud, 2014, p. 14).

The quality of financial statements can be defined as the set of characteristics that must be present in financial information in order for it to be valuable to its users and contribute to supporting them in making sound decisions, it is also defined as the degree of truthfulness and accuracy of the accounting information contained in the financial statements, and the extent to

which it can provide a benefit to the various parties using it. These financial statements should be free from any misleading information, and should be prepared in accordance with legal, regulatory and technical standards (Saadi & Chikh, 2021, p. 8).

With regard to the quality characteristics of financial statements, there are two types, primary qualitative characteristics and secondary qualitative characteristics, this assessment was issued by the international accounting standards board :

The main characteristics are relevance and reliability :

Relevance: This can be defined as the necessity of information being clsely linked to decisions made within the company. Information gains its importance through its relevance, enabling decision-makers to evaluate past and present events, as well as predict future developments. Hence, relevance is linked to the concept of relative importance of information.

Reliability :This is one of the essential characteristics of accounting information, such that this information is reasonably free from any manipulation or errors and reflects the reality it claims to express. Accordingly, reliability is closely related to the honesty and dependability of the information. This characteristic consists of 3 sub-characteristics : first, verifiability or objectivity means that practitioners can reach the same results using accounting measurement, provided they use the same methods and procedures, second, truthfulness in expression or honest representation of the content of financial reports means that accounting information accurately reflects the actual economic reality and various financial events of the accounting entity, third, neutrality is achieved when accounting information is free from any bias that may affect users. This means presenting accounting measurements and presentations by avoiding presenting them in a way that serves a presenting them in a way that serves a particular category of users at the expense of another category (Zawya & Belour, 2017, pp. 106-107).

Comprehensibility : This can be defined as the requirement that the information contained in financial statements must be presented in a clear and understandable maner so that people with an average level of knowledge in business and economics can understand and use it effectively in decision making. Furthermore information on complex topics should not be excluded if it is important to decision-makers, even if it is difficult for some user to understand.

Comparability :This refers to the ability to compare current accounting information with previous similar information relating to similar events. For example, the effects of depreciation on profits can be compared between the current year and the previous year. Comparability also extends to comparing the performance of the institution with other similar institutions. In order to achieve this, adherence to consistent accounting policies and disclosure of any changes to them and their effects on the financial statements is a pivotal factor to ensure comparability.

Verifiability :This can be defined as the ability to verify that the information provided accurately reflects the company’s actual economic situation. The verification process is carried out by parties outside the company. however, this does not require complete agreement, but rather a logical and reasonable convergence of opinions regarding the information and its credibility-this verifications consists of two methods, direct and indirect, the first means that verification can be carried out by reviewing balances such as bank balance, while the second

method is carried out by reviewing the models used to ensure that the same results are achieved (Mkaddam, Difellah, & Labza, 2019, pp. 321-322) .

Timeliness : this means that financial information needs to be provided to its various users at the appropriate time to help and enable them to make effective decisions at the right time. The speed in providing financial statements within an appropriate time frame reflects the efficiency of the accounting system and the performance of its employees. Therfore, it has become necessary to present financial statements in a timely manner, with the aim of helping them make effective decisions. (Khamloul, 2020, p. 70).

Section two :The role of (AI) in improving the quality of financial statement

Artificial intelligence is one of the most significant discoveries of our time, with a major impact on various fields, including accounting and financial statement preparation, it speeds up data processing and analysis, improves accuracy, reduces human error, and improves financial forecasting. All of which contributes to the production of high-quality financial statements. In this section, we will examine the impact of artificial intelligence on improving the quality of financial statements.

Subsection one :The impact of using artificial intelligence technologies in accounting.

In recent years, the world has witnessed rapid developments, most notably advances in modern digital technology. This development has had a clear impact on the accounting profession, which has been required to integrate digital technologies into its professional practices in order to keep pace with the rapid changes in order to keep pace with the rapid changes in the business environment. Many companies have undergone major transformations in their performance and management methods as a result of relying on relying on these technology in accounting is of paramount importance, particularly artificial integrate digital technologies into its professional practices in order to keep pace with the rapid changes in order to keep pace with the rapid changes in the business environment. Many companies have undergone major transformation in their performance and management method as a result of relying on these technologies. The use of digital technology in accounting is of paramount importance, particularly artificial intelligence, which mimics human thinking ,contributes to more accurate and effective results, and is capable of processing and analysing vast amounts of financial data with high efficiency.

Sub-subsection one : The concept and importance of accounting profession.

The American institute of certified public accountants defined it in 1941 as process that seek to record and classify various financial transactions and events, with an explanation of the results of these transactions carried out by the institution. (Benatta, 2007, p. 20).

Accounting is defined as a profession with deep historical roots. In our current era, it has become one of the most influential activities, interacting with various global changes and developments in technology, politics, and society. It involves the collection and analysis of financial data, a task undertaken by an accountant who may be an in-house employee or an external consultant. This financial information facilitates understanding the nature of company’s economic activity and enables the preparation of essential financial reports for measuring the company’s performance.

It is also known as the primary tool through which one can determine the financial status of a company, whether it is making profits or incurring losses, and it also helps in identifying the most profitable activities within the company.

The accounting profession has been defined in many ways, but it can be said that it encompasses a range of complex functions and tasks that contribute to supporting economic decisions within a company. These include analyzing the effects of cash flows, supporting liquidity risk management, and making necessary adjustments to budgets. All of this aims to provide reliable information about the company's true financial position and to help various stakeholders, such as shareholders and financial institution, make informed decisions. (Mrah & Twilab, 2022, p. 29).

The importance of the accounting profession lies in its vital role in providing accurate, comprehensive and high-quality financial information. This data is the basis for making sound economic decisions. Transparency in corporate management depends greatly on the quality of this information, as reliable financial reports contribute to improving the level of transparency, thus creating a good investment environment both domestically and internationally. This leads to increased confidence among investors, which is reflected in financial stability . (Adagye, Azagaku, & Umbugadu, 2015, pp. 138-139).

Sub-subsection two :The impact of artificial intelligence on accounting .

Artificial intelligence positively impacts accounting in many aspects including :

Financial data analysis : Artificial intelligence technologies enable accountants to reach more accurate results because they help in processing huge amounts of complex data. These technologies also provide accountants with great opportunities by helping them to detect unusual and abnormal cases, and they help in the financial forecasting process and support budget preparation, thus enabling important and efficient decision-making.

Automated data processing: Artificial intelligence technologies help to automatically collect various financial data from several sources, such as receipts, and then directly enter them into accounting programs without manual intervention. This leads to a reduction in the likelihood of errorsand an increase in the level of accuracy.

Fraud detection: (AI) -powered systems can identify abnormal activities by analyzing larg amounts of financial data. These technologies also help identify unusual patterns, which contributes to reducing the risk of financial fraud and enhancing the ability to detect it in its early stages. (Sreseli, 2023, p. 76).

Buying and Selling :Automating accounting systems contributes to enhancing the buying and seelling processes by implementing them with high accuracy and smoothness. These systems also greatly help in supporting the process of calculating costs and evaluating prices accurately and effectively by helping to track price changes between suppliers and distributors.

Customer Service Development: Artificial intelligence technologies contribute to the development of customer service through chatbots, which can respond instantly and accurately to various inquiries, such as current account balances, they also enable customers to review

various receipts related to expenses or revenues, which enhances the accuracy and efficiency of this service.

Auditing: Artificial intelligence technologies are considered an effective tool relied upon by accountants and auditors, among these technologies are expert systems that help then raise the level of quality of control and auditing, this is achieved through their use in many aspects, including planning and evaluating audit tasks, they also contribute to identifying risks related to audit processes and verifying the accuracy of transaction amounts, they also play a major role in detecting fraud and errors.

Expert Systems are also very useful for management accounting, by improving financial analysis processes and enhancing the effectiveness of decision-making. These technologies also enable more accurate analysis of costs and data, and enable the prediction of the financial future and the assessment of risks, in order to avoid or reduce them in the future. (Abdellah & Boufarwa, 2025, p. 116).

Improving the quality of accounting information: The use of artificial intelligence in preparing various financial statements has led to noticeable improvement, With traditional accounting methods, accountants had to record transactions in accounting books, prepare data, and then generate financial statements all of which was done manually and took a great deal of time and effort and it required significant human and financial resources , which increased the likelihood of errors affecting the accuracy of accounting information, in contrast, when using modern accounting software various financial procedures can be performed automatically, with the role of financial staff limited to entering data and leaving the rest to the system to process , prepare reports, and detect errors as soon as they occur, thus obtaining high-quality accounting information. (Ezenwa & Nkem, 2021, p. 20).

In addition, there are many opportunities and benefits that artificial intelligence offers to accounting, which we will mention below:

In traditional accounting, preparing accounting processes such as bookkeeping, preforming calculations, and summarizing statistics required a great deal of time and effort on the part of accountants because this data was processed using traditional manual methods, The difficulty lies in the fact that each process contains many sub-tasks, however in our current era, with the emergence of artificial intelligence, its technologies have come to play a major role in simplifying complex accounting processes and performing financial analyses on complex data through the automation of routine tasks, which enhances accounting work and makes it more accurate and efficient.

The quality of accounting information is extremely important in organizations, in previous accounting practices, most data was processed manually, making errors inevitable and negatively affecting the quality and accuracy of accounting information, in the age of artificial intelligence, however, technology can improve the accuracy and quality of accounting information through the use of intelligent data processing software, which avoids distorting or affecting accounting information as much as possible, something that was nearly impossible in traditional accounting systems.

Traditional accounting work involves processing large and repetitive amounts of data, which requires the employment of a large number of accountants. However, in the age of artificial intelligence, accounting, tax, and auditing tasks can be performed by intelligent financial robots or advanced software, this reduces the need for organizations to hire junior accountants or accountants with little experience, thereby contributing to lower human resource costs for companies, artificial intelligence also supports the evolving needs of financial modeling and computing by processing structured and unstructured data, with the help of artificial intelligence, companies can gain a deeper and more comprehensive understanding of their business situations, which helps them monitor their actual development and make informed decisions based on predictions of various future risks and returns. (Jin, et al., 2022, p. 571).

Artificial intelligence can also improve accuracy and speed up accounting processes such as preparing financial reports, entering data, recording, and other accounting tasks.

Relying on automation for routine tasks reduces costs and increases human resource efficiency by allowing accountants to focus on other tasks.

(AI) helps enhance security and increase the transparency of financial data. It plays a role in detecting fraud and correcting errors as soon as they occur, it also opens up opportunities for accountants, enabling them to analyze large amounts of data and predict future financial trends. (Mirzaie, 2025, p. 132).

Subsection two: The Impact of Artificial Intelligence Technologies on Enhancing the Quality of Financial Statements .

First, we will discuss the impact of certain (AI) technologies on improving the quality of financial statements :

Machine learning and deep learning: These two technologies have powerful capabilities that help companies reduce the likelihood of financial fraud, because their nature makes them difficult to influence or pressure with force or money, as they rely primarily on predefined programming rules and therefore make decisions automatically, machine learning technology can predict and detect and easily identify fraudulent activities through advanced programs that rely primarily on machine learning. Deep learning technology plays a major role in the auditing process, as it helps analyse unstructured data and attempts to identify their relationship to financial information in order to detect any manipulation, given the great importance of (AI) in our time most major accounting firms are adopting it by integrating knowledge technologies into the auditing process, making it more intelligent and efficient, which meets the needs of financial information users in particular.

Expert systems : The latter has had a positive impact on accounting operations by contributing to increased accuracy and speed in task preparation and improving the quality of internal and external reports in addition to reducing paper use, increasing efficiency, and preventing fraud by separating employee responsibilities, as each employee specializes in their own work based on their own account and password. (Ali, 2023, pp. 55-56).

The role of (AI) in improving the quality of financial statements is also highlighted through :

Artificial intelligence helps simplify access to information and enables users to collect information from various sources through precise processes that include filtering, sorting, analyzing, and compiling. This helps produce highly efficient reports, thereby supporting more effective and accurate decision-making, information systems also help companies adopt timely production strategies.

Information technology is a valuable tool that provides information to support effective decision-making, thereby contributing to the success of the investment process through the emergence of new initiatives to support customer service, it also provides information on the website to help stakeholders gain a clear view of the company's position and objectives. (Moorthy, Voon, Samsuri, Gopalan, & Yew, 2012, pp. 3-4).

Artificial intelligence contributes to improving relationships with internal and external parties by building them on the basis of law and strength, it also plays a major role in helping establishments adopt modern management approaches such as digital sustainability and creative thinking, as well as its role in assessing of resource use and disclosing it more clearly, it also plays an important role in providing reliable and objective assurances to stakeholders about how funds are used and managed (AI) also helps to verify the accuracy of accounting adjustments and ensure that they are not exploited to manipulate earnings management, thereby enhancing the credibility of financial statements in addition to improving its transparency. (Elkadi, 2023, p. 1021).

(AI) also helps detect and correct errors automatically in a fast and efficient manner, as it can identify missing data and recognize invalid patterns within databases, it also ensures that data is stored reliably, analyzed accurately and processed in a simplified manner to support innovation and decision-making, in addition, there is a close link between the adoption of (AI) technologies and the achievement of financial statement quality characteristics such as relevance, faithful representation, and timely information provision.

(AI) contributes to speeding up the process of preparing financial statements and enhancing their accuracy, which saves companies time and resources and increases the reliability of financial information, thereby improving its quality, many companies also rely on (AI) technologies to improve transparency by enhancing the clarity and accuracy of the information provided, thereby boosting confidence levels and presenting a more professional image. (Avrist, Naz Rafour, & Haryim, 2025, pp. 213-214) .

Artificial intelligence technologies have had a significant impact and transformation in the preparation and presentation of financial statements, helping companies to process and analyze large amounts of data quickly and efficiently, these technologies also enhance the ability to extract information and conclusions from complex data, allowing accountants to focus on other more important aspects and thus make high value-added decisions (AI) also helps to improve the quality of financial disclosure by ensuring that accurate information is provided in a timely manner and by simplifying the presentation and organization of this information in a clearer and more understandable way.

Various artificial intelligence technologies also show tangible potential for improving decision-making and enhancing long-term strategic vision (AI) is also a vital tool for developing the financial reporting sector.

Artificial intelligence also contributes to reducing human error and limiting manipulation of financial data through the application of analytical algorithms designed to detect unusual and abnormal patterns in data.

Artificial intelligence also plays a pivotal role in enhancing the accuracy of financial reports by improving financial forecasting and risk management methods, which in turn positively reflects on the level of confidence in the financial information provided by the company to various stakeholders, it can therefore be said that artificial intelligence has become and essential element in improving the effectiveness and efficiency of financial statement preparation. (Mwisi & Fawaz, 2025, pp. 112-113).

Subsection three: Drawbacks and Challenges of Using (AI) in the Preparing high-quality Financial Statements.

It is true that artificial intelligence has shown many positives and advantages in performing all accounting tasks up to the preparation of financial statements, but there is no disagreement that there are drawbacks and challenges to using (AI) in accounting in general and financial statements in particular, because the greatest impact is on financial statements as they reflect the financial position of the company and are considered the final result of accounting work, in this subsection we will discuss the various drawbacks and challenges facing the use of (AI) in the preparation of financial statements:

The high cost of acquiring artificial intelligence technologies is a major challenge for companies, as these technologies rely on vast amounts of hardware and computers to process the huge amounts of data needed to develop and operate artificial intelligence systems, securing and purchasing the necessary hardware is a major obstacle for many companies, especially start-ups and small businesses, cloud computing has helped to facilitate this process to some extent but with the growth in data volume and computing complexity, these solutions have become less reliable over time.

Artificial intelligence has been developed to date to perform specific or single-path tasks based on available inputs, this differs from the human mind which has the ability to make multiple decisions and choose the best option for any situation, therefore, when designing artificial intelligence technologies, it is necessary and imperative to ensure that the solutions they provide do not lead to problems or negative effects in other areas. (Dongre, Pandey, & Gupta, 2021, p. 230).

Many accountants suffer from a clear lack of technical competence to use artificial intelligence tools effectively, and this problem is considered one of the most significant challenges hindering the use of (AI) tools to keep pace with global developments ,studies indicate and confirm that the absence of professional development programmes for continuous training is a major obstacle to integrating these technologies into the daily work of accounting and financial statement preparation. (Kanam, 2025, p. 480).

One of the most prominent drawbacks and challenges is cyber security and information security, as the use of (AI) in accounting and financial statement preparation faces significant risks related to cyber attacks, this has caused many companies to hesitate in adopting these technologies in their accounting operations, due to their desire to protect information security and ensure the confidentiality of data within their information systems, in addition to all this, the difficulty of repairing software after it has been hacked, as well as restoring leaked data are all concerns and challenges that may hinder the spread of Artificial Intelligence in accounting and consequently, lead to a lack of accuracy and transparency in the preparation of financial statements.

The lack of interpretability and explainability is also one of the prominent challenges in Artificial Intelligence algorithms, as these algorithms often function as black boxes, making it difficult to understand the basis and methodology these systems use to arrive at their outputs or results, this issue is further complicated in the field of financial reporting as this field requires a high degree of transparency and accountability both of which are essential and indispensable, therefore, one of the most prominent challenges is the need to develop approaches that contribute to raising the level of transparency with the aim of making these techniques clear and understandable in terms of how they work.

The application of Artificial Intelligence in the field of accounting presents numerous ethical challenges, as (AI) technologies may give rise to unintended biases resulting from the quality of the data used to train them, leading to inaccurate and unfair decisions and consequently, incorrect financial statements which directly contradicts the fundamental ethical principles of the accounting profession in general which include objectivity, integrity and independence. Here we face a significant dilemma: who bears the responsibility the accountant or the Artificial Intelligence technologies? It has therefore become essential to focus on addressing these ethical challenges to ensure that (AI) is applied in a manner characterised by responsibility and adherence to ethical principles.

Artificial Intelligence based technologies face a range of technical limitations, which often affect their effectiveness, for example the difficulty of comprehending human context in depth, as well as limited capacity for sound logical reasoning, these challenges may have a negative impact on the quality and reliability of the results, therefore, it has become essential to address these technologies effectively and work on developing them in a way that ensures their reliability and security. (Saada, 2025, pp. 801-802).

In addition to the fear and the greatest challenge now facing the profession-namely, the phasing out of accountants the use of (AI) has reduced the need for traditional accounting work, which has led to a decline in the demand for accountants who rely on traditional methods. Recently, and in light of rapid technological developments, it is expected that accountants who lack the advanced technological skills to keep pace with modern technology will be phased out. According to a study conducted in the UK by accountants on the future of the accounting profession, the study confirmed that the use of (AI) in this field will inevitably lead to a reduction in job opportunities for accountants who lack advanced skills. It is expected that financial robots will take over many accounting tasks in the future, however, we cannot say that (AI) will completely replace accountants. There will always be a need for human expertise to

manage these technologies efficiently and to interpret and analyze the data provided by (AI) systems. Furthermore, accountants play a fundamental role in providing advisory services, something that is difficult for smart machines to deliver. (Bentorkiya, 2024, p. 425).

Section three: Review of previous studies .

Numerous previous studies have addressed the topic of Artificial Intelligence and its role in the field of accounting, particularly in the preparation of high-quality financial statements, with most researchers seeking to examine the impact of (AI) technologies on accounting work and financial information in general. In the following, we will address the most important and prominent previous studies in this field by presenting two subsections: the first subsection covers various foreign studies, whilst the second subsection will focus on Algerian studies.

Subsection One: International Studies

With scientific and technological advancements, the global academic community has seen significant interest from many researchers in studying the role of (AI) in improving the quality of financial statements. The most studies focuse on highlighting its impact when preparing financial statements . In this subsection, we shall review various international studies that treate the same subject of our research.

"Artificial Intelligence in financial statement preparation: Enhancing accuracy, compliance, and corporate performance". Presented by Abderrahim Awad, Osama Akola, Mohamed Amer and Ezzat Kamel Abdellah Mousa, (2025). Article

This study aimed to analyze the impact of using (AI) techniques in the preparation of financial statements and the extent to which they contribute to improving the accuracy of financial reporting. The study adopted a systematic review methodology, analyzing a body of previously published studies on (AI) technologies in financial statements, such as Machine Learning (ML) and Natural Language Processing (N.L.P), the study's findings showed that the use of (AI) in the preparation of financial statements improves the accuracy of financial disclosures and detects fraud more effectively than traditional methods. Conversely, this study also highlighted a number of challenges, the most notable of which is the high cost of purchasing (AI) technologies, particularly for, as well as the challenge of the lack of transparency in algorithms.

This study aligns with our own in terms of subject matter, as it focused on the impact of (AI) techniques on improving the quality of financial statements in terms of accuracy and reliability, as well as the challenges associated with their use in the preparation of financial statements, on the other hand, this study differs from ours in that it relies on a systematic review methodology (PRISMA), unlike our study, which adopted a descriptive and analytical approach in its practical aspect and utilized a questionnaire. The study sample comprised accountants, auditors, heads of finance and accounting departments, as well as university lecturers to measure the impact of (AI) on the quality of financial statements.

"The role of (AI) in enhancing financial reporting quality: Evidence from Saudi Arabia's Vision 2030 Transformation". Presented by Amel Yamani,(2025). Article

The aim of this study was to examine the role of (AI) in improving the quality of financial reporting in the Kingdom of Saudi Arabia in line with Vision 2030; this study adopted a

qualitative approach, conducting interviews with numerous financial leaders, regulatory professionals, and auditors. The findings concluded that (AI) technologies significantly help to enhance the accuracy and transparency of high-quality financial reporting. In addition, they assist in the immediate analysis of large volumes of data, support the decision-making process, and enhance investor confidence.

This study aligns with our own in that it examines the role of (AI) in improving the quality of financial statements by enhancing accuracy and transparency, improving the reliability of information, and supporting decision-making. However, it differs from our study in that it relies on a qualitative approach based on interviews with a group of professionals in the Saudi environment and within the framework of Vision 2030, whereas our study used a questionnaire to analyze the impact of (AI) on the quality of financial statements in the Algerian environment.

"The Impact of (AI) Technology on the Quality of Accounting Information". Presented by محمد بخيت محمد علي, (2025). Article

The aim of this study was to investigate the applications of (AI) in the accounting profession, it also sought to determine whether there is a statistically significant relationship between various (AI) technologies and the quality of accounting information. The study employed several methodologies, including descriptive-analytical and inductive approaches, utilizing a questionnaire distributed to various staff members at the Agricultural Bank of Sudan. The findings indicated that (AI) has a positive impact on the development of accounting systems and the improvement of information quality.

Our study aligns with this study in its examination of the role of (AI) technologies in improving the quality of accounting information, it also resembles our study in its reliance on a questionnaire. Furthermore, whilst our study drew on this study for its theoretical framework, it differs from it in terms of its scope of application. Where the questionnaire was distributed to employees of the Agricultural Bank in the Republic of Sudan, whilst our study's questionnaire was distributed in Algeria to a sample comprising a group of accountants, auditors, heads of finance and accounting departments ,and university professors.

"An Analysis of the Use of (AI) in Enhancing the Quality of Financial Reporting for the Industrial Sector in the Kurdistan Region of Iraq". Presented by أفرست كمال مصطفى, ناز غفور عمر, هريم أحمد عبد الله, (2025). Article

Highlighting the role of (AI) technologies in improving the quality of financial reporting in industrial companies, this study adopted a descriptive and analytical approach, using an online questionnaire as a tool to collect data from industrial companies in Kurdistan, the study's findings concluded that (AI) contributes positively to improving the quality of financial reporting and the timely detection of fraud, the study also highlighted a number of challenges relating to weak technological infrastructure and data protection.

This study aligns with our own research in its focus on the role of (AI) in improving the quality of financial statements by reducing errors and detecting fraud, as well as the various challenges faced in applying (AI) to the preparation of financial statements, from which our study has benefited in theoretical terms, they are also similar in their practical application through the use of a questionnaire, but differ from our study in the practical domain the questionnaire was

distributed to employees of nine industrial companies in Iraq Kurdistan, whereas our study's questionnaire in Algeria was distributed to a group of accountants, auditors, and university lecturers.

"The Impact of (AI) Techniques on improving the Accounting profession". Presented by عبد القادر بلقاسم عبد الله, كمال سعد بوفروة, (2025). Article

the aim of this study was to examine the role of (AI) technologies in the accounting profession in the Republic of Libya, it adopted a descriptive and analytical approach, utilizing a questionnaire and analyzing the data using SPSS. The findings indicated that the use of (AI) technologies contributes to improving accounting work and also helps to develop accountants' skills and raise their standards. The study further recommended the adoption of these technologies within the Libyan accounting environment.

This study is similar to ours in that it examined the impact of using (AI) technologies in the field of accounting, particularly in terms of improving the quality of accounting information , our study drew on it for its theoretical framework. Furthermore, both studies relied on a questionnaire as a tool for data collection and used the same sample, to which the questionnaire was distributed to university lecturers and accountants. However, it differed from our study in that it focused on the impact of (AI) on the development of the accounting profession in Libya, whereas our study focused on a specific aspect of accounting, namely its impact on the quality of financial statements in the Algerian context.

"The impact of (AI) on the quality of financial reports and its reflection on decision-makers". Preresented by علياء مهدي علي, (2023). Master's note

the aim of this study was to determine the extent to which (AI) technologies influence the quality of financial reporting, as well as their impact on decision-makers, it adopted a descriptive-analytical approach and used a questionnaire as a tool for data collection. The study's findings concluded that (AI) technologies significantly help to improve the quality of financial reporting, detect errors and manipulation in a timely manner and support the process of forecasting the future.

This study is similar to ours in that it examines the same topic (AI) and the quality of financial statements-and our study drew on it for its theoretical section concerning the impact of (AI) technologies on financial statement quality. The two studies are also similar in their use of a questionnaire distributed to a sample comprising accountants, auditors, and academics. However, in the second part, we differed in that this study did not limit itself to the impact of (AI) on the quality of financial statements, but also examined its impact on decision-makers. Furthermore, the study was conducted in Iraq, whereas ours was conducted in Algeria.

"Impact of (AI) on Accountancy profession". Presented by Emetaram Ezenwa, Uchime Helen Nkem, (2021). Article

This study examined the topic of (AI) and its impact on the accounting profession, analyzing the extent to which its technologies contribute to accountants' performance. It employed a descriptive-analytical approach using a questionnaire based on a five-point Likert scale, which was distributed to a group of organizations specializing in finance and accounting in Nigeria. The study's findings concluded that (AI) has a positive impact on the accounting profession, as

it helps to enhance the quality of professional performance and improve efficiency. It recommended that the study recommended that accountants should utilise (AI) technologies in their work to ensure they keep pace with global developments.

This study aligns with our own in its focus on the role of (AI) in the development of the accounting profession, highlighting its positive impact. Furthermore, our study drew on this research for its theoretical insights into (AI) techniques in accounting, and it also parallels our own in its reliance on a tool questionnaires to collect data, but differs from ours in that it focused on the impact of (AI) on the accounting profession in general, whereas our study focused on its role in improving the quality of financial statement And also differs in terms of application, as this study was conducted in Nigeria, unlike our study, which was conducted in the Algerian context .

Subsection Two: Algerian studies

Like other countries, Algeria has been affected by recent developments, indeed, there have recently been numerous studies examining the subject of (AI) and the field of accounting, particularly with regard to improving and enhancing the quality of financial statements. Many researchers have expressed their intention to analyze this topic and highlight the key challenges facing its application in the accounting field, especially in the preparation of financial statements. Below, we present the most significant Algerian studies that have explored this field.

"The role of (AI) technologies in improving the effectiveness of integrated reports and the extent to which this is reflected in improving the accuracy of financial analysts' forecasts". Presented by مروة مويسي, نادر محمود فواز, (2025). Article

This study analyzed the impact of the use of (AI) technologies on consolidated reports and financial analysts' forecasts, the study's field methodology relied on a questionnaire administered to a sample of workers and employees at listed companies that utilize (AI) in their operations. The study reached several conclusions, the most significant of which is that the application of (AI) technologies, such as (M.L) and (N.L.P), contributes significantly to improving the quality of, which in turn has a positive impact on the accuracy of financial analysts' forecasts.

Although our study aligns with this one in its focus on the role of (AI) technologies in improving the quality of financial statements, and both studies share a common interest in the extent to which these technologies contribute to enhancing reliability and accuracy, and both relied on a questionnaire as a data collection tool, on the other hand, differed from our study in that it focused specifically on integrated reports, whilst our study focused on improving the quality of financial statements. Furthermore, the sample for that study comprised 120 employees from various companies listed on the stock exchange that rely on (AI) in their operations, whereas our sample comprised accountants, auditors and university, all within the Algerian context.

"The impact of (AI) applications on the future of the accounting profession in Algeria: Prospects and challenges". Presented by صليحة كانم, (2025). Article

the aim of this study was to analyse the level of awareness among accountants regarding the importance of (AI) technologies within companies and organizations in the Algerian context, as well as the various challenges faced in their implementation. For the practical aspect, the

study relied on a questionnaire based on the five-point likert scale, which was distributed in the province of chlef to a group of accountants, experts and university lecturers. The results showed that the adoption of (AI) in Algeria is still in its early stages, but they confirmed that it has significant and positive importance in the field of accounting; however, this faces several challenges, such as weak technological infrastructure and information security.

This study is similar to ours in that both examine the impact of (AI) technologies on the accounting profession, focusing on the reality of this impact in Algeria in terms of its importance in improving the quality of accounting work on the one hand, and the challenges it faces on the other. They are also similar in that both rely on a questionnaire conducted in the Algerian context. It differs from our study in that we specialized in the impact on the quality of financial statements, whereas the study focused on accounting in general; it also differed in that our study aimed to provide greater depth through a field study involving a diverse range of accountants, auditors, heads of finance and accounting departments, and university lecturers.

" The impact of using (AI)technologies on the accounting". Presented by فتحية سعادة, (2025). Article

This study sought to examine the role of (AI) technologies in bringing about changes within the accounting profession, this study was based on an applied analysis of the Fatoura compta application in Algeria, conducted via email correspondence with one of the developers of this application, as a practical example of its use in invoice management relying on (AI). The study highlighted the benefits it offers to users as well as the challenges it faces, the results of the study showed that the Fatoura compta application helps to produce high-quality invoices by speeding up their completion and reducing human error, thereby improving accounting work within companies. However, it also presents a number of challenges, such as a lack of funding and government support, and a shortage of skilled personnel capable of working with (AI) technologies.

This study was consistent with and similar to our own in that both examined the impact of (AI) technologies on accounting by focusing, from a theoretical perspective, on concepts relating to the definitions of these technologies and their positive role in this field; both studies also highlighted the challenges that the accounting field and accountants face in the context of the shift to words (AI), whereas they differ from our study in that they relied on a case study of the Fatoura compto application as a model for analyzing the impact of (AI), whilst our study relied on a field survey (questionnaire) targeting various groups, including accountants, auditors, university lecturers and heads of finance and accounting departments, where our study focused on a broader view of the reality of (AI), whilst this study focused on the analysis of a specific application.

"Application of (AI) in Accounting and Auditing of financial information". Presented by Labsi Ali, Difallah Mohammed Elhadi, Tedjania Hamza, (2024). Article

The aim of this study was to analyze the extent to which (AI) technologies contribute to the development of the fields of accounting and auditing. In its practical aspect, the study examined a case study of (ABC) company regarding its adoption of (AI) technologies in carrying out its various financial operations and services. The results showed that the use of (AI) technologies

by this company helped to process invoices quickly and detect fraud in a timely manner, thereby greatly assisting employees in carrying out more important tasks rather than wasting time on routine work, thereby producing high-quality and accurate financial statements. She also highlighted the main challenges faced, such as high costs, whether for acquiring (AI) technologies or for training staff.

This study is similar to ours in that it examines a common theme the extent to which (AI) technologies contribute to the development of the accounting field in general, specifically through their ability to improve accounting information and consequently their impact on the quality of financial statements in particular. This study also highlights the main challenges faced in their implementation, which is also consistent with our study however, in the second part, it differed from our study in that it examined a case study of (ABC) company from an applied perspective, whereas the applied aspect of our study relied on a questionnaire using the five-point Likert scale.

"The impact of (AI) on the accounting and auditing professions". Presented by Seffahlou Rachid, (2024). Article

This study sought to determine the extent to which (AI) is impacting the accounting and auditing professions. It was based on interviews with staff at accounting firms in Algeria, with the sample comprising a group of accountants and auditors from 16 firms. The study's findings concluded that the use of (AI) in the accounting profession reduces human error and saves time. Furthermore, it enhances confidence in accounting information, whilst also highlighting key drawbacks such as widespread unemployment and the risk of power cuts.

The subject of this study is similar to that of our own study in that it examines the role of (AI) in the field of accounting, highlighting the key advantages and challenges facing (AI) in this field, they also agree in terms of the study sample and its application in the Algerian context; however, we differed in our examination of the impact of (AI) on accounting and auditing, whilst our study focused specifically on its impact on the quality of financial statements. Furthermore, it differed from our study in its reliance on interviews for the practical aspect, whereas our study relied on a questionnaire according to Likert's five-point scale.

"The most important applications of (AI) used in the accounting and auditing professions - A case study of the reality of the Big four firms". Presented by بلعيد كريم, بنحواس كريمة, (2024). Article

This study examined the extent to which modern technologies, such as (AI), have impacted the accounting and auditing professions within four global companies. It analyzed the financial performance of these companies in terms of their revenue from 2009 to 2023. The findings revealed that, since adopting these technologies, the companies have been able to provide high-quality services to their clients and save time by analyzing large volumes of data in a short time, as well as improving the accuracy of financial data. Consequently, their revenues have risen by significant and substantial percentages, and they have achieved substantial profits.

This study is similar to ours in that it examines the role of (AI) technologies in the accounting profession, particularly in terms of the importance of these technologies for keeping pace with the modern business environment, however, it differs from ours in that it focused on a case

study of four multinational companies, whereas our study was based on field research in the Algerian context, using a questionnaire addressed to accountants, auditors, university lecturers and heads of finance and accounting departments to ascertain the impact of (AI) on the quality of financial statements by identifying its advantages and disadvantages.

"The integration of (AI) in accounting and their impact on the future of the accounting profession in Algeria - An exploratory study". Presented by نجاة بن تركية, (2024). Article

This study examined the use of (AI) in the field of accounting, the fieldwork for this study relied on a questionnaire distributed to a group of accountants in companies and accounting firms in Algeria, with a total of 37 questionnaires completed, the results indicated that the use of (AI) in the accounting profession saves time and effort in preparing accounting data by enabling the analysis of large volumes of data in a short time. In addition to these benefits, the study highlighted several challenges facing the use of (AI) in accounting, such as the high costs of purchasing (AI) technologies, concerns regarding data security, and concerns faced by accountants.

This study was similar to ours in that it addressed the impact of (AI) on accounting, our study drew on it, particularly with regard to the advantages and challenges of using (AI) in accounting. Our study also aligned with it in its use of a questionnaire based on a five-point likert scale the only difference was that in our study, we expanded the sample to include auditors, heads of finance and accounting departments, and university lecturers, and we focused on the impact of (AI) on the quality of financial statements, unlike this study, which focused on the accounting profession in general.

"The impact of (AI) Technology on improving the quality of information accounting". Presented by عوقيبة أحلام, سعدو رشيدة, (2023). Master's note

The aim of this study was to analyze the impact of the use of modern technology on improving the quality of accounting information within organizations, the study relied on a questionnaire for its practical component, which was distributed to 43 respondents, including accountants and university lecturers. The data was analyzed using SPSS, and the study's findings indicated that the use of (AI) has a positive and beneficial impact on improving the quality and standard of information.

This study is similar to ours in that it highlights the importance of using modern technology, particularly (AI), to improve the quality of information, both studies focus on the positive relationship between (AI) technologies and the quality of information ouputs. Furthermore, both adopted a practical approach based on a questionnaire, with statistical analysis of the data. However, the difference lies in this study's examination of (AI) technology and its impact on accounting information, whereas our study focused more specifically on the role of (AI) in the quality of financial statements. Furthermore, our study expanded the sample to include professionals and academics and added the challenges associated with the application of the adoption of (AI) in the accounting field.

Subsection Three: What sets our study apart.

Through our review and in-depth analysis of previous studies, we found that most previous studies focused on examining the impact of (AI) on the accounting profession in general. This

is common in most studies that have addressed this topic, unlike our study, which specialized in the accounting field by focusing on the role of (AI) in improving the quality of financial statements. Furthermore, our study conducted field research in the Algerian context using both paper and electronic questionnaires, targeting a diverse sample comprising accountants, auditors, heads of finance and accounting departments, as well as university lecturers specializing in finance and accounting. This enabled us to gather a range of diverse opinions that synthesize and blend the views of experts and academic perspectives. This is the outcome of our study, which sought to make a scientific contribution.

It could be said that this study aims to provide a more comprehensive analysis of the impact of (AI) technologies on the quality of financial statements by identifying the advantages and disadvantages of their use in this field within the Algerian context, an area which has not previously received sufficient attention in research on this topic.

Conclusion :

In this chapter, we have discussed the subject of our research, namely the role of (AI) in improving the quality of financial statements, by presenting the key concepts relating to (AI), including its definition, technologies, characteristics and positive role in enhancing the field of accounting in general and financial statements in particular, through the improvement of and accuracy, as well as highlighting a number of shortcomings and challenges facing its application in the accounting field, such as high costs. We have also reviewed a number of previous studies on this topic, which generally highlighted the positive impact of (AI) on the quality of financial statements, whilst also raising certain challenges, even if these studies differed in the methodologies applied and the countries in which the research was conducted.

Having covered the theoretical aspects in this study, we can now move on to the practical application of what we have previously discussed, which we shall examine in this second part of the study.

Chapter two :
Applied Study

Introduction:

Having completed the first chapter, which covers the theoretical concepts related to AI and the quality of financial statements -a foundation that will allow us to apply these concepts in practice to verify their validity -which is what we will address in chapter two :the practical aspect of studying the impact of AI of financial statement quality. We will do this by using a questionnaire as a tool for data collection, with the aim of answering the research question, reaching conclusions, and verifying the validity of our hypotheses. This chapter is divided into two sections:

Section one: The General Methodological Framework of the study.

Section two: Analysis of study Results.

Section one: The General Methodological Framework of the Study.

In this section, we will outline the methodological framework of this study, identifying the methods and tools used for data collection, as well as the study population and sample.

This section is divided into three subsection: the first covers the methodology and population, the second subsection convers the study model and its limitations, and the third and final subsection convers the field study tools.

Subsection One: Methodology and Population of the Study.

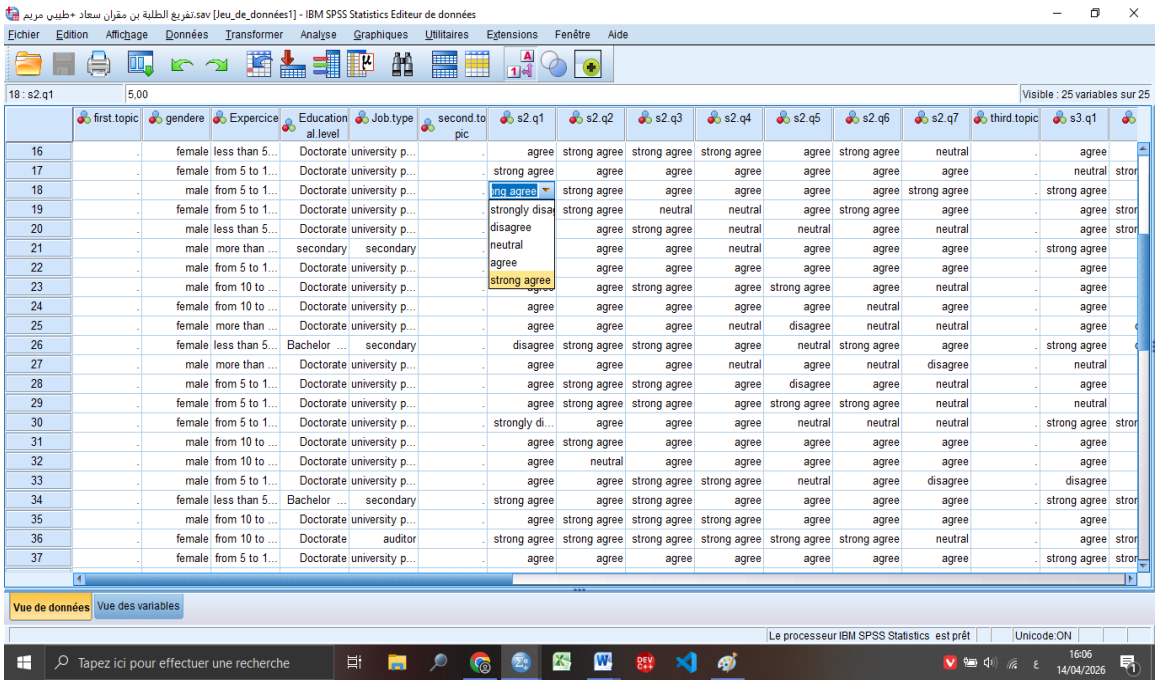
In this subsection,we will present the adopted methodology and the study population, both of which are important componentsof the reserch process.

Sub-subcection One: Methodology of the Study .

This study adopted the descriptive-analytical method, which is based on collecting, comparing, analyzing, and interpreting facts and information to reach acceptable generalizations. Or, it is the study, analysis, and interpretation of the phenomenon by identifying its characteristics and dimensions and describing the relationships between them.

The Statistical Package for the Social Sciences (SPSS 26, version 26) was used to process the data obtained through the field study of the sample, based on a number of statistical analysis tools.

Figure (*1*) :Statistical Package for the Social Sciences



Source: Prepared by students

Sub-subsection Two: Population and Sample of the Study.

The population is a group of individuals who constitute the subject of the research problem, while the sample is a subset of the research population, representing the elements of the

population in the best possible way so that the results of that sample can be generalized to the entire population.

The focus of our research is primarily on identifying the views of professionals and academics, a sample was selected from the study population consisting of accountants and auditors at accounting firms and companies, as well as heads of finance and accounting departments and university professors specializing in finance and accounting. The questionnaire was distributed to (40) individuals, and 37 questionnaires were returned. The number subject to analysis is 37 questionnaires, representing 92.5% of the total distributed questionnaires.

- Paper questionnaires (21)
- Electronic questionnaires(16)

Subsection two: The study model and its limitations.

This subsection is an important component of the research framework, as it allows us to identify the study model as well as its temporal and spatial boundaries.

Sub-subsection one : The study model .

Regarding the independent variable: it represents "Artificial intelligence."

As for the dependent variable: it is represented by "Financial statments"

The relationship between the two variables is shown through knowing the correlation and influence relationship between the independent variable " Artificial intelligence " on the dependent variable " Financial statments.".

Sub-subsection two : Scope of the study.

The limitations of the study were as follows :

Timeframe: The field study was conducted from 21/12/2026 to 27/12/2025.

As for the spatial boundaries, the field study was conducted in the

provinces of Oran and Ain temouchent.

Subsection three: Field study tools.

After defining the study objectives, formulating the problem statement, and setting hypotheses, and after clarifying the type of data and information to be collected through the theoretical framework, it is necessary to determine the appropriate tools that serve the field study.

The desired results were achieved, and our research was based on the following:

Sub-subsection One: The questionnaire is the main research tool for collecting information.

- Our study relied on questionnaires for data collection, using both paper-based and electronic questionnaires. The paper-based questionnaire refers to the one distributed directly to the sample population in printed form by visiting their locations, where they answer the questions. As for the electronic questionnaire, it refers to the one distributed electronically via various digital platforms and channels, such as email or whatsapp,

among others, and is distinguished from the paper-based version by its lower costs. Particularly regarding printing and travel to the respondents'locations-which facilitates reaching a larger number of responses.

- The questionnaire is considered the primary tool that was relied upon to complete the field study. The questionnaire is a form that contains a set of statements in the form of questions that are defined and formulated well by the researcher, who distributes them to the respondents, in order to collect data and information about the subject of the study.

To achieve the study's objective, primary data was collected through a questionnaire as the main research tool. The research tool consisted of three main parts:

First: Among the personal data of the study sample, which is gender, Experiece , educational level, Job type.

secondly :

The second axis: This concerns the independent variable which includes 07 statements designed Knowledge . (advantages of using artificial intelligence in preparing financial statement)

The Third axis: It concerns the dependent variable which included 07 statements designed to assess . (Disadvantages of using artificial intelligence in preparing financial statement)

Explanation of the five-digit likert scale

The study relied on a five-point Likert scale:Strongly Disagree, Disagree, Neutral, Agree, Strong Agree (where each response takes on a specific relative importance).

The importance level for the arithmetic means that the study will reach to interpret the data was determined based on the following criterion:

In this study, we will rely on the five-point Likert scale. Since the variable representing the choices (Strong Agree, Agree, Neutral, Disagree, Strongly disagree) is an ordinal scale, and the numbers entered into the program represent the weights (Strongly disagree, 1), (Disagree, 2), (Neutral, 3), (Agree, 4), (Strong Agree, 5), the overall range is calculated according to the formula:

E=Xmax-Xmin.

(5-1= 4) The result was divided by the number of scale categories to obtain the cell lengths as follows:

(4/5 =0.8), the value was added to the lowest value on the scale, which is 1, by setting the upper limit of the first cell,

which becomes 1.80. Then we repeat the same process up to the fifth cell.

Table (*01*): Table of cell lengths according to the five-point Likert scale.

Arithmetic mean value	Level of opinion	Diretion type	Opinion trend
From 1 to 1.79	Very low	Negative (−)	Completely disagree
From 1.80 to 2.59	Low	Negative (−)	disagree
From 2.60 to 3.39	Middle	Note sur (.)	neutral
From 3.40 to 4.19	High	Positive (+)	agree
From 4.20 to 5	Very high	Positive (+)	Completely agree

Source :five –point Likert

Sub-subsection Two: Study Reliability and Validity

The questionnaire items were examined using Cronbach's alpha coefficient, and the results were as follows:

Table (*02*): Table Representing the Study Reliability and Validity for the Two topics.

Study topics	Number of phrases	Steadfastness and honesty
Second topic	07	0.857
Third topic	07	0.899
Total	14	0.876

Source: Prepared by the student based on SPSS version 26 outputs

The analysis results showed that all reliability coefficients for the study axes and the instrument as a whole were greater than 0.80. This indicates a high level of reliability for the study instrument, meaning that the survey results can be relied upon and their credibility in achieving the study objectives can be assured.

Sub-subsection Three : The relationship between the two topics pearson.

Table No. (*3*): Pearson correlation between topics.

		Second topic	Third topic
Second topic	Pearson correlation Sig N	1 37	0.404* 0.013 37
Third topic	Pearson correlation Sig N	0.404* 0.013 37	1 37

Source: Prepared by the student based on SPSS version 26 outputs

From the above table (*3*), we find that the previous correlation coefficients have statistically significant internal reliability.

There is a moderate positive correlation between the second and third topics, the correlation coefficient is 0.404*, which is statistically significant at the 0.013 level. This confirms the validity and reliability of the questionnaire's topics, making the questionnaire suitable for use with the main study sample.

Sub-subsection four: Internal Consistency

Internal Consistency: spearman's correlation coefficient indicates the strength of the relationship between two variables where:

spearman's coefficient is calculated to clarify the validity of the question and its relation to the dimension. It is required that all values be significant at 0.05 or (0.01)

1- spearman coefficient for the second axis

Table (*4*) : correlation coefficient spearman for the second topic.

Phrase	Spearman laboratories	Statistical value Sig
01	**0.606****	**0.000**
02	**0.775****	**0.000**
03	**0.628****	**0.000**
04	**0.703****	**0.000**
05	**0.686****	**0.000**
06	**0.526****	**0.001**
07	**0.508****	**0.001**

Source: Prepared by the student based on SPSS version 26 outputs

2- **Spearman coefficient for the third axis**

Table (*5*) : correlation coefficient spearman for the third topic

Phrase	Spearman coefficient	Statistical value Sig
01	0.371*	0.024
02	0.685**	0.000
03	0.680**	0.000
04	0.824**	0.000
05	0.846**	0.000
06	0.821**	0.000
07	0.707**	0.000

Source: Prepared by the student based on SPSS version 26 outputs

3- **Summary of the topics validity**

It is clear from the two tables above, that the degree of correlation between most of the statements in the study's topics is strong at the significance levels of (0.01) and (0.05), indicating their validity and correlation with each other.

Section two : analysis of study Results

The purpose of this section is to present an analysis of the field study results and to test the hypotheses through subsection: the first convers the Analysis of personal data, the second subsection convers the Analysis of the first axis, and the third subsection covers the testing statistical hypotheses.

Subsection one: Analysis of Personal Data

SPSS version 26 was used to analyze the data

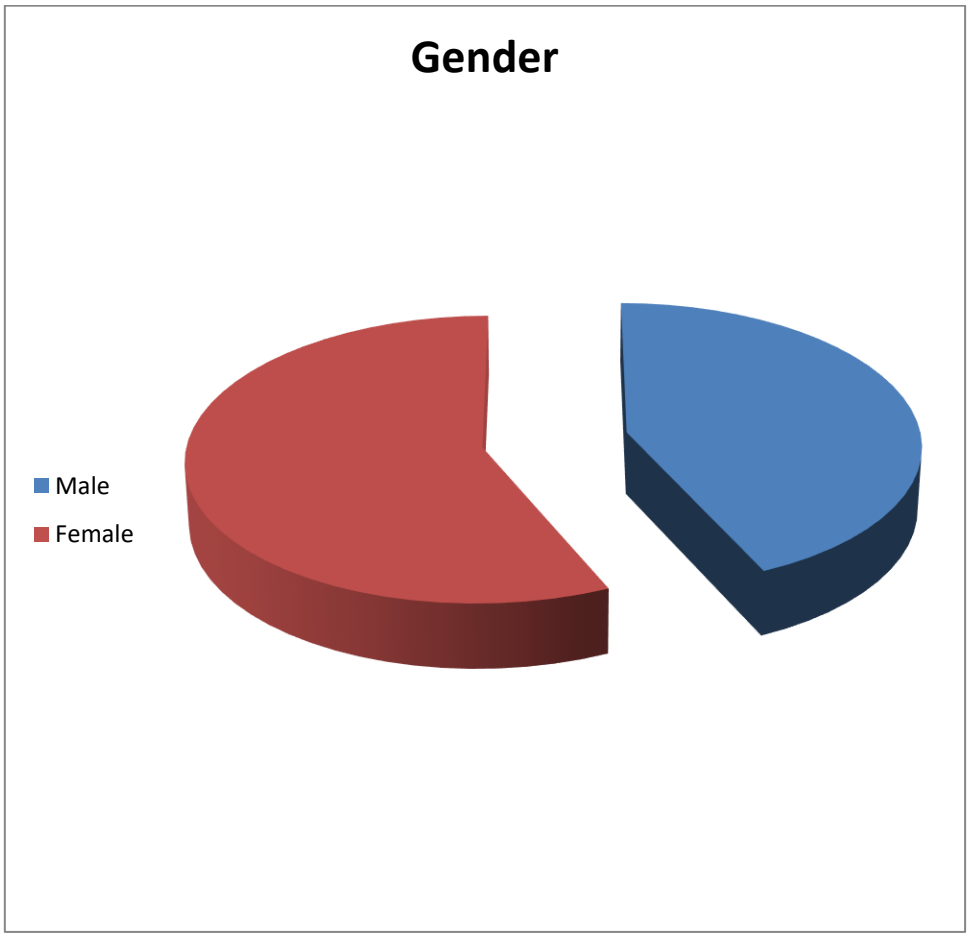
Table No. (*6*): Shows the frequency and percentage of personal data.

Type		frequency	percentage	total
gender	Male	**16**	**43.2%**	**37**
	Female	**21**	**56.8%**	
Experience	Less than 5 years	**10**	**27%**	**37**
	From 5 to 10 years	**11**	**29.7%**	
	From 10 to 20 years	**10**	**27%**	
	More than 20 years	**6**	**16.2%**	
Educational	Seecondary	**1**	**2.7%**	**37**
	Bachelors or masters	**8**	**8%**	
	Doctorate	**28**	**75.7%**	
	Other	**-**	**-**	
Job type	Accountant	**6**	**16.2%**	**37**
	Auditor	**2**	**5.4%**	
	Head of finance and Accounting Departments	**2**	**5.4%**	
	University Professor in finance and Acounting	**27**	**73%**	

Source: Prepared by the student based on SPSS version 26 outputs

Sub-subsection one: Data Analysis by Gender Variable

Figure (*2*): Graph by Gender

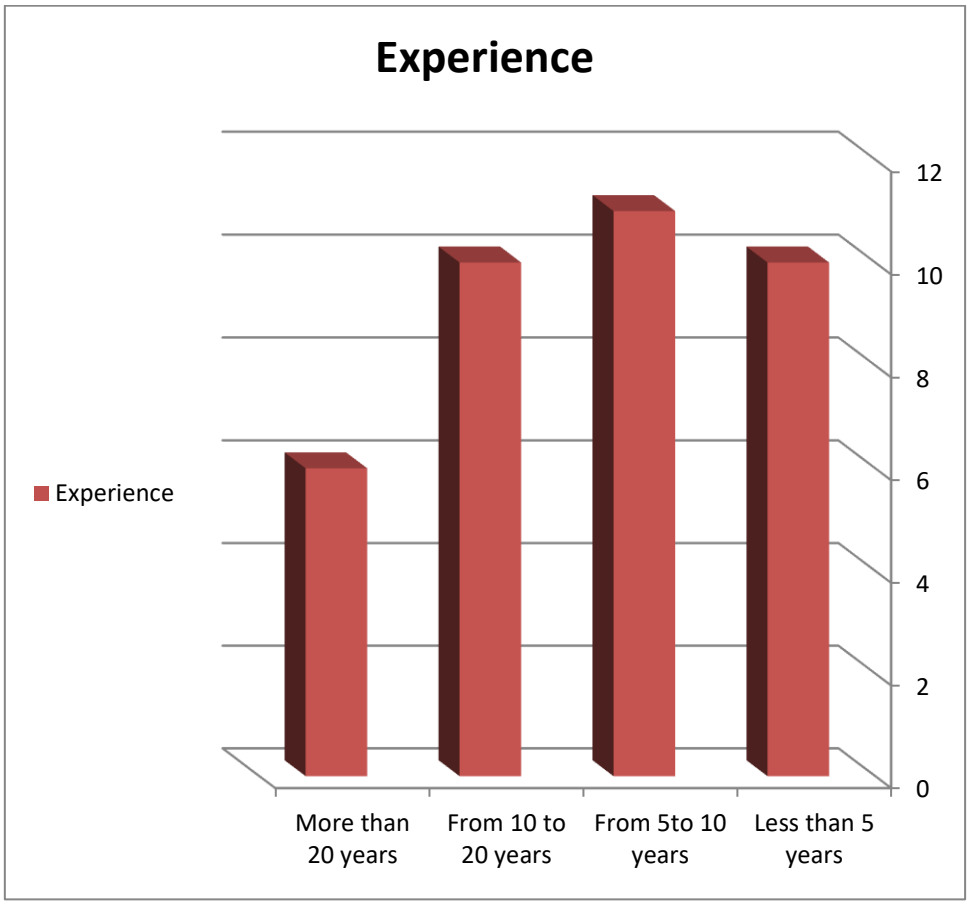


Source: Prepared by the student using SPSS version 26

. The study involved a total of 37 participants. The data shows a slight majority of female participants, accounting for 56.8% (21 individuals), while males represent 43.2% (16 individuals). This indicates a relatively balanced gender representation within the accounting and academic sectors in the regions of Oran and Ain Temouchent, with a higher inclination toward female participation in this specific sample.

Sub-subsection two : Data Analysis by Experience

Figure (*3*): Graph by Experience

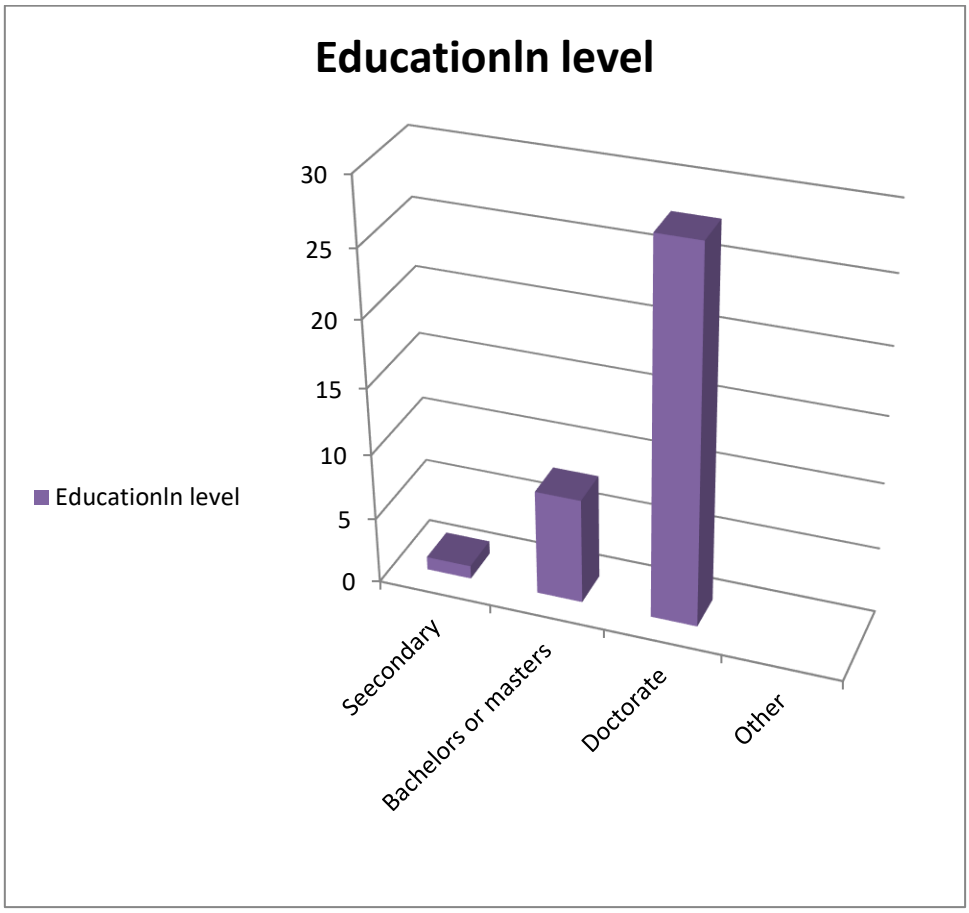


Source: Prepared by the student using SPSS version 26

The professional background of the respondents is diverse and well-distributed across different seniority levels. The largest group consists of professionals with 5 to 10 years of experience (29.7%). Those with less than 5 years and those with 10 to 20 years are equally represented at 27% each. Only a small segment (16.2%) possesses extensive experience exceeding 20 years. This spread ensures that the study captures insights from both early-career professionals and seasoned experts. In other words, it can be said that nearly(60%) of the sample have less than 10 years of experience, they are young people and are the most vulnerable to AI.

Sub-subsection Three: Data Analysis by Educational Level Variable

Figure (*4*): Graph by Educational Level

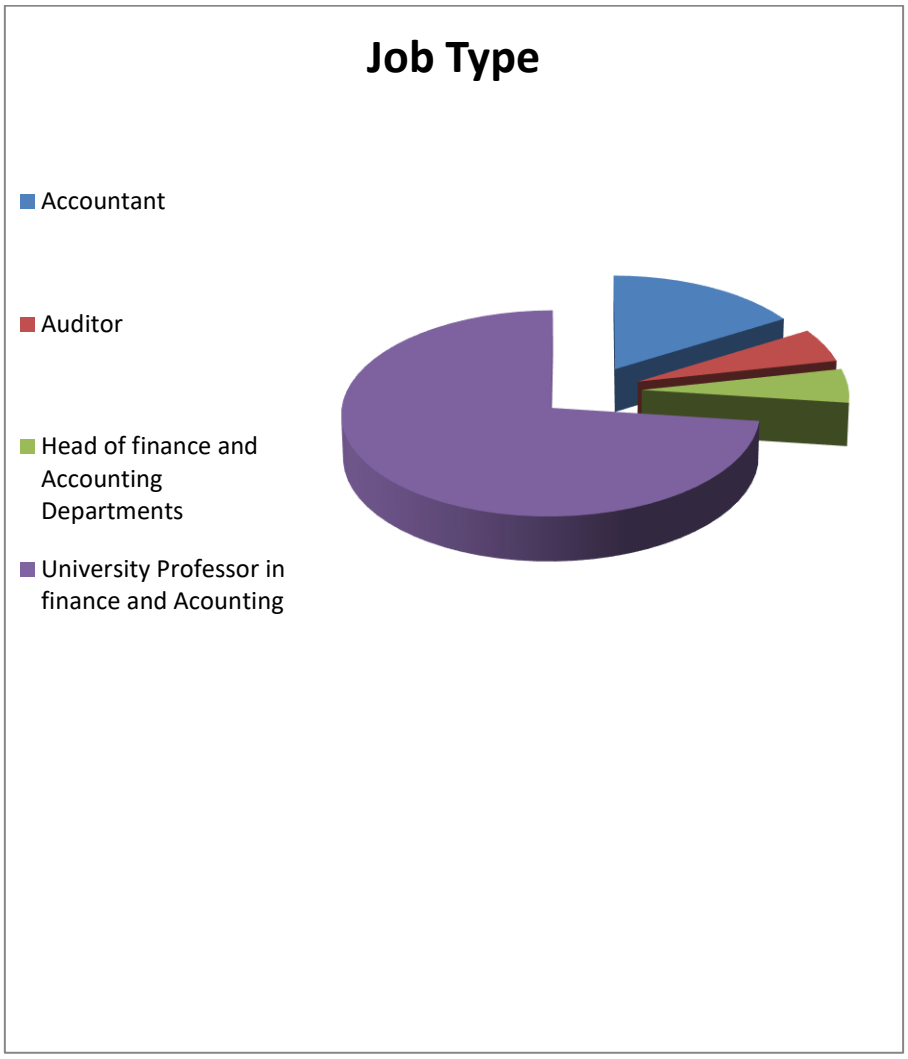


Source: Prepared by the student using SPSS version 26

The educational level of the sample is exceptionally high, reflecting the academic nature of the study. A significant majority of the participants, 75.7% (28 individuals), hold a Doctorate degree, which aligns with the fact that the survey was distributed among university professors. Participants with Bachelor's or Master's degrees represent 8% of the sample, while only one participant (2.7%) has a secondary education level. This high level of academic attainment adds significant intellectual weight and credibility to the study's findings.

Sub-subsection Four: Data analysis by job type

Figure (*5*): Graph by Job Type



Source: Prepared by the student using SPSS version 26

Regarding job roles, the sample is dominated by the academic sector, with 73% (27 individuals) serving as University Professors in Finance and Accounting. The remaining 27% is comprised of practitioners from accounting offices, including Accountants (16.2%), Auditors (5.4%), and Heads of Finance and Accounting Departments (5.4%). This distribution confirms that the study successfully bridged the gap between theoretical academic perspectives and practical professional application within the Oran and Ain Temouchent regions. We not that the largest percentage was university professors, which demonstrates their openness to new technologies and techniques. In addition, professors in the field of accounting are often professionals as well, and this shows the quality of the response and the validity of the survey results.

Subsection two: Analysis of the study topics

They key points are of great importance, as they allow us to gain a deeper understanding of the subject at hand through analysis and discussion, thereby reaching accurate conclussions.

Table No.(*7*): Table of frequencies and percentages of responses from the sample of second topic.

phrases (Advantages).	strongly disagree.	%	disagree	%	neutral	%	agree	%	Strong agree.	%	total	% total
1-AI technologies have the potential to reduce human error.	3	8.1	4	10.8	1	2.7	20	54.1	9	24.3	37	100
2- AI helps speed up the process of preparing financial statements.	1	2.7	2	5.4	2	5.4	16	43.2	16	43.2	37	100
3-AI helps save time and effort in entering and processing accounting data.	-	-	1	2.7	1	2.7	19	51.4	16	43.2	37	100
4-AI contributesto improving the relevance characteristic (allowing for timely decision-making) in financial ststements.	-	-	2	5.4	6	16.2	19	51.4	10	27	37	100
5-AI contributes to the preparation of accurate and transparent financial ststements.	1	2.7	3	8.1	5	13.5	20	54.1	8	21.6	37	100
6-AI helps in the early detection of unusual data, errors, and manipulations.	1	2.7	1	2.7	5	13.5	18	48.6	12	32.4	37	100
7-AI contributes to increasing confidence in financial statements.	-	-	4	10.8	11	29.7	17	45.9	5	13.5	37	100

Source : Prepared by the student using SPSS version 26

1- The arithmetic mean and standard deviation of the second topic.

Table No. (*8*) :The arithmetic mean and standard deviation of the second topic.

Second topic: Advantages of using artificial intelligence in improving the quality of financial statements			
Phrases	**Arithmetic mean**	**Standard deviation**	**General trend**
1- Artificial intelligence technologies have the potential to reduce human error.	**3.7568**	**1.18803**	**Agree**
2- Artificial intelligence helps speed up the process of preparing financial statements.	**4.1892**	**0.96718**	**Agree**
3- Artificial intelligence helps save time and effort in entering and processing accounting data.	**4.3514**	**0.67562**	**Strong Agree**
4- Artificial intelligence contributes to improving the relevance characteristic (allowing for timely decision-making) in financial statements.	**4.000**	**0.81650**	**Agree**
5- Artificial intelligence contributes to the preparation of accurate and transparent financial statements.	**3.8378**	**0.95782**	**Agree**
6- Artificial intelligence helps in the early detection of unusual data, errors, and manipulations.	**4.0541**	**0.91122**	**Agree**
7- Artificial intelligence contributes to increasing confidence in financial statements.	**3.6216**	**0.86124**	**Agree**
TOTAL	**3.9730**	**0.62437**	**Agree**

Source: Prepared by the student using SPSS version 26

The statistical results shown in the table above reflect the responses of the study sample regarding the role of artificial intelligence technologies in improving the quality of financial statements. The overall arithmetic mean for the axis was (3.97) with a standard deviation of (0.62), indicating a general trend towards "agreement" among the sample members regarding these advantages.

The third statement ranked first with an arithmetic mean of (4.35), reflecting a strong conviction and high degree of agreement that artificial intelligence contributes significantly to saving time and effort in the processes of entering and processing accounting data. The sample members also strongly supported the role of these technologies in accelerating the preparation of financial statements and detecting errors and manipulations early on, as the second and sixth statements recorded arithmetic means of (4.18) and (4.05) respectively.

On the other hand, the results confirmed that the use of artificial intelligence enhances the qualitative characteristics of accounting information, particularly the characteristic of "relevance" by providing timely data for decision-making, as exemplified by the fourth statement with a mean score of (4.00). Although all statements were in the direction of "agreement," the seventh statement regarding increased confidence in financial statements and the first statement regarding reduced human error recorded the lowest averages in this axis. This means that the participants acknowledged the benefits.

These results confirm that the move towards digitizing accounting work and using artificial intelligence applications is no longer merely a technical option but a strategic necessity to improve the efficiency of collection and processing data, thus ensuring the issuance of accurate, transparent, and reliable financial statements. This serves the objectives of both the tax administration and economic institutions in the provinces of Oran and Ain Temouchent.

Table No.(*9*):Table of frequencies and percentages of responses from the sample of third topic.

Phrases(disadvantages).	Strongly disagree	%	Disagree	%	neutral	%	agree	%	Strong agree	%	total	% total
1-high and expensive costs for acquiring AI systems.	-	-	2	5.4	3	8.1	21	56.8	11	29.7	37	100
2-A significant shortage of qualified personnel in the use of advanced AI technologies.	-	-	3	8.1	2	5.4	20	54.1	12	32.4	37	100
3-Difficulty in verifying the accuracy of AI outputs.	-	-	8	21.6	5	13.5	16	43.2	8	21,6	37	100
4-There are concerns regarding information security and the possibility of it being hacked.	1	2.7	4	10.8	1	2.7	20	54.1	11	29.7	37	100
5-Weak technological infrastructure hinders the use of AI techniques in preparing financial statements.	-	-	3	8.1	2	5.4	17	45.9	15	40.5	37	100
6-The absence of clear laws regulating how AI is used in accounting.	1	2.7	2	5.4	4	10.8	20	54.1	10	27	37	100
7-There are significant concerns about the potential displacement of traditional accountants due to the development of AI technologies.	1	2.7	5	13.5	1	2.7	20	54.1	10	27	37	100

Source : Prepared by the student using SPSS version 26

2- The arithmetic mean and standard deviation of the third topic.

Table No. (*10*):The arithmetic mean and standard deviation of the third topic.

Third topic: Disadvantages of using artificial intelligence in preparing high-quality financial statements			
Phrases	**Arithmetic mean**	**Standard deviation**	**General trend**
1- High and expensive costs for acquiring artificial intelligence systems.	**4.1081**	**0.77401**	**Agree**
2- A significant shortage of qualified personnel in the use of advanced artificial intelligence technologies.	**4.4081**	**0.84274**	**Strong Agree**
3- Difficulty in verifying the accuracy of artificial intelligence outputs.	**3.6486**	**1.05978**	**Agree**
4- There are concerns regarding information security and the possibility of it being hacked.	**3.9730**	**1.01342**	**Agree**
5- Weak technological infrastructure hinders the use of artificial intelligence techniques in preparing financial statements.	**4.1892**	**0.87679**	**Agree**
6- The absence of clear laws regulating how artificial intelligence is used in accounting.	**3.9730**	**0.92756**	**Agree**
7- There are significant concerns about the potential redundancy of traditional accountants due to the development of artificial intelligence technologies.	**3.8919**	**1.04838**	**Agree**
TOTAL	**3.9846**	**0.67661**	**Agree**

Source: Prepared by the student using SPSS version 26

The table presents the results related to the axis “Disadvantages of using artificial intelligence in preparing financial statements.” The findings reflect the opinions of the study sample regarding the main challenges associated with the adoption of artificial intelligence technologies in the accounting field. The overall arithmetic mean of the axis reached (3.9846) with a standard deviation of (0.67661), indicating a general trend of agreement among respondents that several obstacles may hinder the effective use of artificial intelligence in preparing financial statements.

The results also show that the highest mean value was recorded for the statement related to the significant shortage of qualified personnel capable of using advanced artificial intelligence technologies, with a mean of (4.4081) and a trend of strong agreement, which indicates that the lack of skilled human resources represents one of the most important barriers to adopting these technologies. This is followed by the statement concerning weak technological infrastructure that hinders the use of artificial intelligence techniques in preparing financial statements, with a mean of (4.1892), and the statement related to the high and expensive costs of acquiring artificial intelligence systems, which scored a mean of (4.1081), reflecting the presence of financial and technical constraints that limit the adoption of these systems.

In addition, respondents agreed that there are concerns related to information security and the possibility of hacking, with a mean of (3.9730). The same mean was recorded for the absence

of clear laws regulating the use of artificial intelligence in accounting, which highlights the need for a clear legal and regulatory framework governing the use of these technologies, and the third ststement, which relates to the difficulty of verifying the outputs of AI, and the seventh ststement, which relates to concerns about dispensing with traditional accountants in light of the development of AI technologies, recorded the lowest averages in this axis. Overall, the results confirm that despite the potential benefits of artificial intelligence, several organizational, technical, financial, and legal challenges still affect its effective implementation in financial statement preparation.

Subsection three: Present the results of the hypotheses.

In this subsection, we will discuss the analysis of the study's results based on the analysis of the study's results based on the arithmetic mean and standard deviation in order to determine the overall opinions of the sample and ultimately, to confirm or reject the hypothesis.

Hypothesis 1:

The results of the statistical analysis of the questionnaire showed that the overall arithmetic mean of the sample's responses was 3.9730, which is a high value compared to the benchmark, that is the majority of opinions confirmed the positive impact of using AI on improving the quality of financial statements, and the total standards deviation was 0.62437, which is a low value. This confirms that the responses of the individuals who answered the questionnaire were close together and not scattered, meaning they agreed on certain opinions. Therefore, we confirm the first hypothesis.

Hypothesis 2:

The results of the statistical analysis for the third axis of the questionnaire indicated that the overall mean was 3.9846, which is a high value compared to the reference on the five-point likert scale, indicating that most of the sample agreed with the items in this axis regarding the negative effects of using AI in preparing financial statements. The standard deviation was 0.67661, which is a low value, indicating a lack of dispersion in the sample members' opinions-meaning their responses were consistent. Therefore, we confirm the second hypothesis.

Conclusion:

In conclusion to this chapter, in which we have discussed the key findings of our applied study based on a questionnaire distributed to a sample comprising accountants, auditors, heads of finance and accounting departments, as well as university professors in finance and accounting in the provinces of Oran and Ain Temouchent, we divided this questionnaire into three topic: the first covered personal information such as experience and educational level , the second topic covered the advantages of using AI to improve the quality of financial statements, and the third topic covered the disadvantages of using AI in preparing financial statements. The data was processed and analyzed using SPSS. The study's results showed that most respondents affirmed that the use of AI contributes positively to improving the quality of financial statements, such as increasing their accuracy and transparency. On the other hand, they also expressed other views, noting that despite its benefits, AI has drawbacks, such as the high costs of purchasing of various AI technologies, as we confirmed in the theoretical chapter.

General conclusion

General conclusion

In this era of digital transformation, progress, and prosperity that the world has been witnessing recently, there has been increasing discussion about AI due to its great importance. It can be said that this is a very broad field aimed at simulating the human mind in performing tasks, and it is used in many areas, most notably in accounting-which is the subject of our study. This study sought to highlight its role in improving the quality of financial statements through its positive and negative aspects. It aimed to identify various concepts related to AI and its technologies, and to measure the extent of its impact on the accounting field in general and financial statementsin particular. To achieve these objectives, we divided our study into two chapters. The first chapter covers the theoretical framwork of the study, beginning with the concept of AI and its most prominent technologies, as well as the concept of financial statement quality, its characteristics, and its positive impact on the accounting profession and financial statements, as well as the various shortcomings and challenges it faces in this field. The second chapter includes a field study conducted through a survey administered to a sample of professionals in accounting firms in the provinces of Oran and Ain temouchent,as well as academics, specifically university professors, at the faculties of economics and business and management sciences at the universities of Belhadj bouchaib and Belgaid, regarding the extent of the impact of on the quality of financial statements. All of this was done to address the research question and confirm or refute the proposed hypotheses, through the analysis of data using SPSS to obtain accurate results and establish a link between the theoretical and practical components.

1-Study findings:

Based on the findings of our study, both theoretical and practical, we have reached the following conclusions:

- AI plays a significant role in saving time and effort by helping to expedite the preparation of financial statements.
- AI helps reduce human errors and enables their timely detection.
- The high arithmetic means indicate that the sample agrees on the importance of using AI in the accounting field.
- AI contributes to enhancing the quality characteristics of financial statements, such as relevance and reliability.
- The use of AI enables the presentation of accurate and transparent financial statements, thereby supporting decision-making processes.

In addition, there are some drawbacks:

- A significant need for qualified professionals capable of using these technologies.
- The high cost of purchasing AI technologies, coupled with the absence of laws regulating their use in the field of accounting.
- Concerns regarding cyberattacks.
- The difficulty of determining the reliability of AI outputs.

- In addition to the challenge of phasing out traditional accountants.

- Hypothesis testing:

H1: “There is a statistically significant relationship between the use of AI and the improvement in the quality of financial statements, due to its positive effects”. Therfore,the above confirms the first hypothesis.

H2: “There is a statistically significant relationship between the use of AI and its impact on the quality of financial statements through its negative effects”. Therfore, the above confirms the second hypothesis.

2-Study Recommendations:

Based on the findings of our study, we recommend the following:

- It is necessary to establish training centers and organize seminars and workshops to train professionals, such as accountants, to enhance their skills in working with AI technologies.
- It is necessary to rely on various AI technologies in the accounting field, but in a thoughtful and gradual manner.
- Avoid total reliance on AI in preparing financial statements to allow room for assessing the accountant’s competence.
- Establish advanced internal control systems to protect software and data within companies.
- Provide a robust technological infrastructure by upgrading equipment and resolving connectivity and internet issues.

3-Scope of the study:

We hope we have been able to explore this topic from various angles; however, given the rapid pace of development in the field of AI and its diverse applications,we offer some suggestions, whether in the realm of scientific research by other students or in the applied field:

- Conducting studies on this topic at major international or national companies in algeria, such as sonatrak.
- A comparative study between algeria and a gulf country regarding the extent of AI use in the economic sector.
- A study on the role of AI in enhancing competitiveness among companies in the algerian business environment .
- The adoption of modern AI technologies in accounting and auditing firms in algeria, with the government providing support to these firms to acquire such technologies.

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Appendices

Appendix 1

Questionnaire

Universiy of Ain Temouchent ,Belhadj Bouchaib

Faculty of Economics, Business and Management Sciences

Department of Finance and Accounting

Specialisation: Accounting and Taxation

Dear Sir/ Madam,

As part of the preparation of our Master's thesis entitled The Role of Artificial Intelligence in Improving the Quality of Financial Statements, we are pleased to present this questionnaire to you for the purpose of researching our topic.

We kindly ask you to answer the questions in the questionnaire by placing an (×) next to the appropriate statement . We assure you that your information will remain confidential and will be used solely for academic research purposes.

Thank you in advance for your cooperation.

Prepared by the students:

BENMOKRANE SOUAD

TAIBI MERIEM

Under the supervision of professor :

BENSABEUR SLIMEN ASMA

Academic year: 2025 -2026

First topic:General information

1-Gender :

Male ☐

Female ☐

2-Experience :

Less than 5 years ☐

From 5 to 10 years ☐

From 10 to 20 years ☐

More than 20 years ☐

3-Educational level:

Secondary ☐

Bachelor's or Master's ☐

Doctorate ☐

Other ☐

4-Job Type :

Accountant ☐

Auditor ☐

Head of Finance and Accounting Departments ☐

University Professor in Finance and Accounting ☐

Introduction about Artificial Intelligence:

Artificial intelligence is the ability of a computer or computer systems to mimic human intelligence , through technologies capable of learning from data , analysing information , making decisions or solving problems ,as well as automatically recording transactions ,detecting errors and discrepancies , and analysing the financial position and performance of an organisation without human intervention . These technologies improve over time as they acquire more data.

Second topic : Advantages of using artificial intelligence in improving the quality of financial statements

The statement	Strongly Disagree	Disagree	Neutral	Agree	Strong Agree
1- Artificial intelligence technologies have the potential to reduce human error.					
2- Artificial intelligence helps speed up the process of preparing financial statements .					
3- Artificial intelligence helps save time and effort in entering and processing accounting data .					
4- Artificial intelligence contributes to improving the relevance characteristic (allowing for timely decision-making) in financial statements.					
5- Artificial intelligence contributes to the preparation of accurate and transparent financial statements.					
6- Artificial intelligence helps in the early detection of unusual data , errors, and manipulations.					
7- Artificial intelligence contributes to increasing confidence in financial statements.					

Third topic : Disadvantages of using artificial intelligence in preparing high-quality financial statements .

The statement	Strongly Disagree	Disagree	Neutral	Agree	Strong Agree
1- High and expensive costs for acquiring artificial intelligence systems.					
2- A significant shortage of qualified personnel in the use of advanced artificial intelligence technologies .					
3- Difficulty in verifying the accuracy of artificial intelligence outputs.					
4- There are concerns regarding information security and the possibility of it being hacked.					
5- Weak technological infrastructure hinders the use of artificial intelligence techniques in preparing financial statements.					
6- The absence of clear laws regulating how artificial intelligence is used in accounting.					
7- There are significant concerns about the potential redundancy of traditional accountants of artificial intelligence technologies.					

Appendix 2

Alpha Kronbach factory.

Second topic

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,857	7

Third topic

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,899	7

All topics

Statistiques de fiabilité

Alpha de Cronbach	Nombre d'éléments
,876	14

Pearson's correlation coefficient between the two topics.

Corrélations

		DISadvantaages22	advantaages11
DISadvantaages22	Corrélation de Pearson	1	,404*
	Sig. (bilatérale)		,013
	N	37	37
advantaages11	Corrélation de Pearson	,404*	1
	Sig. (bilatérale)	,013	
	N	37	37

*. La corrélation est significative au niveau 0.05 (bilatéral).

Spearman's correlation coefficient between the items on the second topic.

Corrélations

			advantaages11	s2.q1	s2.q2	s2.q3	s2.q4	s2.q5	s2.q6	s2.q7
Rho de Spearman	advantaages11	Coefficient de corrélation	1,000	,606**	,775**	,628**	,703**	,686**	,526**	,508**
		Sig. (bilatéral)	.	,000	,000	,000	,000	,000	,001	,001
		N	37	37	37	37	37	37	37	37
	s2.q1	Coefficient de corrélation	,606**	1,000	,363*	,256	,447**	,189	,123	,238
		Sig. (bilatéral)	,000	.	,027	,125	,005	,263	,467	,156
		N	37	37	37	37	37	37	37	37
	s2.q2	Coefficient de corrélation	,775**	,363*	1,000	,554**	,585**	,358*	,512**	,263
		Sig. (bilatéral)	,000	,027	.	,000	,000	,030	,001	,116
		N	37	37	37	37	37	37	37	37
	s2.q3	Coefficient de corrélation	,628**	,256	,554**	1,000	,617**	,396*	,370*	,060
		Sig. (bilatéral)	,000	,125	,000	.	,000	,015	,024	,723
		N	37	37	37	37	37	37	37	37
	s2.q4	Coefficient de corrélation	,703**	,447**	,585**	,617**	1,000	,364*	,271	,156
		Sig. (bilatéral)	,000	,005	,000	,000	.	,027	,104	,357
		N	37	37	37	37	37	37	37	37
	s2.q5	Coefficient de corrélation	,686**	,189	,358*	,396*	,364*	1,000	,427**	,444**
		Sig. (bilatéral)	,000	,263	,030	,015	,027	.	,008	,006
		N	37	37	37	37	37	37	37	37
	s2.q6	Coefficient de corrélation	,526**	,123	,512**	,370*	,271	,427**	1,000	,350*
		Sig. (bilatéral)	,001	,467	,001	,024	,104	,008	.	,034
		N	37	37	37	37	37	37	37	37
	s2.q7	Coefficient de corrélation	,508**	,238	,263	,060	,156	,444**	,350*	1,000
		Sig. (bilatéral)	,001	,156	,116	,723	,357	,006	,034	.
		N	37	37	37	37	37	37	37	37

**. La corrélation est significative au niveau 0.01 (bilatéral).

*. La corrélation est significative au niveau 0.05 (bilatéral).

Spearman’s correlation coefficient between the items on the third topic.

Corrélations

			DISadvantaage s22	s3.q1	s3.q2	s3.q3s	s3.q4	s3.q5	s3.q6	s3.q7
Rho de Spearman	DISadvantaages22	Coefficient de corrélation	1,000	,371*	,685**	,680**	,824**	,846**	,821**	,707**
		Sig. (bilatéral)	.	,024	,000	,000	,000	,000	,000	,000
		N	37	37	37	37	37	37	37	37
	s3.q1	Coefficient de corrélation	,371*	1,000	,318	,191	,091	,116	,256	,309
		Sig. (bilatéral)	,024	.	,055	,256	,592	,495	,126	,062
		N	37	37	37	37	37	37	37	37
	s3.q2	Coefficient de corrélation	,685**	,318	1,000	,303	,435**	,547**	,614**	,410*
		Sig. (bilatéral)	,000	,055	.	,069	,007	,000	,000	,012
		N	37	37	37	37	37	37	37	37
	s3.q3s	Coefficient de corrélation	,680**	,191	,303	1,000	,557**	,495**	,504**	,346*
		Sig. (bilatéral)	,000	,256	,069	.	,000	,002	,001	,036
		N	37	37	37	37	37	37	37	37
	s3.q4	Coefficient de corrélation	,824**	,091	,435**	,557**	1,000	,827**	,674**	,545**
		Sig. (bilatéral)	,000	,592	,007	,000	.	,000	,000	,000
		N	37	37	37	37	37	37	37	37
	s3.q5	Coefficient de corrélation	,846**	,116	,547**	,495**	,827**	1,000	,698**	,541**
		Sig. (bilatéral)	,000	,495	,000	,002	,000	.	,000	,001
		N	37	37	37	37	37	37	37	37
	s3.q6	Coefficient de corrélation	,821**	,256	,614**	,504**	,674**	,698**	1,000	,609**
		Sig. (bilatéral)	,000	,126	,000	,001	,000	,000	.	,000
		N	37	37	37	37	37	37	37	37
	s3.q7	Coefficient de corrélation	,707**	,309	,410*	,346*	,545**	,541**	,609**	1,000
		Sig. (bilatéral)	,000	,062	,012	,036	,000	,001	,000	.
		N	37	37	37	37	37	37	37	37

*. La corrélation est significative au niveau 0.05 (bilatéral).

**. La corrélation est significative au niveau 0.01 (bilatéral).

The frequency and percentage of personal data.

Gender

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	male	16	43,2	43,2	43,2
	female	21	56,8	56,8	100,0
	Total	37	100,0	100,0	

Experience

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	less than 5 years	10	27,0	27,0	27,0
	from 5 to 10 years	11	29,7	29,7	56,8
	from 10 to 20 years	10	27,0	27,0	83,8
	more than 0 years	6	16,2	16,2	100,0
	Total	37	100,0	100,0	

Educational.level

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	secondary	1	2,7	2,7	2,7
	Bachelor or master	8	21,6	21,6	24,3
	Doctorate	28	75,7	75,7	100,0
	Total	37	100,0	100,0	

Job.type

		Fréquence	Pourcentage	Pourcentage valide	Pourcentage cumulé
Valide	secondary	6	16,2	16,2	16,2
	auditor	2	5,4	5,4	21,6
	head of finance and accounting Departments	2	5,4	5,4	27,0
	university profeesoor in finance and acounting	27	73,0	73,0	100,0
	Total	37	100,0	100,0	

The mean and standard deviation of the second topic.

Statistiques

		s2.q1	s2.q2	s2.q3	s2.q4	s2.q5	s2.q6	s2.q7	advantaages11
N	Valide	37	37	37	37	37	37	37	37
	Manquant	0	0	0	0	0	0	0	0
Moyenne		3,7568	4,1892	4,3514	4,0000	3,8378	4,0541	3,6216	3,9730
Ecart type		1,18803	,96718	,67562	,81650	,95782	,91122	,86124	,62437

The mean and standard deviation of the third topic.

Statistiques

		s3.q1	s3.q2	s3.q3s	s3.q4	s3.q5	s3.q6	s3.q7	DISadvantaages22
N	Valide	37	37	37	37	37	37	37	37
	Manquant	0	0	0	0	0	0	0	0
Moyenne		4,1081	4,1081	3,6486	3,9730	4,1892	3,9730	3,8919	3,9846
Ecart type		,77401	,84274	1,05978	1,01342	,87679	,92756	1,04838	,67661