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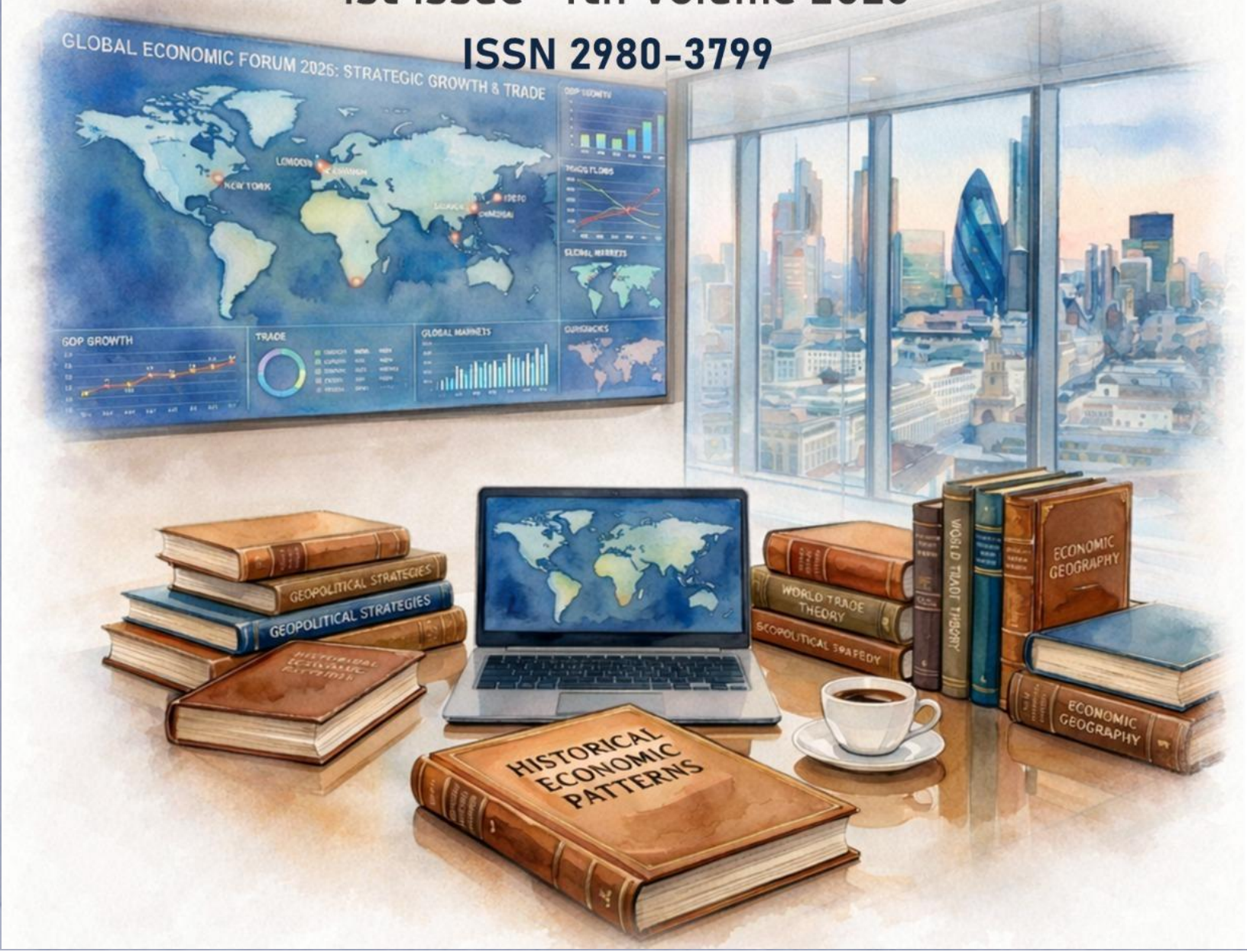


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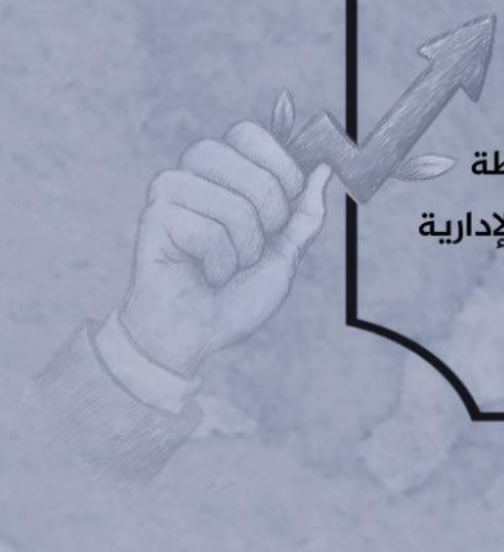

The Role of Artificial Intelligence in Developing the Accounting Profession from the Perspective of Auditors

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Abstract

This study aimed to investigate the impact of Artificial Intelligence (AI) technologies on the accounting profession. This was achieved by analyzing the level of awareness of these technologies among auditors and assessing their perception of the benefits and challenges associated with their application in the accounting environment. To achieve this objective, the descriptive-analytical approach was adopted, which is concerned with describing, interpreting, and analyzing the studied phenomenon to arrive at scientific generalizations that contribute to developing knowledge in this field.

The study population consisted of auditors, due to their direct link to the accounting profession and their practical engagement with modern technologies. A simple random sample of (43) auditors was selected to accurately represent the population. A validated and piloted questionnaire was used as the main data collection tool. It was designed to cover demographic aspects and evaluate participants' opinions using a five-point Likert scale. The questionnaire was subjected to expert

Review, and the internal consistency results showed a Cronbach's Alpha reliability coefficient of (0.77), indicating a good degree of reliability.

The study results revealed a high level of awareness among auditors regarding AI applications in accounting, and a broad agreement on its utility in improving efficiency and reducing time and errors. Challenges related to security and privacy were also noted, alongside practical difficulties in integrating these technologies into daily work. Furthermore, the study indicated no statistically significant differences in auditors' attitudes attributable to the variables of gender, age, academic qualification, or years of experience, reflecting a consistency in perspectives across different categories.

The study concluded with a set of recommendations, most notably: the necessity of enhancing specialized AI training for auditors, developing the digital infrastructure of institutions, integrating AI technologies into university curricula, in addition to supporting scientific research and establishing clear regulatory frameworks for the use of these technologies in auditing and accounting.

Keywords: Artificial Intelligence, Accounting, Auditors

Introduction

The global business environment has witnessed a series of developments in recent years, leading to the emergence of the Information and Communication Technology (ICT) environment, a blend of communication technology and information technology with its various tools. Undoubtedly, these developments have become part of the global economic entity characterized by the use of informational and technological advancements. This has led institutions to currently attempt to perform their work using modern technology tools, shifting from their previous manual and classical methods. The evolution in business intelligence and the widespread use of computers have resulted in a relevant response from most business entities to these developments, as the rapid pace of technological advancements has become prevalent in all aspects (Amirhim, 2022).

Artificial Intelligence (AI) technology is considered one of the most significant outcomes of the new technological revolution, profoundly impacting the lives of individuals and society in general, and organizations in particular. AI is no longer viewed merely as a tool; it is now seen as capable of setting its own agenda by understanding the nature of human intelligence, simulating human behavior, processing operations, and providing users with relevant information at high speed. Activating these applications helps organizations respond quickly and adapt efficiently and effectively to modern changes and continuously transition towards entrepreneurship to remain competitive, progressive, and growth-oriented (Shanan, 2024).

There are numerous AI-based tools and techniques that can be applied to different tasks in accounting. Natural Language Processing (NLP) can be used to analyze large volumes of unstructured data and extract valuable insights, while machine learning algorithms can be employed to identify patterns and relationships in data and make predictions. Predictive analytics involves using historical data and statistical algorithms to forecast future events (Bayoud, 2023).

In conclusion, studying the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors is an important step towards understanding how modern technology affects this vital profession. This study opens new horizons for understanding the transformations taking place in the accounting field, especially in terms of improving performance and audit quality, as well as the challenges professionals may face in adopting these technologies. Through this study, we seek to provide a comprehensive vision that contributes to enhancing the utilization of AI in the accounting

sector, which will positively impact the development of the profession and achieve better results in financial auditing.

Study Problem

The study problem lies in determining the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors. With the rapid development of AI technology and its increasing use in various fields, including the accounting profession, there is a need to understand how this technology impacts the professional performance of auditors. Although

AI offers many opportunities to improve efficiency and accuracy in accounting operations; it also raises challenges related to human interaction with these technologies and ways to integrate them with traditional procedures. Based on this, the study problem can be formulated in the following main question:

What is the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors?

Study Importance

The importance of the study is represented by the following points:

1. Studying the role of Artificial Intelligence (AI) in improving the efficiency and quality of accounting work.
2. Accelerating audit processes and reducing human errors through automation and intelligent analysis.
3. Enhancing auditors' ability to detect manipulation and predict future economic trends.
4. Determining the extent of acceptance among auditors of AI technologies and their deployment in their daily practices.
5. Improving the credibility of financial reports and increasing confidence in the financial results presented to clients and stakeholders.
6. Exploring how to develop auditing strategies using AI to enhance the effectiveness and quality of accounting work.

Study Objectives

1. Identifying the level of awareness among auditors regarding AI applications in the accounting profession.
2. Identifying the expected benefits of using AI in improving the efficiency of accounting work and saving time, from the perspective of auditors.
3. Determining the challenges faced by auditors when using AI technologies in accounting.

Theoretical Framework

Artificial Intelligence (AI)

Despite the existing variations in the concept of Artificial Intelligence, the majority share the common reality that AI has become a tangible presence relied upon in various aspects of our daily lives due to its great importance across all fields. Among these fields that utilize AI is the business and finance sector, where AI plays a pivotal role in improving economic and commercial operations and achieving greater financial benefits (Nasser, 2022).

Definition of Artificial Intelligence:

Artificial Intelligence (AI) can be divided into two words, as appeared in the Webster dictionary: intelligence and artificiality. Each word has a specific meaning, starting with Intelligence, which is the ability to understand new and changing circumstances or situations, meaning it is the ability to perceive, understand, and learn new situations or conditions. In other words, the keys to intelligence are perception, understanding, and learning (Kazem, 2012).

The word Artificial or Synthetic is associated with the act of manufacturing or creating, and thus the word is applied to all things that arise as a result of an activity or action created through the fabrication and shaping of objects, distinguishing them from things that already exist without human intervention (Russell & Nording, 2009).

From a terminological perspective, there are many definitions provided by scholars and scientists. However, one of the first to define it and coin the term Artificial Intelligence was the American John McCarthy (the science and engineering of making intelligent machines), especially intelligent computer programs, which is a branch of computer science aiming to create intelligent mechanisms (Abdul Hadi, 2015).

The definition from the World Intellectual Property Organization (WIPO) regarding intellectual property and AI states: "Artificial intelligence is a discipline within computer science aimed at

developing machines and systems that can perform tasks viewed as requiring human intelligence, whether with limited human intervention or without human intervention. AI also expresses the ability of these computer devices to perform tasks associated with intelligent beings, i.e., resembling humans. The word Artificial Intelligence applies to systems that adopt human intellectual processes such as the ability to reason, discover meaning, and learn from past experiences" (Kazem, 2012).

Origin and Development of Artificial Intelligence:

Artificial Intelligence is the product of 2000 years of tradition in philosophy and theories of perception and learning, and 400 years of mathematics that led to theories in logic, probability, and computation. It also has a long history in the development of psychology, revealing the capabilities and workings of the human brain. Furthermore, AI is the fruit of strenuous efforts in linguistics that uncovered the structure and meanings of language and the development of computer science and its applications, which has made AI a realized reality (Ghalib, 2011).

The philosophical roots of AI can be traced back to Greek philosophers (Socrates, Plato, Aristotle), the French philosopher Francis Bacon (1561-1626), and Bertrand Russell, who introduced what is known as Logical Positivism. Its roots in mathematics stem from three areas: Computation, Logic, and Probability Theory, and Algebra, which was founded by the Arab scholar "Al-Khwarizmi" (Ghalib, 2011).

In 1956, a conference was held at Dartmouth College. At this conference, John McCarthy proposed the use of the term Artificial Intelligence (AI) to describe computing machines with the ability to perform the functions of the human mind. Thus, AI systems include all individuals, procedures, physical parts of the computer, software, data, and knowledge required to develop computer systems and equipment that exhibit characteristics of intelligence (Mousa, 2012).

Characteristics of Artificial Intelligence:

Artificial Intelligence enjoys many characteristics and features, including (Juma'a, 2015):

- Using intelligence to solve presented problems even in the absence of complete information.

- The ability to think and perceive.
- The ability to acquire and apply knowledge.
- The ability to learn and understand from previous experiences.
- The ability to deal with difficult and complex situations.
- The ability to distinguish the relative importance of elements in presented situations.
- The ability to conceptualize, be creative, and understand and perceive visual matters.
- The ability to provide information to support administrative decisions.

Types, Importance, and Limitations of Artificial Intelligence:

Types of Artificial Intelligence:

The types of AI appear within three main categories, ranging from simple reaction to self-awareness and interaction, as follows (Abdul Wahab et al., 2018):

1. Narrow AI or Weak AI: This is characterized by the ability to collect and analyze information, and it benefits from the process of accumulating experiences, which enables it to make independent and autonomous decisions. Examples include self-driving cars, chatbots, and personal self-help programs.
2. General AI or Strong AI: This is the simplest form of AI, where AI is programmed to perform specific functions within a defined environment. Its behavior is considered a reaction to a specific situation, and it can only operate under the conditions of its specific environment. An example is the robot "Deep Blue," created by IBM, which defeated world chess champion Garry Kasparov.
3. Super AI: These models are still under experimentation and seek to simulate humans. This type allows for a distinction between two basic patterns:
   - The first: attempts to understand human thoughts and emotions that affect human behavior, possessing a limited ability for social interaction.
   - The second: is a model of the theory of mind, where these models can express their internal state, predict the feelings and attitudes of others, and are capable of interacting with them. They are expected to be the next generation of super-intelligent machines.

Importance of Artificial Intelligence:

Studies by the Arab British Academy and Suriya (Suriya, 2016) concluded that the importance of Artificial Intelligence stems from the following:

- AI contributes to preserving accumulated human expertise by transferring it to intelligent machines.
- Humans can use human language to deal with machines instead of computer-dependent programming languages, making the use of machines accessible to everyone, even those with special needs, after dealing with old machines was only for specialists and experts.
- AI plays an important role in many sensitive fields such as assisting in medical and legal sciences, security and military sectors, accounting and auditing, and other fields.
- Intelligent systems enjoy independence, accuracy, and objectivity, leading to correct decisions.
- Intelligent systems relieve humans of many psychological pressures and risks, allowing them to focus on more important and more humanitarian matters.

Concept of Accounting

Accounting has several definitions, which are presented as follows:

The Committee on Terminology of the American Institute of Certified Public Accountants (AICPA) defined accounting as:

"Accounting is the art of recording, classifying, and summarizing in a significant manner and in terms of money, transactions and events which are, in part at least, of a financial character, and interpreting the results thereof." (Al-Abdullah & Al-Jajjawi, 2009)

The American Accounting Association (AAA, 1996) defined accounting as: "The art of recording, classifying, and summarizing business transactions and events of a financial nature in accordance with established procedures, and interpreting the results thereof to determine profit or loss during a particular accounting period and to show the financial position of the business." (Al Adam & Rizq, 2000)

Accounting can also be defined as the process of collecting, classifying, summarizing, and interpreting financial data related to a company's operations (Deif, 1981). From the above, accounting can be viewed as the process of providing and measuring financial information related to an entity's activities and communicating it to its users through financial statements for decision-making purposes.

Accounting Assumptions

Accounting assumptions represent the foundation of the theoretical framework. They are underlying ideas and beliefs that cannot be directly verified but must be few, consistent, and sufficient. The key accounting assumptions include:

1. Business Entity Assumption

The economic entity is treated as a separate accounting unit, distinct from its owners and management. Accordingly, all financial transactions and financial statements are prepared from the perspective of this independent entity. Transactions related to owners' personal affairs are excluded. (Jarboa, 2000)

2. Concern Assumption Going

This assumption implies that the entity is expected to continue operating for the foreseeable future, unless there is objective evidence to the contrary. This ensures that the business can meet its obligations, recover its asset costs, and generate wealth over time.

3.Accounting Period (Periodicity Assumption)

For practical purposes, the continuous life of an entity is divided into specific accounting periods (usually one fiscal year) to provide timely information for decision-making and performance evaluation.

4. Monetary Unit Assumption

Accounting measures and reports the results of an entity's activities using a stable monetary unit (e.g., the Algerian Dinar), as money is the most effective means of communicating financial information. (Jarboa, 2000)

Accounting Principles

Accounting principles form the conceptual framework that governs measurement and disclosure in financial statements. They are broad, general guidelines designed to ensure consistency and comparability. The key accounting principles include:

- Accounting Entity Principle: Each organization is treated as a separate and independent entity from its owners and other organizations.
- Monetary Unit Principle: Assets, liabilities, and income are measured in monetary units (e.g., Algerian Dinar), which serve as a common unit of measure. (getvom.com)
- Historical Cost Principle: Financial transactions are recorded at their

original cost and remain so unless otherwise adjusted for usage or impairment.
- Concern Principle: The entity is assumed to continue its operations for the foreseeable future.
- Accounting Period Principle: The life of the business is divided into uniform periods (usually fiscal years) to determine periodic results.
- Revenue Recognition Principle: Revenue is recognized only when it is realized or earned.
- Consistency Principle: Once an accounting method is adopted, it should be applied consistently from one period to another.
- Accrual Principle: Transactions are recorded when they occur, not when cash is received or paid.
- Conservatism (Prudence) Principle: Anticipate no profits but provide for all potential losses.
- Materiality Principle: The degree of precision in reporting depends on the relative importance of the information to financial statements.
- Full Disclosure Principle: All information that could affect users' decisions must be disclosed transparently. (getvom.com)

Objectives of Accounting

Accounting aims to:
- Identify and measure financial events and transactions in monetary terms.
- Record financial transactions in journals and ledgers based on source documents.
- Verify debts, liabilities, and assets as of a specific date.
- Determine the financial position and performance of the entity during a given period.
- Analyze, interpret, and communicate financial information to users for decision-making. (Al-Sharif et al., 1998)

Nature of the Auditing Profession

Every company pursues specific objectives, which require management to establish effective internal control systems that ensure reliability and accuracy. Auditing emerged to meet this need, protecting investors and organizations from fraudulent accounting practices through an independent and qualified professional adhering to technical standards and ethical guidelines.

Definition of Auditing
Auditing is defined as:
"A systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to determine the degree of correspondence between those assertions and established criteria, and communicating the results to interested users." (Al-Matarneh, 2006)

The American Accounting Association (AAA) defines auditing as:
"A systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to determine the degree of correspondence between those assertions and established criteria and communicating the results to interested users." (Khudeir, 1991)

Auditing Assumptions
Auditing assumptions form the foundation of auditing theory. Each concept builds logically upon the preceding one. They include:
- Auditor Independence: The auditor must perform work objectively, adhering to professional standards, and express an impartial opinion on whether the financial statements fairly present the entity's financial position. (Jarboa, 2000)
- Verifiability of Financial Data: If financial statements were not verifiable, there would be no justification for auditing. (Suleiman, 2004)
- Absence of Unusual Errors or Manipulations: The auditor assumes that financial data are free from significant irregularities unless evidence suggests otherwise. (Yura, 2015)
- Existence of an Effective Internal Control System: The auditor relies on internal controls to ensure the reliability of accounting information. (Jumaa, 2015)
- Stability of Past Facts: Unless conditions change, past facts are assumed to remain valid in the future, based on the going concern principle. (Al-Sahen & Al-Sabban, 2004)
- Non-Conflict Between Auditor and Management: Auditors and management share a cooperative relationship aimed at improving decision-making.

Auditing Principles

There are two groups of scientific auditing principles related to assurance and reporting. They include:

- Cognitive-Integrated Control Principle: The auditor must fully understand the nature of the entity's activities and their potential effects. (Jumaa, 2015)
- Comprehensiveness Principle: The audit should cover all major and subsidiary objectives and financial reports, considering materiality. (Jumaa, 2015)
- Objectivity Principle: The auditor should minimize personal bias by relying on sufficient audit evidence.
- Human Competence Principle: The auditor must assess the adequacy of human performance within the organization, as it affects operational efficiency.
- Communication Adequacy Principle: Audit reports should fairly present the entity's economic activities to all stakeholders.
- Disclosure Principle: Audit reports must disclose weaknesses in internal control systems and accounting procedures. (Jumaa, 2015)
- Fairness Principle: The auditor's report should be fair and unbiased toward all stakeholders.
- Causality Principle: The auditor should clearly explain any abnormal findings and base reservations on objective evidence. (Jumaa, 2015)

Objectives of Auditing

Auditing serves vital roles in financial, governmental, and economic environments (Ameen, 2004).

Its objectives include:

- Detecting errors or fraud in accounting records (Al-Rimahi, 2009).
- Contributing to economic and social welfare (Hammad, 2007).
- Obtaining and evaluating audit evidence to support management assertions (Ameen, 2004).
- Verifying the accuracy of financial statements through physical inspection.
- Ensuring ownership of assets and existence of liabilities.
- Confirming the correctness of accounting data and presenting it fairly.
- Assessing accounting events in accordance with accepted methods.
- Providing credible and reliable financial information.
- Expressing an impartial professional opinion on whether financial statements present a true and fair view.

- Reporting on any findings that affect the credibility of audited financial statements.
- Supporting the organization’s broader goals, including not only profit maximization but also social responsibility and community welfare. (Ameen, 2004)

A review of relevant literature reveals a consensus on the positive impact of Artificial Intelligence (AI) on the accounting profession, while also highlighting critical challenges related to adoption and competence. Studies such as Chukwudi et al. (2018) in Nigeria found that the application of AI, specifically Expert Systems and Intelligent Agents, significantly and positively affects the performance of accounting operations, recommending that firms enhance their knowledge of AI to boost efficiency. Similarly, Hug (2014) concluded that AI, particularly Expert Systems, leads to an overall improvement in productivity in accounting areas like auditing and taxation by reducing the need for supervision and granting users greater control over decision-making processes. Furthermore, Simon (2018), through interviews with accountants in Belgium and Luxembourg, noted that while AI will be used to automate routine tasks, it's less likely to replace functions requiring critical thinking, suggesting a change in the accounting business model rather than outright replacement. In the context of the underlying infrastructure, studies like Al-Dalabihk (2018) and Thapyom (2015) emphasize that the quality and security of Accounting Information Systems (AIS) are crucial, with a positive effect on financial data quality and the achievement of organizational goals, which provides the necessary technological foundation for AI integration. The previous studies, both local (referencing studies like Al-Dalabihk, 2018) and international (e.g., Chukwudi et al., 2018; Simon, 2018), consistently affirm that AI is an effective tool for enhancing the efficiency and accuracy of accounting processes, while also raising the necessity to address associated challenges, particularly concerning human skill development and ethical concerns. Studies from the Arab world also confirmed the importance of Expert Systems in facilitating electronic auditing procedures and supporting complex decision-making, which boosts institutional profitability. The literature collectively identifies a duality: immense benefits through automation, superior data analysis, and fraud detection, contrasted with challenges related to job function transformation, the cost of implementation, security, and the urgent need for updated professional skills and regulatory frameworks. The current study differentiates itself by providing a localized empirical investigation into the

specific awareness level and the perceived benefits and challenges among auditors. This focus addresses a gap in the literature by examining how these global technological shifts are being perceived and addressed within a distinct regional and professional context, considering the specific economic and social characteristics of the area.

Methodology

This study adopted the descriptive-analytical method, given its suitability for the nature of the research topic. This methodology aims to describe, analyze, and interpret the studied phenomenon in order to reach scientific conclusions and generalizations that contribute to a deeper understanding of the impact of Artificial Intelligence technologies on the accounting profession.

Study Population

The study population consisted of all auditors who are directly related to the research topic. This population was defined based on its close connection to the accounting profession and the role of Artificial Intelligence in its development, allowing for the achievement of realistic and generalizable results.

Study Sample

The study sample was selected using a simple random sampling method, totalling (43) questionnaires from the individuals in the study population, the auditors. This was done to achieve an objective and accurate representation of the target group. Variety in experience and job roles was considered in selecting the sample, thereby enhancing the reliability of the results.

Study Variables

Independent Variable: Artificial Intelligence (AI)

This variable represents the factor hypothesized to influence the development of the accounting profession. This variable may include dimensions such as:

- Use of intelligent software in auditing.
- Automation and Big Data analysis.
- Machine learning applications and accounting robotics.
- Quality of AI-supported decisions.

Intervening Variable: Auditors' Perception or Attitude

This variable mediates the relationship between Artificial Intelligence and the development of the accounting profession. It represents the manner in which auditors interact with AI technologies, such as:

- Their degree of acceptance for using AI.
- Their perception of its impact on their profession.
- Their readiness to adopt modern technology.

Dependent Variable: Development of the Accounting Profession

This represents the expected outcome or the result influenced by the independent variable. It includes:

- Improving the efficiency of accounting work.
- Raising the quality of accounting outputs.
- Reducing errors and time.
- Developing the skills of accounting staff.

Study Instrument

A questionnaire was prepared as the main tool for data collection. It was designed to survey the opinions of auditors regarding the role of Artificial Intelligence (AI) in developing the accounting profession. The questionnaire included three main sections:

1. Introductory Section:

This section provided an introductory explanation outlining the study's objective and emphasized the confidentiality of responses, encouraging participants to engage seriously.

2. Demographic Data:

This included general personal information which helps in analyzing the data according to personal variables (such as gender, age, academic qualification, and years of experience).

3. Questionnaire Axes (Items):

This comprised a set of statements related to the basic axes of the study. These items were formulated using a five-point Likert scale (ranging from "Strongly Agree" to "Strongly Disagree") to measure the attitudes and opinions of the participants accurately and objectively.

The questionnaire was presented to a panel of experts composed of specialists in the fields of accounting and artificial intelligence, in addition to the academic supervisor. This step was taken to verify the instrument's face validity and its suitability for measuring the study dimensions.

Study Instrument Validity:

The research team verified the validity of the study instrument by presenting it to a group of referees (experts), who offered several observations. Consequently, the study instrument was finalized in its current form to accurately measure the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors. Internal Consistency (Validity)

Table (1): Pearson Correlation Coefficient Results for the Correlation Matrix of Study Instrument Items with the Total Score of the Instrument.

Item No.	Correlation Value (*r*)	Statistical Significance (*p*)	Item No.	Correlation Value (*r*)	Statistical Significance (*p*)
1	0.255	0.091	13	0.457	0.002
2	0.590	0.000	14	0.706	0.000
3	0.137	0.371	15	0.668	0.000
4	0.124	0.419	16	0.255	0.091
5	0.174	0.253	17	0.584	0.000
6	0.555	0.000	18	0.158	0.301
7	0.337	0.024	19	0.409	0.005
8	0.709	0.000	20	0.203	0.181
9	0.528	0.000	21	0.656	0.000
10	0.513	0.000	22	0.370	0.012
11	0.542	0.000	23	0.118	0.439
12	0.318	0.033	—	—	—

The table above shows that the majority of the correlation values (r) between the items and the total scale score are statistically significant ($p < 0.05$ for most items), indicating the internal consistency of the scale's items. This confirms that the items collectively measure the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors.

Reliability of the Study Instrument

Reliability was calculated using the internal consistency method by computing the Cronbach's Alpha (α) coefficient, as shown in Table (2).

Table (2): Cronbach's Alpha (α) Results for Study Instrument Reliability.

Dimension	Number of Cases	Number of Items	Alpha Value (α)
Auditors' Level of Awareness of AI Applications in the Accounting Profession	45	7	0.33
Expected Benefits of Using AI in Improving Accounting Work Efficiency and Saving Time	45	8	0.74
Challenges Faced by Auditors in Using AI Technologies in Accounting	45	8	0.31
Total Score	45	23	0.77

The reliability of the study instrument was verified by examining the internal consistency of the items using the Cronbach's Alpha coefficient on the total study sample. The overall reliability value was 0.77, which indicates that the instrument possesses a good degree of reliability.

Statistical Treatment

After collecting the study data, the research team reviewed it in preparation for computer input. The data was entered into the computer by assigning specific numerical codes, converting verbal responses into numerical data. The responses were scaled as follows (Likert Scale): Strongly Agree (5 points), Agree (4 points), Neutral (3 points), Disagree (2 points), and Strongly Disagree (1 point). Thus, an increase in the score indicates a higher perceived role of AI in developing the accounting profession, and vice versa.

The necessary statistical processing was performed by extracting frequencies, percentages, arithmetic means, and standard deviations. The study hypotheses were tested at the significance level $\alpha=0.05$, using the following statistical tests: the t-test, the One-Way Analysis of Variance (ANOVA) test, the Pearson Correlation Coefficient, and the Cronbach's Alpha Coefficient. All analyses were conducted using the Statistical Package for the Social Sciences (SPSS) software.

Arithmetic Mean Scale Range Level Interpretation

1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Moderate
3.41 – 4.20	High
4.21 – 5.00	Very High

Result

Study Question: What is the degree of the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors?

To answer the previous question, the frequencies, arithmetic means, and standard deviations for the degree of the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors were extracted on the total score of the scale, as shown in Table No. (3).

Table No. (3): Frequencies, Arithmetic Means, and Standard Deviations for the Degree of the Role of Artificial Intelligence in Developing the Accounting Profession from the Perspective of Auditors.

Descriptive Statistics for the Study Variables

Variable	Frequency (n)	Arithmetic Mean (M)	Standard Deviation (SD)
Auditors' Level of Awareness of AI Applications in the Accounting Profession	45	3.86	0.33
Expected Benefits of Using AI in Improving Accounting Work Efficiency and Saving Time	45	4.22	0.51
Challenges Faced by Auditors in Using AI Technologies in Accounting	45	4.14	0.33

Variable	Frequency (n)	Arithmetic Mean (M)	Standard Deviation (SD)
Total Score	45	4.08	0.33

The data presented in the table above indicates that the degree of the role of Artificial Intelligence in developing the accounting profession from the perspective of auditors was High.

The Arithmetic Mean for this degree on the total study scale was (4.08), with a standard deviation of (0.33). According to the study's Arithmetic Mean Scale (where 3.41-4.20 is considered "High"), this result confirms the high perceived role of AI.

Detailed Observations:

1. Expected Benefits ranked the highest, with a mean of (4.22), which is classified as "Very High" (since it falls into the 4.21-5.00 range), indicating a very strong agreement among auditors regarding AI's potential to improve efficiency and save time.

2. Challenges also showed a high mean of (4.14), suggesting that while auditors recognize the benefits, they are also highly aware of the difficulties and obstacles (such as security, integration, and skill gaps) associated with implementing AI technologies.

3. Awareness Level had a mean of (3.86), categorized as "High," reflecting that the auditors generally possess a strong understanding of AI applications in their profession.

The overall High degree Mean=4.08 reflects a positive and optimistic outlook among auditors regarding AI, viewing it as a powerful driver for the development and future of the accounting profession.

Recommendations

- Enhance Professional Training and Qualification for Auditors in the field of Artificial Intelligence (AI) and its applications in accounting, by organizing specialized workshops and training courses that focus on practical skills.
- Encourage Accounting and Financial Institutions to adopt AI technologies and provide the appropriate infrastructure for their effective utilization, thereby contributing to raising performance efficiency and the accuracy of financial reports.
- Increase Awareness regarding the importance of Security and Privacy issues when handling financial data using AI technologies, through the adoption of policies and procedures that ensure the protection of this data.
- Integrate AI courses into university and college accounting education programs, with the aim of preparing a new generation of accountants capable of keeping pace with modern technological advancements.
- Urge Regulatory and Professional Bodies to issue clear guidelines and standards clarifying how to use AI in auditing and accounting work, to ensure the standardization of practices and enhance confidence in the results.
- Support Scientific Research in the field of AI and accounting by providing the necessary funding and encouraging researchers to study the applied aspects and long-term effects of these technologies.

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