

EXPLORING ACCOUNTANTS' VIEWS ON THE FUTURE OF THE PROFESSION IN THE ERA OF ARTIFICIAL INTELLIGENCE

Zalni^{1*}
Hempy Putuhena²
M. Rifkhi Fauzan S.³

^{1,2,3} Faculty of Economics and Business, Pattimura University, Ambon, Indonesia

*Corresponding Author: zalni@lecturer.unpatti.ac.id

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Abstract: Goldman Sachs has projected that Artificial Intelligence (AI) may potentially replace the equivalent of 300 million full-time jobs worldwide, as many occupational tasks and functions can be automated. AI technologies are particularly useful in accounting-related work, with platforms such as QuickBooks, Xero, Sage Intacct, BlackLine, and AuditBoard already widely applied. The purpose of this study is to examine the attitudes, knowledge, expectations, and concerns of respondents regarding the future of the accounting profession. Adopting a quantitative descriptive approach, this research uses data quality tests, variable descriptions, and crosstab analyses, with data collection through online questionnaires by targeting professional accountants as respondents (excluding accounting educators). The findings indicate generally positive perceptions toward the importance of skills development, training, and readiness to adapt to AI technologies, which are believed to enhance the efficiency and quality of accounting work. However, a portion of respondents expressed concern over ethical implications and the potential replacement of certain routine tasks.

Keywords: Accounting, Artificial, Perception, Profession, Views.

Abstrak: Bank investasi Goldman Sachs menyatakan bahwa Artificial Intelligence bisa menggantikan setara dengan 300 juta pekerjaan penuh waktu di seluruh dunia, karena tugas dan fungsi pekerjaan tersebut bisa dilakukan secara otomatis. Teknologi AI sangat usefull dalam menyelesaikan pekerjaan yang berhubungan dengan akuntansi, seperti Quicbooks, Xero, Sage intacct, BlackLine, AuditBoard, dll. Tujuan Penelitian ini ialah untuk mengetahui sikap, pengetahuan, harapan, maupun kekhawatiran responden terhadap profesi akuntan di masa depan. Menggunakan pendekatan deskriptif kuantitatif dengan uji kualitas data, deskriptif variabel, dan uji crosstabs, data diperoleh dengan kuesioner yang di sebar via online dengan menetapkan responden para akuntan profesional (selain akuntan Pendidik). Hasil uji menunjukan persepsi positif terhadap pentingnya pengembangan keterampilan, pelatihan, dan kesiapan untuk beradaptasi dengan teknologi AI dan meyakini dapat meningkatkan efisiensi dan kualitas pekerjaan akuntansi. Meskipun terdapat kekhawatiran dari beberapa responden mengenai dampak etis dan potensi penggantian beberapa aspek pekerjaan rutin.

Kata kunci: Akuntan, Artificial, Pandangan, Persepsi, Profesi.

INTRODUCTION

Artificial Intelligence (AI) has recently emerged as one of the most widely discussed phenomena, receiving extensive attention from both the public and the mass media. Although AI was introduced decades ago, the rapid pace of its development in recent years has generated significant interest and debate. Various stakeholders, ranging from scholars to industry practitioners, have increasingly leveraged AI's advanced capabilities, underscoring its transformative potential.

Rantti (2023) defines AI as a technological innovation that enables computer systems and software to “think” like humans and mimic human actions. AI is characterized by its ability to rationalize and determine the best possible actions in pursuit of specific goals.

Multiple scholars have defined AI, including Simon (1996), Rich (1991), Kristanto (2004), and Gaskin (2008). Despite differences in wording, these definitions converge on two main points: AI is computer-based intelligence capable of performing tasks traditionally executed by humans. Simon (1996) describes it as “a field of study, application, and instruction concerned with programming computers to perform functions that are regarded as intelligent by human standards.” Similarly, Gaskin (2008) views AI as “intelligence demonstrated by an artificial entity, created and embedded in machines to enable them to perform tasks comparable to human capabilities.”

The origins of Artificial intelligence can be traced back to the 1940s with the rise of digital computing. AI is often used to develop systems typically handled by humans. Initially, AI applications were designed to address mathematical and logical problems. Over time, however, AI has evolved and expanded into diverse domains, such as gaming, translation, and robotics.

In 1956, during the Dartmouth Summer Research Project on Artificial Intelligence, John McCarthy, who at the time served as an assistant professor at Dartmouth College, introduced the term ‘artificial intelligence’ (AI), stating that the main goal of AI is to understand and model human thought processes and design machines so that they can imitate them.

Artificial Intelligence, which continues to advance, certainly provides numerous benefits and supports the progress of human civilization, as many aspects of human life have become easier and faster due to AI. For example, in social media applications such as Facebook, by utilizing AI, users who want to tag someone in a photo no longer need to do it manually because Facebook can perform it automatically and accurately. Similarly, various conveniences are experienced by Android/Smartphone users through the use of Google Assistant. In the automotive sector, robotic technology (autonomous vehicles) applied to cars such as autopilot and the ability to read road signs allows drivers to relax. Likewise, many other conveniences are increasingly being contributed by AI technology today.

An AI research organization was established in 2015, namely OpenAI, with one of the owners being Elon Musk. OpenAI has developed various AI models that can be used for various purposes, and one of the most famous AI models is ChatGPT. This AI shocked the public when it was first released by OpenAI in November 2022. It can even be said that the excitement of reporting and public discussion about ChatGPT for some users became the starting point of recognition of various other AI technologies.

ChatGPT users in January 2023 reached 100 million active users, and in March 2023 its monthly active users exceeded 100 million. This is certainly a very high achievement for an application. ChatGPT operates using deep learning techniques to understand and generate human language. This technology has various applications in many fields, such as education, business, entertainment, and others.

The various capabilities offered by AI certainly provide positive contributions to civilization, but this also raises skepticism from some parties, for example in the world of work, because with AI many jobs no longer need to be carried out by humans. This raises the question of which jobs might be replaced.

Iswara (2023) reported that an investment bank, Goldman Sachs, stated that AI could replace the equivalent of 300 million full-time jobs worldwide, because tasks and job functions could be performed automatically. This is equivalent to a quarter of all jobs performed by humans in the US and Europe in 2023. The report highlighted a number of industries and job types that could be affected, including administration, law, architecture, and management. However, the report also identified significant potential in many sectors, estimating that AI could increase global GDP by 7%.

In health sector, several fields of medicine and science have already utilized AI, such as doctors using this technology to help identify breast cancer. Scientists also use AI to develop new antibiotics.

ChatGPT and other artificial intelligence are known to be technologies capable of generating text, images, sound, or other data based on the input provided. This technology has the potential to transform various fields and professions, including accounting. This is not merely opinion—related accounting institutions such as IAI (Ikatan Akuntan Indonesia) and KPAP (Komite Profesi Akuntan Publik) have in several events, either in webinars or podcasts, discussed themes related to Artificial Intelligence and the accounting profession, such as “The Threat of ChatGPT to the Accounting Profession” (by IAI), “Artificial Intelligence in Accounting and Auditing” (by KPAP), “Will the Accounting Profession Still Survive?” with the Chairman of DPN-IAI (Ardan Adiperdana in the Helmy Yahya Podcast), and in other professional accounting activities.

AI technology is very useful in completing work related to accounting, such as QuickBooks, Xero, Sage Intacct, BlackLine, AuditBoard, etc. Each of these products has its own functions in accounting by utilizing AI technology.

Some benefits in the field of accounting that can be obtained from the use of AI technology include increased efficiency, accuracy, quality, and innovation in accounting work. For example, a study conducted in Saudi Arabia found a positive relationship between AI and perceived usefulness, implying that AI is considered useful for improving accounting and auditing methods in Saudi Arabia (Abdullah & Almaqtari, 2024). Regarding effectiveness and efficiency, Seniutis et al. (2024) concluded that AI technologies, if applied wisely, can streamline information processing and improve client interaction through automation, offering more personalized and efficient services.

However, this technology also poses challenges and threats to the accounting profession, such as reducing the need for human labor, increasing risks related to ethics, security, and data privacy, and requiring adjustments in competencies and regulations.

Based on the research topic, several research questions are formulated and described in accordance with the methodological approach employed, as follows:

- 1) How do professional accountants perceive the importance of skills development and training in responding to advancements in AI technology?
- 2) How prepared are professional accountants to adopt automation and artificial intelligence technologies in their work?
- 3) How do professional accountants view the impact of AI development on the efficiency and quality of accounting tasks?
- 4) How do professional accountants perceive the ethical implications of using AI in accounting practice?
- 5) How do professional accountants view the future of the accounting profession in relation to the adoption of AI and automation?
- 6) Are there differences in accountants' perceptions based on demographic characteristics (gender, age, education, area of expertise, and length of work experience)?

LITERATURE REVIEW

Social Cognitive Theory (Bandura, 1986). This theory explains that an individual's perception is influenced by the interaction between personal factors, behavior, and environment. Bandura argues that learning and changes in perception occur through observation, direct experience, and interaction with the environment, so accountants' perceptions of AI can change as exposure to this technology increases.

Artificial Intelligence

Artificial intelligence (AI) is a field of modern computer science and is the result of developing computer systems capable of performing tasks that are typically only achievable by humans. This includes natural language processing, contextual understanding, image recognition, decision-making, and more. AI's main goal is to enable machines to learn, adapt, and independently develop from experience.

The current development of AI is remarkable, with many tasks capable of being performed automatically in a short time. The application of artificial intelligence (AI) in accounting, for example, has transformed numerous processes and significantly impacted efficiency, accuracy, and analytical capability. Some accounting processes that have already utilized AI include;

- a. Automatic Invoice Recognition and Processing: AI can be used to automatically recognize and process invoices. Systems can identify key information such as amounts, dates, and suppliers from invoice images or documents.
- b. Data Processing and Transaction Classification: AI can classify transactions into appropriate categories. Machine learning algorithms can understand patterns in transaction data and automatically group them based on certain characteristics.

- c. **Cost Analysis and Financial Forecasting:** AI systems can analyze historical data and identify trends that can be used to predict future costs or make financial forecasts. This helps companies in budgeting and financial strategy.
- d. **Fraud Detection and Automated Auditing:** AI algorithms can detect suspicious patterns or anomalies in financial data, assisting in fraud prevention. Audit processes can also be enhanced through automatic financial data analysis.
- e. **Cash Management and Liquidity Forecasting:** AI can assist in cash management by predicting liquidity needs based on payment and receipt patterns. This helps companies optimize cash allocation and avoid liquidity shortages.

Other applications include Automatic Financial Report Generation, Sentiment and Credit Analysis, Investment Management, and Financial Chatbots and Customer Service.

In addition to increasing operational effectiveness, the use of AI in accounting procedures creates new avenues for in-depth research and more intelligent decision-making in the financial and accounting fields.

Concept of Artificial Intelligence

Scholars have provided various definitions of AI. Among them, McCarthy (1956), a key figure in AI development, defines AI as "the science that makes machines do things that would require intelligence if done by humans."

Andrew Ng (2016), a computer scientist and founder of Coursera from England, describes AI as "a branch of computer science that enables computers to perform tasks that require human intelligence."

Russell & Norvig (2016), in their well-known book *Artificial Intelligence: A Modern Approach*, define AI as "a field of computer science that aims to create computers that can behave like humans—possessing intelligence."

Elon Musk, founder of Tesla and SpaceX, describes AI as "an artificial intelligence that allows computers to perform tasks that normally require human intelligence."

Kurzweil (1990), a futurist and well-known author, views AI as "the creation of computers or computer programs that can think and learn like humans."

Simon (1996), Nobel Laureate in Economics, describes AI as "research on how to make machines perform tasks that are currently considered human intellectual work."

The definitions provided by these scholars can be summarized in a single sentence: AI is a computer system or machine that possesses intelligence and can perform tasks previously achievable only by humans, with a level of intelligence above average human capabilities.

Branches of AI

AI consists of several main branches, including Machine Learning (ML), a subfield that allows machines to learn from data. There is also Computer Vision, which focuses on image recognition, and

Natural Language Processing (NLP), which enables computers to understand and communicate in human language. These are some examples of the many developing AI subfields.

The Role of Data in AI

Data is the primary resource in AI development. The more data available, the better AI can learn and perform. Data collection, storage, and processing are key to successful AI projects. Additionally, techniques such as deep learning allow AI to uncover complex patterns in data. For example, ChatGPT uses deep learning techniques to understand and generate human language. According to duniaku.idntimes.com, ChatGPT technology has various applications across fields such as education, business, and entertainment. Some examples of ChatGPT applications include;

- a. ChatGPT can be used as a personal assistant to answer questions, provide suggestions, remind schedules, and assist with daily tasks.
- b. ChatGPT can serve as a learning tool to help students understand subject matter, develop language skills, and produce academic writing.
- c. ChatGPT can be used as an entertainment tool to generate engaging content such as stories, poems, songs, jokes, and more.

ChatGPT can also serve as a business tool to assist entrepreneurs in data analysis, report generation, strategy design, and customer communication. Artificial intelligence has been implemented in most industries, where AI models are used to detect fraud with smart suggestions and data protection (Afiah Zamain & Subramanian, 2024).

Ethics and Challenges of AI

With AI advancement, ethical issues also emerge. Challenges related to privacy, algorithmic bias, unemployment, technology, and AI control are significant societal concerns. Efforts are required to ensure AI is used wisely and responsibly.

Accounting Profession

The accounting profession is a career field involving the analysis, management, and reporting of financial information for organizations, individuals, or other entities. Accountants are responsible for ensuring that financial information is prepared accurately, relevantly, and in accordance with applicable accounting standards.

The accounting profession involves analyzing, managing, and reporting critical financial information for business and financial decisions. Accountants have the responsibility to organize and manage accounting systems, prepare financial statements, audit financial reports, and provide general accounting insights. Accountants can be classified into several types, such as public accountants, educational accountants, government accountants, and corporate accountants. Accountants have at least two important roles;

- a) The accounting profession plays a key role in economic development by providing financial information that investors, creditors, governments, and the general public can use to make informed and timely decisions.
- b) They also help ensure transparency and accountability in business practices, which is crucial in increasing market trust.

The accounting profession plays a very important role in assisting organizations and individuals in managing their financial aspects. With high ethical standards, strict qualifications, and deep knowledge of accounting and finance, accountants contribute significantly to economic growth and business stability.

In the digital era, the future of the accounting profession is heavily influenced by:

1. The level of AI adoption in accounting practice. AI technology enables process automation such as transaction recording, data-driven auditing, and predictive analysis, which previously required significant human time and effort. This adoption not only increases efficiency but also transforms accountants' roles into more analytical and value-added functions (Kokina & Davenport, 2017). In this context, accountants are no longer merely performing administrative tasks but act as strategic advisors capable of interpreting data generated by intelligent systems (Appelbaum et al., 2017).
2. Changes in Accounting Work are also important indicators in assessing the future of this profession. Automation and technology usage shift responsibilities from mechanical tasks to those requiring critical thinking, professional ethics, and data-driven decision-making. Future accountants must have adequate digital skills and the ability to collaborate with intelligent systems to provide added value to organizations (IFAC, 2019). These changes mark a fundamental transformation in accountants' roles, from mere reporters to strategic partners in business decision-making.

These dimensions can be used to measure factors influencing the future of the accounting profession.

Perception

Perception is how individuals understand and interpret the world around them. It involves complex mental processes where people collect, process, and give meaning to sensory information received from their environment. Perception can also be influenced by personal experiences, values, beliefs, emotions, and social context.

Several scholars have provided concepts of perception or perceptual change, such as Social Cognitive Theory by Bandura (1986) and Selective Perception Theory studied in A Theory of Cognitive Dissonance by Festinger (1957).

Social cognitive theory emphasizes that perceptual changes are influenced by the interaction between personal factors (such as beliefs and attitudes), behavior, and the environment. Social learning processes, observation, and direct experiences play important roles in shaping an individual's perception.

Individual perception can change when they acquire new information or experiences from the environment or when they observe the behavior of others.

In this research, perception refers to accountants' ways of interpreting and understanding information related to technological developments, particularly the adoption of automation applications in accounting. This perception includes accountants' beliefs, risk assessments, and attitudes toward technological change and its impact on their profession. In this study, the following points are used as indicators to measure perception regarding the future of the accounting profession:

- 1) Relevant Technical Skills (Skills and Training) (IFAC, 2019), such as mastery of information systems, data analysis, and accounting software, as well as participation in continuous training to maintain competence.
- 2) Readiness for Automation, an important indicator given that accounting tasks are increasingly transferred to systems such as robotic process automation (RPA) and AI. Kokina & Davenport (2017) state that accountants capable of adapting to AI technology can take strategic roles within organizations.
- 3) Advancement of Artificial Intelligence or Technology Development (AI) opens opportunities to enhance large data processing efficiency, anomaly detection, and financial forecasting (Appelbaum et al., 2017).
- 4) Upholding Professional Ethics. Principles such as confidentiality, integrity, and objectivity remain fundamental in accounting practice, as emphasized by the IESBA in the Handbook of the Code of Ethics for Professional Accountants (2020).

Several studies have been conducted to assess accountants' perspectives on artificial intelligence, including:

Andani et al. (2022) found that accounting students' perceptions of AI-based curricula provided by universities in Indonesia positively and directly affected students' perceived competence in working with AI.

Mohammad et al. (2020) observed serious concerns among practicing accountants that they could be replaced by automated AI systems. To avoid this fate, accountants need to adapt not only to the use of information technology but also to the continuously changing business environment.

Ernis & Pirdaus (2022) found that the deep integration of emerging technologies such as big data, ML, and AI in accounting has introduced remarkable changes to the accounting profession, such as reengineering accounting procedures, reducing errors and distortions in accounting information, improving accounting efficiency, and promoting transformations in accounting career structures.

Rohmah et al. (2022) stated that technological developments, such as AI, will significantly impact professional accounting services in the future. New skills and knowledge are required to face these changes. Professionals are expected to confront future challenges and seize potential opportunities. They need a new set of skills related to AI systems in input, processing, and output.

RESEARCH METHODOLOGY

This study employs a quantitative descriptive approach using an online questionnaire as the data collection tool. The research population consists of accounting practitioners working as public accountants, government accountants, and management accountants, excluding accounting educators in Indonesia. According to data from web.iaiglobal.or.id, the total population amounts to 55,000 individuals. With the assumption that 10% are accounting educators, the population for this study is 51.554 individuals. The research sample was determined using random sampling with the Slovin formula, resulting in a requirement of 397 completed questionnaires as valid research data.

The questionnaire will be distributed through social media, email, or messaging applications, accompanied by a short narrative inviting accounting practitioners/professionals to take the time to complete it. The data collection period is scheduled for two months (from mid-February to mid-April 2024).

The online questionnaire consists of three sections. The first section contains questions regarding respondent characteristics, such as gender, age, education, occupation, and length of employment. The second section includes statements related to respondents' perceptions of the integration of artificial intelligence into the accounting profession in the future. These questions use a 5-point Likert scale ranging from strongly agree to strongly disagree.

The data obtained from the online questionnaire will be analyzed statistically using SPSS software. The analyses to be conducted include;

- a. Validity and reliability tests to examine the quality of the research instrument.
- b. Descriptive analysis to present the characteristics of respondents and their perceptions of the future of the profession in relation to the use of artificial intelligence.
- c. Analysis of the relationship between respondents' demographic data and their answers across each variable dimension.
- d. Crosstab Test

RESULT AND DISCUSSION

After distributing the online research questionnaire to several acquaintances for a period of not less than two months, the researcher was only able to collect data from 35 respondents. However, one of these respondents was identified as an accounting educator and was therefore excluded from the dataset, as this category does not fall within the scope of the research sample.

The following figure presents the results of the descriptive statistical analysis, which have been summarized by the author in the form of a diagram.

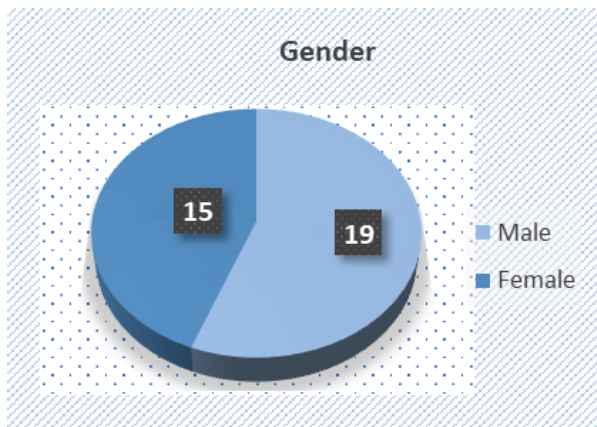


Figure 1. Distribution of Respondents by Gender

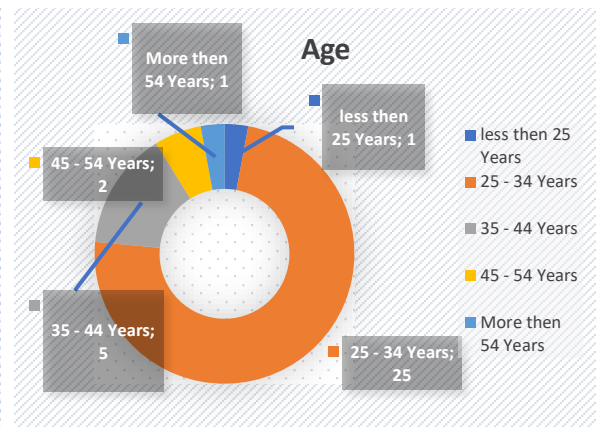


Figure 2. Distribution of Respondents by Age

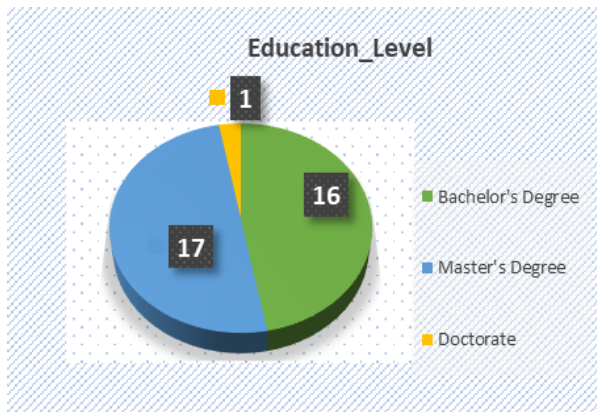


Figure 3. Distribution of Respondents by Education



Figure 4. Distribution of Respondents by Expertise

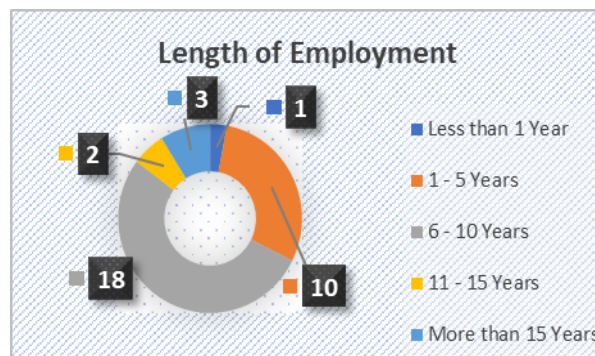


Figure 5. Distribution of Respondents based on Length of Employment

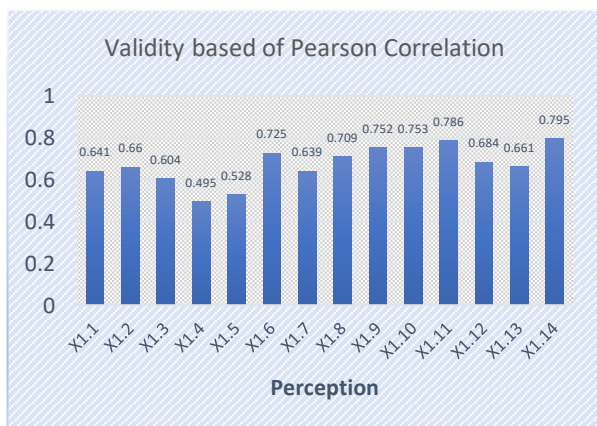


Figure 6. Validity of X-based data values of Pearson Correlations

Source: Primary Data Processed SPSS, 2025

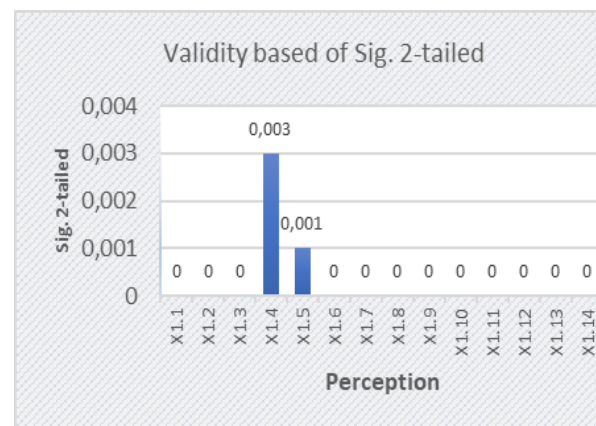


Figure 7. Validity of X-based data Sig. value (2-tailed)

Source: Primary Data Processed SPSS, 2025

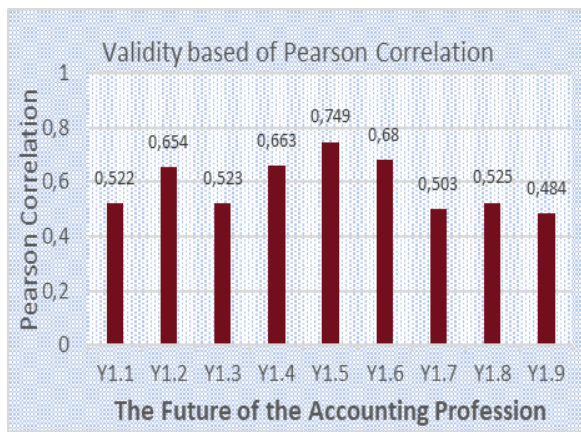


Figure 8. Validity of Y-based data, Personal Correlations value

Source: Primary Data Processed SPSS, 2025

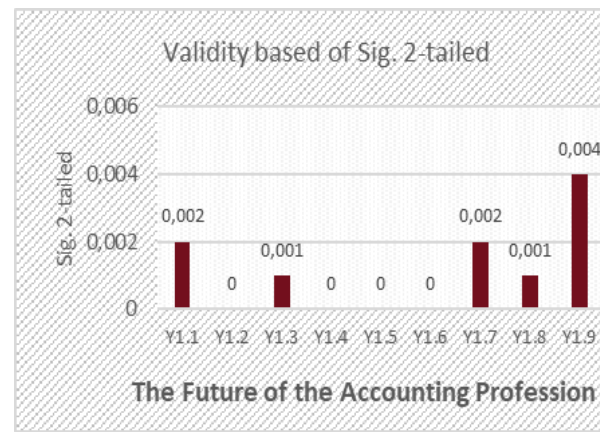


Figure 9. Validity of Y-based data Sig. value (2-tailed)

Source: Primary Data Processed SPSS, 2025

Table 1. Scale: All Variables

Case Processing Summary			
		N	%
Cases	Valid	34	100.0%
	Excluded ^a	0	0.0%
	Total	34	100.0%

*Listwise deletion based on all variables in the procedure.

Source: Primary Data Processed SPSS, 2025

Table 2. Data reliability

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,844	,950	25

Source: Primary Data Processed SPSS, 2025

Table 3. Descriptive Perception Variables

	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
X1.1	34	1	4	5	4,44	0,504	0,254
X1.2	34	3	2	5	3,88	0,88	0,774
X1.3	34	3	2	5	3,74	1,024	1,049
X1.4	34	4	1	5	3,56	1,078	1,163
X1.5	34	4	1	5	3,56	1,106	1,224
X1.6	34	3	2	5	4,15	0,744	0,553
X1.7	34	2	3	5	4,32	0,589	0,347
X1.8	34	2	3	5	4,06	0,6	0,36
X1.9	34	3	2	5	4,18	0,716	0,513
X1.10	34	3	2	5	4,15	0,784	0,614
X1.11	34	3	2	5	4,18	0,626	0,392
X1.12	34	4	1	5	3,62	1,074	1,152
X1.13	34	4	1	5	3,53	1,107	1,226
X1.14	34	4	1	5	3,82	0,936	0,877
Total.X	34	36	34	70	55,18	7,814	61,059
Valid N (listwise)	34						

Source: Primary Data Processed SPSS, 2025

Table 4. Descriptive Variables of the Future of Profession

	Descriptive Statistic						
	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance
Y1.1	34	3	2	5	4,03	0,937	0,878
Y1.2	34	3	2	5	4,32	0,684	0,468
Y1.3	34	3	2	5	4,24	0,741	0,549
Y1.4	34	3	2	5	4,26	0,71	0,504
Y1.5	34	3	2	5	4,06	0,851	0,724
Y1.6	34	4	1	5	3,88	0,913	0,834
Y1.7	34	4	1	5	3,59	1,104	1,219
Y1.8	34	3	1	4	2,59	0,892	0,795
Y1.9	34	4	1	5	2,88	1,149	1,319
Total. Y	34	26	17	43	33,68	5,596	31,316
Valid N (listwise)	34						

Source: Primary Data Processed SPSS, 2025

A. Interpretation of Accountants' Perceptions

1. Perceptions on Skills and Training Dimension

This dimension emphasizes how accountants assess the importance of developing skills in order to keep pace with technological advancements. The average scores are above 3 (on a 1–5 scale), indicating a general tendency toward agreement. This means that the majority of respondents acknowledge the importance of upskilling and training to remain relevant in an AI-driven environment.

The highest average score is found in the statement that accountants actively strive to develop their skills, reflecting a strong commitment to technological adaptation.

This dimension is concerned with how accountants evaluate the value of learning new skills to stay current with technology advancements. On a scale of 1 to 5, statistical test revealed an average score above 3, which suggests a propensity to agree. This indicates that most respondents agree that training and upskilling are essential to stay relevant in an AI-driven environment. Most accountants understand the value of skill improvement and look for AI-related training to stay relevant in their careers. Additionally, the workplace is thought to be quite supportive of these initiatives. These findings are consistent with Almufadda & Almezeini (2022) who stress the importance of AI adoption in the auditing profession and highlight the need for proper training. Hasan (2022) emphasizes the necessity of skill development for accounting professionals. Findings from Tempomona et al. (2023) also point out the demand for training as a means of preparing for technological change. Similarly, Ahmad (2024) states that accountants require new competencies such as digital literacy, AI comprehension, data analytics capabilities, critical thinking, and communication, collaboration, and adaptability skills. Comparable findings by Anomah et al. (2024) reveal a heightened awareness of the importance of mastering data analytics and AI, indicating the necessity for proficiency in skills such as data analytics, AI usage, and data interpretation.

2. Automation Readiness Dimension

Statements 4–8 evaluate accountants' readiness to adopt automation technologies. The mean scores range between 3 and 4, as shown in X1.4 (mean = 3.56), X1.5 (mean = 3.56), X1.6 (mean = 4.15), X1.7 (mean = 4.32), and X1.8 (mean = 4.06). These results suggest that most respondents feel ready to use AI as an automation tool. However, the relatively high standard deviations for some items indicate variations in confidence and preparedness among accountants. This finding is in line with Grosu et al.(2023) who argue that accounting professionals are committed to transformation but often lack sufficient experience and are uncertain about how to respond to digital technologies. Similarly, Seethamraju & Hecimovic (2022) note that auditors perceive AI as a tool to enhance audit quality and efficiency, though some auditors remain in the adjustment stage.

Overall, the results indicate that most accountants consider themselves reasonably prepared to adopt AI as a means to improve work quality and efficiency, even though some are still adapting.

3. Technological Development Dimension

Statements 9–11 explore accountants' views on the impact of AI developments. Respondents generally express optimism regarding AI's benefits for efficiency and positive changes in accounting practices. This is reflected in the relatively high mean scores, all above 4 (X1.9 = 4.18, X1.10 = 4.15, X1.11 = 4.18).

This positive perception shows that many accountants regard AI as an opportunity to improve the quality of their work. Although there is some variation in levels of confidence, the overall trend indicates optimism about AI's potential in enhancing efficiency and work quality. These findings are consistent with (Chandra & Nugraha, 2024) who report that respondents are generally optimistic about AI's role in improving audit efficiency and outcomes, especially in improving audit quality. Similarly, Ais Sahla & Latif (2023) find that auditors with positive perceptions of AI tend to make more accurate financial statement evaluations, reflecting confidence in AI's contribution to efficiency and audit quality.

4. Trust in Professional Ethics Dimension

This dimension investigates accountants' beliefs about AI's role in maintaining and enhancing ethical practices in accounting. Although responses vary, most respondents show optimism regarding AI's support for more ethical practices, with an average score of 3.66.

The descriptive table reveals relatively high standard deviations for the first two items (1.074 and 1.107), suggesting differences in perceptions of AI's ethical implications. This indicates that ethical concerns remain an issue to be carefully managed. Nonetheless, respondents generally maintain optimism about AI's potential to support ethical practices in the accounting profession. These results align with (Nugrahanti et al., 2023; Transformasi Praktik Akuntansi Melalui Teknologi Peran Kecerdasan Buatan, Analisis Data, Dan

Blockchain Dalam Otomatisasi Proses Akuntansi, n.d.) who highlight ethical challenges such as data privacy and change management, while still acknowledging AI's potential to enhance efficiency and support ethical conduct. This is also supported by (Holmes & Douglass, 2022) who argue that despite ethical concerns, AI can strengthen ethical practices by improving accuracy and efficiency. Likewise, Guan et al. (2022) show that with proper mechanisms, AI can assist ethical decision-making in various fields, including accounting. In contrast, the study conducted by Hasiao and Han (2023) reveals that respondents also expressed concerns regarding ethical issues associated with the use of technology.

Overall, accountants demonstrate positive perceptions regarding the importance of skills development and training to keep up with technological change, with the majority acknowledging that upskilling in AI is necessary to remain relevant. Readiness to adopt automation is also relatively high, as accountants generally perceive AI as an opportunity to improve work efficiency and quality, despite differences in confidence levels. Regarding technological development, respondents are largely optimistic about AI's positive impact on efficiency and work quality. Furthermore, although ethical concerns remain, most accountants believe AI can support ethical practices within the profession.

B. Interpretation of the Accounting Profession's Future

1. Adoption of AI in Accounting Practice

This dimension measures accountants' views on the adoption of AI in accounting practices. Most respondents believe that AI will transform the way accountants work and that they need to develop new skills. The mean score is relatively high (4.13), reflecting strong confidence in AI's impact on the profession's future.

Accountants generally acknowledge that AI can replace certain routine tasks, but they regard adaptation to AI as a positive step that can improve accuracy and work quality. This is supported by Apriana & Armiani (2025) who find that AI introduces innovations with both positive and negative implications, presenting challenges and opportunities for academics, practitioners, and policymakers in accounting. Similarly (Guyader, 2020) finds that AI can facilitate the application of complex accounting standards, enhancing accuracy and efficiency in reporting. Al-Obaidy (2024) also highlights that although AI may replace routine tasks, accountants view adaptation as a means to improve accuracy and efficiency.

2. Indicators of Change in Accountants' Work

This dimension focuses on how accountants perceive shifts in their roles as AI adoption increases. The results indicate some concerns that AI may replace aspects of their work, as reflected in mean scores exceeding 3.00 for negatively worded statements.

Despite these concerns, accountants generally remain realistic about the need to adapt to technological change. This highlights the importance of balanced strategies that integrate technological advancements with human skills.

The overall interpretation of the accounting profession's future suggests that most accountants believe AI adoption will significantly transform their work, requiring them to develop new skills. While the high mean scores indicate readiness for adaptation, concerns remain that AI may replace certain routine tasks and raise ethical questions. Nevertheless, accountants show a realistic outlook on the necessity of AI adoption, underscoring the importance of strategies that balance AI technology with human competencies.

C. Interpretation of Crosstab

1. Skills and Training Indicator

- a. Gender; Based on crosstab and Chi-Square tables for X1.1, X1.2, and X1.3, there are no significant differences between male and female respondents regarding their views on skills and training. For instance, the Chi-Square value for X1.1 is 1.266 with a significance level of 0.260, indicating no significant difference.
- b. Age; For this indicator, responses varied across age groups, but the Chi-Square value was not significant, such as for item X1.1 which yielded a value of 5.769 (with a significance of 0.217)."
- c. Educational Background; No significant differences in views on skills and training among respondents with undergraduate, master's, or doctoral degrees.
- d. Field of Expertise & Length of Employment; Overall, these variables show no significant influence on skills and training indicators.

2. Automation Readiness Indicators

- a. Gender; Crosstab results show no significant differences between male and female respondents regarding automation readiness across all indicators (X1.4–X1.8).
- b. Age; For X1.8, a Chi-Square value of 18.998 ($p = 0.015$) suggests that respondents aged 25–34 are more prepared compared to other age groups.
- c. Educational Background; A small but significant difference is observed in X1.8 ($p = 0.024$), indicating that educational attainment influences readiness for automation.
- d. Field of Expertise & Length of Employment; These variables show no significant effects on automation readiness indicators toward the variables of field of expertise and length of employment.

3. Technological Development Indicators

- a. Gender; Chi-Square tables show no significant differences between male and female respondents' views on technological development across all indicators.
- b. Age, Education, Field of Expertise, and Length of Employment; Crosstab and Chi-Square results indicate no significant differences for indicators X1.9–X1.11.

4. Trust in Professional Ethics Indicators
 - a. Gender; Crosstab results indicate no significant gender differences in levels of trust regarding professional ethics (insignificant).
 - b. Age, Education, Field of Expertise, and Length of Employment; No significant relationships are found between these demographic variables and responses to ethical trust indicators.
5. Adoption of AI in Accounting Practice Indicators
 - a. Gender; There are no significant gender differences in views on AI adoption across all indicators.
 - b. Age, Education, Field of Expertise, and Length of Employment; All demographic variables show similar responses, with no significant differences regarding AI adoption.
6. Indicators of Change in Accountants' Work
 - a. Gender; Gender differences do not significantly influence perceptions regarding changes in accountants' work.
 - b. Age, Education, Field of Expertise, and Length of Employment; No significant differences are observed in perceptions of work changes based on these demographic variables.

CONCLUSION

Overall, accountants exhibit positive perceptions toward the importance of skill development, training, and readiness to adapt to rapidly advancing AI technologies, which they believe can enhance the efficiency and quality of accounting work. Although concerns remain regarding ethical implications and the potential replacement of certain routine tasks, accountants remain optimistic and realistic in viewing AI as an opportunity. This highlights the need for balanced adaptation strategies that integrate technological mastery with human skills in order to maintain the relevance and ethical foundations of the profession in the future.

The crosstab analysis further indicates that demographic variables (gender, age, educational background, field of expertise, and length of employment) do not exert significant influence on the tested indicators. Perceptions related to skills, automation readiness, technological development, professional ethics, AI adoption, and changes in work responsibilities are relatively consistent across demographic groups.

Implications

This study provides several important implications for practice, education, and policy.

1. For accounting practitioners, the findings indicate the necessity of enhancing technical competencies, particularly in information technology, accounting information systems, and data analytics. Accountants can no longer rely solely on fundamental accounting skills but must adapt

to digital transformations such as robotic process automation (RPA) and artificial intelligence. Organizations employing accountants are encouraged to invest more in training and continuous professional development to strengthen preparedness for automation.

2. In higher education and accounting curricula, the results emphasize the urgency for institutions to revise curricula to be more responsive to labor market demands increasingly shaped by AI. Integrating materials on AI, data science, and digital ethics into accounting programs is essential to prepare graduates who are not only technically competent but also ethical and adaptive to change. This aligns with Andani et al. (2022), who found that students' positive perceptions of AI-based curricula enhanced their confidence in working with such technologies.
3. From a professional and regulatory standpoint, organizations such as IAI, IFAC, and IESBA must continue to develop ethical standards and professional guidelines relevant to the digital era. Respondents' concerns about ethics and privacy underscore the importance of upholding professionalism and accountability despite increasing digitization. Professional ethics remain a cornerstone in maintaining trust amid AI integration in accounting practices (IESBA, 2020).
4. For public policymakers, the findings highlight the need for supportive regulations and policies that promote inclusive digital transformation in the accounting sector. Governments can play a role in facilitating training, providing incentives for companies that adopt AI responsibly, and ensuring that digital transformation does not exacerbate inequality or lead to severe job displacement.

Finally, at the conceptual level, this study contributes to a deeper understanding of accountants' perceptions of technological disruption, particularly through the lens of Bandura's Social Cognitive Theory, which posits that perceptions evolve through the interaction between individuals and their environments. These findings open avenues for further research, such as testing models of technological adaptation among accountants using broader quantitative approaches or employing qualitative methods to explore the long-term dynamics of perception change.

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