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# Artificial intelligence and the new norm in financial and managerial accounting and auditing

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## Abstract

Rapid technological and economic developments have brought about radical changes in accounting, through the development of new tools and solutions, which increase efficiency and improve accuracy within the practice. Artificial Intelligence (AI) has a prominent place in critical issues, especially regarding forecasts, as its algorithms are based on historical data to create rigorous analyzes and make rational financial decisions. The future of artificial intelligence in accounting involves advanced predictive analytics, through its deeper integration into strategic financial planning and the development of systems capable of handling more complex accounting tasks with minimal human intervention. This paper comes to illuminate critical issues in which there is a gap, as the literature is particularly limited in the field of accounting, focusing on how artificial intelligence affects accounting. The contribution of the study lies precisely in this aspect, in order to have a smooth transition in the accounting profession to the new normality. The findings showed that artificial intelligence particularly affects Financial, Managerial accounting and Auditing, while it can significantly improve the accuracy of financial reporting by reducing human errors in calculations in data entry, updating accounting records, preparing both financial statements, as well as audit reports. The need for compliance of the entire spectrum of accounting with the relevant accounting standards and regulations, within the framework of ethics and data protection, is identified.

**Keywords:** Artificial intelligence; Financial accounting; Managerial accounting; Auditing; Accountant

## 1. Introduction

Artificial intelligence (AI) is increasingly appearing in the field of accounting through systems for automating repetitive tasks, data analysis and fraud detection mechanisms (Askary et al., 2018). With the integration of artificial intelligence in the accounting profession, a set of challenges is observed in terms of decision-making, the development of new skills with the parallel human control and interpretation of financial and accounting data (Zemankova, 2019).

The dimension of artificially intelligent technologies in the modern global economy is now a new trend, focusing on the financial management of daily transactions, the recording, analysis and drafting of financial statements (Di Vaio et al, 2020).

Important issues of forecasting and efficiency now pass at the threshold of automation, for the presentation of financial reports in a short time and with a large amount of data and information. Traditional accounting practices tend to become a thing of the past, as various agencies, ministries have already introduced artificial intelligence into daily practice (Abrokwah-Larbi, K and Awuku-Larbi, Y, 2024).

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Artificial intelligence has been given many definitions, but in a broader context its echo marks the adoption of machine learning to collect, process and analyze vast amounts of data with predictive models that are nevertheless based on historical evidence that leads to strategic decision-making character (Kottara and Zaridis, 2024a).

Automated tasks in professions such as economists, accountants and managers provide greater security in avoiding the possibility of errors during daily and long-hour calculations (Loureiro et al., 2021). Today, the restructuring of the accounting profession is a fact as the rapid technological development requires the transition to new, more modern and realistic conditions. Financial, Management **Accounting and Auditing** are constantly challenged by the new reality of artificial intelligence, setting new frameworks that need to be taken into account by government agencies, public and private bodies, as well as educators (Kottara et al., 2024b). Commercial management through invoicing, financial statements of payroll, updating and entering accounting books tend to be automated, reducing the human factor during these processes (Kaushik, 2022).

It is observed during the implementation of accounting procedures the need for better decisions through data that can be collected and analyzed with the dynamic intervention of artificial intelligence, helping accountants to more easily comply with International Financial Reporting Standards and more easily identify errors and frauds (Allioui and Mourdi, 2023).

The effectiveness of artificial intelligence is related to the data that needs to be fed in to produce reliable data and reports. It is important that businesses make the appropriate investment in infrastructure and secure data management. Algorithms used in artificial intelligence, if not used properly, involve the risk of biases and errors which can lead to wrong decisions. For these reasons, it is necessary to carry out quality checks to avoid data entry errors and possible programming errors (Sträßer and Stolicna, 2023).

Accounting cycle appears to require both human supervision and interpretation of extracted data, along with a large volume of data (Doshi et al., 2023; Kottara et al., 2024c). These data are not based on any critical thinking skills to manage any judgments and decisions. In addition, it has been found that AI-powered tools as a whole enable the detection of patterns and trends that are difficult for an accountant to see. Significant benefits from the integration of AI in the accounting profession are better and safer assessment of risk management, more immediate identification of business growth opportunities and more correct distribution of financial resources, not only for the sustainability but also for the profitability of companies (Chauhan, Parida and Dhir, 2022).

A reorganization of the economic and accounting profession is observed, as the need for the development of new skills and roles in these branches is rapid (Kottara et al., 2024d). The challenges bring new situations offering a set of opportunities for the harmonious coexistence of artificial intelligence and accounting for the advancement of accountants, in the context of modern business needs in a globalized competitive environment (Huang, Rust and Maksimovic, 2019).

The contribution of the present research lies precisely in this aspect through the investigation of artificial intelligence in Financial, Managerial accounting and Auditing, in order to help economists and accountants in adapting a new normality to the daily practice of businesses. This regularity relates to the future of AI in accounting, including advanced predictive analytics through its deeper integration into strategic financial planning and the development of systems capable of handling more complex accounting tasks with minimal human intervention in the accounting industry. The present research comes to illuminate critical issues in which there is a gap, as the literature is particularly limited in the field of accounting, investigating the level of how the presence and integration of artificial intelligence affects the accounting industry, and specifically we pose the **RQ: "How does artificial intelligence affect the application of Financial, Administrative and Audit Accounting;"**.

In the second part the literature review is presented, in the third the methodology, the findings are presented in the fourth, while in the fifth the discussion and conclusions follow, in the sixth the limitations with suggestions for further research, with a final section on the sources used by the researchers.

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## 2. Literature Review

### 2.1. Artificial Intelligence

Artificial intelligence as a concept was first presented at a conference in 1956, with speaker Marvin Minsky stating that, building machines with the ability to solve problems, visual perception, speech recognition, planning, decision making can process data and information in real time. In addition, it has been claimed that these "artificial intelligence

machines” are quite flexible and enhance the skills of human users, while increasing business efficiency and productivity (Faccia et al., 2019).

It is noteworthy that the artificial intelligence system is not a single technology but a set of technologies combined to perform different types of tasks. According to a publication by Sträßer and Stolicna (2023) 33% of companies frequently use artificial intelligence in at least one business function, 40% manage to increase investments in artificial intelligence and 60% already use Generative artificial intelligence (gen AI).

Often in the modern digital age we live in people acquire knowledge, interact and work in an expanded technological context. More specifically, with the use of robotics which includes robots in various stages of production of goods or provision of services (Li et al., 2020; Losbichler and Lehner, 2021).

Also, computer vision applications where sensors and learning algorithms are used in order to extract complex thematic information, through the automation or updating of other processes, even for predictive purposes (Zemankova, 2019).

Great interest is observed in natural language processing systems that can recognize and understand both written and spoken language, while in more advanced applications such as NeuroLinguistic Programming (NLP) through chatbots, call center interaction analysis and digital voice assistants such as Siri and Alexa can help many companies (Shi, 2020).

There are benefits in terms of improved efficiency and productivity, as AI-powered systems can manage a large amount of data with incredible speed, enabling each human resource to engage in more activities that are more creative rather than automated (Shneiderman, 2020).

Data-driven decision making using business AI systems to analyze large volumes of structured and unstructured data can add value to a business. This fact provides immediate information within a company by quickly updating and extracting data to identify trends, forecast and improve business processes. Through artificial intelligence algorithms it is easier to find patterns that human beings can bypass, missing the opportunity for policies, strategic planning, assessments of potential risk and the streamlining of business processes (Oberoi et al., 2021).

Another important advantage of artificial intelligence is operational efficiency in repetitive, time-consuming tasks, as it is easy to perform more complex calculations, data analysis, contributing to accuracy and reducing errors. Artificial intelligence enables users to detect not only errors but also security breaches, reducing potential losses (Wu et al., 2022).

The advent of artificial intelligence has brought significant changes to knowledge through intelligent systems that contribute to the discovery of data, with information in real time, so that employees and management of a company can make informed decisions that will not be harmful. The exchange of knowledge can be done within or outside the company both between departments and geographically dispersed locations, promoting innovation, productivity and efficiency (Cho, 2024).

## **2.2. Artificial Intelligence and Accounting**

In the accounting profession, artificial intelligence is no longer seen as something foreign, as accounting tasks are governed by automation with the aim of better customer service, increasing productivity, detecting a possible fraud and managing a larger volume of data useful for sound decisions (Odonkor et al., 2024).

There is an abundance of software around the world based on artificial intelligence to approve, issue, display and collect data from various documents such as invoices in order to perform risk management more directly through user monitoring (Vărzaru. et al., 2022).

There is a perpetual collaboration of accountants and artificial intelligence related to decision-making issues and it is crucial to adapt to the new normal where in the near future they will have to align. New technological developments and e-government affect the work and skills of accountants and all businesses that are called to respond to these new situations (Asonitou and Kottara, 2019; Asonitou et al., 2020; Loureiro et al., 2021).

It is observed that, in several companies to integrate artificial intelligence in order to have better deviation information for the purposes of forecasts and in general unstable situations to achieve optimal results. Its contribution to the empowerment of accounting teams through better distribution to heterogeneous teams is of crucial importance.

Artificial intelligence is used in a number of tasks such as the analysis of financial statements, tax preparation and planning of audit procedures, fraud detection, invoice processing, etc. (Liu, 2022).

Artificial intelligence has a positive impact on the quality of accounting information by enhancing tax and audit services, while providing a unique opportunity for management accountants to improve the measurement of corporate performance and create effective management control systems. Neural networks today can be used to predict fraud and improve the quality of control. Intelligent Decision Support Systems (IDSS) are based on the use of AI techniques, where it is possible to cover all the variables involved in solving accounting and control problems. Today company management can easily use a matrix to identify internal control weaknesses (Chowdhury, 2023).

There are several ethical challenges in terms of the impact on employment and the workforce, so there is a strong fear that artificial intelligence may replace human jobs in the accounting industry. However, it becomes important to understand the ethical implications of using artificial intelligence in decisions, since there is a need to establish ethical guidelines and regulations to ensure that it is used responsibly and correctly (Supriadi, 2024). The EU General Data Protection Regulation (GDPR) and other related regulations are governed by a strong legal framework and data privacy principles. It is necessary that the use of artificial intelligence works in favor of the human entity, ensuring a just society. Ethical issues in the use of artificial intelligence in accounting are even related to the interpretation of algorithms in higher-level decision-making, while human effects are embedded in artificial intelligence algorithms used in accounting (Sreseli, 2023).

The coordination of responsibilities between accountants/auditors for ethical systems based on artificial intelligence in accounting, particularly through algorithmic accountability as algorithms are viewed as objects of human creation and interaction, is of key importance (Han et al., 2023). Notably, the ethical intent and good governance of AI-based accounting technologies should ensure processes such as accountability to data ownership, challenge of data integrity, privacy and safeguarding of that data (Munoko et al., 2020). In addition, the distribution of decision-making power by accountants and company management is important, because there is the possibility of negative effects. This can happen if decisions are solely based on artificial intelligence, i.e. mitigation combined with human management is necessary. In a broader context the entire business system is apt to be based on moral and ideological awareness, which may be lacking in the set of decisions derived from artificial intelligence alone.

Man-machine coexistence with careful checks and balances is necessary, creating a framework for critical and normative thinking in order to create a sustainable business future (Lehner et al., 2022).

Artificial intelligence is coming to help the accounting and business industry and not lead to mass unemployment, since throughout the accounting cycle decisions still require direct human input.

### **2.3. The application of Artificial Intelligence in Financial accounting**

The presence of artificial intelligence has certainly brought many changes to the world map, but in some professions the human aspect will be preserved, as it has been found that the combination brings better results (Jejenywa et al., 2024).

It is a fact that the accounting entries in the **accounting** book, the reconciliation of the accounts are already part of the automation process (Kottara et al., 2024e). Bookkeeping is by far the most common, laborious, and amenable to automation among the jobs that fall under the umbrella of accounting requirements.

These processes are easy to automate through the possibility of machine learning, where accounting data is handled faster and more accurately. At the same time, in this way the possibility of fraudulent activity on the part of the employees is reduced (Adeyeri, 2024).

The emergence of "big data" has made it possible for businesses to analyze data and come up with findings that are useful in making decisions in order to be rational, fast and reliable, enabling both the control of future possibilities and threats.

Within the last decade, the advent of digitization, technical innovation and business globalization have contributed to a transformation of the nature of organizational structures and business processes (Norzellan et al., 2024).

Today it appears that several companies and organizations are developing rapidly with the help of technology and artificial intelligence, they achieve this through their ability to quickly adapt to the needs of the market. Thus they can

differentiate the services they provide and redirect the attention of competing companies, expanding their activities into areas that were previously unavailable (Kanaparathi, 2024). Since the advent of digitization and the implementation of centralized network management, the prevalence of flexible organizational structures with broadband connectivity has been supported in order for a company to have access to any part of the planet. The majority of transactions are now done digitally and the rise of the internet economy has made possible the creation of new supply chains and virtual corporate structures. It is becoming clear that all these factors play a decisive role in accounting and financial services, which are vital to businesses and will always look for ways to improve. Automation has helped the accounting profession while rapid changes can be seen in the role it has played in the field of Financial Accounting (Estep et al., 2024).

Nowadays, modern robots have the ability to undertake monotonous and repetitive activities, where this gives accountants the opportunity to spend more time on strategic thinking, analysis and forecasting. Accountants now possess more time to perform tasks that are more accurate as a result of new technology that allows them to access real-time financial data and analyze and report simultaneously.

However, it is important to understand that the use of robotic functions will not result in the replacement of accountants. On the contrary, it will improve their responsibilities, through the possibility of being able to contribute more holistically and decisively to the daily accounting cycle and the publication of financial statements with a high degree of compliance with the International Financial Reporting Standards.

#### **2.4. The application of Artificial Intelligence in Managerial Accounting**

The field of Management Accounting and management accountants are faced with rapid technological developments. In the past, direct labor was best for most cost allocation processes, and a smaller base of general expenses allowed allocation mechanisms based on production level. However, this is no longer the case as the use of standard costing processes becomes increasingly inefficient for businesses as they see an increase in the variety of products they sell and the complexity of their production processes. This results in increased general expenses and costs that cannot be allocated in an efficient manner. It is important for accountants to stay abreast of the latest technological developments and anticipate future changes in corporate and management accounting practices (Zhang et al., 2023).

Today through the provision of services with remote computing, enterprises increase the flexibility of their resources in several ways, the underlying systems become modifiable according to the demand, which leads to a significant reduction of their essential fixed costs over time. In this way, both small and large businesses have an easier time accessing the most advanced computer and information technologies (Napolitano, 2023).

It becomes clear that making administrative decisions requires the use of specialized data, as financial statements such as the Balance Sheet and the Profit and Loss Account are important reference elements for financial managers.

Strategic issues that need in-depth knowledge include, but are not limited to, developments in information systems, internet-based technology, environmental sustainability, and the global financial crisis (Dai and Vasarhelyi, 2023).

Globalization has brought about significant impacts on industries and issues such as payroll, taxation, information technology, planning, innovation, research and customer relationship management.

When making decisions, it is important that the new accounting procedures are accepted by the majority of people, but this takes time, as accounting management needs to transform and develop in order to adapt to the increasingly unpredictable nature of the business environment.

A company's management accountants must be knowledgeable about the technology adopted by the companies they work with, as robots prove useful in the planning and budgeting phase, providing a wide variety of viable scenarios that are effective for the company's course (Secinaro et al., 2024).

In several cases the right algorithms can produce predictions for both the short and long term, avoiding the potential risks that exist in the business environment. Each of the company's specific budgets depends on accurate revenue forecasts.

With the help of predictive models built using machine learning methods, business strategy can be improved. Predictions can become much more accurate and this is a result of the use of artificial intelligence. Accountants, on the

other hand, need to demonstrate an increased level of care regarding the data they enter into the system (Quinn and McConville, 2024).

In addition, as mentioned by Arkhipova et al., (2024) machine learning models are applied to huge amounts of unstructured data, such as an email, contract, graph, etc., providing advantages to businesses that already have the ability to provide superior strategic solutions and operational options.

Their control requires the use of specialized equipment and personnel, where today management and chartered accountants are required to upgrade their skill set in order to maintain their competitive edge in the modern global market.

## 2.5. The application of Artificial Intelligence in Auditing

Artificial intelligence has not left auditing untouched, as it appears to be beneficial by reducing the day-to-day tasks of auditors, giving them more time. It is considered important for auditors to evaluate the data resulting from the adoption of artificial intelligence, as a faulty algorithm can have a significant impact on the ability to audit. Given the lack of human control, serious errors are likely to occur (Raschke et al., 2018). However, fraud detection and prevention techniques can be improved through artificial intelligence systems due to the fact that these systems are rule-based and cannot be influenced by external variables such as power and any vested interests.

Deliberate actions by executives and staff can lead a business to significant losses. These losses in turn can be caused by theft, tax evasion, embezzlement, falsification of accounting documents and other financial crimes (Agustí and Orta-Pérez, 2023).

It is evident that in recent years the use of artificial intelligence (AI) in **Auditing offers** the potential for new opportunities by introducing new approaches to challenges faced in the past. Artificial intelligence algorithms have the potential to automate the process, which enables quick and accurate identification of the hazard and point of investigation.

However, there is a significant improvement in the accuracy of detecting a fraud with the help of artificial intelligence to instantly process and analyze a huge amount of data. This is achieved by detecting fraudulent behavior allowing it to recognize irregularities that people may overlook (Aitkazinov, 2023).

The information management that technology offers is a great advantage for an auditor who manages and protects his clients' money by performing higher quality audits.

The use of Robotic Process Automation (RPA) according to Sheppard (2019) could improve the effectiveness of control by reducing time spent, better assessing risk and resulting in better decision making.

Increased efficiency is one of the advantages of artificial intelligence in the process of conducting financial audits and drawing up annual reports.

This is made possible by algorithms powered by artificial intelligence, enabling auditors to make more accurate estimates, which in turn enhances the reliability of financial audits and reduces the risk of making incorrect claims.

The use of artificial intelligence in auditing raises a number of serious ethical issues. In particular, the ethical issues arising from AI audits highlight the importance to ensure that AI algorithms are impartial, transparent and do not influence the judgments they make. The study highlights the need for auditors to conduct a comprehensive assessment of the models, algorithms and data sources used by AI systems. This is to ensure ethical decision-making and to eliminate the risk of bias. It is important that AI algorithms are both visible and interpretable in order to maintain the trust of stakeholders and the integrity of the auditing profession (Chowdhury et al., 2022). The study's findings led the researchers to conclude that auditors should inspect, verify and validate artificial intelligence systems to ensure they comply with their ethical rules and regulations.

On the other hand, despite the advantages, there are also challenges, such as the lack of technical skills, and for this reason, the continuous education and training of auditors interested in making the most of AI-based solutions is necessary. By effectively communicating with each other and working together across teams, it is possible to overcome implementation challenges and reap the full benefits of using AI in auditing. The loss of jobs caused by intelligent

automation is an even more serious concern. As computers become more capable of performing tasks previously performed by humans, it is possible that some auditor roles will become obsolete (Kindzeka, 2023).

Auditors who are made redundant as a result of automation may find it difficult to obtain new career opportunities if they lack the necessary skills for alternative employment opportunities. As a result, a large number of workers may experience a sense of financial instability. Additionally, if experienced auditors leave their positions, the quality of audits may decline, as machines cannot seem to match the intuition and judgment of humans.

Despite the potential benefits associated with the use of artificial intelligence and intelligent automation in auditing, there are potential risks associated with its use, which need to be carefully evaluated before deployment (Anh et al., 2024).

It is becoming clear that methods should be devised to retrain and improve the skills of inspectors in order to reduce risks. Auditors today need to become more strategic and consultative in data analysis, data science and cyber security, providing accurate, reliable and transparent data, showing the way for companies to invest money in the development of innovative audit techniques that use artificial intelligence.

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### 3. Methodology

In the present work, the researchers relied on the utilization of already existing research, through a systematic way of identifying, criticizing and summarizing the scientific field under consideration, helping to define current knowledge, gaps and future directions.

The data were drawn from databases such as libraries, electronic repositories and other authoritative scientific sources to collect research related to the topic under investigation in the field of accounting and artificial intelligence.

The bibliographic sources were then evaluated in terms of their quality, reliability and contribution to the topic. After this process, the most important findings were organized and at the same time it was possible to understand the existing research situations and to identify the research gaps that require further investigation.

Table 1 shows that the research revealed three dominant areas of accounting that have been most affected by artificial intelligence: Financial accounting, Managerial accounting and Auditing.

**Table 1** Themes of Artificial Intelligence in Accounting and Auditing

The application of Artificial Intelligence in Financial accounting
The application of Artificial Intelligence in Managerial accounting
The application of Artificial Intelligence in Auditing

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### 4. Results

The findings came from the summary of the literature regarding the application of Artificial Intelligence in the field of Financial and Managerial Accounting and Auditing, where it is evident that its effect is indisputable and with stormy challenges.

Then, regarding the RQ: How artificial intelligence affects the application of Financial and Managerial Accounting and Auditing, the researchers present the results through a table they created in a holistic and scientific way.

It has been found that the application of Artificial Intelligence (AI) offers enormous potential to the accounting profession. It has the ability to reduce repetitive tasks, while at the same time increasing the production of reliable financial information.

In addition, it can prevent and control business risks and improve human resource efficiency. Artificial intelligence provides accountants with a large volume of data that helps rational decision-making, giving more accurate and reliable information, intensifying the effort to adapt to modern changes and supporting the accounting profession in the "new normality".

**Table 2** The overall picture of the application of Artificial Intelligence in Financial, **Managerial Accounting and Auditing**

<b>Application Points</b>	<b>Central points</b>
Evaluation of existing accounting procedures:	Focusing and examining daily operations in order to identify and improve daily operations that are repetitive, time-consuming tasks or even areas prone to accounting errors. Analysis of accounting work flows in order to identify any bottlenecks in order to provide opportunities for improvement.
Defining goals towards the integration of Artificial Intelligence:	Defining clear goals for the integration of AI in the accounting circuit, through the automation of "routine" tasks, while simultaneously improving the accuracy of data and leveraging predictive analyzes to make rational financial and operational decisions.
Investigating and Choosing the Right AI Tools:	Search and select the appropriate AI tools that are personalized and aligned with the company's goals and accounting tasks. This can be realized through the gradual integration of AI into existing systems. Focus and examine the functionality of the selected tools by comparing cost-effectiveness and user-friendliness of financial and accounting information.
Development of a comprehensive project business plan:	Development and description of a comprehensive plan that thoroughly describes the administrative, financial and accounting tasks, schedules, resources required and potential challenges that will be encountered. Critical point here is the data migration and software installation, as well as the training team.
Data infrastructure planning and preparation:	Evaluation of the data storage process in the management systems through security valves for smooth integration, through proper preparation and organization of accounting events and financial reports.
Training of accountants and all staff on the use of Artificial Intelligence AI:	Carrying out training seminars with the aim of familiarizing professional accountants and all company employees with AI tools. Focus on the practical interaction of applications with daily accounting tasks.
Thorough integration of AI tools:	Integrating AI first into less critical accounting tasks to reduce the risk of business disruption. The gradual adaptation of staff, especially accountants and economists, to new technologies and procedures is considered important.
Systematic monitoring and optimization of AI performance:	Continuously evaluate the effectiveness of AI tools through user reports and feedback. At the same time, conducting a performance analysis in order to improve the functionality and efficiency of all accounting tasks and processes.
Developing an ethical framework for data assurance, compliance and security:	Organization and continuous implementation of security protocols according to compliance standards in Accounting and Financial Information. Reinforcement of the Ethical framework that must govern daily processes through cyber security and e-governance practices, throughout the range of accounting procedures on an accounting and tax basis.

## 5. Discussion

The purpose of this study is to investigate artificial intelligence and *"how it affects the application of Financial, Managerial Accounting and Auditing"*.

The majority of the research led to the conclusion that its application greatly affects the accounting industry and especially in the three sectors that were thoroughly analyzed.



More specifically, through the literature review, artificial intelligence finally found more benefits to the accounting industry, as it contributes to the efficiency and effectiveness of the internal control system to produce highly reliable accounting information (Liu, 2022; Odonkor et al., 2024).

Furthermore, it has been observed that the daily tasks of financial accounting are carried out more easily through the harmonious relationship that develops between accountants and "smart machines" (Sreseli, 2023). Software systems with the presence of artificial intelligence seem to make accounting work more flexible for both journal entries, general and detailed ledgers, and the balance sheet, reducing potential errors from the workload and fatigue that the accounting profession brings (Jejenywa et al., 2024; Adeyeri, 2024).

Routine accounting work is carried out faster and more automated, while the publication of financial statements through the integrated and intelligent systems of artificial intelligence (Estep et al., 2024), can be used more easily to reveal relationships between variables that affect accounting information using Intelligent Decision Support Systems (IDSS).

Also, it became clear that there is great flexibility in making predictions for possible frauds and at the same time improving the quality of the audit (Zhang et al., 2023). In recent years, management accountants have been able to plan, budget and cost using advanced systems and take into account the information of neural networks, for a more advanced use of artificial intelligence in accounting, creating the conditions for better and safer accounting quality information (Napolitano, 2023; Secinaro et al., 2024; Quinn and McConville, 2024).

However, researchers reported that despite the great benefits of artificial intelligence in the accounting industry, there are also some limitations, these are around data and ethical concerns in the context of GDPR (Dai and Vasarhelyi, 2023).

To address these challenges, further research is suggested in areas such as the ethical aspects of artificiality, the development of training programs and the creation of custom algorithms (Vărzaru. et al., 2022).

Today in business it is a great advantage to be able to provide high quality financial and accounting services, while at the same time employees in the industry can reap huge benefits from technology in a number of ways, including automating repetitive tasks, processing massive amounts of data, and being able to make decisions much faster and with greater clarity.

However, there is an urgent need for the accounting profession to adapt immediately to the "new normal" as businesses stand to benefit greatly from the ways in which the accounting industry can be transformed through the technological revolution (Chowdhury et al., 2022 ).

For these reasons, careful planning, thorough risk assessment and continuous staff training are essential. Collaboration between humans and machines, cyber security and adherence to ethical and accounting standards are four of the most important conditions for the successful use of artificial intelligence in accounting (Raschke et al., 2018).

In addition, auditors-accountants need to adapt to new situations and rapid developments in order to stay ahead of the competition in order to offer sustainable services to their business clients (Agustí and Orta-Pérez, 2023).

The auditor's profession is not threatened by the presence of artificial intelligence, everyone else is presented with a unique opportunity to improve it, acquiring appropriate knowledge and developing advanced skills, to ensure the reliability and integrity of financial data and reports (Aitkazinov, 2023).

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## 6. Conclusions

From the findings of this research, the researchers highlighted the importance of the interaction and influence that exists during the application of artificial intelligence in the accounting industry. While, seven central points of application emerged in the context of Financial and Managerial Accounting and Auditing.

Specifically: a) the evaluation of the accounting procedures that already exist in a company, b) the definition of goals for the integration of Artificial Intelligence, c) Investigation and Selection of its appropriate tools, d) the development of an integrated business project plan, e) the design and preparation of data infrastructure, with the parallel training of accountants and all staff for its use, f) the thorough integration of its tools, g) the systematic monitoring and optimization

of its performance and k) the development of an ethical framework for data assurance, compliance and security in today's globalized environment.

#### *Limitations and suggestions for future research*

Through this research, a systematic effort was made for the field under consideration, however, as in most studies, there were limitations, as it focused on secondary research through a literature review. In addition, the evolution and application of Artificial Intelligence, requires further investigation, with the aim of understanding the application, effects and perspectives, in order to improve the efficiency and quality of the accounting profession. The interaction of accounting and artificial intelligence is an event that has brought significant changes in Financial and Managerial Accounting and Auditing, where it should be further examined through qualitative and quantitative research, comparing primary with secondary research. It is important that the research findings are compared and expanded in order to have a more complete picture of the revolutionary relationship that emerges between humans and the systems of the new normal that the dimension of artificial intelligence brings to the accounting industry.

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### **Compliance with ethical standards**

#### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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