

## AI in Audit and Accounting: A Qualitative Exploration

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### ABSTRACT

*Artificial intelligence (AI) has made inroads into nearly all industries, from governance to finance and education to healthcare and retail. As the United Arab Emirates (UAE) encourages digitalisation as a way of life for individuals and businesses to optimise efficiency, the consequences need to be carefully analysed. Concerning the application of AI to the accounting and auditing domains in the UAE, this study intends to analyse the perspectives of auditors and accountants. The study was conducted in two phases. Phase I was the exploratory phase, in which the data were collected using an open-ended questionnaire survey. The responses (qualitative data) collected from 21 accounting and auditing experts were analysed using Atlas.ti in Phase II. This research breaks through the hype and offers clear findings related to the perceptions of professionals towards the application of AI. The findings of the study present the challenges and opportunities of using AI in accounting and auditing, and the future expectations from these professionals in the era of emerging technologies such as AI in the UAE context. This study adds to the existing body of knowledge by being one of the few empirical studies examining the effects of AI on accounting and auditing professionals.*

*Keywords: Artificial intelligence; auditing; accounting; qualitative data analysis; Atlas.ti*

### INTRODUCTION

In the rapidly evolving auditing and accounting landscape, the integration of AI technologies stands out as a transformative force, reshaping traditional practices and methodologies. The advent of AI presents unprecedented opportunities and formidable challenges for professionals in these fields. As organisations strive to leverage AI to enhance efficiency, accuracy, and insights in their financial reporting and auditing processes, a critical need arises to navigate the complex AI landscape effectively.

AI refers to the capability of a machine to perform tasks that typically demand human intelligence, including speech recognition, natural language comprehension, and decision making (Soori et al. 2023). It is a complex system capable of outperforming humans in a variety of ways (Agnese et al. 2024). AI encompasses a wide range of innovative technologies, such as big data (Gepp et al. 2018; Salijeni et al. 2019) and machine learning (ML) (Lindebaum et al. 2020).

Human life and leisure are evolving due to the widespread adoption of emerging technologies such as AI and blockchain in areas as diverse as medicine, transportation, finance, entertainment, environment, agriculture, athletics, energy management, safety, and more (Soni et al. 2020). With the increasing prevalence of AI applications, organisations are confronted with challenging concerns about the impact of AI on work (Jarrahi 2018). With repetitive tasks being taken over by machines, emerging technologies, such as AI, are a major focus in many reports about the future of work (Károly & Panis 2019).

Currently, almost every industry utilises one or many emerging technologies, and accounting and auditing are no exceptions. Almost every industry is trying to exploit the opportunities in relation to AI technologies (Damioli et al. 2021). Many accounting firms and the Big Four firms have reported using AI in their auditing and consulting functions (Munoko et al. 2020). Therefore, the Big Four firms have invested heavily in AI and emerging technologies (EY 2023; Hussein et al. 2016) and have plans to continue with the same (Maurer 2023; PwC 2023). These investments and technological advancements will inevitably significantly impact accounting professionals' current roles, responsibilities, and skill sets, including employees, managers, and report recipients. This issue is particularly urgent from a practical standpoint (Losbichler & Lehner 2021).

The UAE initiated its national strategy for AI 2031 in October 2017 (OECD 2022). With its policy in place, according to the forecast made by PwC, AI could contribute 13.6% of the GDP by 2030. Also, the UAE is expected to reap benefits worth US\$5.3 billion from the investment in Generative AI by 2030 (Al Badoor & Ahmed 2023). Considering the UAE's explicit objective to establish itself as an AI leader, it is prudent to investigate and comprehend the ramifications of AI in accounting and auditing. A few researchers have done quantitative analysis related to the technology acceptance model for UAE auditors (Hayek et al. 2022) and auditors' perceptions related to AI in the Gulf countries (Alastal et al. 2024), but there is a lack of research from a qualitative perspective.

Based on a comprehensive literature review of AI in accounting and auditing, four research gaps have been identified and formulated into these four RQ (research questions):

RQ<sub>1</sub> What are the implications of AI applications in accounting and audit?

- RQ<sub>2</sub> What challenges are faced by accounting and auditing professionals due to the implementation of AI?  
RQ<sub>3</sub> What opportunities can be created by the use of AI applications in accounting and audit?  
RQ<sub>4</sub> What is expected from accountants and auditors in the future of emerging technologies such as AI?

The following are the major contributions of this work:

This study addresses a notable gap in the existing literature by conducting a qualitative enquiry into the perspectives of auditors and accountants regarding the impact of AI implementation in the UAE, thus providing genuine insights from professionals directly involved in the field. The findings of this research contribute to the current understanding of how auditors and accountants in the UAE adapt to and embrace emerging technology-driven practices, thereby enriching the literature on technological adaptation within the accounting profession.

By exploring the challenges and advantages associated with AI implementation in auditing and accounting, this study enhances the comprehension of the opportunities and obstacles posed by technological advancements in the field, aligning with prior research that has identified both challenges and potentials stemming from technologies such as AI. Additionally, the study underscores the essential skills required in the future in a collaborative environment between humans and machines. It sheds light on the implications of AI applications and the pivotal competencies needed for professionals operating in an AI-enhanced setting.

The remainder of the paper is structured as follows. In Section 2, we provide an exhaustive literature review of the existing research on AI in auditing and accounting. Section 3 discusses the formal research methodology adopted in this study and the sampling and data collection processes. In Section 4, we describe the data analysis process using the three stages of grounded theory (Noble & Mitchell 2016). In Section 5, we discuss the results of this analysis, and its implications in Section 6. Finally, in Section 7, we indicate the limitations of this work along with directions for future research and a conclusion.

## LITERATURE REVIEW

### THEORETICAL BACKGROUND

Accounting and auditing functions, although at the back end, are considered the backbone of any business organisation. These functions are considered significant not only for organisations but also for society (Flint 1988). Both of these functions have evolved over a period of time. The accountant's role has been discussed since the 1980s (Hopper 1980; Sathe 1983), and is still being discussed (Herbert et al. 2021; Kommunuri 2022). In their findings Wolf et al. (2020) discussed the evolving role of accountants. The common thread in the discussion in the literature over the course of this period has been the role of accountants in relation to information technology (Kaye 1988; Knudsen 2020). The literature shows the evolution of accountants from bean counters (Bougen 1994) to data scientists (accountants specialised in IT issues) (Oesterreich & Teuteberg 2019).

Similar to accounting, the field of auditing has also evolved. The changes in the auditing domain and the role of auditors date back 400 years (Gene Brown 1962). Since then, there have been considerable changes in the techniques and objectives of auditors' work. The main period in which there was an important development in technology was between 1960 and 1990 (Teck-Heang & Ali 2008). During this period, critical developments occurred, and auditors changed their approach from 'verifying transactions in the books' to 'relying on the systems'. Later, with the advent of technology and expert systems, auditors' approaches continued to change (Abdolmohammadi 1987).

Emerging technologies, especially AI and blockchain, are believed to significantly impact the functioning of businesses (Abu Afifa et al. 2023). They have further changed the auditing and accounting landscape by improving processes, risks, challenges, and opportunities (Dai & Vasarhelyi 2016; ICAEW 2017; Lindsay et al. 2019). As AI possesses considerable capability to influence and improve auditing and accounting procedures, it has started taking over repetitive tasks involving large transactions (Baldwin et al. 2006). With the advancement of emerging technologies such as AI over the last few years, the role of accountants and auditors is changing (Fedyk et al. 2022; Hasan 2022; Luo et al. 2018; Mansoor et al. 2023; Mohammad et al. 2020). Auditors are continuously learning, improving, and facing risks and opportunities because of technology implementation (Arntz et al. 2017; Dwivedi et al. 2021; G. Harkut & Kasat 2019; Gotthardt et al. 2020).

### AI AND TYPES

John McCarthy, the pioneer of AI, introduced this phrase in 1956, considering it an experimental field inside computer science. According to Stancheva-Todorova and Bogdanova (2021), the term "artificial intelligence" is interchangeable with "cognitive technology" and "cognitive computing". In the current scenario, when people talk about AI, they are referring to the evolution of computers to the point that they can perform activities previously reserved for humans' higher levels of intelligence, including visual perception, translation, and decision making (Simon 2019).

Today, several types of AI are being utilised, including chatbots, speech recognition, and digital assistants. The PWC Report 2017 categorised AI into four categories: automated intelligence (performs routine/non-routine tasks automatically), assisted intelligence (performs tasks faster), augmented intelligence (assists in decision making), and autonomous intelligence (performs decision making tasks automatically) (PWC 2017b).

#### AI AND UAE PERSPECTIVES

With AI, the global economy is about to undergo a dramatic shift. As a result of the Industrial Revolution 4.0, companies and governments in the Middle East are starting to catch on to the worldwide trend towards AI and other cutting-edge technologies (PWC 2018b).

According to the PWC Report 2018, “the Middle East is expected to accrue 2% of the total global benefits of AI in 2030, and the most significant gains are expected to accrue to Saudi Arabia, where AI is expected to contribute over US\$135.2 billion in 2030 to the economy, equivalent to 12.4% of GDP”.

When the UAE government launched its AI strategy (WAM 2017), its dedication to the nation’s technological advancement was made very clear. In 2017, an AI smart lab was also set up to train employees in both the public and private sectors to use AI effectively. The United Arab Emirates is well positioned to become a regional and, by extension, a global leader in AI because of its committed AI policy and its efforts to promote technological progress (Government 2023). The UAE is the first country in the world to appoint a Minister of AI (in 2017), and according to the government’s vision, the UAE aspires to become the world’s most prepared country for AI (Minister of State for Artificial Intelligence, 2022). The UAE has also established the world’s first graduate-level AI University (Brown 2025). AI development and investment is happening globally, but what makes the UAE unique is its government-led strategy and rapid implementation.

Nearly half of all jobs in the six Middle Eastern nations are currently automatable with the technology available today. With barely any fluctuation among the six nations, this average is just below the 50% worldwide average. As the most technologically advanced nation among the six countries ranked by the McKinsey Country Digitization Index in 2015, the UAE scored 50% higher than Egypt, which ranked last in digital advancement (Peter et al. 2018).

The UAE has set a clear vision to become a world leader in AI by 2031. AI is therefore being implemented in all business practices and areas. Because of this, the accounting and auditing industry in the UAE is undergoing enormous transformation. Accordingly, it is important to investigate how accountants and financial auditors in the UAE view the potential effects of AI on their work.

#### AI IN ACCOUNTING AND AUDITING

The accounting industry is one of the many business practices that are being influenced and reshaped by AI around the world (Zhang 2020). The application has found its way into various business functions, which include accounting and finance, auditing, sales and marketing, production, distribution, sales, research and development, human resource management, and so on (Kokina & Davenport 2017). Various accounting functions, including reconciliation, accounts receivables, inventory movement, impairment testing of intangibles, accounts payable, and more, can be delegated to AI (Petkov 2020).

The application of AI to accounting functions positively influences the performance of accounting organisations. As a result of the implementation of AI in accounting processes, there has been considerable advancement in the accounting discipline (Longinus Chukwudi et al. 2018). According to Smith (2020), AI has decreased or eliminated repetitive and routine tasks. As a result, accountants can focus on non-routine, creative, and unstructured work that calls for more complex abilities and thinking.

Technology started being used in auditing in the 1980s (Lamboglia et al. 2020). Back then, expert systems were used in auditing to assist auditors (Alles & Gray 2020; Omoteso 2012; Sutton et al. 2016). With technological development, various technologies such as AI, blockchain, robotic process automation (RPA), and cloud have found their way into auditing (Boillet 2018; Cohn 2020; EY 2023; PWC 2018a). Various Big Four and B firms have recently announced their future investments in emerging technologies in auditing and accounting (PYMNTS 2020).

AI technologies, in particular, are transforming the field of auditing. AI and machine learning algorithms are delving into auditing processes to make audits digital. AI-based software can efficiently perform various tasks in the auditing process, including analysing massive amounts of data, reviewing documents, and making decisions (Kend & Nguyen 2020). Some of the auditing tasks being performed by AI include analysing general ledger entries to detect anomalies (Persico & Sidhu 2017), identifying financial misstatements and fraud (PWC 2017a), producing reports and trends by scanning the large sets of documents (Deloitte 2018), and extracting and analysing information from contacts, invoices, and images to get the auditing evidence (Ernst & Young 2025). There has been a continuous need to involve AI technologies in audits due to clients’ business models being digitalised (Tiron-Tudor & Deliu 2022).

## AI CHALLENGES AND OPPORTUNITIES

Implementation of AI technologies in accounting and auditing includes benefits such as consistency, effectiveness, and efficiency in auditing tasks and high-quality decision making. Additionally, AI improves accounting information, reforms the conventional approach to accounting and auditing, and decreases the likelihood of fraudulent activities (Owusu et al. 2020). With the application of AI in accounting and auditing tasks, firms can reduce their costs and help their accountants to focus more on data-driven and analytical tasks rather than monotonous ones. However, with benefits come risks. Owusu et al. (2020) pointed out the risks of the implementation of AI technologies in accounting and auditing, including the huge cost of forming, maintaining and updating systems, building the knowledge base of those who are new, and more.

According to an EY (Ernst & Young) source, AI technologies might cause a 50% decrease in the number of new hires, which would significantly impact the industry's employment paradigm (Hasan 2022). A few issues identified with the application of AI technologies in accounting are: slow returns in comparison to high investment, lack of skilled and quality professionals, and lack of experience, which, in some way or another, affect the field of accounting (Luo et al. 2018). According to Huang and Huang (2018), one of the obstacles faced by accountants and auditors is the frequent changes in rules and regulations, which require an AI system to get updated from time to time.

## RESEARCH METHODS AND TOOLS FOR DATA ANALYSIS

### RESEARCH PROCESS

The research process followed for this study is shown in Figure 1. While there is some useful information in the current literature, more qualitative work is still needed regarding AI implementation in auditing and accounting and its impact. The research philosophy used in the study is interpretivism (Saunders et al. 2019). The purpose of interpretivist research is to gain a better understanding of the interpretations and perspectives of different groups. The study has similar aims. The goal of the study is to gain a richer understanding of the perspectives of accounting and auditing professionals regarding the implementation of AI in these areas.

### RESEARCH METHODOLOGY

The methodology adopted is based on grounded theory. According to Glaser and Strauss, grounded theory is based on the premise that first the theory is formulated and then the data are collected and analysed (Glaser & Strauss 2017). This study uses an inductive qualitative approach that entails working solely from participants' experiences. These later form the basis of the data analysis (Azungah 2018).

### SAMPLE SIZE

The determination of the sample size is important for qualitative research. Unlike quantitative research, there are no power analyses or computation methods to determine the minimum sample size in qualitative research (Sandelowski 1995). Sandelowski (1995) stated in his work that determining sample size depends on many factors. Bernard (2011) described the ideal standard sample size for qualitative research as the point of saturation where all concepts are repeated and no new concept emerges. Furthermore, Morse (2000) stated that estimating the number of participants required to reach the saturation point depends on factors such as the scope of the study and nature of the topic. Many researchers have questioned and discussed sample sizes that are too small and too large for qualitative research (Lincoln & Guba 1985; Morse 2000; Strauss & Corbin 2003; Trotter 2012).

In some studies, researchers mentioned that, for grounded theory-type qualitative research, a sample size of 20 is small and a sample size of 40 is large. They recommended a sample size of 20–30 as the appropriate sample size for such a study (Marshall et al. 2013). In addition, in the case of a homogenous population, a sample size above 30 would be considered large (Boddy 2016). The sample size of this study is 21, which lies within the range mentioned for grounded research (Boddy 2016) (Marshall et al. 2013).

### DATA COLLECTION

The data were collected using an open-ended questionnaire to identify themes and develop coding schemes for the responses (Lambert et al. 2017; Trott & Reeves 2018). The participants chosen for the study are experts working in the area of accounting and auditing. They hold 6 to 30 years of experience and are from the auditing, banking, retail, and service industries. Table 1 shows a descriptive summary of the participants. The open-ended questionnaire was distributed to the experts via email to capture their views in detail. Fielding et al. (2013) stated that an open-ended questionnaire allows the derivation of an analytical

dimension that is not covered by a closed questionnaire. The self-administered questionnaire method was adopted to reduce the social desirability bias as it isolates the respondent (Nederhof, 1985). Also, the email survey mode with respondent anonymity was adopted to further reduce bias (Larson 2019). The data collected were then analysed using the Atlas.ti software.

DATA ANALYSIS TOOL

Various other software tools such as NVivo, MAXQDA, QDA miner, Qualrus, etc., are also available for qualitative data analysis. However, Atlas.ti software is described by Lewis (2004) as an effective and organised way of analysing a wide range of qualitative data types. Apart from simplifying the researcher’s analysis process, it enhances qualitative data visualisation (Rambaree 2012).

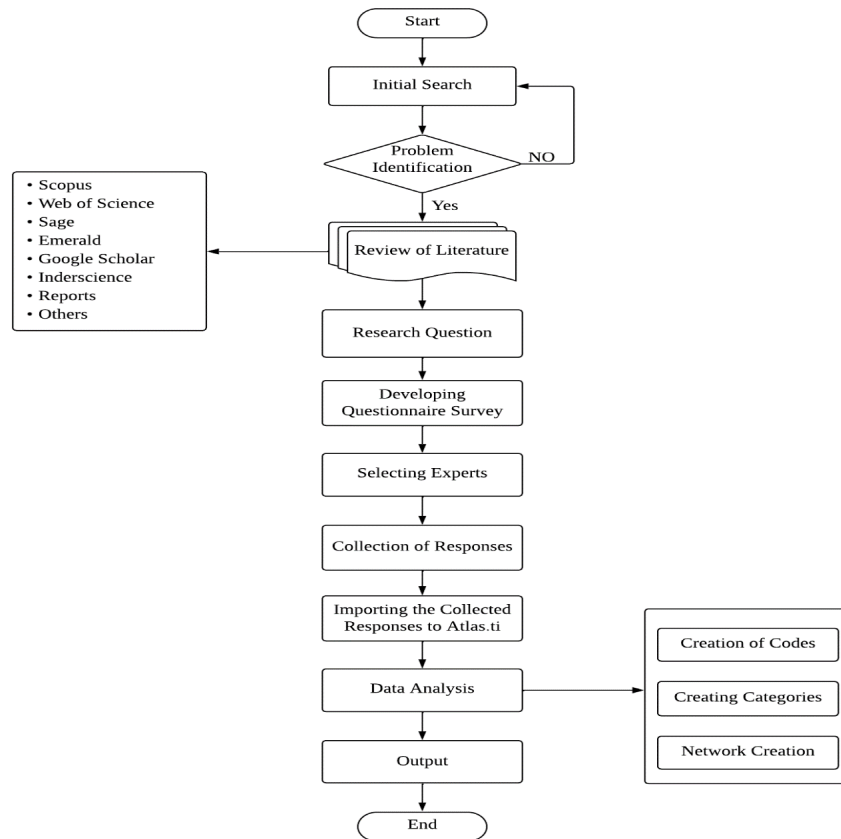


FIGURE 1. Research process

TABLE 1. Descriptive summary of participants

	Profession	Gender	Professional Qualification (CA/CPA/CFA etc.)	Experience, (in years)	Industry
1	Auditing	Male	Yes	31	Audit, BIG 4
2	Auditing	Male	Yes	26	Audit, BIG 4
3	Accounting	Female	Yes	14	Education
4	Auditing	Male	Yes	22	Audit, tier 2
5	Finance	Male	Yes	21	Education
6	Auditing	Male	Yes	21	Audit, BIG 4
7	Accounting	Female	Yes	12	F & B
8	Auditing	Male	Yes	20	Audit, tier 2
9	Finance	Male	No	30	Retail
10	Finance	Male	No	17	Private equity
11	Auditing	Male	Yes	19	Audit, tier 2
12	Auditing	Female	Yes	6	Audit, BIG 4
13	Finance	Male	Yes	22	Banking
14	Finance	Female	Yes	13	Banking
15	Accounting	Female	No	11	Education
16	Finance	Male	Yes	20	Banking

17	Auditing	Male	Yes	22	F & B
18	Auditing	Male	Yes	17	Audit, tier 2
19	Finance	Male	Yes	24	Audit, BIG 4
20	Auditing	Male	Yes	19	Audit, BIG 4
21	Finance	Male	Yes	16	Retail

## DATA ANALYSIS

The data were analysed according to the stages outlined in grounded theory (Noble & Mitchell 2016). The three stages in data analysis in grounded theory are ‘open coding’, ‘axial coding’, and ‘selective coding’ (Glaser & Strauss 2017). Atlas.ti software was used for coding. The documents containing the experts’ responses were first imported into Atlas.ti so that they could be coded. In the first stage, open coding (line-by-line coding) was used to identify key phrases. For each document, all the relevant data essential to answering the research questions were coded using various options available in Atlas.ti: open coding (assigning codes to the data segment where a new code is created and the quotation appears), in vivo coding (coding the data segment as it is where the data segment appears as a code), list coding (selecting the code from the already existing codes), and quick coding (using the last used code). In this stage, while coding the data, responses from each respondent were compared for similarities.

In the next stage, the categories were formed, and connections and relationships between the categories were identified. In the last stage, the linkages and relationships between different categories were identified. The “network function” and the “network view” were used to understand the logical patterns and build convoluted episodes from the data (Rambaree, 2012).

The analysis started with coding the data collected, keeping in mind the research question. The responses in each document were assigned an initial code. The key terms or phrases in the responses received were highlighted and coded using the different options available in Atlas.ti (in vivo, list, quick, and open coding). To develop themes and seek a logical pattern, an array of similar codes was examined using the network view. With the help of the network view, the implications of AI in the accounting and auditing professions were analysed. The implications were then further classified as challenges and opportunities that the implementation of AI has brought to the accounting and auditing profession.

Using the coding functions available in Atlas.ti, three themes were identified for RQ4 – “What is expected from accountants and auditors in the future of emerging technologies such as AI?” The data from all respondents could be categorised into three broad themes. These are (a) data-related skills, (b) skills related to information technology (IT), machine learning (ML), and RPA, and (c) other skills. These three themes emerged as categories for the analysis related to future expectations due to AI implementation.

## RESULTS

### IMPLICATIONS OF AI

The research aims to identify the implications of the application of AI in accounting and audits. The findings are categorised into major aspects, such as benefits, challenges, and opportunities. Figure 2 was created using the network function of Atlas.ti with the help of codes and categories. The network represents a logico-empirical pattern that emerged from the data collected, as suggested by Rambaree (2012) in his work. The analysis shows different challenges and threats, such as redundancy of traditional accountants, disruption, need for reskilling, etc., and benefits such as better data analysis, improved quality of work, precision in predictive tasks, etc.

As Atlas.ti helps the researcher to create patterns with several layers of data, the intertwining of different aspects can be seen in Figure 2. Regarding the implications of AI on the auditing and accounting profession, various elements emerged. The analysis shows that the challenge ‘need for reskilling’ leads to greater opportunity, which in turn is a benefit of implementing AI. This shows that although reskilling is challenging, it brings in new opportunities and growth. Similarly, the benefits of better data analysis, error-free processing of routine accounting operations, better trend analysis and forecasting (stated by respondent KVE), real-time availability of data for decision making, and precision in predictive tasks (stated by respondent TO) will result in another benefit, improvement in quality of work, which is a benefit of the application of AI. The overall analyses show not only the different benefits and challenges, but also the interrelationship between them. The excerpts from the responses to the question on the implication of the application of AI in accounting and auditing by a few respondents are as follows:

*“Artificial intelligence is poised to reshape the audit. As with most monumental shifts, this creates opportunities – and challenges. This will change the requirements for auditors to be successful. A foundational knowledge of accounting will remain important, but it will be joined by a range of new skills, including an understanding of data science. In the future, auditors will spend less of their time looking at source transactions and interviewing customers and vendors. Instead, they will*

need to be able to assess the auditing technologies that their clients are using. In accounting, as with so many professions, the ability to understand and evaluate how technology is applied will become a central tenet of the job.” (Respondent B)

“It should allow for much greater precision in predictive tasks such as budgeting and offer greater opportunity in auditing to identify unusual transactions and discrepancies.” (Respondent C)

“Fast and error-free processing of routine accounting operations and better tools for data analysis and making real-time data available for decision making.” (Respondent D)

The responses of Respondents C and D are shown in the network in Figure 2 as generated by Atlas.ti. This feature of Atlas.ti helps establish connectivity while analysing the data.

### OPPORTUNITIES AND CHALLENGES OF AI APPLICATION

Figure 2 shows the implications of AI implementation in accounting and auditing. The various codes created using Atlas.ti are shown in three different colours and represent a specific classification. The elements in Figure 2 can be broadly classified as the opportunities and challenges that result from the application of AI in accounting and audit. The codes rendered in green—that is, learning to deal with exceptions, understanding, and evaluating the application of technology, less/no involvement of humans, etc.—represent challenges. The codes given in blue—that is, help in the forensic examination of data, reduce efforts with repetitive tasks, improve the quality of work, etc.—represent opportunities.

The code ‘becoming more analytical’ is classified as a challenge, as shown in Figure 2, and overlaps with one of the codes created for the research question ‘key skillset expected in the future’. This code can also be seen in Figure 3. While creating the codes in Atlas.ti, one can witness the overlap of the codes. In addition, the code in purple, ‘Business acumen to support decision making’ in Figure 2, is identified as a challenge by one of the respondents. It is also described by another respondent as the key skill set expected in the future due to AI implementation, as shown in Figure 3. This code can be seen in both the network diagrams created in Figures 2 and 3, as it is common for both research questions.

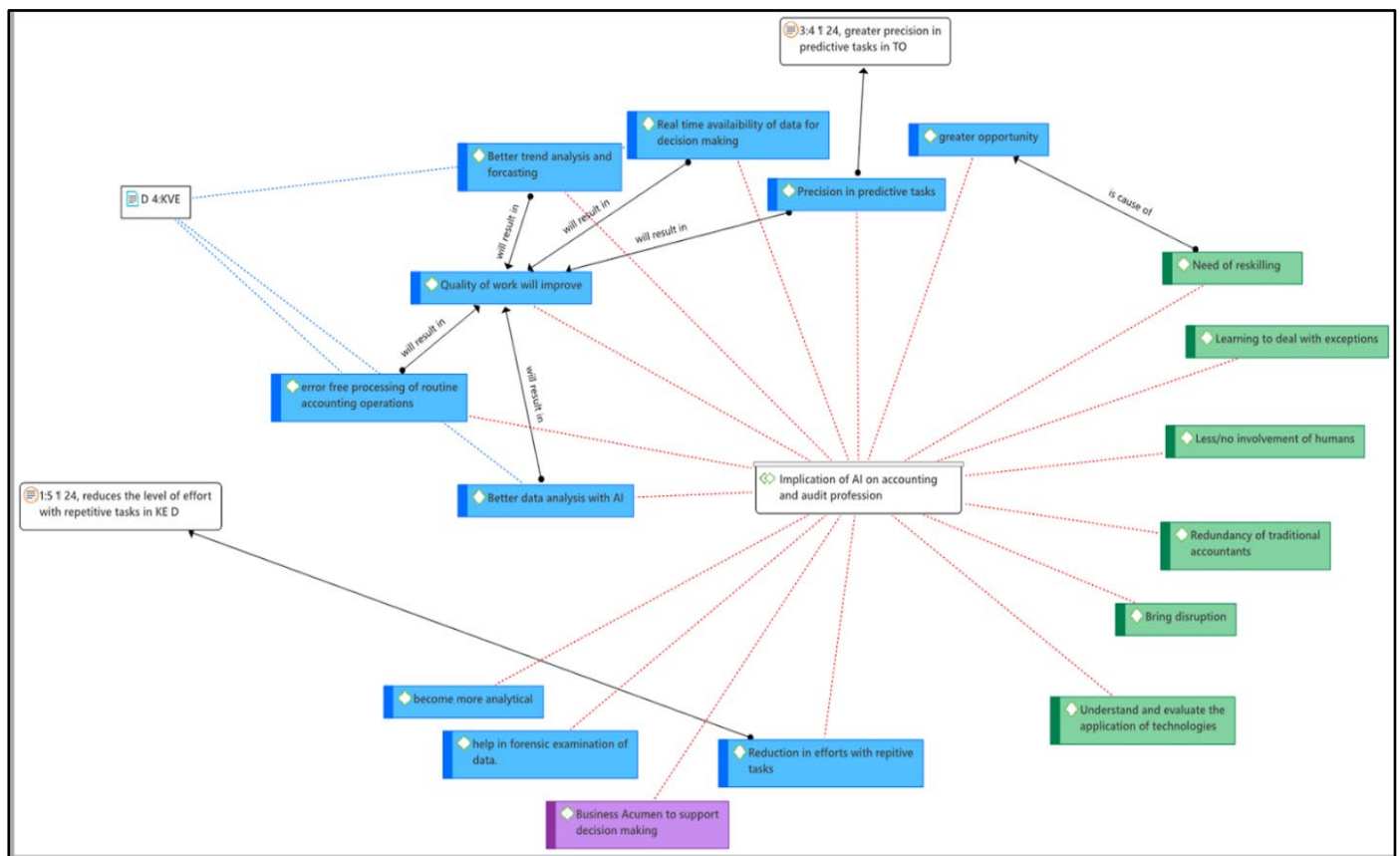


FIGURE 2. Implications of AI in accounting and auditing, opportunities, and challenges

EXPECTATIONS IN THE FUTURE

Figure 3 shows the key skillsets expected by auditors and accountants in the future due to AI implementation. The key skillsets are broadly classified into three categories: first, the skills related to understanding IT, machine learning (ML), and robotic process automation (RPA); second, the data-related skills; and third, other skills. Each skill has its own subsets, as shown in Figure 3.

Understanding the automation flow for controls, knowledge of digital currency mechanics, basic machine learning in finance, interfaces, etc. are part of skills related to understanding IT, ML, and RPA. Data scrubbing and retrieval, data visualisation, etc. are part of data-related skills. Communication and interpersonal skills, problem solving and strategic thinking skills, and business acumen to support decision making, etc., are part of other skills. The key skill of becoming more analytical was also expressed by respondents as a challenge to AI implementation, as shown in Figure 2. This is the unique intertwining feature of Atlas.ti.

For the skills related to understanding IT, Machine Learning (ML), and robotic process automation (RPA), one of the respondents stated: *“Need ability to have knowledge of new technology tools and how to embrace them in a business environment.”*

Describing data-related skills:

*“The ability to order, analyse, and interpret data is becoming increasingly important for finance and accounting. Need more analytical skills and experience in using data mining tools.”* (Respondent A)

*“Skills the chartered accountant, auditor of the future will need: balance between non-technical and technical skills including clear understanding of big data and analytics, together with high level of IT Competence.”* (Respondent B)

Regarding the other skills required, Respondent B stated:

*“High-order thinking skills (critical thinking, analytical and problem solving skills, strategic thinking skills) and more business acumen to support decision making.”*

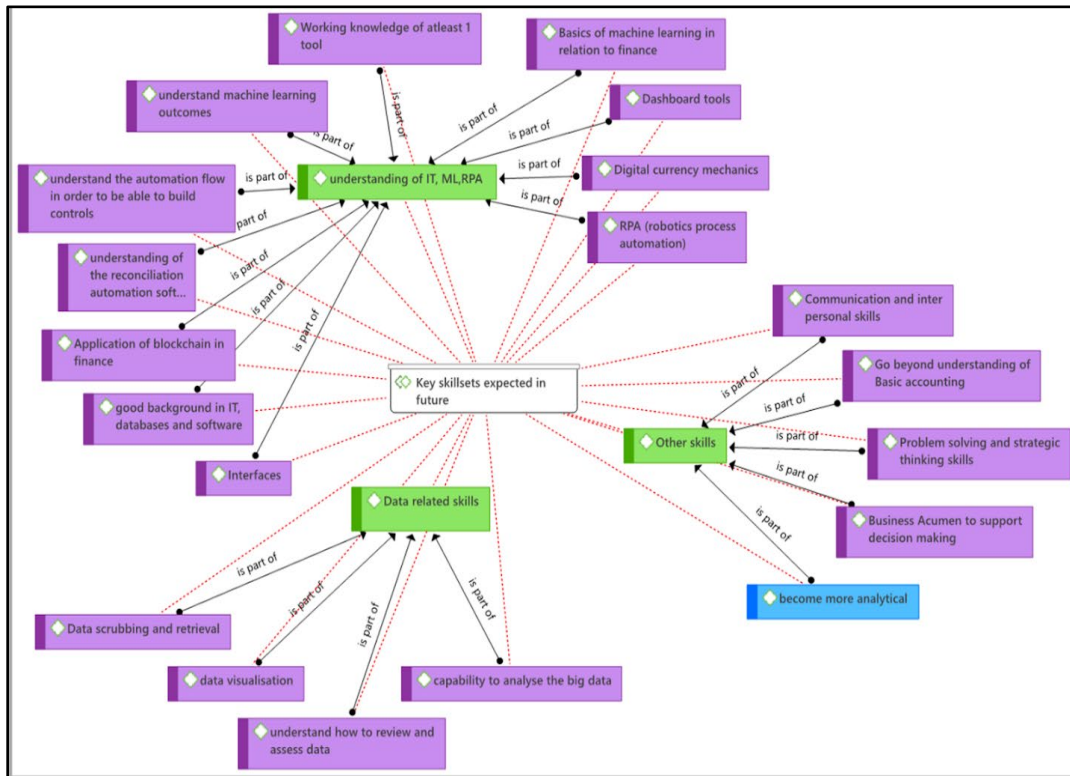


FIGURE 3. Future expectations from accountants and auditors due to AI implementation  
IMPLICATIONS



We highlight the importance of this study by discussing its key findings. First, although prior researchers have undertaken numerous studies, no qualitative study currently presents the genuine perspectives of auditors and accountants regarding the effects of AI implementation in the UAE. This study fills this void by examining and comprehending the viewpoints of accountants and auditors working with AI (Murthy & Kerr 2005).

Second, the results of this study contribute to the current literature regarding the capacity of auditors and accountants working in the UAE to adjust and get used to emergent technology-driven digitally intervened practices. Third, the study's results enhance our understanding of the difficulties and benefits that come with the implementation of AI for auditors and accountants. Various researchers have identified difficulties and possibilities in the accounting and auditing field due to the emergence of technologies such as AI (Kommunuri 2022; Shaffer et al. 2020). The management of the organisations can take into account the study's findings and prepare their workforce to face the challenges and explore opportunities related to technology implementation.

Moreover, the study highlights the key skills needed in a human-machine collaborative environment (Mcbride & Philippou 2022). It provides a road map for the various skills needed and the adaptation required in the future due to AI implementation. Accountants and auditors are not IT specialists; whenever new technology is implemented, they have to adjust and adapt to understand various technological and ethical aspects. It is a difficult task if professionals do not have an IT background. The attention of professional bodies (ACCA, ICAEW, AICPA, etc.), higher educational institutions, and the management of organisations is needed to focus on developing the requisite skills necessary to work with machines in the future. It is essential that these professional bodies and educational institutions bring changes in the curriculum and provide training to the professionals to make them future ready.

#### LIMITATIONS, FUTURE RESEARCH DIRECTIONS, AND CONCLUSIONS

Although this study has practical implications for auditors and accountants, it has certain shortcomings that ought to be discussed. The study has the usual limitation related to the qualitative approach used, the results of which cannot be generalised. Because the findings rely on the coding of the open-ended question responses, there is a limitation of generalised applicability. The study, therefore, has the limitation of transferability.

Furthermore, there can be concerns regarding the adequacy of the sample size; even so, in the past, numerous qualitative studies have been carried out with similar sample sizes (Ohlsson et al. 2023). In addition, the point of saturation was considered when determining the sample size (Creswell 1998; Thomson 2016). However, the findings will be more widely applicable if a larger sample is taken.

In the future, it would be interesting to do a cross-country comparison, as this study focuses on the UAE. Also, a comparison could be made between auditing firms of different sizes, to understand how the perspectives of professionals working in large organisations differ from those working in medium-sized organisations. Also, the ethical issues related to AI and data bias can be touched upon in the future.

The coding for the study was done manually using the Atlas.ti software; it would be interesting to see the results of the AI coding function of Atlas.ti.

In summary, the findings of the study explicitly articulate the nuanced perspectives of accountants and auditors. It gives a fair idea that the future will be with machines, and working with them will be the new normal. The key takeaway is to develop future-ready abilities, emphasising training and learning.

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