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The evolution of accounting practice in the age of artificial intelligence: challenges and opportunities for higher education in public accounting

La evolución de la práctica contable en la era de la IA: desafíos y oportunidades para la educación superior en contaduría pública

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Abstract

This paper explores the relationship between accounting and artificial intelligence (AI), highlighting the transformation of accounting practice through history, from its origins in ancient civilizations to the current digital era. It begins with a historical journey, from Mesopotamia to the Roman Empire, mentioning milestones such as the Merdiban method and Luca Pacioli's double-entry bookkeeping. The core of the study is a systematic review that assesses the impact of AI and Industry 4.0 on the accountant's role, emphasizing how technological evolution has driven efficiency and accuracy in accounting processes, transforming tasks and roles. Digitalization, far from rendering the accountant obsolete, provides the opportunity to adopt strategic roles, moving towards data analysis and decision-making. However, a challenge is highlighted in accounting education, which must evolve to equip professionals with the necessary skills in this digital context. In conclusion, it is argued that AI and automation not only redefine the accounting field towards technological integration but also ensure its future relevance, urging for proactive adaptation and interdisciplinary collaboration in the digital age.

Keywords: accounting, technological evolution, artificial intelligence, accounting myopia, accounting practices, industry 4.0.

Resumen

Este artículo explora la relación entre la contabilidad y la inteligencia artificial (IA), destacando la transformación de la práctica contable a través de la historia, desde sus orígenes en antiguas civilizaciones hasta la era digital actual. Inicia con un recorrido histórico, desde Mesopotamia hasta el Imperio Romano, mencionando hitos como el método Merdiban y la contabilidad por partida doble de Luca Pacioli. El núcleo del estudio es una revisión sistemática que evalúa el impacto de la IA y la Industria 4.0 en la función del contador, enfatizando cómo la evolución tecnológica ha impulsado

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la eficiencia y precisión en los procesos contables, transformando tareas y roles. La digitalización, lejos de hacer prescindible al contador, le brinda la oportunidad de adoptar roles estratégicos, moviéndose hacia el análisis de datos y la toma de decisiones. Sin embargo, se subraya un desafío en la educación contable, la cual debe evolucionar para equipar a los profesionales con las habilidades necesarias en este contexto digital. En conclusión, se argumenta que la IA y la automatización no solo redefinen el campo contable hacia la integración tecnológica, sino que también aseguran su relevancia futura, instando a una adaptación proactiva y colaboración interdisciplinaria en la era digital.

Palabras Clave: contabilidad, evolución tecnológica, inteligencia artificial, miopía contable, prácticas contables, Industrias 4.0.

Introduction

Public accounting is a human activity that has existed since antiquity (George & Alvarez Medina, 2005). Some authors clearly consider its origins in ancient civilizations, while others debate these arguments and place the origin of accounting much closer to current civilization in the 14th century (Casal & Viloria, 2007; Kizil, 2023; Shenderivska, 2022). Those defending the first stance believe that the origin of accounting dates back to ancient civilizations, specifically to Mesopotamia (present-day Iraq) and ancient Egypt (Casal & Viloria, 2007).

In Mesopotamia, accounting practices emerged around 4000 to 3000 BC, where clay tablets were used to record transactions, inventories, and financial information (Casal & Viloria, 2007). It is likely that the first accountants were scribes who were responsible for keeping records and managing financial transactions (George & Alvarez Medina, 2005; Pérez Vaquero, 2010). In ancient Egypt, accounting was also practiced, and there is evidence that accountants known as scribes of the house of gold were in charge of recording and managing the kingdom's finances (Zambrano Rodríguez & Forero Moreno, 2017). Similarly, accounting techniques and practices further developed in ancient Greece, and philosophers like Socrates, Plato, and Aristotle contributed to the understanding and analysis of financial records (Casal & Viloria, 2007). Over time, accounting principles and practices spread to other civilizations, including the Roman Empire, where detailed financial records were maintained for tax purposes (Casal & Viloria, 2007; Kizil, 2023; McBride & Verma, 2021).

It is also possible to trace the application of the staggered method or Merdiban in the Ottoman Empire. This method, also known as *Muhasebe Usulü*, was a financial recording system used by the Ottoman Empire for over 500 years, from the 14th century to the early 20th century. Its name derives from the Persian word merdiven, meaning ladder, referring to the stepped structure that characterized its organization (Elitaş et al., 2008; Kizil, 2023).

The Merdiban was used to accurately and efficiently record the empire's financial transactions, including income such as taxes, tributes, customs, trade, etc., expenses such as salaries, administration, public works, army, etc., and debts like loans, financial obligations. The system was based on three main registers: the General Ledger, which recorded all transactions chronologically; the Journal, which detailed daily operations with greater precision; and the Balance Sheet, which presented a summary of the empire's assets, liabilities, and equity. These books were complemented with other auxiliary registers, such as the Siyakat, a specialized calligraphic script for numeric texts (Elitaş et al., 2008).

On the other hand, those defending the second stance group themselves into what could be called the history of modern accounting. These authors consider that the turning point from where the beginning of accounting can be evidenced was the appearance of Luca Pacioli's book, *Summa de Arithmetica, Geometria, Proportioni et Proportionalita*, which introduced the technique of double-entry bookkeeping (Kizil, 2023).

For these authors, double-entry has been the basis of accounting for more than five centuries (Staszel, 2014). In the 17th century, accounting began to spread from Italy to the countries of Western and Central Europe due to the shift of the European commercial center to the North Atlantic and the North Sea. In this same sense, the French commercial code, *Ordonance de commerce*, issued in

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1673, played a significant role in popularizing accounting by imposing the obligation of bookkeeping on merchants (Staszel, 2014).

Despite the debate over its origin, the presence of accounting practice in the development of humanity and modern organizations is undeniable (Johnson, 1975). Accounting has been a constant over the last 500 years of human history, where the accountant has played a predominant role, especially since the Industrial Revolution. Accountants were an essential component for the development of the capitalist economic system (Bryer, 2006, 2024) and the legal and economic systems (Bryer, 2024; Edwards, 1989). However, over the years and with the inclusion of new technologies, their role was relegated to levels of lesser importance within organizations (Meiryani et al., 2022), especially in developing countries.

In many organizations, the role of the accountant has progressively been relegated to merely technical functions, resulting in a loss of its strategic relevance within the corporate structure. With the arrival and widespread adoption of accounting software systems, the accountant, who previously played a fundamental role as a key advisor in financial and strategic decision-making, has seen their function transformed into that of a support role, primarily limited in many cases to the simple input and processing of data. This shift has diminished their prominence and marginalized their capacity for critical analysis and advisory functions, aspects that had historically been essential for the proper interpretation of financial information and business planning. To a large extent, this problem is presented by several factors among which the training and the myopia of accounting professionals towards new technologies and the transformation of their professional practice stand out (Hopper, 2018; Laffin, 2015; Santos de Jesus et al., 2020).

More recently, the development of digital technology has resulted in significant benefits for both accountants and organizations, by facilitating more effiicient data processing, improved internal control, and the production of high-quality financial reports (Fauzi et al., 2022; Gorodilov et al., 2023). This relationship between accounting and technology is interdependent, as the technologies used in accounting are influenced by production systems and the nature of accounting instruments, thus impacting the accounting content (Gorodilov et al., 2023).

In this context, this document discusses the need to transform the work and training of accountants in the face of new technologies. This transformation is essential not only to restore the prominence that accountants have historically held in the strategic advisory of organizations but also to ensure that their competencies and skills align with the demands of the contemporary business environment. Emerging technologies, such as the automation of accounting processes and data analysis through advanced tools, require a comprehensive rethinking of the accountant's role, which must evolve from being a mere system operator to a professional with analytical, strategic, and technological capabilities. Thus, this document aims to demonstrate that the future success of organizations partly depends on having accounting professionals who not only manage financial information but also actively participate in value creation through deeper analysis and data-driven decision-making. For this purpose, a systemic literature review was conducted about the role of the accountant in contexts of Industry 4.0 and artificial intelligence following the criteria proposed by Chicaíza-Becerra et al. (2017) and Yang & Xia (2021). Documents addressing the role of the accountant in the mentioned context were specifically searched in Scopus and Redalyc. Subsequently, relevant articles and works on the subject were searched in complementary databases and indexes, such as Google Scholar, with the intention of covering as much information as possible given the novelty of the topic. Subsequently, a qualitative synthesis (Bearman & Dawson, 2013; Seers, 2012; Thomas & Harden, 2008) was carried out, which allowed identifying the main points to carry out the discussion.

Theoretical Framework

Technology and Accounting

Technology has played a significant role in the development of accounting throughout history (Gorodilov et al., 2023; Kizil, 2023). It has enabled the automation and stream-

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lining of accounting processes, making them more efficient and accurate (Kizil, 2023). Each technological revolution has brought improvements in this field (Gorodilov et al., 2023).

In ancient civilizations, accounting was primarily manual, relying on basic tools such as clay tablets and abacuses (Karaca, 2023; Kizil, 2023). With the advent of the first industrial revolution and the rise of modern accounting practices, technology began to play a more prominent role in the field (Kizil, 2023). his historical period witnessed several technological advances that transformed accounting, such as double-entry bookkeeping (Gorodilov et al., 2023), and later, with more technological advances, the introduction of typewriters and calculators (Kizil, 2023). Furthermore, over time, more sophisticated accounting practices were developed. The use of computers marked the beginning of digital accounting (Gorodilov et al., 2023). These revolutionary technological changes, in each of their moments, propelled the accounting profession towards automation and efficiency in the processing of financial data.

Similarly, technology applied to this task influences the accounting of commercial and business entities (Larios Soldevilla & Atoche Socola, 2023) and their reporting, which led to changes in accounting methods and data processing (Gorodilov et al., 2023; Shygun & Biriuk, 2022). The development of information technology has had a profound impact on the field of accounting, particularly in the development of Accounting Information Systems (AIS), the inclusion of Robotic Process Automation (RPA), and financial data processing (Fauzi et al., 2022; Gorodilov et al., 2023; Larios Soldevilla & Atoche Socola, 2023).

More recently, a significant transformation has been observed in the functions of accounting and the skills required for accountants, thanks to technological innovations (Fauzi et al., 2022; Karaca, 2023). Technologies such as blockchain, artificial intelligence, cloud technology, RPA, and big data systems are leading this digital transformation (Fauzi et al., 2022; Karaca, 2023; Larios Soldevilla & Atoche Socola, 2023). These tools are profoundly impacting how accounting tasks are carried out and are reshaping the landscape of the accounting profession, requiring accountants to acquire new competencies, not only technical but also technological, and adapt to an ever-evolving environment (Fauzi et al., 2022; Karaca, 2023; Larios Soldevilla & Atoche Socola, 2023).

Technology stemming from Industry 4.0 has played a crucial role in the development of accounting, allowing its transfer to the digital platform (Esmeray & Esmeray, 2020). Revolutionary turning points, such as uniform accounting systems, practices of international accounting standards, and the use of computer programs, have transformed the field of accounting, improving efficiency, accuracy, and the speed of financial reporting and analysis (Esmeray & Esmeray, 2020).

Technological development has led to the modification of the main scientific indicators of accounting, including its theme, objects, and methods (Shygun & Biriuk, 2022). However, the more widespread adoption of software products and online services, such as NFC technologies, cloud services, and blockchain, has the potential to further enhance the technological level of accounting practices (Shygun & Biriuk, 2022) and transform their work, requiring a transformation of the accountant's role.

Technology and the Role of the Accounting Professional

Accountants, by utilizing technology in their practices, become natural agents of technological development in accounting (Karaca, 2023). Their role is undergoing a significant transformation in response to the digital revolution and the growing predominance of Big Data (Mayor-Ríos et al., 2019). Academic institutions have begun to adapt to these changes by incorporating these elements into their accounting curricula (Mayor-Ríos et al., 2019). However, there is still a considerable journey ahead to equip future professionals with the tools and competencies necessary to perform adequately in this renewed context (Mayor-Ríos et al., 2019). This evolution is expected to continue, steering the accounting profession towards roles predominantly focused on data analysis and decision-making based on complex and voluminous information (Mayor-Ríos et al., 2019).

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Failing to adopt digital technology in their practices could leave accountants behind in the technological advancement of accounting, missing the opportunity to employ tools like artificial intelligence for data analysis, automation, and support in decision-making. This integration is crucial for improving efficiency and accuracy in areas such as financial analysis, risk assessment, and fraud detection (Karaca, 2023). Nevertheless, adaptation to digitalization and continuous skill updating are essential (Fauzi et al., 2022; Gorodilov et al., 2023), so that accountants can navigate through the technological transformation brought about by the innovations of Industry 4.0 and 5.0, which have reformed the competencies necessary in accounting and opened new opportunities in information system audits and consulting, as well as facilitating more efficient financial prediction, risk management, and improvement in fraud detection processes, among others.

The introduction of automation in accounting has significantly modified the accountant's work, making their role in relation to artificial intelligence constantly evolving (Esmeray & Esmeray, 2020; Shygun & Biriuk, 2022). While AI can perform specific tasks, accountants are crucial for interpreting and validating the results it produces, ensuring regulatory compliance, and providing professional judgment. Additionally, they have had to adjust to digital change, adopting skills in digital accounting and ensuring an ethical use of AI.

In this scenario, the digital era demands continuous skill improvement to face challenges as growth opportunities, a transformation of the accountant's role towards data analysis and decision-making based on complex information (Mayor-Ríos et al., 2019). From the educational domain, universities must adapt their curricula to prepare future professionals with the necessary competencies for this new era, although much remains to be done to adequately equip accountants for this changing context (Mayor-Ríos et al., 2019). The role of the accountant in the digital age has evolved from a traditional function to one that is more advanced technologically, requiring them to stay up-to-date with technological advancements and continuously improve their skills (Santos de Jesus et al., 2020).

Discussion

In the current digital transformation landscape, the accounting profession faces unprecedented challenges and significant opportunities due to the growing adoption of AI and process automation. These technological advances are redefining the traditional role of the accountant, forcing a reconsideration of their approach to accounting practice. Traditionally, accounting has been seen as a profession focused on numerical accuracy, tax compliance, auditing, and financial reporting. This could be considered a new form of myopia for accountants, or accounting myopia, meaning a blindness to evolve and see beyond what is institutionally established for an accountant. However, with automation assuming routine tasks such as transaction recording, account reconciliation, and financial statement preparation, accountants must now adapt to an environment where their traditional technical skills are complemented, and in some cases replaced, by technology. This paradigm shift does not signify the obsolescence of the accounting profession but rather an evolution towards roles that demand an expanded set of competencies. Automation and AI not only free accountants from repetitive tasks but also offer them the opportunity to focus on higher-value-added activities. In this new context, accountants must be capable of interpreting and analyzing financial information generated by automated systems, offering strategic insights that facilitate decision-making in organizations (Nkwede & Aniuga, 2023). This requires a deep understanding of business models, as well as advanced analytical skills to assess the impact of various variables on the financial health of the organization.

In this framework, accountants must not only master traditional accounting and financial principles but also develop competencies in areas historically considered outside their field of specialization (Ma, 2022). The expansion of these competencies ranges from administrative and marketing knowledge to technological understanding and process awareness, each contributing to the value accountants bring to any organization, see Figure 1. In other words, the accountant must once again become a holistic and well-rounded professional.

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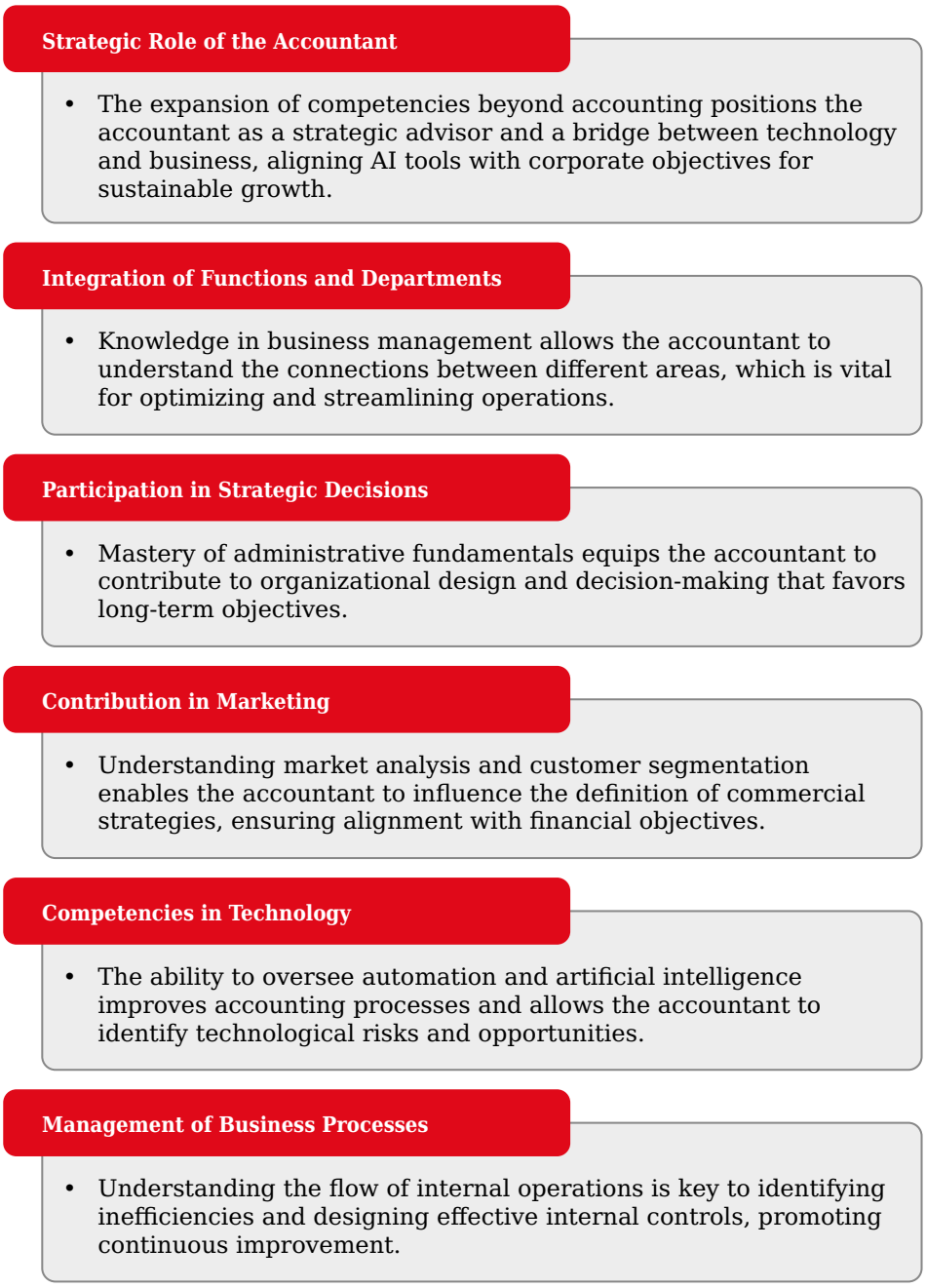

Figure 1. New roles and skills required by accountants to add value in the context of AI

Source: Own elaboration.

From an administrative perspective, knowledge in business management allows accountants to better understand how various functions and departments interconnect within an organization (Mubarak, 2013). This is crucial for identifying opportunities for optimization and operational efficiency, as well as for implementing management practices that promote agility and business resilience.

By understanding the basics of administration, accountants are better equipped to participate in strategic decision-making and contribute to the design of organizational

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structures that favor the achievement of long-term goals in line with their financial situation. In marketing, mastering concepts such as market analysis, customer segmentation, and positioning strategies allows accountants to participate in defining effective business strategies from their expertise standpoint (Bendle et al., 2021; Misic et al., 2003). This understanding of marketing facilitates the assessment of the financial impact of advertising campaigns, promotions, and the launch of new products or services, ensuring that marketing investment decisions align with the organization's financial objectives.

Technology, especially regarding automation and artificial intelligence, is another critical area of competency for the modern accountant. The ability to understand and oversee the implementation of automated accounting and financial systems not only enhances the efficiency and accuracy of accounting processes but also enables accountants to identify risks and opportunities associated with technology. This includes evaluating technological solutions from a cost-benefit perspective, as well as managing system integration to ensure data consistency and integrity.

Lastly, knowledge of business processes allows accountants to map and understand the flow of transactions and operations within the company. This is essential for identifying bottlenecks, inefficiencies, and operational risks, as well as for designing and implementing effective internal controls. Additionally, mastering business processes facilitates collaboration with other departments in optimizing workflows and implementing practices that contribute to continuous improvement.

Expanding the competencies of accountants, encompassing areas beyond accounting, not only reinforces their role as strategic advisors but also positions them as a crucial bridge between technology and business. Moreover, this could dispel some fatalistic forecasts that currently predict the demise of the accounting profession (Eloundou et al., 2023), perhaps with some justification.

Beyond financial analysis, the modern accountant can assume the role of strategic advisor, participating in business planning and long-term strategy development. This role leverages their understanding of accounting and financial principles to guide the organization towards sustainable growth and profitability.

Another opportunity area for accountants in the digital age is risk management. With the increase in the complexity and speed of commercial transactions, companies face a variety of financial and operational risks. Accountants, with their deep knowledge of internal processes and regulations, are exceptionally positioned to identify, assess, and mitigate these risks, using advanced analytical tools to foresee potential scenarios and their financial implications.

Digital transformation has also led to new forms of fraud and cybercrime, underscoring the importance of information security and the protection of financial data. In this regard, accountants can play a vital role in developing and implementing internal control systems and security protocols, working alongside IT experts to safeguard the organization’s assets.

Finally, accountants can expand their professional scope towards the realm of sustainability and corporate social responsibility (CSR). Companies are increasingly committed to operating ethically and sustainably, which includes environmental, social, and governance (ESG) management. Accountants, through their expertise in measurement and reporting, can significantly contribute to assessing the organization’s ESG performance, thereby facilitating transparency and promoting responsible business practices. Here, new roles such as the environmental accountant integrate all environmental criteria into accounting, moving beyond purely financial pigeonholing to think about a superior social role.

The Problem from an Educational Perspective

Given the trend towards meeting demand and the scarce reading of the environment, many universities, especially in Hispanic America, are dedicated to training accountants according to traditionally accepted

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standards. The competencies taught in their accounting programs often do not extend beyond socially and traditionally established techniques.

This situation could be due to several reasons. Here, it's possible to mention the tendency to think that the university's sole purpose is to professionalize trades or deliver professionals to society. This overlooks the purpose of the university as a center of culture and intellectual development, which ultimately leads to societal progress.

According to Ortega y Gasset, the university's purpose is not simply to transmit specialized knowledge or prepare students for the labor market. Rather, the university is a center for the creation of an intellectual culture that fosters critical thinking and deep reflection (Ortega y Gasset, 1966). This author argues that the university should cultivate in students not only knowledge but also the ability to think autonomously and critically (Ortega y Gasset, 1966). Critical thinking is key for professionals in business sciences (Hernández et al., 2019), such as accountants (see Figure 2).

Perhaps this has been the case in accounting for many years. Academic programs, university faculties, and experts in the field have predominantly directed their efforts towards research and the perfection of technical knowledge, neglecting or underestimating the importance of theoretical knowledge and critical analysis of the academic and business context in which they operate. This trend has had significant consequences for the accounting profession, relegating the traditional role of the accountant, omitting new areas of action such as the environmental component, and fostering the emergence of new disciplines, or traditional disciplines with new approaches, that have started to occupy spaces that were previously exclusive to accountants.

The emergence of disruptive technologies, including Chat GPT and other forms of artificial intelligence, has marked a turning point in the perception and approach of accounting researchers and faculties in some countries. Before this phenomenon, there was a notable lack of attention to the integration and potential impact of these advanced technologies on the profession and accounting practice. This omission can be considered a missed opportunity, as anticipation and preparation for imminent technological changes are crucial in any discipline, especially in fields as fundamental and cross-cutting as accounting. This seems to be a systemic problem caused by accounting myopia that prevents seeing beyond technique. For instance, in Colombia, the International Financial Reporting Standards were only implemented in 2015. The country's universities had to change their curricula to adapt to this (Quintero Cardona, comunicación personal, 2024). At that time, AI was just a whisper; now, it's a reality. However, AI in accounting has been implemented since the 1950s (Török, 2022).

With the public emergence of these technological disruptions, there has been a reaction, perhaps belated, that has spurred discussions about the function and role of the accountant in the new technological paradigm. These conversations are essential but

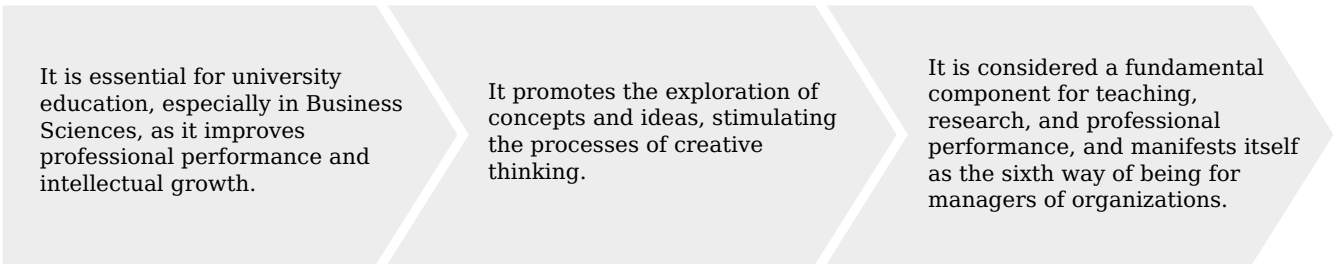

Figure 2. Contributions of critical thinking to accounting and business science professionals

Source: Own elaboration based on Hernández et al. (2019).

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reveal a lag in the adaptation and adoption of technological innovations by academia and professionals in the sector. This delay in recognizing and addressing the impact of artificial intelligence raises questions about accountants' preparedness to face the challenges and opportunities these technologies present.

It is evident that accounting, as a profession, must redefine itself in a context where traditional tasks are being transformed or even replaced by automated systems and intelligent algorithms. This change affects not only the technical competencies required but also analytical and adaptation skills. Accounting researchers and faculties must, therefore, review and update their curricula and research lines to include a more robust focus on emerging technologies, ensuring that future accountants are equipped not only to use these tools but to understand their operation, scope, and limitations. Additionally, given that the main development of the accounting discipline currently comes from English-speaking countries, it is essential to encourage Hispanic students and accounting professionals to adopt English as a second language (Lozano Mejía, comunicación personal, 2024).

Similarly, it is imperative that universities lead in exploring how artificial intelligence can contribute to creating value in accounting, beyond task automation, towards generating strategic criteria and informed decision-making. This proactive approach would not only prepare accountants for the future, freeing them from traditional tasks and giving them space for new roles and approaches (Mera, 2024) but also position accounting as a discipline at the forefront of technological innovation.

Conclusions

In conclusion, the incursion of AI and automation into accounting does not herald the demise of the accounting profession, but rather, indicates a process of profound transformation. This change represents not only a challenge but also a significant opportunity for accountants to acquire new competencies and assume more strategic roles within organizations. Thus, they secure a place of relevance in the future of work, contributing value that transcends mere execution of numerical calculations to encompass detailed analysis, strategy formulation, risk management, information assurance, and sustainability promotion. The key for the contemporary accountant lies not in competing against technology, but in effectively integrating it into their professional practice, expanding their field of action, and redefining their contribution to organizations in this new digital era.

Accounting has experienced constant evolution throughout human history, marking its presence from manual practices in ancient civilizations to the adoption of sophisticated technologies in the modern era. This trajectory underscores the fundamental importance of accounting in the recording and management of economic resources, adapting and evolving in response to changes in the socioeconomic and technological environment.

The impact of technology on accounting has been profound and multifaceted, radically transforming accounting practices. The automation of routine tasks and the incorporation of advanced systems, such as artificial intelligence and blockchain, have significantly improved efficiency, accuracy, and analytical capacity in the accounting field. These innovations offer powerful tools for analyzing large volumes of data, allowing accountants to generate deeper and more accurate analyses and opinions.

In turn, automation and digital technology have redefined the role of the accountant. What was once a focus on repetitive, low-value-added tasks has now transformed into roles demanding advanced analysis, data interpretation, and strategic decision-making. This new paradigm requires accountants to expand their competency set to include advanced technological and analytical skills, adapting to a constantly changing work environment.

However, there is a significant challenge in traditional academic training in accounting, which often does not adequately cover the competencies necessary to thrive in the digital age. This gap underscores the urgent

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need for a curricular review and a shift in educational focus, to prepare accountants to effectively face contemporary and future challenges. Accounting education must, therefore, focus not only on the technical fundamentals of the profession but also on the development of skills in emerging technologies, languages, and critical thinking.

On the other hand, the integration of emerging technologies opens unprecedented opportunities for innovation in accounting, improved decision-making, and leadership in the digital transformation of organizations. Accountants, equipped with skills in advanced technologies, are in a unique position to play a crucial role in navigating and managing changes driven by digitalization. This new scenario not only expands the scope of their professional practice but also elevates their strategic importance within organizations.

In harmony with the above, it is possible to propose some final recommendations. These suggestions aim to ensure that accounting not only adapts but also thrives in the context of technological advances.

First, it is imperative that educational institutions undertake a comprehensive and ongoing review and update of their accounting curricula. This process should focus on incorporating knowledge and skills relevant to emerging technologies, advanced data analysis, language requirements, environmental and sustainability components, and effective change management. By doing so, future accountants will be prepared for a labor market that is constantly evolving, equipped with the necessary tools to navigate and lead in a professional environment increasingly dominated by technology. The curricular update must reflect a commitment to training professionals capable of interpreting and manipulating large volumes of data, and who also possess a solid understanding of how digital technologies can be applied to improve decision-making and business strategy.

Second, continuous professional development is established as a fundamental pillar for accountants in the era of digitalization. Accounting professionals must proactively engage in constant learning and professional development, placing special emphasis on technological and analytical areas. Adopting a mindset of lifelong learning is crucial to remain relevant and competitive within the accounting profession. This implies a continuous investment in education and skill updating, especially in those that enable effective information interpretation and strategic use of advanced technological tools.

Lastly, interdisciplinary collaboration is presented as a strategic approach to maximizing the potential of technological innovations in accounting practice. Accountants are encouraged to collaborate closely with technology experts, thereby facilitating a knowledge exchange that can accelerate the adoption of new practices and foster a deeper understanding of technological implications in accounting. This collaboration can not only enrich accountants' skill repertoire but also promote greater innovation and efficiency in the profession, ensuring that accounting maintains its relevance and adaptability in the face of future technological challenges.

Conflict of interest

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